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## R E P O R T

OF THE

# INDUSTRIAL COMMISSION

ON

## TRUSTS AND INDUSTRIAL COMBINATIONS

(SECOND VOLUME ON THIS SUBJECT),

INCLUDING TESTIMONY TAKEN SINCE MARCH 1, 1900, TOGETHER  
WITH REVIEW AND DIGEST THEREOF, AND SPECIAL  
REPORTS ON PRICES AND ON THE STOCKS  
OF INDUSTRIAL CORPORATIONS.

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VOLUME XIII  
OF THE COMMISSION'S REPORTS.

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WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1901.

X9.73.M985

DO:13

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E. DANA DURAND, *Secretary.*

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[Extract from act of Congress of June 18, 1898, defining the duties of the Industrial Commission and showing the scope of its inquiries.]

Sec. 2. That it shall be the duty of this commission to investigate questions pertaining to immigration, to labor, to agriculture, to manufacturing, and to business and to report to Congress and to suggest such legislation as it may deem best upon these subjects.

Sec. 3. That it shall furnish such information and suggest such laws as may be made a basis for uniform legislation by the various States of the Union, in order to harmonize conflicting interests and to be equitable to the laborer, the employer, the producer, and the consumer.

INDUSTRIAL COMMISSION,  
*December 4, 1901.*

*To the Fifty-seventh Congress:*

I have the honor to transmit herewith, on behalf of the Industrial Commission, a report on the subject of Trusts and Industrial Combinations, prepared in pursuance of an act of Congress approved June 18, 1898.

This is the second volume submitted by the commission on this subject, the first constituting Volume I of the commission's reports. The present report covers the testimony taken before the commission since March 4, 1900, with a review and digest thereof, and also special reports on the effect of industrial combinations on prices, local variations in prices, the relative prices of American products in American and foreign markets, and speculation in the securities of industrial corporations.

The conclusions and recommendations of the commission on this subject will be submitted in its Final Report.

Respectfully,

ALBERT CLARKE, *Chairman.*

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## REVIEW OF EVIDENCE.

### INTRODUCTION.

Since the publication of the preliminary report on industrial combinations a large amount of new evidence on the subject has been taken. In the main this evidence tends to confirm conclusions reached in the earlier report; but several new lines of investigation have been followed, so that somewhat more complete statements can be made and the conclusions formerly reached are made substantially certain. Additional information has been secured, particularly on the subjects of the promotion and financing of industrial combinations; on the causes for the failures of those which have not proved successful; on the practices of combinations in connection with the export trade; on prices for export goods as compared with those sold within the country, and on the relation of the tariff to industrial combinations. The details regarding the various subjects will be given each under its separate heading.

### CAUSES OF COMBINATION.

It is clearly the opinion of most of those associated with industrial combinations that the chief cause of their formation has been excessive competition. Naturally all business men desire to make profits, and they find their profits falling off first through the pressure of lowering prices of their competitors. The desire to lessen too vigorous competition naturally brings them together.

A second way of increasing profits is through the various economies which they think will come by consolidation. The special details of these savings will be given under another heading.<sup>1</sup>

One or two of the witnesses considered the protective tariff as the chief cause of the trusts. They urged that high tariff duties, by shutting out foreign competition, make it easier for our manufacturers to combine to control prices, and they think that the experience of the last few years justifies the assertion. Likewise, they say, through the high profits that come from the exclusion of foreign competition by the tariff, capital has been attracted into industries here to so great an extent and with the expectation of so high profits that home competition has been unduly stimulated, thereby leading to the formation of combinations.<sup>2</sup>

Some other witnesses believe that the tariff, while not the most important cause, has, nevertheless, some influence toward encouraging combinations;<sup>3</sup> while one witness, Mr. La Taste, believes that the monopoly of natural opportunities, under our present system of taxation, is to be considered the fundamental cause.<sup>4</sup>

Nearly all of the witnesses who have considered excessive competition as the chief cause do not agree that the tariff is to be looked upon as a cause, nor as a rule do

<sup>1</sup> Chapman, pp. 93, 98, 99; Pitcairn, pp. 227, 241; White, pp. 253-256; Burn, pp. 284-303; Hopkins, p. 346; Chisholm, pp. 431, 435.

<sup>2</sup> Holt, pp. 562, 563, 569; Spalding, pp. 1-4

<sup>3</sup> Hillyer, p. 13.

<sup>4</sup> P. 23.

## VI INDUSTRIAL COMMISSION:—TRUSTS AND COMBINATIONS.

they concede that those engaged in the organization of combinations have any intention of securing a complete monopoly. It is, of course, true that the restriction of competition is a step toward monopoly, but competition has not been suppressed entirely, and they do not believe that monopoly has been or can be secured. In most cases they would deny that a monopoly was in any respect desirable.

### THE SAVINGS OF COMBINATION.

(a) Among the economies that are generally recognized as resulting from combination is the regulation of production. Where there is no general understanding among producers there is a strong tendency to overproduction, so that markets become demoralized and competition excessive. The combination is able so to fit the supply to the demand that while customers can be fully supplied at reasonable prices there is no danger of overproduction. It is thus a means of preventing panics and periods of depression.<sup>1</sup>

(b) Closely allied with this adaptation of supply to demand is the advantage that comes from the possibility of carrying much smaller stocks of goods. This saves not merely the investment of capital, but also interest on running capital, insurance, storage charges, shop-work charges, etc.<sup>2</sup>

(c) This same control of production enables the combination to keep its factories running full time, thus keeping labor fully employed. It has been found in several special cases that the percentage saved in the cost of production in the rubber industry by running a factory full time instead of half time was from 4 to 8 per cent. In other cases it is doubtless more.<sup>3</sup>

(d) When a large proportion of an industry is under the control of one central management, it becomes essential to success that the various products be standardized. In this way the quality of goods can be made much more uniform than would otherwise be the case, and its excellence can be guaranteed. Furthermore, the number of styles of goods can regularly be very much reduced, thus lessening the cost of manufacture and effecting a saving in the amount of stock that needs to be carried.<sup>4</sup>

(e) The same influence leads to the larger use of special machinery, and to the adaptation of the workmen and the superintendents to the special departments for which they are best suited. In many cases through this specialization more can be saved than through the introduction even of new machines. In one case, in connection with the manufacture of rubber goods, as much as 20 per cent of the cost was saved by thus specializing the machinery. Mr. Schwab, president of the United States Steel Corporation, mentions the specialization and adaptation of material as a great saving in the steel industry.<sup>5</sup>

(f) The specialization mentioned above saves also materially through a lessening in the cost of superintendence, which is sometimes very large. Likewise the increased efficiency often enables the manufacturer to lessen the number of laborers per unit of product.<sup>6</sup>

(g) There are also noteworthy savings along somewhat similar lines in connection with the cost of selling; for example, the number of traveling men can often be greatly reduced. In the case of the United States Rubber Company there was a saving of 25 per cent in the number of traveling salesmen.<sup>7</sup> Substantial economies can be made through direct sales instead of through middlemen; and the cost of advertising can be materially lessened, owing to more intelligent distribution and method of advertising. Advertising in a large way permits also the securing of

<sup>1</sup> Flint, pp. 35, 92; White, p. 264; Spalding, p. 9; Chapman, p. 109; Schwab, pp. 450-452.

<sup>2</sup> Flint, p. 35.

<sup>3</sup> Flint, p. 34; Spalding, p. 9; White, p. 264; Schwab, pp. 453, 454; Waterbury, pp. 128, 129.

<sup>4</sup> Flint, p. 35; White, p. 263.

<sup>5</sup> Flint, p. 34; Schwab, pp. 450-452; Duke, p. 327.

<sup>6</sup> Flint, p. 35; White, p. 266.



more favorable rates.<sup>1</sup> The popularity of a trade-mark can be more readily secured when the sales are direct.

(A) There is often through combination a better knowledge and control of credit conditions, so that bad debts may be guarded against. During the year 1890 the United States Rubber Company, doing a business of about \$28,000,000, lost less than \$1,000 by bad debts. The loss by the separate companies on that volume of business would have averaged doubtless over \$100,000 per year.<sup>2</sup>

(i) Of course there is a very material saving in many instances through shipping goods to customers from the nearest plants.<sup>3</sup> In this matter of freight saving also the large combinations can often supply themselves with storage facilities at central points and then ship their goods in large quantities during the seasons of the year when freight rates are lowest, thus often securing the advantages of water transportation which otherwise would not be available.<sup>4</sup>

In the case of local combinations, as, for example, the Cleveland and Sandusky Brewing Company, a similar saving is made in the cost of delivery of goods. Before the combination was made each brewery delivered beer to every part of the city. Now each brewery delivers to the portion near which it is situated.<sup>4</sup>

#### FORM OF ORGANIZATION.

In the case of the newer combinations in the United States it has been found that practically all of the important ones are put into the form of a single large corporation. In many cases the new corporation buys the individual plants which it seems desirable to combine and thus becomes a single owner of all the establishments.

In other cases, and this is perhaps true especially with reference to the largest combinations, the stock of the constituent members is all bought by the single unifying company. The constituent companies then retain their organization intact, being controlled simply by the central corporation, as a stockholder, which can elect directors and officers at will and thus guide the management absolutely.

#### PROMOTION AND FINANCIERING.

(a) *Method of organizing.*—Considerable new evidence has been taken regarding the methods of promotion and the part which the promoter plays in the organization of the combinations, as well as regarding the relations between the promoter and those who finance the organization. It is quite a general custom for a syndicate to be organized of individuals, bankers and others, who furnish whatever cash may be needed to purchase the different plants entering the combination, and who agree to take a certain proportion, if not all, of the new stock which is not taken by the vendors of the plants and by the public. Perhaps the most usual method followed is for the so-called "promoter" either to secure options upon the various plants entering into the combination, or to purchase them outright for cash or for stocks of the new combination; then to sell them to the new combination, taking as pay therefor its stock or stocks and bonds. The financiers furnish to the promoter the cash to pay for the plants or for the stocks of the individual establishments. They receive from the promoter, for the cash, stocks of the new corporation. All the exchanges of securities are frequently effected at the same time and place by the different parties entering into the transaction, so that there is no especial necessity for any large sums of money to be transferred, and the bargains made beforehand between the different parties are all consummated at once.<sup>5</sup>

<sup>1</sup> Flint, pp. 84, 85; Duke, pp. 327, 328; Campbell, pp. 309, 310.

<sup>2</sup> Flint, pp. 86, 87.

<sup>3</sup> Flint, pp. 85, 86; White, pp. 253, 254.

<sup>4</sup> Chapman, p. 106.

<sup>5</sup> Chapman, pp. 98, 94.

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<sup>4</sup> Flint, p. 35; White, p. 263.

<sup>5</sup> Flint, p. 34; Schwab, pp. 450-452; Duke, p. 827.

<sup>6</sup> Flint, p. 85; White, p. 256.

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<sup>1</sup> Flint, pp. 34, 35; Duke, pp. 327, 328; Campbell, pp. 309, 310.

<sup>2</sup> Flint, pp. 36, 37.

<sup>3</sup> Flint, pp. 35, 36; White, pp. 253, 254.

<sup>4</sup> Chapman, p. 105.

<sup>5</sup> Chapman, pp. 93, 94.

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(b) *Pay of the promoter.*—There are various ways for the promoter to receive his pay. In certain instances, as, for example, the United States Rubber Company, the promoter received for his work 5 per cent of the total stock issued, but had to pay out of this the charges of lawyers, accountants, appraisers, and bankers.

A more usual form of remuneration is to give to the promoter a certain amount of stock with which to buy the plants required and to pay expenses, permitting him to retain the surplus for his profits. In the case of the Rubber Goods Manufacturing Company the syndicate subscribers furnishing cash received for each \$100 paid in \$100 in preferred stock and \$90 in common stock. The promoters had to purchase the plants and were given the entire issue of preferred and common stock. If they could buy the plants for the proceeds of the 100 per cent of preferred stock and 90 per cent of common, they made the 10 per cent of common stock for their profit; if they had to pay more than that sum their profits were correspondingly lessened; if they could buy for less, naturally they made more than the 10 per cent of the common stock. They were under the express limitation that no preferred stock was to be issued in excess of tangible assets, and no common stock in excess of an amount determined by the earning capacity of the plants, as shown by previous experience, capitalized on a 7 per cent basis.<sup>1</sup>

In the case of the American Smelting and Refining Company syndicate subscribers received for each \$100 paid in cash \$100 in preferred stock and \$70 in common stock. The promoters received the remaining \$30 in common stock, out of which they had to pay the entire expenses of organization. They retained the remainder for their profits. Speaking generally, Mr. Chapman states that when a financiering syndicate receives for its subscriptions par in preferred stock and something less than par in common stock, the usual custom is for the promoters to receive the remainder of the common stock as pay for their services and for covering the costs of organization. In most cases their profits will depend upon the rigidity with which they can hold down their expense accounts, and, in many cases, where the purchase of plants is entirely in their hands, upon the skill which they can show in making purchases. Usually, of course, a careful appraisal has been made of plants beforehand, so that the basis of the stock issue is well known to all parties interested in the deal. A certain speculative chance is also often given to the promoters through the fact that it is within their discretion to buy for cash or stocks as they can best make agreements with the vendors. In that case they can sometimes make much better bargains for themselves by paying cash, or, on the other hand, by persuading the vendors to take securities, thus lessening the amount of cash that needs to be paid out. It is regularly the case that the promoter receives his pay in common stock.

(c) *Pay of the financier.*—Within the last two or three years there seems to have been a more conservative tendency shown by the bankers and others interested in financing the industrial combinations. The man who advances money to buy the various plants is, in many instances, taking a considerable risk and expects often to secure high pay therefor. The extent of his pay is dependent nevertheless largely upon his judgment as to the future course of development of the business of the combination in question. He practically buys securities of manufacturing establishments. If they earn high dividends his earnings will be great, provided he retains the securities; if he sells them his profits will be determined by the market rate of the securities, that being dependent again in the long run upon the earning capacity of the establishments. The more usual terms probably, under which within the last two or three years the financial agreements have been made, are that for each \$100 cash paid in the subscribing member of the financial syndicate receives par in preferred stock with a bonus in common stock equal to the preferred less the amount reserved for the pay of the promoter. This reserve has sometimes been as high as 50 per cent of the common stock, sometimes 30 per cent, and sometimes only 10 per cent.<sup>2</sup>

<sup>1</sup> Flint, p. 38.

<sup>2</sup> Chapman, pp. 93, 94; Flint, pp. 37, 38, 51, 66-73.

Instead of the plans mentioned above numerous others are of course found, especially where it is more desirable to issue bonds or where for some reason it seems desirable to make special terms, owing to the peculiar situation of some of the members entering into the combination. Promoters sometimes receive specified sums of money for their services; bankers practically always have to take for their services a percentage of the stock or the surplus left over.<sup>1</sup>

It is apparently the case that within late years private bankers are taking a more active and much more influential part in floating large business corporations—a line of business quite remote from banking proper. In Europe, especially in Germany and Austria, bankers have long been the chief promoters. The lessening rates of interest in this country seem to be driving them into the same practices here.

### CAPITALIZATION.

#### GENERAL STATEMENTS.

Two general opinions regarding the basis of capitalization of companies and combinations are represented by the witnesses: First, that the amount of capitalization should be limited by the actual value of the properties owned, or should at any rate bear some strict relation thereto; second, that the capitalization should be dependent upon the earning capacity of the company.

Some of the witnesses were apparently of opinion that the actual cash value might be substantially determined by the cost of building of the plants themselves and by the actual selling value of the stock on hand.<sup>2</sup> Others took the rather extreme ground that so far as the effect on the public was concerned the amount of capitalization made practically no difference whatever. Overcapitalization, it was said, will not affect earnings, and the stockholder and the public are interested in earnings rather than in capital. Capitalization has no relation whatever to earnings.<sup>3</sup>

Even those witnesses, however, would be of opinion that the investor, if not the public, has some interest in the question of capitalization, and that there should be enough public knowledge on the matter so that the investor would know what his company was doing. Some general provision that would determine that condition for the investor might well be provided.<sup>4</sup>

The greater number of witnesses seemed to be of the opinion that there should be for capitalization a basis of tangible assets whose value should be well known and should be, other things equal, somewhat closely related to the cost of production of the plants. It was thought that such a basis of tangible assets was, on the whole, suitably represented by preferred stock at par, provided a company or a combination were to issue both preferred and common stock; or in case a company thought it wiser to issue bonds instead of preferred stock, the tangible assets would afford a fairly satisfactory basis for a bond issue, provided that the earning capacity, judging from the experience of preceding years, was enough to pay considerably more than interest on such bonds.

These witnesses were usually of the opinion that besides this basis of tangible assets for preferred stock it was just and, on the whole, in the interest of the public, including investors in stocks, that there be also an issue of common stock, based upon so-called intangible assets—that is, upon patents, trade-marks, good will, and the increased earning capacity that might come from combination itself. The amount of such common stock dependent upon earning capacity would naturally vary greatly in different kinds of business. Those corporations whose earnings were largely dependent upon the popularity of brands or trade-marks might properly issue a much larger proportion of common stock as compared with preferred than could

<sup>1</sup> Chapman, pp. 96, 97.

<sup>2</sup> Pircairn, pp. 227, 232, 233.

<sup>3</sup> Chapman, pp. 107, 108. Schiff, vol. 9, on Transportation, pp. 773, 775.

<sup>4</sup> Flint, pp. 92, 93. (Chapman, p. 108.)

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those companies whose product came more directly into the market in competition with others of like character, as, for example, various steel products, sugar, hoots and shoes, etc.<sup>1</sup>

The expression "good will" was used by many of the witnesses to include the various forms of intangible assets mentioned above, but in some cases the meaning of the word was, properly, restricted to the business advantage of acquaintance and reputation acquired by any establishment through a long period of dealing with its customers. Several of the witnesses who held to the last-named meaning were of the opinion that the mere fact of combination itself removed to a considerable extent this element of good will, and that in consequence it formed no just basis for capitalization. In order to avoid this loss of good will through combination it had been found best in many instances to retain the individual existence of the separate establishments under the combination, or at any rate to retain the names of brands and trade-marks of which the value had been built up by earlier establishments.<sup>2</sup>

### FACTS REGARDING SPECIAL COMPANIES.

Mr. Pitcairn,<sup>3</sup> the president of the Pittsburg Plate Glass Company, testified that when it was organized by increasing its capital stock and buying properties of its principal competitors, the properties were bought in at their actual cash values, nothing being paid for good will, and that the capitalization represented strictly actual cash values. The properties purchased in the Sloss-Sheffield Steel and Iron Company were bought at what was regarded as actual values, represented mainly in tangible assets, and this covered the issue of both preferred and common stock.<sup>4</sup>

Many of the witnesses, testifying with reference to their own combinations, stated that there was a fixed relation between the tangible assets and the capitalization, and usually that the preferred stock represented the tangible assets. For example, the United States Rubber Company issued capital stock to the amount of the tangible assets.<sup>5</sup> The preferred stock of the Rubber Goods Manufacturing Company was limited strictly to the tangible assets.<sup>6</sup> The bonds and preferred stock together of the United States Bobbin and Shuttle Company were not to exceed the actual appraised value of the tangible assets.<sup>7</sup> In the case of the rubber companies these assets were defined as including plant, machinery, tools, fixtures, and accounts guaranteed. The American Smelting and Refining Company limited its preferred stock also to its tangible assets, as did the National Salt Company and numerous others.<sup>8</sup>

In practically all of these cases where preferred stock or preferred stock and bonds represented tangible assets, at least an equal amount of common stock was issued, which represented good will in the broader sense of that term—that is, including patents, trade-marks, brands, and good will in the narrower sense. In some cases the amount of common stock, instead of being made equal to that of preferred, was determined rather by the earning capacity of the plants as shown by their record for a few years preceding.

In the Rubber Goods Manufacturing Company, which owned a large number of patents and trade-marks, the issue of common stock was limited to 14½ times the amount of the net earnings of the separate companies during the year previous to the organization of the combination; that is to say, the issue of the common stock was put on a 7 per cent earning basis.<sup>9</sup>

The United States Rubber Company intended the common stock, which was equal to that of the preferred, to include patents, good will, etc., but likewise it represented,

<sup>1</sup> Flint, pp. 50, 53, 92, and elsewhere, White, p. 252; Burn, p. 306; Duke, pp. 317, 331; Hopkins, pp. 343, 365; Chisholm, pp. 432, 433, 441; Norris, p. 477.

<sup>2</sup> Burn, p. 287; Taylor, p. 162.

<sup>3</sup> Pp. 227, 232, 233.

<sup>4</sup> Flint, 54, 57.

<sup>5</sup> Flint, 48.

<sup>6</sup> Flint, 97.

<sup>7</sup> Flint, 57.

<sup>8</sup> Chapman, pp. 94-96; White, pp. 249, 262.

<sup>9</sup> Flint, p. 38.

"among other things, the increased earning capacity by reason of the consolidation of the interests acquired."

In the appraisal of the Bobbin and Shuttle Company, no allowance was to be made for the value of any franchises, labels, or trade-marks, earnings or output.<sup>1</sup>

The common stock of the National Salt Company was to pay for good will, earning capacity, trade-marks, brands, etc., but was limited to five times the average annual net earnings for the preceding two years.<sup>2</sup>

Mr. Norris<sup>3</sup> says that in the case of the International Paper Company the common stock, which was spoken of as representing good will, was issued on a very low basis of value. He speaks of one paper mill that yielded \$4.50 in company securities for every dollar of original investment. He estimates the overcapitalization of the company at \$40,000,000.

Mr. Chisholm, president of the company, says that the authorized capitalization of the International Paper Company, \$25,000,000 of preferred and \$20,000,000 of common stock, of which \$22,000,000 of the preferred and about \$17,000,000 of the common, have been issued, together with \$9,000,000 of bonds, is not excessive; that properties were paid for at a fair valuation when everything was taken into consideration, including water powers, position with relation to the supply of timber, and so on. He acknowledges that the capitalization is considerably more than the aggregate capitalization of the separate establishments taken into the organization, but says that many of them had been organized long before at a very low capitalization. At the beginning the capitalization of the whole, including bonds, amounted to \$46,000,000, the appraisal at actual value of the properties was \$43,000,000, and the company had \$7,000,000 of working capital—a total of \$50,000,000.<sup>4</sup> He thinks it extremely doubtful whether the property now owned by the company could be duplicated for the entire capitalization at par, including the common stock with the preferred and the bonds.

The plan of capitalization of the Royal Baking Powder Company is somewhat unique, \$10,000,000 of 6 per cent preferred stock and \$10,000,000 of common. The preferred stock is sold on the market and has regularly paid its 6 per cent dividends. A provision is made that if the interest should be in default four months, the owners of \$50,000 of the preferred stock can call a meeting, elect directors, and take charge of the business. They can then control the business until all arrearages of dividends on the preferred stock shall have been accumulated or paid. After the payment of the deficiencies the voting power vested exclusively in the preferred stock shall cease and be restored to the holders of the common stock. No mortgage can be created or assumed by the company, nor can the preferred stock be increased, nor the company consolidate with another company, nor a mortgage be placed on any of the properties without the consent of the holders of 75 per cent of the preferred stock.<sup>5</sup> In this company the common stock is all held in private hands, and no report is given regarding the earnings on it. The control of the company is also exclusively in the hands of the few holders of the common stock so long as the dividends on the preferred stock are paid.

In certain instances where brands and trade-marks are of especial value, instead of the rather peculiar provisions of the baking powder company which seem to imply that the earnings on the common stock are high, a larger issue of stock is provided. For example, in the case of the American Chicle Company, while there was no formal appraisal of the tangible assets, their value was quite accurately ascertained. Preferred stock then was issued to three times the amount of the tangible assets, in round numbers, and the amount of common stock was made double that of the preferred. That is to say, speaking roundly, the total capitalization is nine times the amount of the value of the tangible assets. The most valuable property of this company is its trade-marks, it owning substantially all the valuable brands of chewing gum in the country. It is claimed that the capitalization of the company is on

<sup>1</sup> Flint, pp. 57-66.

<sup>2</sup> White, pp. 249-259.

<sup>3</sup> Pp. 409-420.

<sup>4</sup> Chisholm, pp. 432-441.

<sup>5</sup> Morris, pp. 73, 77, 80.

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a conservative basis as compared with its earning capacity, from the fact that the company earns about six times the dividends on its preferred stock and has paid 8 per cent regularly on its common stock. The price of preferred and the price of common stock both stand at about 80.<sup>1</sup>

Before one can justify a high capitalization by the mere fact that dividends can be paid on it, one would perhaps need to inquire, in some cases at least, the source of power to secure these high earnings. If it were a monopoly power, some would not consider the high capitalization justified.

Another interesting question regarding capitalization was raised by Mr. Schwab in connection with the United States Steel Corporation. Whether that company was to be considered as overcapitalized or not depended largely, in Mr. Schwab's judgment, upon the value that was to be placed upon its unmined ores and its coking coal. He thought, also, that the value of the ore and coal ought to be considered as considerably greater from the fact that the supply of Lake Superior ores and of Connellsville coking coal was apparently limited and, so far as one could judge from the present outlook, would be exhausted within a comparatively few years.<sup>2</sup> It should be noted that the addition of large capitalization representing values of unmined ore is not usual, although it has doubtless a certain basis of justification.<sup>3</sup> If we grant that a materially added value comes from the fact that the supply is limited and that the United States Steel Corporation is to get the benefit of this limited supply by virtue of the fact that it owns some 80 per cent of the Lake Superior ore in sight, this is a capitalization which may possibly be entirely proper, but which is clearly a capitalization of natural monopoly.

As will be seen from the note<sup>4</sup> the capitalization of the United States Steel Cor-

<sup>1</sup> Flint, 50, 51.

<sup>2</sup> Schwab, pp. 464, 467, 472.

<sup>3</sup> Cf. King, p. 500.

<sup>4</sup> Comparison of stocks of first constituent members of United States Steel Corporation and shares given in exchange therefor.

[From circular letters issued by J. P. Morgan & Co.]

Name of company.	Amount of stock outstanding.	Numbers shares stock new company for every 100 shares old stock.		Amount of new stock required to make the exchange.	
		Preferred.	Common.	Preferred.	Common.
Federal Steel Co.:					
Preferred .....	\$58,260,900	110	.....	\$58,586,990	.....
Common .....	46,484,300	4	107½	1,859,372	\$49,970,823
American Steel and Wire Co.:					
Preferred .....	40,000,000	117½	.....	47,000,000	.....
Common .....	50,000,000	.....	102½	.....	51,250,000
National Tube Co.:					
Preferred .....	40,000,000	125	.....	50,000,000	.....
Common .....	40,000,000	8.8	125	3,520,000	50,000,000
National Steel Co.:					
Preferred .....	27,000,000	125	.....	33,750,000	.....
Common .....	32,000,000	.....	125	.....	40,000,000
American Tin Plate Co.:					
Preferred .....	18,325,000	125	.....	22,906,250	.....
Common .....	28,000,000	20	125	5,600,000	38,000,000
American Steel Hoop Co.:					
Preferred .....	14,000,000	100	.....	14,000,000	.....
Common .....	19,000,000	.....	100	.....	19,000,000
American Sheet Steel Co.:					
Preferred .....	24,500,000	100	.....	24,500,000	.....
Common .....	24,500,000	.....	100	.....	24,500,000
Amount new stock required to make exchange, totals .....				261,722,612	269,720,823
Present issues of the seven companies, totals .....				217,085,900	239,984,300
Increase in capitalization for seven companies .....				44,636,712	29,736,823
Total increase common and preferred stock, seven companies .....					44,636,712
					74,373,035



poration is \$74,373,035 more than the total capitalization of the separate companies of which it was at first formed, not counting the Carnegie company nor the companies taken in since the organization. From the testimony given by the officers of several of these separate companies their capitalization was also materially greater than their tangible assets. Mr. Reid<sup>1</sup> testified that of the \$28,000,000 of common stock and \$18,000,000 of preferred stock entering into the capitalization of the Tin Plate Company, the \$18,000,000 preferred were supposed to represent the cash values of the plants as going concerns including ordinary good will. All of the common represented "good will"—hope of future success—and pay of the promoter. He stated further, however, that owing to the fact that the establishments were bought as going concerns at a time when business was prosperous and when some of the vendors doubtless felt that they were in a position to make good terms, the prices for which they sold were high; so that all the stock taken together would represent probably three or four or five times the cash value of the plant itself under ordinary conditions.

The National Steel Company, according to the testimony of its president, Mr. Reis,<sup>2</sup> had the value of its plants fairly accurately represented by its preferred stock, \$27,000,000, the common stock, \$32,000,000, being all for "good will"—expectation of profits—and the pay of the promoter. From the testimony of other officers the implication is that the capitalization of the American Steel Hoop Company, with \$14,000,000 preferred and \$19,000,000 common, was divided on substantially the same basis,<sup>3</sup> and the same plan, it is generally understood, was followed in the organization of the American Sheet Steel Company.

According to the testimony of Judge E. H. Gary<sup>4</sup> the capitalization of the Federal Steel Company at \$98,000,000 represented the actual value of the properties and cash. He stated, however, that \$31,000,000 of that valuation was increase, not

Footnote—Continued.

*Comparison of stocks of first constituent members of United States Steel Corporation, etc.—Continued.*

Name of company.	Amount of stock outstanding.	Number shares stock new company for every 100 shares old stock.		Amount of new stock required to make the exchange.	
		Preferred.	Common.	Preferred.	Common.
<i>Companies added after organization.</i>					
<i>American Bridge Company:</i>					
Preferred.....	\$31,373,800	110		\$34,511,180	
Common.....	30,960,800		106		\$32,498,340
<i>Lake Superior Consolidated Iron Mines:</i>					
Common.....	29,887,449	135	135	40,348,056	40,348,056
Amount new stock required.....				74,869,236	72,846,396
Present issue for two companies, total.....				31,373,800	60,838,249
Increase in capitalization for two companies.....				43,485,436	12,008,147
					43,485,436
Total increase, two companies.....					55,493,583
Increase, seven companies.....				44,686,712	29,736,323
Increase, two companies.....				43,485,436	12,008,147
Total increase, nine companies.....				88,122,148	41,744,470
					88,122,148
Total increase, preferred and common.....					129,866,618

<sup>1</sup> Vol. 1, pp. 866, 884.

<sup>2</sup> Guthrie, vol. 1, pp. 953-957; Moore, vol. 1, pp. 959, 962, 963, 967.

<sup>3</sup> Vol. 1, p. 944.

<sup>4</sup> Vol. 1, p. 987.

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appearing in the book values of the separate companies. That increase represented mainly increased values of the properties since they had been held by the constituent companies. For example, some coal land was put in at \$500 an acre, of which some had been sold just before the time when he gave his testimony at \$1,000 an acre; the Illinois Steel Company had one iron mine that cost about \$75,000—they had just been offered \$600,000 in cash for it—and similar matters of that kind. It will be seen that in this way a part of this actual valuation of \$98,000,000 (\$31,000,000) was in the form of mines, real estate, etc., part of which of course was not immediately productive, but which it was supposed at that time had an actual cash value of the amount named.

Mr. Gates, at that time chairman of the American Steel and Wire Company,<sup>1</sup> testified that of its capitalization of \$90,000,000, probably \$50,000,000 to \$60,000,000 might be considered as value of plants, and \$10,000,000 or \$15,000,000 were issued as "good will." As showing the increased and increasing value of such property he stated that the demand for steel cars, steel vessels, and steel frames for buildings and bridges constituted as large a demand in tonnage as the total tonnage of the United States in iron and steel 15 or 20 years ago.

From the testimony offered by these different witnesses it will be seen that in October, 1899, the actual cash values of most of the plants entering into the United States Steel Corporation (including the National Tube Company on the same basis as the American Tin Plate Company) were placed by the officers themselves of those companies at their very liberal estimate of \$298,570,200, leaving \$158,500,000 as "good will." From the table given above in the note it will be seen that that capitalization has been increased by \$74,373,035, making a total of \$232,873,035 for "good will," in the broad sense, provided there had been no increase in the value of the tangible assets. On that question some considerations are given below.

A fairer basis of comparison between the separate companies than the above would be that made in substance by the United States Steel Corporation itself in purchasing the shares of the different companies. The shares of the Federal Steel Company, the American Steel and Wire Company, and the National Tube Company were all of them taken at somewhat lower rates than those of the National Steel Company or the American Tin Plate Company. From the testimony already cited it seems that in the case of those two companies all of the common stock at any rate, and probably considerably more was to be considered as issued for "good will"—i. e., expectation of earnings. On that basis, as has often been assumed without allowances for increase in values during the last two years, taking all the common stock of all the companies purchased by the United States Steel Corporation, with the exception of the Carnegie Company and the Lake Superior Consolidated Mines, neither of which had any preferred stock, it will be seen that the "good will" in the constituent companies amounts to \$270,835,100. If we may also assume that the added common stock is to be considered as "good will," and add this to the sum mentioned above, it results that the "good will" of the consolidated companies amounts to \$302,118,963, or, if one were even to include the added preferred also, it would amount to \$389,918,111. If we were to take the price of the stock of the Lake Superior Consolidated Mines as a criterion of the value of that stock before it entered into the consolidation, it would appear that more should be added, but regarding that we have no definite basis for comparison and therefore omit it entirely, except as regards the increase. It should be kept in mind, however, that the testimony on which these statements are based refers to conditions of nearly two years ago.

It is, of course, true that there are increased values of the properties, because they have doubtless since the earlier date added materially to their plants and cash on hand, and there has doubtless been also some added value given to the plants by the prosperous conditions of the last two years. How much is to be so reckoned,

<sup>1</sup> Vol. 1, p. 1021.

how much is to be credited to good will or actual earning capacity, of course is a matter for individual judgment; but, according to officers of the Steel Corporation itself, not less than \$175,000,000 have been added in actual values since the testimony of the officers of the different plants referred to was given. It has been testified also that in certain cases good will alone in its narrower sense is of more value than all the tangible assets of an establishment.

There is no evidence before the commission and there has been no published statement showing the issue of stocks and bonds paid for the Carnegie properties. In a circular letter issued by J. P. Morgan & Co., March 2, 1901; it was stated that the "bonds of the United States Steel Corporation are to be used only to acquire bonds and 60 per cent of the stock of the Carnegie Company." It has been frequently stated, though not published on authority, that the bonds were exchanged at par, and that Mr. Carnegie received \$1,500 in bonds for each \$1,000 of his Carnegie stock. At those rates he would have received for—

	Bonds of U. S. Steel Corporation.	
\$160,000,000 bonds.....	\$160,000,000	
\$96,000,000 stock at 150 in bonds.....	144,000,000	
		304,000,000

As this sum agrees exactly with the amount of bonds issued, it seems a reasonable interpretation.

It is generally supposed that most of the remainder of the Carnegie stock was taken at 150 preferred stock with an equal bonus of common, though some little was bought for \$1,200 or \$1,300 cash. Assuming all taken at the first rate, and that \$25,000,000 cash was raised with \$25,000,000 par of preferred with equal bonus of common, a generally accepted inference, the remainder of the Carnegie holdings and the cash would have cost as follows:

	New stocks.	
	Preferred.	Common.
For \$25,000,000 cash.....	\$25,000,000	\$25,000,000
For \$64,000,000 Carnegie stock at 150.....	96,000,000	96,000,000
Stocks of the 9 companies.....	121,000,000 886,581,848	121,000,000 342,567,019
Total to pay for purchases.....	457,681,848	468,567,019

Taking these sums, which as will be seen are partly estimates, known to be not quite accurate, but probably too large, from \$550,000,000 each of preferred and common, the total amount authorized, there is left for the pay of the syndicate and as treasury stock to be used in future:

Preferred.....	\$92,418,152
Common.....	86,432,981

PRICES.

RAW MATERIAL.

Comparatively little testimony was given regarding the effects of the combinations on the prices of raw material, but in a few special cases some effects appeared. At the time the National Cordage Company was founded there were 5 houses in Manila dealing in manila hemp. The Cordage company made an agreement with them by which they were bound not to sell hemp to any other concern in America, nor to any house in England unless that house agreed not to sell to any one in the United States, except at an advance of half a cent a pound above the price the National

Cordage Company was paying. In this way the company succeeded in obtaining a slight advantage for a brief time. The English houses later, thinking that the contract would be held illegal in the English courts, broke it and sold to the American manufacturers.<sup>1</sup> The other prominent cordage manufacturers, like Mr. Fidler and Mr. Holmes, testified that they at no time had serious trouble in getting supplies, and they had supposed that they bought as cheaply as did the National Cordage Company.<sup>2</sup> Mr. Taylor, formerly of the National Cordage Company, said, however, that at this time there was an understanding between the National Cordage Company and the Fidler and Plymouth companies.<sup>3</sup>

It has been thought by some of the competitors of the tobacco combinations that inasmuch as the number of purchasers of leaf tobacco has lessened since the formation of those companies the competition for leaf is less keen, and in consequence the price has been lowered. Mr. Campbell, president of the United States Tobacco Company, testified that since the American Tobacco Company controls the purchase of tobacco for Japan, this has had the effect of cutting down the prices of the grades that are exported to that country.<sup>4</sup> He is also of the opinion that the American Tobacco Company has greatly reduced prices, especially of cutters, in Virginia and the Carolinas. In his judgment, the farmer does not now realize more than half as much as he did when the several companies composing the American Tobacco Company were competing on the warehouse floors. Numerous leaf dealers have been driven out of business because the companies for which they bought have been absorbed. Within two years the acreage of North and South Carolina has been reduced 30 to 40 per cent because prices were so low.<sup>5</sup>

On the other hand Mr. Duke, president of the American Tobacco Company and of the Continental Tobacco Company, believes that his companies are at a disadvantage in buying raw materials because of the large purchases which they must make. The smaller manufacturer can pick up bargains; the large one must buy openly in large quantities. Moreover, he urges that it is not to the interest of the manufacturer to put the price of tobacco very low. If that is done the farmer will grow poorer tobacco. Inasmuch as the price of the finished product is dependent upon that of the raw material, and a slight increase in price does not materially affect sales, there is no special gain to come from beating down the farmer. Even with no competition at all it would be wise to pay a good price for tobacco.<sup>6</sup> He thinks, too, that the output of tobacco has increased very largely during the last ten years in the Carolinas and Tennessee. The increase has come to a considerable extent through the increased demand of the combinations for tobacco which they wished to use in manufacturing cigarettes for export.

A somewhat similar argument is made by Mr. Chapman<sup>7</sup> with reference to the prices paid for ore by the American Smelting and Refining Company. He urges that it would not be to the advantage of the company to reduce the price of ore. The more they pay, the more mines will be operated and the more raw material they will be able to get.

It is noticeable that since the organization of the United States Steel Corporation it has fixed the price of Lake Superior iron ore at \$1.25 less per ton for the season of 1901 than was paid during the season of 1900.<sup>8</sup> Of course, owning, as it does, something like 80 per cent of the ore, it is practically within its power to fix its price for the general market. Mr. Schwab in his testimony did not give the reasons for fixing the lower price beyond an intimation that this fact showed that there was no attempt at securing excessively high prices. Possibly one further element is to be found in the fact that the United States Steel Corporation is also a purchaser of crude iron, and that there may be in this a certain element of reciprocity.

<sup>1</sup> Waterbury, pp. 131, 132.

<sup>2</sup> Fidler, p. 147; Holmes, p. 139.

<sup>3</sup> Taylor, p. 163.

<sup>4</sup> P. 312.

<sup>5</sup> Pp. 308, 313.

<sup>6</sup> Pp. 326, 327.

<sup>7</sup> P. 98.

<sup>8</sup> Hopkins, pp. 511, 513, 516; King, pp. 499, 500; Schwab, pp. 471, 472.

In his testimony regarding the rubber combinations Mr. Flint states that the price of crude rubber has of late years decidedly increased, owing to the action of the law of supply and demand. While the combination of rubber interests has prevented any great speculative advance, it has not been able to keep down the price of the raw material in general.<sup>1</sup>

It is the very general belief in Europe, and the belief is one that seems to be spreading here also, that the larger industrial combinations will find it to their interest, and also within their power, to prevent to a considerable extent either speculative advances or reductions in the prices of raw materials. In many industries, as, for example, in cordage and sugar, the speculative element in the price of raw material is potent in determining profits and prices of the finished product.<sup>2</sup> Any steadying effect in that direction would materially advance the general interests of manufacturers as well as of consumers. The experience of the cordage combinations seems to be distinctly on the other side, but that of the rubber manufacturers, of the sugar refiners, and possibly of some others in this country, as well as of the coal and iron manufacturers of Europe, seems to show that the combinations have at any rate the opportunity to perform this service for the public.

#### CONTROL OF PRODUCT.

Several of the combinations which the Industrial Commission has been lately considering are able to control a very large portion of the entire output of the country, so that they have, perhaps, the power to effect prices. The National Cordage Company soon after its formation controlled probably from 60 to 70 per cent of the entire business, though at the present time the Standard Rope and Twine Company probably does not control more than 15 to 20 per cent of the output; the Fidler Company perhaps 18 per cent, and the Plymouth Cordage Company from 15 to 20 per cent, these largest three companies being not materially different in the amounts produced.<sup>3</sup>

The American Smelting and Refining Company before the union with the Guggenheimers controlled about 85 per cent of the entire smelting business of the country. Since that combination it has substantially all of the trade.<sup>4</sup>

The United States Rubber Company and the Rubber Goods Manufacturing Company handle from 55 to 60 per cent of the rubber trade of the United States.<sup>5</sup> In the case of the Rubber Goods Manufacturing Company, some articles are protected by patents, so that the company has entire monopoly. In other cases its output does not cover more than 25 per cent. The United States Rubber Company probably has about 70 per cent of the output in boots and shoes.

The Pittsburg Coal Company controls the bulk of the lake trade in coal, although there is a little competition from southern Ohio and western Virginia. It is so situated that it can practically dictate the prices in its entire market.<sup>6</sup>

The United States Steel Corporation is made up of companies engaged in various lines of business, from mining to finishing the higher grades of steel. It is probable that at the present time it controls between 65 and 75 per cent of the steel industry of the United States. In very prosperous times the percentage would probably be smaller; in very dull times it would be very much larger.<sup>7</sup>

The International Paper Company produces, probably, at the present time about 1,300 tons per day out of an entire output for the United States of over 2,000 tons per day of news print paper.<sup>8</sup>

<sup>1</sup> P. 81.

<sup>2</sup> Taylor, pp. 158-155; Holmes, pp. 139, 146; Grimwood, p. 120.

<sup>3</sup> Fidler, p. 146; Taylor, pp. 158, 168; Holmes, p. 144.

<sup>4</sup> Chapman, p. 97.

<sup>5</sup> Flint, p. 82.

<sup>6</sup> Chapman, pp. 100 to 103.

<sup>7</sup> Schwab, p. 455, 466.

<sup>8</sup> Norris, p. 411.

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At the time of its formation, in the judgment of Mr. Norris, business manager of the New York Times, it produced about 80 per cent of the American output, but the new mills of the Great Northern Paper Company have probably reduced the percentage somewhat. Mr. Chisholm, president of the International Paper Company, thinks that the company produces now about 70 per cent of all the paper of all kinds manufactured in the United States, although it is impossible to tell accurately just the percentage.<sup>1</sup>

The American Thread Company together with the Coats Company probably control two-thirds of the thread output of the United States. Although the Coats Company is counted as a competitor, it is still a prominent stockholder in the American Thread Company, so that there is not the same vigorous competition that there used to be before there was this community of interest.<sup>2</sup>

The General Aristo Company has nearly a monopoly of certain grades of photographic paper made by foreign paper mills. This comes from the fact that this company had arranged with the German manufacturers to buy only their products for use in this country, provided that they might have the exclusive use of those products in this country. In this way they have succeeded in securing a monopoly so far as the direct purchase from the foreign manufacturers is concerned. It has been shown, however, by other witnesses that they are still able to buy this same grade of paper in Europe from other dealers, although not from the manufacturers.<sup>3</sup>

The National Salt Company apparently produces from 80 to 90 per cent of the output of fine salt east of the Rocky Mountains. In many localities, owing to the freight rates, the salt company has practically a monopoly, whereas in other cases for similar reasons it is compelled to cut its prices very low in order to have any control of the market at all. The freight rates from England by water to coast cities are considerably less than the railroad rates from the plants of the salt company; so that in order to meet this English competition the price obtained for salt at the wells has to be made less than that obtained by the English producer at the wells. In the case of the salt combination the element of freight is so important that its degree of control of the market depends to a very great extent upon the special locality that one has under consideration.<sup>4</sup>

At the time when the wall-paper combination was most effective it controlled at least 75 per cent of the business, and even when it was decided to dissolve it still controlled probably fully 60 per cent.<sup>5</sup>

Mr. Pitcairn, president of the Pittsburg Plate Glass Company, says that that combination produces about 72½ per cent of the plate-glass product of this country.<sup>6</sup>

The American Chicle Company, through its brands and trade-marks, probably controls 65 per cent of the chewing gum consumed in the country. The American Caramel Company owns all the popular brands of caramels, although it does not control a few of the highest-priced products.<sup>7</sup>

The National Starch Company has also a large percentage of control, amounting to probably more than 90 per cent of the box starch used and a very large percentage of starch of other kinds.<sup>8</sup>

In the case of certain local companies, such as the Pittsburg Brewing Company and the Cleveland and Sandusky Brewing Company, the control of the local market is, of course, very nearly complete so far as the ordinary consumption is concerned, although in the case of the larger hotels and restaurants naturally there is considerable outside beer brought into the market.

Certain local companies, such as the Brooklyn Union Gas Company, being natural monopolies, have absolute control of the markets, but their prices are determined to a considerable extent by legislation or by legislative power, even though no direct action is taken.

<sup>1</sup> Chisholm, pp. 481 to 488.

<sup>2</sup> Hopkins, pp. 348, 350, 356.

<sup>3</sup> Dailey, pp. 188, 187; Hubbell, p. 191.

<sup>4</sup> White, p. 247-249.

<sup>5</sup> Burn, pp. 800, 803.

<sup>6</sup> P. 238.

<sup>7</sup> Flint, p. 65.

<sup>8</sup> Flint, p. 66; Fiel, p. 678.

## PRICES OF PRODUCT.

It is perhaps natural for the combinations to attempt to take credit for any decrease in the price of their finished product, stating that this decrease has come about from the various economies which have been made by the combination, and from their willingness to be reasonable in their dealings with the public; or to cite instances of decrease in price as showing that although they may have a large amount of capital they are still subject to competition and are unable to control prices.

On the other hand, when prices in products manufactured by the combinations have increased, it is not unusual for them to call attention to the conditions of the market which have brought about this increase, as, for example, a very largely increased demand for the product, or increase in the price of the raw material, or increased wages, or some other similar factor.

Mr. White, the president of the National Salt Company, says that before the organization of that company prices had fallen so low that they were unremunerative. He submits a table covering several years, which shows a gradual decrease in price until the formation of the company, and since that time quite a decided increase. The average for the year 1896 was 40½ cents in Michigan; in 1899, 38½ cents; in 1900, 47 cents, and in 1901, 55 cents. He thinks, however, that the average price in the different markets is less than the average price of 5 years ago.

It has been one purpose of the company to equalize prices in view of prevailing freight rates, but he thinks that the company is entirely justified in making prices high enough to insure a reasonable rate of profits to the manufacturers, and that they were not high enough for that before. In cases where the retail price of salt has increased very materially, as, for example, from 90 cents a barrel to \$1.40, he urges that the price of cooperage stock has advanced about 60 per cent, wages have also advanced, and the prices of coal and transportation are both increased. The small consumer pays no more at retail than formerly. The grocer loses. He used to buy a 5-cent bag of salt for 2 cents and sell it for 5. Under the higher prices he pays 2½ cents and must still sell for 5 cents.<sup>1</sup> In Mr. White's opinion, in a good many cases, the high prices paid by consumers are due rather to the demands of the grocers and the high profits made by them than to any increase in price on the part of the manufacturer.

He is of the opinion that, generally speaking, his company fixes the price for the market, and that outside manufacturers generally follow these prices, cutting just enough to get business.<sup>2</sup>

Mr. Taylor, the secretary-treasurer of the Standard Rope and Twine Company, says that the National Cordage Company, feeling that it had largely control of the market, pushed the prices higher, both of the raw material and of the finished product, than the conditions of business would warrant. It put the price of hemp as high as 15 or 16 cents a pound, being anxious to secure complete control. Naturally the price of the finished product went up with the price of the raw material. On the other hand, it was to be kept in mind that the National Cordage Company ultimately failed because it was unable to control capital enough to hold its large stock in hand. The business being done largely by seasons, it is usually necessary to carry a very large stock. In 1893, owing to the unsettled condition of the market, the company was unable to borrow so largely on its stock of goods as it had been accustomed to do. In consequence, it was compelled to attempt to issue new preferred stock in order to raise capital to carry on its business. This created distrust, and eventually led to the underselling of its stock, and it was finally thrown into the hands of a receiver. The failure of the company led to throwing its product on the market, and the prices of cordage fell to a point lower than had been known for many years. The price of hemp, for example, went to below 4 cents per pound, although it had been as high as 15 or 16 cents within a comparatively short time before. The finished product,

<sup>1</sup> Pp. 266, 267.

<sup>2</sup> P. 260.

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of course, fell correspondingly. The stock of binders' twine thus thrown on the market—"bankers' twine," as it was called—made the business very unsatisfactory for a considerable time.<sup>1</sup> While the company was successful it had so large control of the market that the Plymouth and Fittler companies were in the habit of letting it fix the price, they following closely.

The price of news print paper, according to the testimony of Mr. Norris,<sup>2</sup> before the organization of the International Paper Company, had been very low, averaging 1½ cents per pound. This had so cheapened the cost of producing newspapers that the daily and Sunday editions had been very much enlarged. The retail price of newspapers had fallen to 1 cent, and there had been an enormous increase of circulation. The organization of the company, with the effort to pay dividends on its large capitalization and with the high salaries paid to its officers, had, in the opinion of Mr. Norris, resulted in an increase of \$3 per ton in the cost of production, although the labor cost had been reduced. He thought that the cost of selling had been largely increased through the sales department, since the sales were made no longer by managers specifically interested in the company, but by a salaried sales agent.<sup>3</sup> Mr. Chisholm, on the other hand, the president of the company, although acknowledging that the prices of news print paper have been increased, explained the matter in a different way. He declared, first, that the prices which prevailed before were so low that there was no adequate return on the capital. Moreover, the very great increase in demand after the beginning of the Spanish war had justified an increase in price. The improved quality of the paper and the increase in wages accounted also in part for the increased price.<sup>4</sup> The result of the increased price of paper had been, according to Mr. Norris, a reduction in the size of some newspapers, an increase at times in the advertising rate, and an increase in the price of the newspapers themselves, with a consequent falling off in circulation to the detriment of the public.<sup>5</sup>

Mr. Hillyer, lawyer of Atlanta, states that the combination of cast iron pipe manufacturers caused the city of Atlanta to pay \$6 or \$7 per ton more for pipe than should have been paid.<sup>6</sup> He is of the opinion that industrial combinations in general are formed for the purpose of putting up prices. Although their savings might permit them, through concentration of management, to lower prices, it is comparatively seldom that that has been the result. Wherever there has been lowering in price of products by combinations, in his judgment this lowering is due rather to improvements in methods of production which have reduced the cost, and which would have been made regardless of the combination.

Mr. Mayer, of John Lucas & Co., glass dealers, declares that the Pittsburg Plate Glass Company has advanced the price of plate glass within 3 years at least 150 per cent. The size 12 by 60 inches 2 or 3 years ago sold at 75 cents a light; at the time of his testimony, at \$1.88. The size 24 by 60 inches sold at \$2.40; after the combination at \$6. The size 24 by 84 inches formerly at \$4.55; later at \$11.38. In his judgment this increase in price has been due almost solely to the combination, aided by the protective tariff, which has prevented free importation of plate glass.

Some glass, however, is still imported in spite of this increase in price, and he offers no explanation of that fact, although it would seem to imply that European prices must also have risen greatly.<sup>7</sup> Mr. Pitcairn, president of the Pittsburg Plate Glass Company, admits that in 1897 prices were much lower than in 1901, but declares that was an exceptional period, when business was in its most demoralized condition. While not denying the specific statements of Mr. Mayer, he declares that

<sup>1</sup> Waterbury, p. 134; Fittler, p. 147; Holmes, p. 144; Taylor, pp. 155-156.

<sup>2</sup> P. 408.

<sup>3</sup> Pp. 407 to 424.

<sup>4</sup> Pp. 433, 435.

<sup>5</sup> P. 421.

<sup>6</sup> Pp. 11-12.

<sup>7</sup> P. 219.



the sizes given are exceptional. He adds: "The actual cash returns received by this company show that the average advance of glass from that period has been only from 50 to 60 per cent, and not 150 per cent, as alleged. This is computing upon the entire sales of all sizes of plate glass. Some of the preferential buyers are now buying certain sizes of plate glass at prices lower than before the industrial revival of 1898." He adds that "in addition to this fact, there has been a great increase in the price of materials." He thinks that the average increase in raw materials is about 85 per cent. Wages have also advanced.<sup>1</sup> While he grants that there has been a great increase in price of some sizes, he declares that about two-thirds of the product of his company is sold in sizes under 10 square feet without profit, and that part of it is sold at a loss. It has been possible to make this low competitive price in certain special sizes, because by making those sizes they would not increase their general expenses of the cost of distribution or of material; and if they could get the bare cost of materials and labor entering into their product, they could afford to take that price in order to keep the works running and the men employed. Considered by itself, on the same basis as their whole business, this would be done at a loss of 10 or 15 cents per foot.<sup>2</sup> The general result of the testimony on plate glass would seem to be this, that the combination has been able to control to a considerable extent the prices, but that there is much excuse for an increase in the prices of some sizes, owing to the conditions of the business.

The real cause of the complaint was not that companies had combined, but that the consolidation had taken the jobbing trade under its own control, hence the retailers of small sizes no longer have an opportunity to sell larger sizes and make a profit therefrom.

Before the organization of the National Wall Paper Company, according to the testimony of Mr. Burn, its president, there had been various agreements among manufacturers under which prices were fixed and maintained at a high point. There was, however, great difficulty in enforcing penalties, and the agreements were frequently broken. After the National Wall Paper Company was organized there was an increase in price—enough to make the business remunerative, although it was not exorbitant. The prices were definite and uniform. It had been expected, however, that most of the profits of the combination would be made rather by economies than by increase in price. It attempted to do without the services of some of the middlemen. The result of this effort, however, was that the jobbers united to encourage its competitors, encouraged new factories to start, and also profited by the prejudice of the public against trusts.<sup>3</sup> The larger company also could not undertake individual competition, and had to give to all buyers the benefit of the lowest figures.<sup>4</sup> These facts in Mr. Burn's judgment seemed to show that in the wall-paper business, at any rate, it was not possible for a combination to maintain high prices for any length of time. The prejudice of the public, together with the ease with which competition could be established, soon brought prices back to a competitive rate.

The testimony of substantially all of the combination men is to the same effect—that unless a combination has either some natural monopoly of the raw material, or is protected by a patent, or possibly has succeeded in developing some very popular style or trade-marks or brands, any attempt to put prices at above competitive rates will result eventually in failure, although it may be temporarily successful.<sup>5</sup> On the other hand, by securing control of trade-marks, or by creating a demand for certain brands through skillful advertising, very material advances in prices may often be

<sup>1</sup> Pp. 231, 232, 235.

<sup>2</sup> Pp. 235-240.

<sup>3</sup> Pp. 283-292.

<sup>4</sup> P. 295.

<sup>5</sup> Chapman, p. 170; Flint, p. 89; Schwab, pp. 455, 456; King, pp. 504-506; Burn, p. 293, 301, 304; Butler, p. 490.

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made. For example, the Royal Baking Powder Company has been able to keep up the price of its products owing largely to the fact that the people demand its brands.<sup>1</sup>

In similar ways, by extensive advertising, the alum baking powder companies have succeeded in extending very largely the sales of their goods, although at much lower prices.<sup>2</sup> Others effect sales at good prices in other ways.

The sales of the various baking powders have also been extended or restricted by other means. Apparently the Royal Baking Powder Company has attempted to extend its sales and lessen the sales of its rivals by advertisements in which it charges that alum baking powders are injurious to health, whereas the manufacturers of alum powders defend their powders as being wholesome, and in their advertisements charge that cream of tartar baking powders are unhealthful. They also encourage sales through offering prizes with their products.<sup>3</sup> Their sales are also at times restricted by adverse legislation, which is predicated on the ground of protection to the health of the community, but which they think is instigated by the Royal Baking Powder Company. Whatever may be the merits of the special controversy in question, the prices on both sides are to a very great extent fixed by the partial monopoly that comes through the exclusive use of trade-marks and through the skillful advertising employed to uphold their value.

Somewhat similar results, although brought about with apparently no feeling of hostility on the part of rivals, have been secured by the American Caramel Company, the American Chiclé Company, and others of a similar nature.<sup>4</sup> As a general principle, however, Mr. Flint makes the statement that the only way in which a concern can destroy competition is by creating and maintaining facilities for a lower cost of production, and by making a lower price to the consumer than others can make. Industrial combinations, he says, "unless they are favored by Government franchises or by Government patents, are subject to the law that the lowest price makes the market."<sup>5</sup> In his judgment, the ultimate result of industrial combinations will be a reduction in prices, although that result has not as yet in all cases been brought about.<sup>6</sup>

Mr. Grimwood, in speaking of cordage, is of the opinion that, considering the experience of the cordage manufacturers, the tendency would now be for the managers of combinations to make the best goods at the lowest prices, and to put them on the market at only a fair profit, so as to keep prices down.<sup>7</sup>

On the other hand, Mr. Klinck, a meat packer of Buffalo, and a large dealer in meats and salt, is of the opinion that the salt combination has increased prices far beyond a reasonable extent. It is his opinion also that various other products which he needs to buy in his business as a packer have had their prices materially raised by combinations. He submits detailed statistics to prove his contention.<sup>8</sup>

In the case of the iron and steel industry the general impression seems to be that so far, at any rate, it has not been possible for the combinations to maintain prices materially above what the market conditions would justify. It is doubtless true that in many cases, even earlier, there have been temporary combinations, pools, in certain lines of industry which have kept prices up, but these have ordinarily been short-lived. If prices are advancing, the pools stand; if prices fall, they go to pieces.<sup>9</sup>

The very great increase or decrease in the prices of iron and steel seem to be due rather to other causes. Mr. Butler says, for example, that the extreme fluctuations to which the iron and steel market have been subject seem to be due largely to the fact that the middlemen, whenever there comes an increased demand, fear that there is going to be a scarcity, and so call for more than they really need, in this way

<sup>1</sup> Morris, p. 74.

<sup>2</sup> Morrison, 382; Morris, 73; Morrison, 374.

<sup>3</sup> Morris, 73-77; Morrison, 373, 379, 383.

<sup>4</sup> Flint, pp. 54-65.

<sup>5</sup> P. 89.

<sup>6</sup> P. 90.

<sup>7</sup> P. 123.

<sup>8</sup> P. 275.

<sup>9</sup> King, pp. 501-502; Butler, p. 488.

making a demand that is abnormal. In order to meet this apparent demand and check it, the output is increased and prices are raised beyond what would otherwise be justified. When at length it is found that there has been an oversupply made ready for the market, prices begin to fall, and these same middlemen, fearing that they will be caught with too large stocks on hand, cut prices until they fall below what the market conditions would really justify. In his opinion, apparently, as well as in that of many of the men associated with the combinations, the effect of a great combination would be rather to prevent these abnormal fluctuations than either to increase or to decrease materially the general average prices.<sup>1</sup> The power of the combinations, in the minds of most of these men, depends to a considerable extent upon the condition of the market. When there is a depression in prices, a combination controlling, as does the United States Steel Corporation, from 65 to 75 per cent of the output would not be able to fix prices to any considerable extent. When, on the other hand, the demand was so great that all establishments were running full, it could aid in steadying prices or in fixing a rate beyond which none could go.<sup>2</sup> None of the steel manufacturers seems to think that there is any great danger of monopolistic control of prices from the existence of the United States Steel Corporation.

## SPECIAL PRICES IN LOCAL MARKETS.

The charge has been very frequently made that the great combinations are able at times to follow their smaller competitors into local markets, to make prices very low there in order to ruin their rivals, then to recoup themselves by higher prices in the general market. Such a course of procedure is generally looked upon as an unfair method of competition.

So far as evidence has been taken before the commission it does not seem that this practice has been followed by the steel manufacturers.

Regarding the Standard Oil Company the charge was substantiated more or less completely, and was even acknowledged by some of the Standard Oil officials themselves to have been their practice in individual cases.<sup>3</sup>

Mr. White, president of the National Salt Company, says that naturally his company sells low where there is competition, and recoups itself off the general market. He considers this procedure perfectly proper, and, on the whole, advantageous to the public. The company does not have a complete monopoly anywhere. There is not a town in the country which its competitors can not reach if they wish to. It is not possible to put up the prices in Kansas to an extraordinary point to make up for loss in killing competition in New York. On the whole this procedure, in his judgment, will tend toward an evening of prices, and toward lower general rates from which the public will not suffer.<sup>4</sup> It is probable that this defense and the acknowledgment of similar practices would be made by managers of other combinations, but such testimony has been seldom given.

The two other prominent cases in which such charges have been made before the commission, although with different elements also entering, are those of the General Aristo Company and of the Continental Tobacco Company; such charges were made by rivals of the General Aristo Company, whose material is sold by the Eastman Kodak Company as a general sales agent. Mr. Dailey and Mr. Carbutt, rival manufacturers, said that the General Aristo Company regularly sold its papers at a discount of 15 per cent from list price; then at intervals it paid an additional rebate of 12 per cent to those who had not handled paper of any other make. They declared that later the company went still further and determined to refuse entirely

<sup>1</sup> Butler, p. 603; King, pp. 501-506; Schwab, p. 458-454; Hopkins, 513.

<sup>2</sup> Schwab, p. 465.

<sup>3</sup> Vol. 1, pp. 569, 571, 506, 792, 799, 366-370, 704-709, 711, 764, et passim.

<sup>4</sup> Pp. 262-263.

its goods, including the goods of the Eastman Kodak Company, to all dealers who handled independent paper. In this way, inasmuch as some of the goods under the control of the Aristo Company or of the Eastman Kodak Company were in general demand, dealers found themselves compelled to refuse independent papers and to limit themselves to those manufactured by the General Aristo Company. They considered this method of dealing unfair and injurious to public interests, if not even illegal.<sup>1</sup>

In behalf of the General Aristo Company, Mr. Abbott, the vice-president, and Mr. Hubbell, counsel, stated that the Eastman Kodak Company, as general agent for the General Aristo Company, offers the goods of the two companies to all dealers at a trade discount of 15 per cent, and gives an additional discount of 12 per cent to dealers who handle their goods exclusively. Mr. Abbott thinks it doubtful if the kodak company would sell anything to a dealer unless he confines himself to its line. The dealer has the option of handling either its goods or other lines of goods. If any compulsion is put upon the dealer, that comes from the consumer. Generally speaking, he says, exclusive agencies are not given, though at times they are. Inasmuch as the company has been at great expense to build up its trade by sending special agents about to educate photographers in the particular use of the company's goods, he thinks it is justified in asking this exclusive use. He sees no reason why they should educate photographers for the benefit of their competitors.<sup>2</sup> Mr. Hubbell, on the other hand, does not go quite so far. He says that the Eastman Kodak Company and the General Aristo Company do offer special discounts to those who handle only their goods. Such contracts, he thinks, are not contracts in restraint of trade as defined in the statutes, but are entirely justifiable.<sup>3</sup>

It seems to be generally conceded on both sides that the prices asked by these companies are higher than those asked by independent companies, but the representatives of the combinations claim naturally that this is due to the excellence of their goods. The charge that their prices have been materially increased within a year or two<sup>4</sup> is denied by Mr. Abbott, who claims that there has been no raising of prices of the papers of the General Aristo Company in any instance, whereas in some cases there has been a decided reduction.<sup>5</sup>

It was charged by some of the competitors of the Continental Tobacco Company that in the New England States that company gave special discounts to dealers who handled only its brands, making the price without this special discount so high that dealers could not afford to do the business without it. Inasmuch as the brands controlled by that company were those popular in that territory, constituting, in fact, probably 90 per cent of the entire purchases, it was felt that this method of conducting business resulted substantially in a monopoly and in an unfair treatment of their rivals.<sup>6</sup>

On the other hand, Mr. Duke, president of the American Tobacco Company and of the Continental Tobacco Company, says that neither of these companies offers special terms to dealers on condition that they handle its goods exclusively, nor has this been done lately by agents in either of the companies. At one time the American Tobacco Company did give dealers a larger commission for handling its goods exclusively, but that policy was abandoned some years ago. The companies do not rely on the jobbers to make markets for their goods. They rely on the demand of the consumers. The Continental Tobacco Company, he says, has endeavored to persuade dealers in New England to sell tobacco on a basis of 2 cents per pound profit, but it adopted this plan at the solicitation of the jobbers.<sup>7</sup>

Mr. Lee, treasurer of the American Tobacco Company, confirms Mr. Duke's state-

<sup>1</sup> Pp. 188-187; 174-182.

<sup>2</sup> P. 201.

<sup>3</sup> Pp. 192-195.

<sup>4</sup> Dailey, pp. 185-186.

<sup>5</sup> Pp. 200-208.

<sup>6</sup> Campbell, pp. 306-314.

<sup>7</sup> Pp. 321-330.

ment so far as his knowledge goes, but he has been with the company so short a time that he does not pretend to have a thorough knowledge of its methods of doing business. He states, however, that he is himself the president of a large jobbing house and that this house handles perhaps as many independent goods as it does those of the American and Continental tobacco companies, and that he has never been asked to make any exclusive contracts. He says that at one time the American Tobacco Company did give a rebate to jobbers, provided that certain fixed prices were maintained. This plan (the factor system) most jobbers favor, and he himself thinks that that is practically the only way in which a profit can be maintained on staple goods, such as sugar, tobacco, and coffee.<sup>1</sup>

The rival companies, through Mr. Campbell and Mr. Landstreet, produced several affidavits to show that the practice of special discounts for exclusive sales is still maintained in New England. Still further, they claim that there is local price cutting, to their detriment. For example, Mr. Landstreet states that the price of one brand of cigarettes made by the American Tobacco Company has been reduced to \$1.50 a thousand in North Carolina and Virginia, while the same brand in New York is sold at much higher prices—from \$1.65 to \$2.50. This price of \$1.50 per thousand, with a 2 per cent discount off for cash, is 3 cents less than the Government tax. He thinks that the cut has been made to drive out the Wells-Whitehead Company, which manufactures the Carolina Bright cigarette. Mr. Duke says that in the tobacco trade it is often desirable to reduce prices very low for the time being, in order to introduce a brand. This is perhaps cheaper at times than to spend money for advertisements in newspapers and for bill posters. It is true that the American Beauty cigarettes are selling in North Carolina for \$1.50 per thousand, with 2 per cent off for cash. This is done in order to establish the brand. The same principle was followed in the introduction of the Battle Axe plug, which at one time sold for 13 cents a pound under a 6-cent tax.<sup>2</sup> These prices, however, are not a matter of competition with anybody else. They are to introduce a brand; then the public demands certain brands, and the manufacturer whose brand is liked by the consumer need not fear competition, whereas one whose brand is not liked can not sell his goods at any price.

#### EXPORT PRICES.

It has been frequently stated that the prices of goods for export are considerably lower than those for the home markets. This is charged against the combinations as a business practice that is not justifiable, and in some instances it is claimed that the protective tariff aids the trust in this practice. On the other hand, not merely the managers of the combinations, but other business men, claim that the practice is justifiable on sound business reasons in the interests of the laborers and consumers as well as of the manufacturers, and that it is one that is practically universal in all countries.<sup>3</sup>

Mr. Schwab, president of the United States Steel Corporation, says that during the last year that corporation exported certain grades of steel at about \$23 per ton, when the price for the same goods to home consumers was from \$26 to \$28 per ton. The reason for the lower prices was that it was desirable to keep the plants running at full capacity. The home demand was not enough to do this. It was not possible to dispose of the surplus at the home price. In consequence a price was made that would sell the goods. He says that this custom has been general among steel manufacturers in circumstances of that kind. Moreover, if the plants were not kept running to their full capacity the cost of production would be so much increased that the price to the home consumer would on the whole be higher than if these export goods were sold at the lower rate.<sup>4</sup> Aside from that fact the laborers would

<sup>1</sup> Pp. 341-342.

<sup>2</sup> Pp. 319-328.

<sup>3</sup> Gunton, p. 638.

<sup>4</sup> Schwab, pp. 464, 454-455.

not be kept employed, and it might even be necessary to cut the wages of those who were working. He considers the working people the chief beneficiaries of all measures taken to increase export business. The sellers of supplies will generally make specially favorable prices for goods to be used in the export trade; the railroads will carry export goods cheaper; but the working people get the same on export products as on those for the domestic market.

Mr. Butler, an iron merchant in Chicago, says that this principle of selling goods for export lower than to home consumers applies not merely to foreign sales, but is practically a universal custom even within the home market. A manufacturer in Chicago, for example, will make, relatively speaking, lower prices to the purchaser in Omaha than to one in Peoria, to one in Denver than to one in Omaha, and to one in San Francisco than to one in Denver. The reason for this is not merely that given by Mr. Schwab, but, still further, the fact that every dealer is anxious to extend his sales, and will make whatever sacrifices are necessary to get the market so long as he is not working at an absolute loss. The farther he goes the greater his expenses are and the greater pressure there is on him; consequently the lower his prices.<sup>1</sup>

Mr. Hopkins, president of the Sloss-Sheffield Iron and Steel Company, says that ordinarily his company has been getting about the same price on its export shipments as on domestic sales. He believes, however, that it is justifiable to sell abroad at lower prices rather than to shut down any American mills.<sup>2</sup>

Mr. King, vice-chairman of the Jones and Laughlins Steel Company, agrees with the statements of other manufacturers regarding the general practice of exporting at lower rates than are secured for domestic sales. During the last year or two, although they have not exported much, they have sold at a dollar or two a ton below the domestic price, most of the difference being made up by the greater cost of delivering to the foreign market.<sup>3</sup>

On the other hand, owing to the advantageous situation as regards raw material and facilities for manufacturing, the International Paper Company has been able to export its goods at a higher price than was secured for the home product. The International Paper Company is establishing agencies for the sale of its product in England, Australia, Japan, and South America. Last year it supplied one-third of the news print paper consumed in Australia.<sup>4</sup> Mr. Chisholm says that last year the export profits on the prices received were the highest in the business.<sup>5</sup>

The American Tobacco Company has established factories in Australia, shipping all the leaf tobacco from this country. It has also factories in Canada. In Japan it consolidated with a Japanese concern, and has a controlling share of the stock. It sells its goods in China and India, although no factories are established there.<sup>6</sup> Mr. Duke states that for the same quality of goods the tobacco companies get a higher price abroad than at home, considering the tax that is paid here. On a certain limited supply of cigarettes which are made cheap the export price has been made lower than the domestic, in order to get into the foreign market.<sup>7</sup>

The Otis Elevator Company sells ordinarily abroad cheaper than in the United States, but this is because the foreign demand is for a lower grade of goods.<sup>8</sup> Usage varies in other companies.<sup>9</sup>

#### EXPORT PRICES AND THE TARIFF.

Some of the witnesses, notably Mr. Byron W. Holt, secretary of the tariff committee of the New York Reform Club, were of the opinion that the combinations secured much higher prices on their domestic products than would have been possible had it not been for the exclusion of foreign competition by the tariff. In many lines of industry in which there are large combinations, whose products are protected

<sup>1</sup> P. 498.

<sup>2</sup> Pp. 512-513.

<sup>3</sup> P. 502.

<sup>4</sup> Pp. 438-439.

<sup>5</sup> P. 440.

<sup>6</sup> Pp. 322-329.

<sup>7</sup> P. 325.

<sup>8</sup> P. 692.

by the tariff, he made an estimate of the cost to the home consumer of this protection. As a basis of this estimate he took the difference between the domestic price and the export price of the same goods whenever this export price had been maintained for a considerable length of time. His assumption was that the export price was high enough to afford some profit, at least, to the combination, and he thought that the difference between this and the domestic price might fairly be considered an added profit given to the combination by the tariff which excluded foreign competitors.

As such tariff trusts that had secured very large and unjustified profits at the expense of the American consumer through the effect of the tariff he named the American Tin Plate Company, the American Window Glass Company, the Borax Trust,<sup>2</sup> the steel companies, and others. He also called attention to the fact that very many of these industries are closely allied in nature as well as in management, so that their plants can be comparatively easily turned from the production of one kind of goods to some other; and likewise to the fact that the same group of men now practically control a very large percentage of the supply of petroleum oil, of iron ore, of iron and steel, of coal, of copper, of salt, and of "hundreds of products and by-products made from these articles, as well as many local municipal monopolies in gas, electricity, street railways, etc." These same men also control, through "community of interest," several of our principal trunk lines of railroads, of our lake freight steamers, and some of our ocean transport lines.<sup>1</sup>

This state of affairs Mr. Holt believed to be detrimental to the American consumer in two ways: In the first place, as has been intimated, he believed that the consumer pays much higher than he need otherwise do for the products manufactured by the combinations. In the second place, these high domestic prices of products which serve as raw materials in many other industries prevent the starting of new industries here which would be of very great advantage both to the American consumer and the American capitalist. Were it not, for example, for our very high prices of domestic tin, he thinks that our export business in canned fruits would be very greatly extended. He calls attention to the fact that the very low price of sugar in England led to the remarkable development of their industry in preserved fruits, jellies, marmalades, etc. Mr. Holt said that it was impossible for him to enumerate in detail many specific industries that might have been created, but the general principle was stated clearly.

In this contention he was also supported by Mr. Edward Atkinson. Mr. Atkinson did not believe that the tariff was the "mother of trusts," but thought that the tariff had checked in many cases the development of very many of the smaller industries in encouraging the development of some of the larger ones. He believed that the benefit of protection had been given very largely to a comparatively small minority of the American people, and he did not think that the tariff was needed for the protection of the larger combinations. In the specific cases, where the industry would not exist even under the combination without the protective tariff, he thought it would be better for that industry not to be developed, but for that capital and industrial energy to be turned in other directions.

He believed that not more than 10 per cent of the working forces of the country could be gathered as operatives under the collective systems of the great factory and the great workshop. He thought that not 5 per cent of the people of this country could be protected by a duty on foreign imports; and that it would have been wiser, instead of developing the cruder forms of iron manufacture by our tariff, an industry which has since been organized into combinations, to admit these crude products free of duty and to develop the higher arts of manufacturing, which require more intelligence and skill.

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<sup>1</sup>Pp. 553-568.

<sup>2</sup>But see Wheeler and Humphris, pp. 714, 715.

He thought also that the prices of certain goods, of which he mentioned particularly chemical products, were much higher in this country than abroad on account of the combinations and of the protective tariff.<sup>1</sup>

Mr. Henry W. Lamb was of the opinion that the tariff trusts, on account of their freedom from foreign competition, raised and lowered prices in a very arbitrary way; for example, in 1900 the price of lead was dropped without warning, and later when the objects which led to the drop had been obtained the price was as arbitrarily raised.<sup>2</sup> Mr. Lewis H. Lapman, vice-president of the United States Leather Company, says that the tariff is a serious handicap on their business. The price of domestic hides is increased by the amount of the duty. The American tanners have to meet the competition of Canadian tanners in the European markets, and our tariff on hides makes this very difficult.<sup>3</sup>

Mr. Atkinson, Mr. Holt, and Mr. Lamb are of the opinion that on the average our high wages are not the result of the tariff, but rather of the productive power of the country, and that a lowering of our tariff would not result in a general lowering of real wages. If in certain industries money wages would perhaps be lowered, the lessened price of products consumed by the laborer, if the change in the tariff were made general, would be enough to more than offset this loss, while they believed that the stimulus given to other lines of industry by the admission of free goods would so increase the demand for labor along other lines that in all probability there would be an increase rather than a decrease in real wages. Mr. Lamb is of the opinion that the free spirit and liberty of this country make labor much more efficient than in Europe.<sup>4</sup>

Mr. Gunton,<sup>5</sup> who answered especially Mr. Holt, cites tables of statistics to show that during the last year while great combinations were forming the prices of iron and steel had fallen, and cited a similar course in the prices of sugar and various metals. He later said that prices in 1900 were abnormally high, on account of a strong demand and increased wages. In reply to Mr. Holt's statements regarding tin plate, he cited figures to show that not only had prices of tin plate in the United States been lower on the whole since the high tariff of 1890 was imposed, but also that the difference between the foreign price and the American price had steadily and rapidly lessened under the tariff. He thinks that the high price of tin plate in 1900 is mostly accounted for by the high prices of raw materials and increased wages.<sup>6</sup> Following a similar line of argument regarding window glass, he states that under the tariff and the trust prices on the whole since 1880 decreased 24 per cent, while foreign prices increased 2½ per cent. Since the trust was formed in 1899, he says, the prices here have increased 16 per cent and abroad 22 per cent. He also denies any abnormal rise in the price of wire nails. His general conclusion<sup>7</sup> is that there has been no tendency toward an abnormal rise in prices since the large corporations. "The large corporations seem to me to be the natural growth of the increased industry. They are the natural movement toward the maximum economy that can be secured." Regarding especially the effect of the tariff, he thinks that it "has no essential relations to trusts as such, and instead of helping to give them a monopoly it is the one thing that prevents them from having a monopoly, because it sustains their smaller competitors, who could most easily be driven out by free foreign competition."

Mr. Robert W. Tayler, member of Congress from Ohio, says that trusts have only an incidental relation to the tariff. The fact that there are trusts in a protective-tariff country does not prove that trusts are the outgrowth of protection. In the case of tin plate there would have been no industry at all without the tariff; the pottery business has been established by the tariff and there is no trust in that field.<sup>8</sup>

<sup>1</sup> Pp. 533-543.

<sup>2</sup> P. 587.

<sup>3</sup> P. 687.

<sup>4</sup> P. 594.

<sup>5</sup> P. 626.

<sup>6</sup> P. 630-633.

<sup>7</sup> P. 632.

<sup>8</sup> P. 608.



Mr. Mayer, of John Lucas & Co., in calling attention to the very high prices of plate glass in this country, thought that these prices had been fixed by the Pittsburg Plate Glass Company under the influence of the tariff, and that it would be just if the tariff on those special articles were reduced, so that the combination could not exact more than what he believed to be the fair price. Likewise Mr. Elliott, on behalf of the Philadelphia Paint Club, protested against certain features of the tariff. The club declared itself in favor of the protection of American manufactures generally, but thought that the development of American industry in many lines and the consolidation of combinations of producers had rendered existing duties in certain industries excessive, and in other cases had left the consumer without the benefit of competition as a factor regulating prices. The members stated, therefore, their belief that the development of American commerce in foreign markets would be greatly facilitated and might be obtained by reasonable moderation in the duties upon the raw materials which are shown to be in excess of the requirements both of revenue and of protection. They wish, therefore, to crystallize the sentiment of the country in the direction of the revision of the tariff on more equitable lines. They have particularly in mind the duty on plate glass.<sup>1</sup>

Mr. Pitcairn showed by a table that on sizes of plate glass up to 24 by 30 inches the Wilson bill made no change; that the Dingley bill made an increase of 3 cents a square foot on sizes up to 16 by 24, and of 2 cents on sizes from 16 by 24 to 24 by 30. He says that glass of these later-mentioned sizes are now sold at less than cost of production, and that on the larger sizes the Dingley bill had maintained the Wilson bill rates.<sup>2</sup> He also states that European manufacturers of plate glass are united into an international syndicate, but that the American industry has been left out of this international combination, because thus far it has not been able to export its goods, owing to the high cost of production here. The European manufacturers treat the United States as a dumping ground for their surplus, and make prices for export to this country far below their domestic prices. Therefore he thinks the tariff should be retained. For example, he states that the European price for polished plate glass cut to size is for the United States 40 per cent and 5 per cent discount from a certain price list; for England, 10 per cent discount only from the same price list, making the price in England 58 per cent higher than that in the United States. For stock sizes the European discount for the United States is 30 per cent off the list; for England 5 per cent, making the English prices 36 per cent higher than the American. In France he asserts that plate glass is sold at least 100 per cent higher than the French manufacturers export it to this country for. On that account he believes that our manufacturers here still require protection, and that the combination is not securing exorbitant prices.<sup>3</sup>

Most of the other manufacturers, including practically all of the witnesses in the iron and steel industries, in the tobacco industry, in the paper industry, in cordage, and in others, maintained a similar position. In certain instances, as, for example, in the case of Mr. Schwab, it is thought that in certain lines in which there is comparatively little labor employed the tariff is no longer needed, and that it might be removed without detriment, but these same witnesses are of the opinion that in the cases of manufactures of higher grade, in which there is much labor employed, a reduction of the duties resulting in European competition would necessitate a reduction in wages. In most cases the manufacturers were of the opinion that so little damage, if any, was done by the tariff that it would be unwise to take the risk of disturbing the present prosperous condition of industry by a discussion of any changes in the tariff.<sup>4</sup>

<sup>1</sup> Pp. 206-208, 222-224.

<sup>2</sup> P. 232.

<sup>3</sup> Pp. 229-230.

<sup>4</sup> King, pp. 499, 506-507; Schwab, pp. 456-458; Butler, pp. 493-494; Hopkins, p. 516; Taylor, p. 608; Hopkins, pp. 349-352; Chisholm, pp. 443, 446; vol. xiv, on Manufactures and General Business, Godfrey, p. 478; Harnah, p. 355; Leake, pp. 274, 275; Steel, p. 246; Folwell, pp. 214, 215; Justice, pp. 386-396.

## FREIGHT.

While there have been individual intimations that there were perhaps still at the present time discriminations made in freight rates between different shippers, no new specific charges of that kind have been made, with one exception, though Mr. H. D. Lloyd repeated the charges made concerning the Standard Oil Company in the preliminary report.<sup>1</sup> Mr. Klinck asserts that large packing concerns in the West have advantages in transportation. He is confident that some 5 or 6 years ago the shipments in private cars of the combinations were underbilled. He states that when he sold several cars of meat 5 or 6 years ago to one of them "he put 33,000 pounds of meat into the car, and the bills were made out in my office for 22,000." Mr. Klinck's own shipments are made of actual weight.<sup>2</sup>

Mr. Holmes, the treasurer of the Plymouth Cordage Company, says: "All that we ask for is at all times to know that none of our competitors gets a lower rate of freight than we are getting. We should be satisfied if we knew that every one of our competitors had to pay the same rate of freight. Whether it is 20 cents or 50 cents, we don't care."<sup>3</sup> He can make no specific charge, but declares: "There is a feeling of unrest when we have to run around to see whether we can get any special advantages, and sometimes succeed." Most of the larger shippers, such as the smelting companies and the steel companies, state that they pay the scheduled rates of freight and know of no discriminations being made.

On the other hand, attention is called with considerable emphasis to the very great advantage secured by the combinations in many cases through ability to ship from the nearer plants, and to the very important influence of the cost of transportation upon the business. In the smelting business, Mr. Chapman estimates that the saving in transportation charges through these shorter shipments would be over \$5,000,000 per year.<sup>4</sup>

Mr. White calls attention to the fact that freight rates on salt have advanced about 30 per cent during the last 2 years, while the minimum carload has been increased from 30,000 pounds to 40,000 pounds.<sup>5</sup> He also says that the high freight rates put the National Salt Company at great disadvantage in its competition with English competitors, especially as the United States is used as a dumping ground for the English surplus product, which is shipped here as ballast. Salt comes from Liverpool to Savannah at an average rate of 75 cents per ton of 2,240 pounds. From the nearest producing point in the United States the freight is about \$3 a ton, including cost of handling. Our tariff is 8 cents per pound. It is possible for the National Salt Company to compete, but its prices at the point of production must be lower than the prices received at the point of production by the English producers.<sup>6</sup>

## LABOR.

Speaking generally, the witnesses have been of the opinion that the effect of the combinations has been to increase wages, or, at any rate, that during the last 2 or 3 years under the combinations the wages have been somewhat higher than they had been before. It is acknowledged in many of these cases that this increase has been due to the prosperous condition of the country and to the fact that there has been a strong demand for labor. In most cases in the iron and steel manufacture, as well as in several other of the most important industries, the wages are arranged after consultation with the labor unions or with committees representing the employees, and a scale is agreed upon, in many cases this being a sliding scale dependent upon the price of the product.

<sup>1</sup> Vol. 1, pp. 292, 352, 396, 487, 601, 634, 645, 700-703.

<sup>2</sup> Pp. 274-275.

<sup>3</sup> P. 142.

<sup>4</sup> P. 98.

<sup>5</sup> P. 267.

<sup>6</sup> Pp. 260-262.

Mr. Schwab, president of the United States Steel Corporation, referring to the experience of the Carnegie Company in the strike of 1892, stated his opinion to be that on the whole the labor unions were detrimental to the interests of the laboring men, inasmuch as they tended to check the opportunity for individual effort and to prevent the full development of excellence and power on the part of the individual workmen that otherwise might be secured. He said that in the Carnegie works, although some of the highest priced workmen under the union scale had been receiving very high wages indeed, some two or three times as high as were received in other establishments, owing to the peculiarly excellent facilities in the Carnegie works, nevertheless the average wages had been regularly increased since the mills had become nonunion. In no year since 1892 had the average wages been as low as they were in that year, although since that time the mills had been entirely nonunion. So far as the United States Steel Corporation was concerned, its constituent companies dealt directly with the workingmen, and the United States Steel Corporation, as such, had nothing to do with the question. Most of these companies, with the exception of the Carnegie Company, employed union men—in part, at least—and dealt with the unions. He had nothing to say regarding the policy of the United States Steel Corporation further than to intimate that the matter would be left to the separate companies to deal with as their officers saw fit.<sup>1</sup>

Mr. Chapman said that in the case of the Pittsburg Coal Company wages were adjusted on a sliding scale after conference with the United Mine Workers' Association of America. There was a minimum below which wages did not go, whatever the price of coal. He believed that the leaders of the labor organizations were alive to the advantages of dealing with one concern rather than with the 140 different concerns which had united into the Pittsburg Coal Company. He had understood that the labor interests were well satisfied with the combination.<sup>2</sup>

Since the organization of the American Smelting and Refining Company there have been one or two strikes. Soon after the organization of the company there was one among the Colorado smelters which lasted for several months. He believes that the companies suspended operations in the mines in that vicinity and continued their business in the districts where there was no strike, transferring the work as far as possible. In this way apparently, for the time being, the combination secured an advantage through the union of various interests.<sup>3</sup>

Mr. Holt testifies that since the window-glass combination was formed the workers have had an agreement with the manufacturers, and the factories have been closed on an average of 5 or 6 months each year. The laborers recognize that this is the only way of sustaining the manufacturers' profits and the present rate of wages. The workmen thus share in the tariff profits of the industry, and ally themselves with the manufacturers against the consuming public. Many of the leaders of the workingmen say that it would be better if they could work as ordinary workmen—that is, at somewhat lower wages, but continuously.<sup>4</sup>

Mr. Flint states that in the case of the combinations with which he is connected there has not been since their formation any substantial change in the rates of wages paid. He thinks that the tendency is, on the whole, to sustain wages.<sup>5</sup> He feels also, as do most of the members of combinations, that the tendency is to make work more permanent under the combination form of doing business, inasmuch as the combination is better able to adjust the supply of goods to the demand, and thus to secure regularity in their productive conditions. On the whole, he thinks the wage-earner has never before been so well off in this country as to-day under the combinations.<sup>6</sup>

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<sup>1</sup> Schwab, pp. 460-462

<sup>2</sup> P. 102.

<sup>3</sup> P. 98.

<sup>4</sup> P. 579.

<sup>5</sup> Pp. 89-90.

<sup>6</sup> Pp. 88-90.

## XXXII INDUSTRIAL COMMISSION:—TRUSTS AND COMBINATIONS.

It is noteworthy that several of the larger establishments, including some of the combinations, have made provisions in the way of cottages, libraries, playgrounds, etc., for their workmen. The Plymouth Cordage Company, a very large establishment, although not a combination, has done so, as has the American Thread Company and others. In most, if not all, of these cases these provisions had been made before the combination was organized.<sup>1</sup>

Some of the witnesses are of the opinion that the industrial combinations give to the labor unions a decided advantage, inasmuch as it enables them to deal with the trade as a whole instead of with separate manufacturers. For example, Mr. Burn, of the wall-paper combination, states that after that combination had been organized the workmen, who under the separate companies had been employed about 9 months out of the year, demanded that they be employed 11 months. Inasmuch as they controlled a large part of the skilled labor in that industry, the concession was granted. The second year it was granted again. The third year 12 months' employment was demanded and obtained, and in the fourth year the company was compelled to yield its 12 months' employment even with increased pay. He believes that industrial combination is an aid to labor in enforcing its demands. The workmen can concentrate their efforts on one concern instead of dividing them among a large number. They are more likely to strike through the whole trade when there is a combination than when there is none, and it is much easier to replace the amount of skilled labor required in one factory than in most of the factories in the country at the same time. There is a somewhat similar intimation in the testimony of Mr. Chapman regarding the Pittsburg Coal Company, although the statement is not made direct.<sup>2</sup>

### SOCIAL EFFECTS.

Little has been said by the later witnesses regarding the social effect of the industrial combinations in the way of separating the community into different industrial classes and of preventing ambitious men from rising.

Questions have been frequently asked as to the amount of capital that is necessary to start competition with some hope of success in an industry in which there is a large combination. This question has brought out distinctly the fact that some industries seem peculiarly well adapted to secure more or less monopolistic control through combinations, whereas others have little opportunity in this direction. For instance, it was testified by Mr. King,<sup>3</sup> that a capital of \$20,000,000 to \$30,000,000 would be needed in order to build and equip for efficient competitive work a steel plant. On the other hand, Mr. Waterbury is of the opinion that \$100,000 would build and equip well a cordage factory, and that with a like amount for working capital the factory might expect to do a successful business, although it would not be quite so economical as a larger one.<sup>3</sup>

Mr. Klinck gave a specific example in which a company with a comparatively small investment of capital had been able to start its own salt well, and in fact practically to force the National Salt Company to sell to it at reasonable rates one of its special plants, in order that the meat packers might thus supply themselves with their own salt at low cost. It is of course true that the circumstances in that special case were somewhat peculiar.<sup>4</sup>

On the whole, the evidence goes to show that in very many lines of industry the independent manufacturer is able to hold his own against the combination, provided he shows an equal amount of intelligence and energy in looking out for his own interests. In several cases it was distinctly stated by men who had themselves been leading officers in combinations that, all things equal, they would prefer the position of the independent competitor instead of that of the manager of the combination. Notably was this true in the case of the wall paper and cordage combi-

<sup>1</sup> Hopkins, p. 345-350; Holmes, p. 144.

<sup>2</sup> Burn, pp. 293-302; Chapman, p. 102.

<sup>3</sup> King, pp. 504-506; Waterbury, p. 132.

<sup>4</sup> Klinck, pp. 271-273.

nations, both of which it will be recalled proved unsuccessful, although they were apparently managed with much skill, and failed rather from special circumstances connected with the business than from poor management.<sup>1</sup>

The witnesses seemed to be of the opinion that while it may be more difficult at times for a man with little capital to enter business independently than it was before the days of the greater consolidations, the opportunities for a young man of intelligence who wishes to begin as an employee and work his way up are much greater now than ever before. Not merely are the salaries higher and the rewards much greater for men in commanding executive positions, but there is much less opportunity of favoritism in a great company managed by many diverse interests than in small companies where the personal relations are closer. Merit, in the sense of ability to manage, is more readily recognized and more certainly rewarded, and the rewards are much greater than ever before.<sup>2</sup>

#### DISADVANTAGES.

The advantages of combinations and the savings which it is thought they effect have been considered in an earlier paragraph. Most of the witnesses have recognized that there are certain disadvantages connected with most combinations. One of the most frequently noticed disadvantages is the difficulty of securing managers and superintendents who will take the same personal interest in the work that is taken by an independent producer who owns his establishment. To obviate this difficulty many of the companies have found it advisable to pay their superintendents and officers in part in accordance with the results secured. Mr. Flint says, for example, that this plan has been followed by the Rubber Goods Manufacturing Company. Mr. Schwab states that this plan has been followed by the Carnegie Company, and it is the intention to follow the same plan so far as possible in connection with the United States Steel Corporation.<sup>3</sup> Mr. White states also that the salary of the president of the National Salt Company is dependent to a considerable extent upon results.<sup>4</sup>

Mr. Waterbury thinks that in the cordage business, and perhaps in most lines of business, a single large mill properly run is better than a combination of mills.<sup>5</sup> This is partly due to the reason given above; partly, also, it is a question of executive ability. To run a number of plants together is very difficult and requires a high order of intellect. For this reason there may be a limit set to the size and range of work of the combinations.<sup>6</sup>

A second way of overcoming this difficulty of lack of interest is, of course, that of comparative bookkeeping, by which the different establishments in the combination are regularly compared with one another in all the details of their working. This system of frequent detailed reports is followed in practically all of the combinations.<sup>7</sup>

Mr. Holt is of the opinion that the trusts form a very corrupting influence in politics, largely owing to the fact that they are protected by the tariff, and in consequence have found it advisable to send agents to Congress to dictate tariff legislation.<sup>8</sup> He thinks also that they deceive the public regarding the nature of the business and of the business of the country through juggling with prices and statistics.<sup>9</sup>

Mr. Hillyer,<sup>9</sup> as well as some of the other witnesses, thinks that the aggregation of power brought about through combination is a dangerous element and a menace to the political independence of the people.

<sup>1</sup> Atkinson, p. 522; Waterbury, pp. 132-133; Burn, p. 295.

<sup>2</sup> Schwab, p. 459.

<sup>3</sup> Flint, p. 84; Schwab, pp. 450-452, 456-462; Burn, p. 295.

<sup>4</sup> Pp. 252, 253.

<sup>5</sup> Pp. 132, 133.

<sup>6</sup> Waterbury, pp. 132-133; Flint, pp. 84, 87, 88.

<sup>7</sup> White, pp. 252, 253; Flint, pp. 84, 85; Taylor, p. 158; Schwab, 452.

<sup>8</sup> P. 554.

<sup>9</sup> Pp. 15-18.

Mr. Spalding endorses this opinion. He believes that it is natural for men to charge all that they can get. The combinations also, in his opinion, diminish individual effort and deprive the individual of the opportunity of rising.<sup>1</sup> He also is of the opinion that their overcapitalization is a serious evil. Overcapitalization, in fact, is mentioned by many witnesses as one of the prominent evils, as has been noted in the section on capitalization.

Mr. White is of the opinion that large corporations labor under the disadvantage of being unable to cater to the whims, the prejudices, the ignorance, or the tastes of individual customers. A combination must manufacture certain standard goods whose production can be systematized, whereas the individual producer may meet any whims or prejudices of his customers, so long as they will pay for them.

The closing of factories has been spoken of by some as an evil, although by others it is mentioned as a benefit, inasmuch as it forms a means of saving at times in the cost of production. In most of the combinations it has been found advisable to close some establishments and to transfer the workmen to other branches of the work. At times a special locality is thus made to suffer severely. A similar result is found, of course, in the discharge of traveling men. It has its evil side as well as its beneficial effect that comes from the lessened cost of production. In many cases it has been found that where these men have been discharged, work has been found for them in other departments of the business, although, of course, there are a good many individual exceptions. Mr. La Taste testifies that, speaking generally, he thinks the combinations have discharged a great many traveling men, and that, on the whole, the sentiment of the traveling men throughout the country is against the combinations. They think that they are injurious, not merely to them as a class of workmen, but also to the interests of the public generally.<sup>2</sup>

#### REMEDIES.

Of the later witnesses that have been heard, the larger number are of the opinion that comparatively few, if any, legislative remedies are needed. The witnesses whose inclinations are strongly toward free trade are of the opinion that the removal of the tariff on goods controlled by the combination would be the best, or at any rate the most nearly practicable remedy. Mr. Stockwell, secretary of the Massachusetts State Board of Agriculture, says that in every case of a large combination or trust the world's market should be opened to this country.<sup>3</sup>

Certain other witnesses, not themselves apparently free traders, seem to indorse this opinion to a certain extent. For example, Mr. Flint<sup>4</sup> is of the opinion that one of the possible evils to American industry would be a tariff war on the part of the leading European countries. He would, in consequence, recommend that certain changes be made in the tariff, and that "in revising duties the fact of these large consolidations being in a position to gain advantages in manufacture should be taken into consideration," in order to check the danger of a tariff war on the part of European countries. He is, however, opposed to any legislation that would discriminate against trusts in general without discriminating, and is opposed to any general revision of the tariff. Most of the manufacturers object to having the tariff interfered with.

Hon. Robert W. Taylor says that the Babcock bill, which proposes to remedy the evils of trusts by removing the tariff from trust products, is objectionable because such legislation would destroy the possibility of manufacturing by independent plants the goods now protected under the tariff, and would simply put strength into the large combinations. The passage of the Babcock bill would be to the advantage of the United States Steel Corporation more than to that of any other concern or person. He suggests the same result regarding tin plate.<sup>5</sup>

<sup>1</sup> Pp. 2, 6, 11.

<sup>2</sup> La Taste, pp. 21-32.

<sup>3</sup> Vol. X, on Agriculture, p. 897.

<sup>4</sup> P. 86.

<sup>5</sup> Pp. 601, 603-604; 607-608.

Probably more of the witnesses think that something could be gained in the way of greater publicity regarding the business of the combinations. For example, Mr. Campbell thinks that corporations whose stock is sold to the public on exchanges should be under Governmental control. He would be willing to have the regulation go even further than a mere publicity of accounts.<sup>1</sup> Mr. White believes that the State has the right to say how the combinations should be regulated, and thinks it possible that some tax might ultimately be placed on what would be considered excessive earnings, the actual earnings to be found out by a complete system of Governmental inspection of accounts.<sup>2</sup> Mr. Flint also favors a proper system of auditing and accounting to regulate the issuing of securities, but thinks that affairs of trade are in the main best regulated by natural laws.<sup>3</sup>

Mr. Chapman thinks that it is possible that the amount of capital stock ought to be limited in certain cases, but sees no way of doing this by legislation, and believes that generally it is unwise to attempt to control business by legislative enactment. Mr. Waterbury and Mr. Grimwood both think that legislation is unwise; that a combination which does not benefit the public will be destroyed by competition.

Some of the witnesses speak distinctly against even a special degree of publicity. Mr. Schwab, for example, thinks there ought not be publicity regarding the business of corporations, and that though the stockholders are entitled to certain statements, even those should be somewhat limited.<sup>4</sup> Mr. Taylor thinks that any legislative interference seems to involve a restraint of trade, to lessen competition, and would therefore be unwise.<sup>5</sup>

Mr. Gunton advises that, if possible, the combinations be put under a national charter, and that they be forbidden to make special low cuts in certain localities to ruin competitors.<sup>6</sup>

Two or three of the witnesses go considerably further and along the lines that meet with less general acceptance. For example, Mr. La Taste thinks that the system of single tax on land values would be a remedy.<sup>7</sup>

Mr. Hillyer thinks that the Sherman law should be rigidly enforced, and that the tariff should be removed; there should be Government ownership so far as municipal combinations are concerned; and, if necessary, the Government should itself ultimately go into the business of manufacturing the products manufactured by the trusts. He would be ready now to have the United States Government control the railroads, telegraphs, and long-distance telephones.

Mr. Campbell thinks that the corporations whose stocks are sold on the exchanges should be under Government control, as does Mr. Landstreet.

Mr. Campbell believes that corporations should also be prohibited from making contracts with purchasers of their goods to the effect that the goods of other companies should not be handled. He would like, if possible, to make such a law national, but is certain that it should be made in the different States.<sup>8</sup>

Mr. Spalding thinks that trusts are a national question; the remedy must be a national one. He believes that it is practicable to enact national legislation which will forbid any trust to put down prices so as to destroy competition or to put them up to a point of extortion. Legislative regulation of prices should not go further than that.<sup>10</sup> He thinks that trusts might be abolished by Congress by a law similar to that which broke up the lottery business. They might be forbidden to use the mails or be forbidden to ship their products across State lines. If a trust should build a plant in every State to supply the wants in that State in order to evade the above-mentioned law, that would do away with many of the offensive features of the combinations. The trusts should certainly give publicity to their operations, and he would favor any method of dealing with them which could constitutionally be adopted, either under the power to regulate interstate commerce or under the taxing power.<sup>11</sup>

<sup>1</sup> Pp. 311, 315, 316.

<sup>2</sup> P. 265.

<sup>3</sup> Pp. 92-93.

<sup>4</sup> P. 474.

<sup>5</sup> Pp. 489-498.

<sup>6</sup> Pp. 634, 638, 639; Campbell 311, 315, 316.

<sup>7</sup> P. 29.

<sup>8</sup> Pp. 15-17.

<sup>9</sup> Pp. 311-316.

<sup>10</sup> Pp. 5-7.

<sup>11</sup> Pp. 4-8.

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# TOPICAL DIGEST OF EVIDENCE.

## I. THE RUBBER COMBINATIONS.

**A. Description of business and extent of control.**—Mr. FLINT says that 97 per cent of the business of the United States Rubber Company is in boots and shoes, and that the company controls about 70 per cent of the output of rubber boots and shoes in this country. The Rubber Goods Manufacturing Company manufactures all kinds of rubber goods, other than boots and shoes. It manufactures 10 different classes of rubber goods. Some of these are protected by patents, and therefore the company has a monopoly in those particular lines. In other lines it manufactures from 25 to 75 per cent of the output of the country. (34.)

Mr. Flint states that there is general and active competition in this country in all rubber goods excepting those which are manufactured under patents or trade-marks, and the lowest price makes the market. The United States Rubber Company and the Rubber Goods Manufacturing Company handle about 55 to 60 per cent of the rubber trade of the United States. (82.)

**B. Organization and capitalization.**—1. *The United States Rubber Company.*—Mr. FLINT states that the organization of the United States Rubber Company was initiated by an agreement under which the parties subscribed \$1,500,000 for the purpose of acquiring interests in rubber companies engaged in the manufacture of rubber boots and shoes in the United States. The authorized capital is \$25,000,000 8 per cent preferred stock and \$25,000,000 common stock. It was provided that preferred stock should be limited to the amount of the tangible assets. The tangible assets were determined to be the value of the plant, machinery, tools, and fixtures, and the value of all other assets above liabilities; accounts to be guaranteed by the manufacturer whose interest was acquired. It was provided that the amount of common stock should be substantially equal to the issue of preferred stock. According to a memorandum submitted by Mr. Flint, common stock was to be issued, "among other things, to represent the increased earning capacity by reason of the consolidation of the interests acquired." It was provided that the pay of the promoters should be limited to 5 per cent of the total stock issued, and that the 5 per cent should cover the charges of lawyers, accountants, and appraisers, and the services of bankers and promoters. (47, 48.)

2. *Rubber Goods Manufacturing Company.*—Mr. Flint states that the first move in the organization of the Rubber Goods Manufacturing Company was the formation of what is called a blind pool. Parties subscribed \$5,000,000, of which \$3,000,000 was allotted. This fund was deposited in the Central Trust Company to be invested in the purchase of rubber properties. In the purchase of the properties the vendors were allowed to choose whether they would take their pay in cash or in the stock of the new company. In some cases they took all cash, but the preference was to take part cash and part stock. The syndicate members who advanced cash received for every hundred dollars \$100 in preferred stock and \$90 in common stock. Manufacturers who entered the new company received stock on exactly the same basis. (37, 47.)

The purchase of the plants was, however, entirely in the hands of the promoters. If they could buy for 100 per cent of the preferred stock and 90 per cent of the common stock of the new company they made 10 per cent of the common stock; if they had to pay more than that they made less than 10 per cent; if they could buy for less than that they made more than 10 per cent of the common stock. They had to keep within the limitation that no preferred stock was to be issued in excess of tangible assets and no common stock in excess of the 7 per cent basis established in the organization of the company, as explained below. (38.)

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The authorized capitalization is \$25,000,000 preferred stock, with cumulative 7 per cent dividends, and \$25,000,000 common stock. The issue of preferred stock has been limited to the amount of the tangible assets. The tangible assets were specified to include plants at appraised value; merchandise, raw, wrought, and in process, at market value; manufactured goods at about cost; receivables guaranteed by the vendors and secured by collateral deposited with the trust company—the collateral deposited amounting to 15 per cent of the preferred and common stock received by the vendors. From the total values there were deducted liabilities, if any, and preferred stock was issued for the net result. The company owns a large number of patents and trade-marks of great value. Common stock was issued to represent the value of good will, patents, and trade-marks. The issue of common stock was limited to 14½ times the amount of the net earnings of the separate companies during the year previous to the organization of the new company. That put the issue of common stock on a 7 per cent basis. (37, 47.)

**C. Relations between the American Bicycle Company and the Rubber Goods Manufacturing Company.**—Mr. FLINT says that 40 of the customers of the Rubber Goods Manufacturing Company united in a company known as the American Bicycle Company. The American Bicycle Company owned 3 rubber manufacturing companies and were in a position to manufacture all the tires they wanted. After some negotiation the American Bicycle Company sold to the Rubber Goods Manufacturing Company the rubber companies which they owned, the Rubber Goods Company paying for the same partly in cash and partly in securities. The American Bicycle Company insisted on a contract whereby they could get tires with desirable trade-marks. (84.)

**D. Closing of factories.**—Mr. FLINT says that through the formation of the Rubber Goods Manufacturing Company 1 factory was closed; through the formation of the United States Rubber Company several factories were closed. The United States Rubber Company purchased at the outset a large number of factories, while, in the case of the Rubber Goods Manufacturing Company, only concerns that were successful were purchased. (34.)

**E. Export trade.**—Mr. FLINT states that, at a rough estimate, a little less than 5 per cent of the rubber output is exported. The wages in American factories are about double what are paid in foreign factories. As the manufacture of rubber boots and shoes largely depends upon hand labor, and American manufacturers have no advantage over European manufacturers in securing raw material, it is not likely that a large export trade in these goods will be developed. (80, 81.)

**F. Foreign competition.**—Mr. FLINT states that there is very little competition in the rubber trade in this country from foreign manufacturers. The rubber industry is an American creation. The manufacture of rubber goods is better understood in this country than in Europe. About one-half of the production of crude rubber is consumed in the United States. People prefer the American styles, and, with the exception of mackintoshes, do not want foreign-made goods. There has been a great reduction in the price of American mackintoshes in the last 10 years and American manufacturers now have possession of the home market. (81, 82, 83.)

**G. Price of raw material.**—Mr. FLINT says that there has been an increase in the price of crude rubber. The price of rubber of standard grade which averaged about 70 cents a pound in the seventies averaged about 90 cents a pound in the nineties. This increase has been due to the law of supply and demand. The combination of rubber interests has prevented any great speculative advance in prices, but it has not been able to keep down the price of the raw material in general. (81.)

**H. Substitutes for rubber.**—Mr. FLINT says that so far no good substitute for rubber has been found. Every proposed substitute which has been presented to him for the last 23 years has been investigated, but so far none which possesses any considerable amount of elasticity has been found. Certain so-called substitutes which are being used cause a reduction in the quality of goods. (81.)

## II. THE CORDAGE COMBINATIONS.

**A. Description and present conditions of business**—1. *Materials—Uses of products.*—Mr. GRIMWOOD, acting secretary of the Cordage Association, says that the nature of the business of a great cordage company is the manufacture of manila, sisal, New Zealand, Russian, Mauritius, and American hemp into ropes, cordage, and binding twine. The manila hemp comes from the Philippines, and apparently can not be grown elsewhere with success. Grown on other soil the fiber seems to

lack strength. Sisal comes from Yucatan. Mr. Grimwood estimates the consumption of the country at about 80,000 tons of binder twine a year and 60,000 tons of rope. All rope manufacturers can make binder twine, but a binder twine factory might lack the necessary machinery for making rope. Rope is made to-day by machinery which the witness thinks has all been invented within 25 years, but the important patents have run out. Manila rope is used for marine purposes and for drilling salt, oil, and gas wells. Sisal is not used for marine purposes to any considerable extent, but is used for hoist ropes, on railroads, in building, etc.

The rope used in the international ocean traffic is bought both in America and in Europe. The trade is well divided. The American rope is better than the foreign, because a great deal of the foreign rope is made of mixed fiber. The production of cordage from American and Russian hemp, or from other material than manila and sisal, is of comparatively little importance. During 1898, 1899, and 1900 the average importation of manila hemp to this country was about 44,000 tons. In the 3 preceding years the amount was nearly 50 per cent greater. (112-115.)

Mr. FITLER says that the chief market for cordage is for shipping. A considerable amount goes to the oil country for drilling oil and gas wells, but this varies greatly with the price of oil. (151.)

Mr. WATERBURY, former president of the National Cordage Company, says that manila cordage is mainly used for ships' rigging, and for other purposes where a flexible rope that will stand the weather is needed. Three-fourths of the whole production is probably used for shipping. The second largest use is perhaps in the drilling of oil and other wells. Sisal cordage is not suitable for ships' rigging and similar purposes, because it mildews. Sisal hemp comes exclusively from Yucatan. It does not seem to grow with a strong fiber elsewhere. Manila hemp has never been grown outside the Philippines. A few thousand bales of New Zealand hemp are brought to this country and used for cheap goods, but it is weaker than sisal. (125.)

Mr. TAYLOR, secretary and treasurer of the Standard Rope and Twine Company, says that since the war with Spain the material used in binder twine has entirely changed. Sixty per cent sisal and 40 per cent manila was formerly used. In 1900, on account of the extremely high prices, not 5 per cent of manila was used. About April, 1900, "and this is the season for manufacturing, manila hemp was selling between 13 and 14 cents per pound, which made the binder twine sell about 15 or 16 cents; and sisal was 7 or 8 cents per pound." (152.)

Mr. Taylor explains that when the consumption of manila for binder twine or rope is reduced by high prices sisal takes its place to some extent, and the demand for sisal is therefore greater and the price is higher; so the prices of the two materials move in sympathy. (154.)

Mr. Taylor says that no success has been made with substitutes for manila and sisal hemp. It is hazardous to try them. As soon as substitutes are put in to cover a temporary situation prices go down, and then there is a loss. A considerable amount of the American hemp—which is grown in Kentucky—is made into tarred goods for shrouding and things of that sort. The production of American hemp has largely increased within 2 or 3 years. It has practically displaced Russian hemp. (160, 161.)

Mr. HOLMES, treasurer of the Plymouth Cordage Company, says that his company makes pure hemp rope and pure sisal rope. It would not under any circumstances mix sisal with manila for purposes of adulteration. In binder twine it is necessary to make mixtures. The principal material for binder twine is sisal, but if twine is to be made running over 500 feet to the pound it will be necessary to put in some manila hemp. If it is to run 600 feet, a larger proportion of manila is necessary, and for 650 feet to the pound one should use pure manila hemp. (143.)

Mr. WATERBURY says that he manufactures wire rope at his cordage plant, but no other cordage manufacturer does so. Wire rope is generally made in connection with the steel industry. (138.)

2. *Materials—Commercial conditions—*a. *Speculation unavoidable.*—Mr. HOLMES, treasurer of the Plymouth Cordage Company, says that the cordage business is necessarily speculative, on account of the importance of the raw material and the changes in its price. The fluctuations have been greater during the last few years than before. For the last 2 years his company has paid 1½ per cent quarterly, and an additional 10 per cent at the end of the year, or 16 per cent per annum. This, however, has been largely on account of the speculative profit made by the rise of the price of hemp. (139, 146.)

Mr. TAYLOR, secretary-treasurer of the Standard Rope and Twine Company, is absolutely sure that no one has made a dollar on the actual manufacture of cordage in the last 5 years. What money has been made has been made in a speculative way by having a stock of hemp on hand when the price advanced. The Philippine

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ports were closed twice, once in 1898 and once in 1899. Each time the price of hemp went up very sharply. The Standard Company had in one case 2 vessels, each with 8,000 bales on it, and the profits were \$150,000. But the loss that followed the opening of the ports was greater than the gain when they were closed. (153-155.)

Mr. GRIMWOOD also says that competition has been so severe of recent years in the cordage business that he thinks no legitimate manufacturing and merchandizing profit has on the whole been made. The money which has been made in the cordage business has for a long time been made by speculating in hemp. (120.)

b. *Methods of dealing.*—Mr. TAYLOR, secretary-treasurer of the Standard Rope and Twine Company, buys hemp from Manila and London houses, but exclusively through their agents in the United States. Hemp is cut in the Philippines and shipped from Manila practically all the year round, but a little less during the rainy season, in August and September. It takes 60 days to get hemp here by steamers and 4 months by sailers. When hemp is bought, 2 months are allowed the shippers to enable them to get the stock. Thus hemp bought in April would be shipped in May and June, and would arrive in August and September. It is necessary to buy 4 or 5 months ahead. The Standard Company tries to keep about 60 days' supply on hand. (151, 153.)

Mr. FITLER, of the Edward H. Fitler Company, says that his company buys its manila hemp through London houses and other large houses. The trade is principally controlled by Englishmen. He buys some from one American house (Peabody, of Boston). (147.)

Mr. WATERBURY, former president of the National Cordage Company, says that no rope manufacturer in this country has any interest in the raising of the raw material. They all buy from importers in the United States. There is a rumor that a Manila syndicate just now controls the price and the supply of manila hemp. This has been denied, though it is admitted that the Manila people are working together. The price of hemp seems to have been higher for several months than the supply would justify. There is nothing like a corner in sisal. The Mexican planters hold it themselves. They are strong enough financially to be able to hold it, however, until they get a good price. (125, 126.)

Mr. TAYLOR says that when a contract is made for hemp of a certain quality a clause is added that if the hemp is inferior the difference shall be subject to arbitration. This has worked to the injury of the manufacturers during the last 3 or 4 years. He, for instance, bought a quantity of "good current" hemp, a quality which his company needed badly. When the material came it was inferior. It was between "good current" and "current." On arbitration the company got an allowance of one-half cent a pound, while the difference between current and good current on the market was 1½ cents. Mr. Taylor thinks that the only escape from this trouble is to have the Government fix a standard of grades and inspect and grade all hemp before it leaves Manila. (159, 160.)

Mr. GRIMWOOD also says that the customary contracts for hemp are very arbitrary and one-sided so far as their legal effect is concerned. If, for instance, one contracts for 1,000 bales of "good current" hemp, one may be compelled to take a lower grade at an allowance. The size of the bale of sisal hemp varies so that if one has bought 1,000 bales and the market has gone down big bales may be delivered and the buyer may have to receive 500,000 pounds, while if the market has gone up he may get only 300,000 pounds. (121, 122.)

c. *Consumption.*—Mr. WATERBURY, former president of the National Cordage Company, gives a table showing the deliveries of manila and sisal hemp to each manufacturer in the United States during 1900. The aggregate was 301,000 bales of manila and 485,000 bales of sisal. Mr. Waterbury says that manila hemp weighs about 270 pounds to the bale and sisal about 360 pounds. (124.)

3. *Present conditions in the trade*—a. *Location of factories, and advantages of location.*—Mr. GRIMWOOD, acting secretary of the Cordage Association, says that the leading cordage plants of the country are in Boston and Plymouth, Mass., Philadelphia, and New York. There is a very fair plant in Galveston, but it is not working at present. There are others in Chicago, Peoria, St. Louis, and Xenia, Ohio. There are two plants on the Pacific coast, but they sell only west of the Rocky Mountains. Eastern manufacturers do not attempt to do business in that region. The mills in the Central West started as binder-twine mills, and that is their main product. They have the advantage of an outlet for their product close at hand, but have to pay additional freight on the raw material. Binder twine consists mainly of sisal, though a mixture of manila and sisal is used, and a larger proportion of manila was used when it was not so high as it has been recently. (114.)

Mr. WATERBURY, former president of the National Cordage Company, says that interior cordage factories get some slight advantage in freight on their manufacture by importing sisal by way of Mobile. (125.)

Mr. HOLMES, treasurer of the Plymouth Cordage Company, Plymouth, Mass., says that the Western manufacturers of binder twine have some advantage over the Eastern in freight charges. They are able to get the sisal from Mexico by way of New Orleans or Mobile at a cost of 27 to 35 cents for freight to Chicago. The freight on the hemp to Boston and on the manufactured product from Boston to Chicago amounts to some 55 cents. (141.)

*b. Production of principal companies.*—Mr. GRIMWOOD says that at the present time the Standard Rope and Twine Company is working about 1,800 spindles, while he thinks there are about 11,000 spindles in use or ready to start in the United States east of the Rocky Mountains, so the Standard Rope and Twine Company has nothing like a monopoly. It does not control over 20 per cent of the business. (118, 120.)

Mr. TAYLOR, secretary-treasurer of the Standard Rope and Twine Company, says that this company made about 20,000 tons of cordage in 1900. He does not know what the whole production of the country was, but he estimates the production of his company at 15 per cent. The National Cordage Company controlled more than 60 per cent of the total output. (158, 163.)

Mr. FITLER, president of the Edward H. Fitler Company, Philadelphia, supposes that his company produces about 18 per cent of the cordage of the United States. The Standard Rope and Twine Company and the Plymouth Cordage Company produce more; but probably no other company. (146.)

Mr. HOLMES, treasurer of the Plymouth Cordage Company, thinks that his company produces between 15 and 20 per cent of the cordage made in the United States, and that it is the largest maker of rope and twine in the world. (144.)

*c. Customs of manufacture.*—Mr. TAYLOR, secretary and treasurer of the Standard Rope and Twine Company, says that ordinary cordage mills have a certain number of spindles for rope and a certain number for twine, and they can not run more than a certain number on either product. For the economical operation of the mill it has been customary to keep a small number of spindles on binder twine through the winter months, and increase them and drop rope as much as possible as the season advances. The largest amount of binder twine is manufactured about May and June. The season of demand varies with the region, being earlier in Texas than in the Dakotas. If there is a good crop the old machines may be turned on during May and June and July and rope may be left out entirely. In August and September as many machines as possible are put on rope. In December and January some spindles are put on binder twine, and the number is gradually increased. (152, 153.)

*d. Labor cost.*—Mr. GRIMWOOD, acting secretary of the cordage association, says that cordage is produced chiefly by machinery, but that he would say, making a rough estimate, that the labor cost is about three-fourths of the entire cost of it. He has not, however, been actually in the business in recent years. The cost of cordage varies greatly with the fluctuations in the cost of the raw material. During the last three years manila hemp has sold as low as 3½ cents per pound and as high as 14 cents. Sisal has sold as low as 2½ cents and as high as 10. (114.)

Mr. WATERBURY, former president of the National Cordage Company, says that wages are fully half the cost of manufacture of cordage. (128.)

Mr. TAYLOR, secretary and treasurer of the Standard Rope and Twine Company, says that the actual labor cost of producing cordage is about 1½ cents per pound; including taxes, insurance, interest on money invested, and all sorts of expenses it is usual to reckon the cost of manufacture at 2 cents a pound. (154.)

*e. Methods of selling.*—Mr. GRIMWOOD says that the Union Selling Company, which is the distributing bureau of the Standard Rope and Twine Company, has branch houses in several cities of the United States. More generally, however, cordage is distributed through jobbers. Jobbers receive a price one-fourth of a cent below the regular card price; that is, this allowance is made on carload lots. Cordage is sold on 60 days' credit, with 1½ per cent discount for cash in 10 days. (122.)

Mr. TAYLOR, secretary-treasurer of the Standard Rope and Twine Company, says that his company does not sell through jobbers, but largely direct. A corporation called the Union Selling Company has been organized for the purpose of handling its goods. This company takes all the product of the Standard Rope and Twine Company and acts as its agent. It has some 26 or 27 agencies in various parts of the country. Mr. Taylor says that it takes more work and more expense to sell goods to the consumers or small dealers than to sell through jobbers, but he thinks it is the only way to conduct the business properly. The risk of loss is less because the failure of one customer is not so serious; and it is not in the power of any one customer to injure one's business greatly if there is a disagreement. It is Mr. Taylor's impression that when middlemen are got rid of the consumer is likely to get the benefit. "A man can afford to split what he has to pay to the jobber." But in the cordage business a jobber gets only one-fourth of a cent a pound, which is about 4 or



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5 per cent on a price of 6 cents; and the expense of selling direct to consumers is greater. (159, 161.)

*f. Export and import trade.*—Mr. WATERBURY says that no rope to speak of is imported, because of the duty. Quite a large amount is exported, principally to South America. (125.)

Mr. FITLER, of the Edward H. Fitler Company, says that his company has for some years exported some cordage to Russia. A good deal goes out indirectly through third parties. Mr. Fitler does not care to look up this trade, as it is much cut up, and is not satisfactory in price. (148.)

Mr. HOLMES, treasurer of the Plymouth Cordage Company, says that his company exports cordage to the Argentine Republic, England, Germany, Russia, Austria, and South Africa. There is an export duty in Mexico on sisal hemp, and he understands that there is none on the manufactured product. This gives an advantage to a Mexican mill that is manufacturing binder twine. The twine comes into the United States free of duty. (140, 141.)

*g. Closing of Philippine ports.*—Mr. WATERBURY says that during the Spanish war the price of Manila hemp went up, and when the war was successful it went down again. When the Philippine ports were closed it ran up to about 14 cents. At the time of Mr. Waterbury's testimony, April, 1901, it was 8 cents. (134.)

Mr. TAYLOR, secretary and treasurer of the Standard Rope and Twine Company, says that the closing of the Philippine ports was a benefit to his company, because the company had a stock of hemp on hand. Yet his company wanted the ports opened. High prices restrict the market and lead to the introduction of substitutes. The proportion of profit is greater with low prices than with high. The Eastern concerns, however, such as the Plymouth Cordage Company, wanted the ports closed. (155.)

*h. Binder twine—peculiar conditions.*—Mr. TAYLOR says that the binder-twine business has practically gone out of the hands of the rope makers into those of the agricultural-machinery makers. The Deering company and the McCormick company are now the leading manufacturers. The Standard Rope and Twine Company made 15,000 tons 3 years ago. Last year it made 5,000 tons and this year it will probably make 4,000 tons. It is not in the market for the twine business because the machine makers sell for barely cost. Formerly jobbers used to handle the binder twine, but now it is sold so close that jobbers will hardly touch it. (152.)

Mr. FITLER protests against the manufacture of binder twine in the prisons of Minnesota, Kansas, and South Dakota. Every pound the prisons sell is so much less for the free mills to make. (150.)

**B. History of combination.**—1. *Pools.*—Mr. WATERBURY, former president of the National Cordage Company, says that the cordage manufacturers in the United States, before the formation of the National Cordage Company, had repeatedly formed pools. The plan was to divide the business of the country among the manufacturers, and have each one who ran beyond his percentage pay into the pool so much a pound on the excess, and each who went below his percentage draw out so much a pound on his shortage. Returns were made monthly to a supervisor, who acted as a clearing house. Mr. Waterbury understands that such pools began to be formed as early as 1860. He himself was a member of several in later years. There was never any written agreement; probably such an agreement could not have been enforced. All manufacturers were included. There were not more than 10 or 15. A pool would always be broken up after a time, either by the starting of new competition or by violation of the agreement by some of the members. Doubtless the experience of the profitableness of the business under pools contributed to the desire for a stricter consolidation. There have been no pools since the National Cordage Company was formed in 1887. (126, 137.)

Mr. HOLMES, treasurer of the Plymouth Cordage Company, says that his company was in former times connected with pools in the cordage trade, in which a certain percentage of the total business was allotted to each establishment, and those who overran paid into the pool a certain amount per pound on the excess, and those who fell short drew out a certain amount per pound on the shortage. The Plymouth Cordage Company has made more money outside of pools than in them. It thought that pools would be of advantage to it, but concluded later that they were not. It always paid in and never drew out. (138.)

2. *National Cordage Company.*—*a. Organization and capitalization.*—Mr. WATERBURY, former president of the National Cordage Company, says that the organization of the National Cordage Company was at first in the form of a trust. Trust certificates were issued, but the organizers were advised that the trust was of doubtful legality, and the organization was changed into a corporation. There were at first only 4 concerns. They were considered the big 4 New York manufacturers, and probably made 40 or

50 per cent of the whole product of the country. A cash capital of \$1,500,000 was paid in. The capital stock issued was \$5,000,000 preferred and \$10,000,000 common; no bonds. The capitalization was based partly on the value of the plants themselves and their cash capital and partly on the earning power, as shown by the actual earnings for the preceding 3 or 5 years. He believes the earning power was capitalized on a 10 per cent basis; that is, at ten times the actual earnings. He thinks this was fair at the time, because some English firms had offered to buy out the plants for ten times their average profit for the previous 3 years, if the managers would continue to run the business for 5 years on salaries. This offer was refused. Mr. Waterbury thinks that on the basis of the earnings of the separate plants before the consolidation it would have been possible to pay 10 per cent on the whole capitalization of the National Cordage Company, \$15,000,000.

The company ultimately brought in some 15 concerns. There were some big concerns outside which it was never able to get in. Sixty or 70 per cent of the total output must ultimately have been controlled. The tangible assets of the whole 15 companies must have exceeded the \$5,000,000 of preferred stock; they probably exceeded \$10,000,000.

The plants were bought on various terms. Some cash was paid and some stock, and sometimes the original owners took a mortgage on the plant for a part of the price. The common stock was finally increased to \$20,000,000. Mr. Waterbury says that besides the regular dividends on the preferred stock, 12 per cent a year was paid on the \$10,000,000 of common, and, after the increase to \$20,000,000, 6 per cent. The principal officers never received any salaries. (126-135.)

Mr. GRIMWOOD says that while the National Cordage Company was started with the intention of bringing nearly all the leading manufacturers together, there were one or two very strong competitors whom it did not succeed in bringing in. It did control a large proportion of the business, but Mr. Grimwood does not know what proportion. (118, 120.)

*b. Relation to constituent plants.*—Mr. WATERBURY states that the several concerns were not wiped out, but retained their individual manufacturing interests. Each year each establishment put in a bid to the National Cordage Company for the amount of goods it would make and the price at which it would make it. Any man who did not bid or did not get a contract had to shut up his factory for the year, at his own cost; and that was not very economical. Mr. Waterbury thinks some were willing to bid below the cost of making, in order to keep their factories going. At the same time they had every inducement to reduce the cost of making. The National Cordage Company bought all the material and sold all the product, paying the individual factories for the manufacture. It was really only the buying and selling agency. Its profits were distributed on the basis of the holdings of stock. (127, 128.)

*c. Failures and reorganizations.*—Mr. WATERBURY says that the failure of the company was due to the contraction of credit in the panic of 1893. The binder-twine business is one of seasons. It is necessary to begin in August and September to make twine to be sold the next spring. In the spring of 1893 the National Cordage Company had some 25,000 tons of binder twine on hand, worth \$5,000,000 or \$6,000,000. On this a large amount of money had been borrowed. The company had unlimited credit, and had always been able to borrow all it wanted. But early in the spring of 1893 the Reading Railroad failure came, and the disturbance about the silver question; and the bankers notified the company that they could not lend it so much money. Then it was determined to issue more preferred stock. Preferred stock was selling at 110, but when the new issue was proposed there was a panic in the stock and the creditors of the company closed in on it. The only way to do justice to all creditors was to have a receiver appointed. The assets did not cover the indebtedness of the company, but that was because of the panic in the hemp and binder-twine market, caused by the failure. Binder twine which was worth \$6,000,000, and would have sold for that, sold for \$2,500,000. Some twine that would have sold for 10 cents a pound did not realize 3 cents.

Mr. Waterbury does not think the failure was due in any degree to loading up the company with worthless plants. All the plants taken in were good plants and were making money. It is true that the formation of the National Cordage Company and its holding up prices enabled its competitors to make more money than they otherwise would. (131, 134, 135.)

Mr. GRIMWOOD says that the National Cordage Company was organized in 1887. His impression is that it made money for a time during the season of high prices; then the price of hemp fell, and it lost. It finally tried to issue two and a half million dollars of preferred stock, and its credit was not such that the stock could be floated. This was the occasion of the company's going into the hands of a receiver. The

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receivership came in 1893. A reorganization was immediately made under the name of the United States Cordage Company. The stockholders, preferred and common, were assessed for about \$3,000,000. The United States Cordage Company existed a year or a little more; then it failed. There was another reorganization, and the Standard Rope and Twine Company was formed. Seven and a half million dollars first-mortgage bonds of the United States Cordage Company were changed to income bonds, not drawing interest unless it was earned. About \$3,000,000 was raised by assessment, and that was put into first-mortgage 6 per cent gold bonds. The capital stock was scaled down from \$20,000,000 to \$12,000,000. Several of the plants were disposed of. Of the remainder, some continued to be used and some were wrecked. (117-119.)

Mr. TAYLOR, secretary-treasurer of the Standard Rope and Twine Company, presents a copy of circular No. 2 of the reorganization committee of the National Cordage Company to the creditors, and also a copy of the reorganization agreement of the United States Cordage Company. He says that the United States Cordage Company had \$8,000,000 guaranteed stock, \$6,000,000 preferred stock, \$20,000,000 common stock, and \$7,500,000 bonds. That makes \$41,500,000. In the reorganization, by which the Standard Rope and Twine Company was formed, the capitalization was reduced to \$22,500,000, consisting of \$12,000,000 common stock, \$7,500,000 5 per cent income bonds, and \$3,000,000 6 per cent mortgage bonds. The guaranteed stockholders paid an assessment of \$20 a share, the preferred \$10 a share, and the common \$5 a share, getting the amount of their assessments in new first-mortgage bonds. The old bonds were exchanged for new income bonds, interest payable only if earned. The guaranteed stockholders received 80 per cent of their holdings, the preferred 40 per cent, and the common 20 per cent, in the stock of the new company. (156, 164, 172.)

3. *Standard Rope and Twine Company.*—Mr. TAYLOR, secretary-treasurer of the Standard Rope and Twine Company, says that this company owns 9 plants, of which only 3 are running. The 3 which are running are in Massachusetts and Brooklyn. Of those that are closed, 3 have not been operated since 1893. One has been closed 2 years. The machines, buildings, and real estate of the working plants alone are worth the amount of the first-mortgage bonds of the company. The other properties, with the good will, are represented by \$12,000,000 of common stock. (157.)

4. *Cordage Association.*—Mr. GRIMWOOD says that competition has been disastrously severe in the cordage business, though before the National Cordage Company was formed the manufacturers had an understanding with each other by which they made some money. After the National Cordage Company failed competition was very keen and prices were very low, and there was no feeling of fellowship among the manufacturers. So for the purpose of getting a little closer together they formed the Cordage Manufacturers' Association. This association has a secretary, but it has no constitution or by-laws and no regular time of meeting. When one of the manufacturers thinks he would like to talk with the others he gives the secretary notice, and the secretary sends out letters to the members saying that so-and-so wants a meeting and asking whether they wish to hold one. Meetings are held very irregularly—sometimes once in 4 or 6 weeks and sometimes once in 8 or 10 months. The discussions are very informal, and there is no agreement to maintain prices. The manufacturers put out price cards, and though the cards are not in the same form they are uniform in substance. The card prices are frequently cut, however, and there is no agreement not to cut them. Yet matters are steadied a little by the conference and the card price, and the irregularity of prices is diminished. Another subject of discussion at recent meetings is the evils in the current forms of contract for the selling of hemp. (118, 120-122.)

Mr. WATERBURY says that the Cordage Association is an association of a majority of the cordage manufacturers, who meet to discuss the hemp situation and prices and the abuses that occur in the trade, such as too much time and too large discounts for cash. The last meeting had to do principally with a uniform hemp contract. The manufacturers want to make a bale of sisal mean 360 pounds.

Such an association is very desirable, in that the manufacturers come together and become acquainted; and if one thinks he has a complaint against another it is frankly spoken of and explained. That fierce competition which is so ruinous to trade is prevented and there is a greater or less uniformity of prices; but there is no pool and no absolute agreement to maintain prices. "Prices vary a quarter of a cent a pound in different sections of the country and with different manufacturers." (135-137.)

Mr. TAYLOR says that the Standard Rope and Twine Company is a member of the Cordage Association and is in harmony with its policy. The Standard Company does not wish to be bound in any way by any association, but believes that the

Cordage Association as it exists is a great benefit to trade. There is an understanding among the members of the association, a kind of gentlemen's agreement, as to prices; but it is not lived up to. (159, 163, 164.)

Mr. FRYLER says that the Cordage Association has no by-laws or legally binding agreements, and that the value of it is in bringing competitors together, making them acquainted with each other, and so producing a better feeling. The list prices are not uniform, and discounts are far from uniform. The association is trying to alter the contracts for the purchase of raw material, so that the responsibility, which the buyers have had to bear alone, may be divided with the foreigners who sell. (148.)

**C. Causes and results of combination.**—1. *Causes of combination—Competition.*—Mr. GRIMWOOD was never connected with the National Cordage Company in any official capacity and can not speak with authority as to the motives of the combination. He understands that the chief motive was the desire to eliminate competition in buying and in selling. When competition reaches such a point, as it has in the rope trade, that the capacity for producing goods is from 30 to 50 per cent greater than the consumption, it is disastrous. (117, 120, 122.)

Mr. WATERBURY, former president of the National Cordage Company, says: "Every concern that came in had been making a profit for a great many years; we were all practical cordage men, and all had made fortunes in the business practically many years before—we and our predecessors in the same concerns." (129.)

2. *Economies of combination.*—Mr. TAYLOR, secretary-treasurer of the Standard Rope and Twine Company, states that the National Cordage Company made a material saving by noting the different methods that were applied in each mill and choosing the best method in each respect. He thinks, also, that there was a saving in cross freights; this was always claimed by the person who had the freight in charge. (156.)

Mr. Taylor also mentions among the economies of combination the diminution in the staff of clerks, and the diminution of superintendents and under-superintendents to some extent. He asserts that his company reduced the pay-roll cost of 2 mills 10 per cent. It is not possible in the cordage business to effect any economies in the purchase of raw material. (162, 163.)

Mr. WATERBURY, former president of the National Cordage Company, says that when that company was formed the intention was to buy the raw material cheap, run full, manufacture cheaply, and do business on an economical basis. But a peculiar condition developed. The supply of raw material for this industry is limited; the big concerns outside were determined to supply themselves with raw material also, and the consequence was that the price of it went up. (128, 129.)

Mr. HOLMES, treasurer of the Plymouth Cordage Company, does not think that an organization could be formed powerful enough to drive the small competitor in the cordage manufacture out of the business. There is no way for a great combination to make savings except by good management, and that is just as open to a small concern. (139.)

3. *Disadvantages of combination.*—Mr. TAYLOR does not think a superintendent on a salary can be expected to give quite the same attention to a business as an owner. If a man owns a mill, that mill is his pet, and he is constantly looking after the details of it. Mr. Taylor does not consider that the Standard Rope and Twine Company fails to keep its superintendents up to the proper standard, but there is a constant danger of slackness which must be guarded against. In the practice of this company the results of one mill are compared with those of another, and if one mill gives poor results an attempt is made to find out the reason. While Mr. Taylor believes that the combination makes a gain by securing a knowledge of the best methods that have been developed in the several mills, he considers that if the same information could be got there would be more economy in having one large mill under one roof. (158.)

Mr. Taylor also says that the public is more disposed to deal with an independent concern than with a combination. This trouble can be avoided to a great extent by maintaining the identity of the companies which come into the combination. Thus the Carnegie Steel Company can keep its own name, though owned by the United States Steel Corporation. The Standard Rope and Twine Company maintains the organization and the names of the L. Waterbury Company and the Sewall-Day Cordage Company, and gets the benefit of the good will which attaches to those names. He recently had a chance to sell the "capital stock of the Sewall-Day, which represents a name only, for \$100,000." (162.)

4. *Control of machinery.*—Mr. WATERBURY, former president of the National Cordage Company, says that that company had an agreement with the manufacturers of cordage machinery not to sell machinery or repairs to any other concern. This

would not affect the factories in existence, but it was thought that it would stop the establishment of new factories. In the event, a new machinery concern started up, and the advertising of the National Cordage Company did it a good deal of damage. New cordage factories started all over the country. (132.)

5. *Control of material.*—Mr. WATERBURY, former president of the National Cordage Company, says that in the days of that company there were 5 houses in Manila dealing in manila hemp. The National Cordage Company made an agreement with them by which they were bound not to sell hemp to any other concern in America, nor to sell to any house in England unless that house agreed not to sell to anyone in this country except at an advance of half a cent a pound above the price the National Cordage Company was paying. For several months the competitors of the National Cordage Company had to pay this premium of half a cent a pound for their hemp. Finally some English houses, after receiving legal advice that the contract would not hold in the English courts, broke it and sold to the American manufacturers. (131, 132.)

Mr. FITLER, of the Edward H. Fidler Company, says that the National Cordage Company tried to corner manila hemp, but did not succeed. When it first started, it apparently had control of spot fiber, and the Fidler Company was embarrassed, because certain sailers were late. After the supplies began to come in there was no serious trouble, although there was a pinch once in a while and the company was running rather close to the wind. (147.)

Mr. HOLMES, treasurer of the Plymouth Cordage Company, never experienced any trouble through any purchasing agreements made by the National Cordage Company. So far as his company was aware, it was always able to buy material as cheap as the larger concern. (139.)

Mr. TAYLOR states that in the days when the National Cordage Company tried to control the hemp market there was an understanding between it and the Plymouth Company and the Fidler Company. The National Cordage Company, while Mr. Taylor was employed by it, shipped hemp to the Plymouth and the Fidler Company. (163.)

6. *Effect on price of material.*—Mr. TAYLOR, secretary and treasurer of the Standard Rope and Twine Company, says that the National Cordage Company pushed prices higher than the conditions of business would warrant. They put up the price of hemp to 15 or 16 cents per pound. They were the only buyers, and were in a position, Mr. Taylor thinks, to control prices; and his conclusion is that they did not want prices to be lower. The company, however, failed because it had not capital enough to continue the business and control it on the high level of prices which it had itself established. (155, 156.)

Mr. FITLER, of the Edward H. Fidler Company, says that when the National Cordage Company's stock of twine was thrown on the market as "banker's twine," as it was called, it made the twine business very unsatisfactory for the time. Mr. Fidler thinks the effect lasted for two seasons. He believes also that the grain crops were not large, and that the demand was smaller on this account. (147, 149.)

Mr. WATERBURY, former president of the National Cordage Company, says that the price of manila hemp early in the 90's was about 6 cents a pound. When the National Cordage Company failed the price went to the lowest point ever known, 3½ cents. (134.)

Mr. HOLMES, treasurer of the Plymouth Cordage Company, does not think that the failure of the National Cordage Company and the liquidation of its assets had any effect on the cordage market. (144.)

7. *Effect on prices of products.*—Mr. HOLMES, treasurer of the Plymouth Cordage Company, says that his company used to follow the prices made by the National Cordage Company pretty closely. The policy of the Plymouth Company has been to make goods of special merit, and it has always been satisfied if it knew that its competitors were not underselling it. The National Cordage Company held prices somewhat higher than they were before it was formed, but it is a question whether it would have done so if hemp had not gone up. Its efforts to get control of hemp put up the price, and the price of manufactured goods had to follow. (139.)

8. *Effect on competitors.*—Mr. FITLER, of the Edward H. Fidler Company, says that when the National Cordage Company was first organized his company found its competition very severe. The National Company seemed to want to whip its competitors into line. It was a question of nerve to stand out and fight against tremendous capital. The National Company tried to buy out the Fidler Company, but did not succeed. (147.)

Mr. WATERBURY says that the National Cordage Company was a great advantage to its competitors in keeping up prices; so much so that he would rather have been outside than inside. (132.)

9. *Possibility of monopoly.*—*a. Probability of new consolidation.*—Mr. TAYLOR feels sure there will never be another combination in the cordage business. There may

be an association, and without one he does not think there would be any money in the business, but there will be nothing like a trust. (163.)

*b. Capital needed by competitors.*—Mr. GRIMWOOD, acting secretary of the Cordage Association, says that a 500-spindle mill for the manufacture of cordage, which would be a pretty good sized mill, would cost some \$500,000 for land, buildings, and machinery. A working capital of some \$250,000 would be needed besides. (114.)

Mr. WATERBURY, former president of the National Cordage Company, says that \$100,000 would build and equip a nice cordage factory, and as much again would be needed for working capital. Such a factory would not be quite as economical as a larger one, but would be a good factory. (132.)

**D. Tariff—Philippine competition.**—1. *Tariff.*—Mr. GRIMWOOD says that the present tariff on manila and sisal cordage is 1 cent per pound, and on hemp cordage, tarred or untarred, 2 cents per pound. Under the McKinley tariff manila and sisal bore 1½ cents and tarred 3 cents; under the tariff of 1894, 10 per cent ad valorem. (115.)

Mr. FITLER says that the competition between different manufacturers in the United States is as severe as it can possibly be; but foreigners work cheaper and the American manufacturers want to be put on an equality with them. There is a duty of a cent a pound on rope. That is not enough to enable prices to be carried to extremes. If the duty were removed, the manufacture would not exist in this country, "unless our labor would compare with the English, German, or French." (150.)

Mr. HOLMES would feel that the removal of the duty on cordage would be injurious to his business, though he would "ask for no advantages, provided the others have to pay the same for labor and supplies." He would expect importations to come particularly from England, and perhaps later from the Philippines. (141.)

2. *Cordage manufacture in the Philippines.*—Mr. WATERBURY says that it would be a disadvantage to have free trade with the Philippine Islands, because some smart Yankee would start a cordage factory there and perhaps get some good men. There is a factory in Yokohama, owned by a Japanese, which makes good rope. A manufacturer in the Philippines would be under a disadvantage because the laborers are ignorant, and there are a great many orders for special lengths that have to be made up quickly and could not be brought a great distance; but manufacturers in the Philippines could hurt the market for ordinary sizes if they could make the goods cheaper. (136.)

Mr. FITLER does not think that the necessity of filling special orders would interfere with the running of a cordage mill at a distance from a market, as in the Philippines. If the mill were intelligently managed, the requirements of the market would be consulted and a proper stock would be carried in this country. (150.)

Mr. GRIMWOOD thinks that the establishment of a cordage factory at Manila would be a serious matter for the business in America. "I think the effect would be, I will not say disastrous, but bad, unquestionably, unless the rate of wages, and so on, should go up to a point equal to the wages in the United States." The cost of transporting the finished product would be about the same as the cost of transporting the raw material, perhaps a little more. There is no loss of weight in the manufacture which would seriously affect the transportation. (115-117.)

Mr. WATERBURY says that the waste in manila hemp is about 3 per cent, and in sisal, which has been running dirtier than usual the last few years, about 7 per cent. (125.)

Mr. TAYLOR says that the shrinkage of manila hemp in manufacture is about 4 per cent, and of sisal about 8 per cent. (154.)

**E. Condition of labor in the cordage industry.**—1. *Relations of employer and employee.*—Mr. HOLMES, treasurer of the Plymouth Cordage Company, says that the relations of his company and its employees have always been friendly and satisfactory. At the seventy-fifth anniversary of the company in 1899 it was found that between 11 and 12 per cent of those who were with the company 40 years ago, in 1859, were with it still. There are no trade unions in the factory and the company has never had occasion to express itself on the subject. There have been no labor disputes since 1863 or 1864 until the week before Mr. Holmes testified. At that time there was a strike, which lasted about 24 hours, and which had, in Mr. Holmes's judgment, no reason whatever. He thinks it resulted from a misunderstanding and from hot-headed talk. Every man went back without any change in the conditions. (140, 143.)

Mr. Holmes adds that his company has established a free library for its employees and intends to build bath houses and to provide a building where lunches will be served to them at low cost. It has offered prizes for the best gardens, and prizes for those who keep their yards in the best condition. It has prepared baseball grounds and grounds for other games, and offered prizes for sports. (144.)

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Mr. TAYLOR, secretary-treasurer of the Standard Rope and Twine Company, says that the relations of his company with its employees have always been entirely harmonious. The company has the same men who were in the plants 10 or 15 years ago. The skilled labor is generally organized, and the company has no objection to organized labor and has never had any labor trouble. The organization of capital in the cordage industry has had no effect on wages. (158, 162.)

2. *Wages and hours.*—Mr. HOLMES, treasurer of the Plymouth Cordage Company, says that the wages paid by his company have not changed since 1880, and he thinks not since 1878. The hours of labor are shorter now, so that wages per hour are higher. For common labor, the cheapest grade of labor of men, \$1.35 a day is paid, and the week of 58 hours is called 6 days. The highest wages, aside from salaried men, are \$2.50 and \$2.75, and in a few cases \$3. The laboring people in this factory are better off to-day than ever before. The 58-hour week is prescribed by the Massachusetts law for women and minors, and the company puts all on the same basis. It runs from half past 6 in the morning to 6 in the evening, with an hour off at noon, and on Saturday it stops at 12 o'clock. (140, 143, 144, 146.)

Mr. WATERBURY says that the girls that spin cordage get about \$6 a week, and ordinary laborers get \$1.50 a day. The spinning of yarn is piecework; nearly everything else in the manufacture is day work. (128.)

Mr. FITLER, of the Edward H. Fidler Company, says that his company, situated at Philadelphia, pays ordinary male laborers \$1.50 per day, and its wages range from this figure up to \$18 per week. The factory works 10 hours per day. (148.)

3. *Steadiness of employment.*—Mr. HOLMES says that during the hard times his factory ran steadily, and for the last 4 or 5 years, excepting the very last year, it has run night and day. (144.)

4. *Employment of women and boys.*—Mr. FITLER says that his company employs about 150 women out of 450 employees in all. There are a certain number of positions for boys of 15 and 16 years of age, and when these boys grow to be men there are not enough men's positions for them. This fact produces some trouble. "If they would only leave and make a vacancy, that would be one thing; but maybe you will strike a youngster who has a nasty disposition, and he will want to make trouble. Then 10 or 15 will drop out, and we get rid of that element." (148.)

Mr. HOLMES says that out of 1,000 employees of his company about 160 are women and girls. (140.)

## III. PHOTOGRAPHIC SUPPLIES.

**A. Description of business.**—Mr. HUBBELL says that the principal business of the General Aristo Company is the manufacture of sensitized photographic paper. It also sells toning and developing chemicals. The raw paper is purchased entirely abroad and is coated in this country. (188.)

Mr. CARBUTT explains the difference between developing-out and printing-out photographic papers. The printing-out papers must be exposed by daylight until the image is bold and vigorous, then washed to remove free silver, toned with a gold solution, and afterwards fixed. The developing-out paper is only exposed for a few seconds in a dark room to either gas light or electric light, and then the image is brought out by a developer. With the help of a boy to expose the paper, Mr. Carbutt has made 25 prints in 10 minutes by using developing-out paper; that is, has exposed them, developed them, and put them into the fixing bath. Sometimes it takes 25 minutes to print one copy in daylight by the printing-out process. The developing-out paper is practically new, having come in within the last 3 years. (177, 181.)

**B. History of combination.**—1. *Organization and capitalization.*—Mr. ABBOTT, vice-president of the General Aristo Company, says that this company has existed since 1899. Its outstanding stock is \$2,400,000 common and \$2,400,000 7 per cent cumulative preferred. It has so far paid the required dividend on the preferred stock and 15 per cent a year on the common. The company has not since it was organized bought any plants which were not taken at the organization. (200.)

Mr. HUBBELL, counsel for the General Aristo Company, says that the capital stock of each of the constituent companies was purchased outright by the General Aristo Company. The intention was to discontinue these companies as separate and distinct concerns as rapidly as possible. The Photo-Materials Company and the Nepera Chemical Company have been merged into the General Aristo Company by legal proceedings. The New Jersey Aristotype Company has been discontinued and the corporation legally wound up. The plant of the Kirkland's Lithium Paper Company has been moved to New York. The American Aristotype Company still continues as a separate organization, because of certain outstanding contracts. As soon as

possible it will be merged in the General Aristo Company. As soon as that is accomplished, the General Aristo Company will be a simple corporation and not a combination. (188, 189, 194.)

The Eastman Kodak Company owns a part, but not a majority, of the stock of the General Aristo Company. It acts as trade agent for the General Aristo Company and markets all the Aristo Company's goods, the latter company paying a commission on sales. The Eastman Company makes the contracts and the terms of sale. (189, 190, 195.)

The capitalization of the General Aristo Company is very much larger than the aggregate capitalization of the constituent companies. The reason for this is that in the case of some of the companies the capital stock of the company did not represent the price which the General Aristo Company had to pay. This was true of all the companies taken over except two. The capitalization of the General Aristo Company is based on the value of the businesses of the constituent companies, rather than upon the value of the tangible property. The value of a going plant which manufactures photographic films or photographic paper consists very largely in the value of its good will, of its secret processes of trade and of manufacture, and in some cases of its patents. (188, 190.)

2. *Constituent companies.*—*a. Generally.*—Mr. HUBBELL says that the various companies which were taken over on the formation of the General Aristo Company were: The American Aristotype Company, of Jamestown, N. Y.; The Nepera Chemical Company, of Nepera Park, N. Y.; The New Jersey Aristotype Company, of Bloomfield, N. J.; Kirkland's Lithium Paper Company, of Denver, Colo., and the Photo-Materials Company, of Rochester, N. Y. The company also brought the photographic paper business of the Eastman Kodak Company, of Rochester, N. Y. (188, 191, 192.)

*b. American Aristotype Company.*—Mr. HUBBELL, counsel for the American Aristotype Company, says that that company was incorporated in 1889 with a capital stock of \$150,000, \$25,000 preferred stock and \$125,000 common stock. Only \$8,500 of the preferred stock has been issued. The capital stock of the company is now owned by the General Aristo Company. (188, 189.)

*c. Nepera Chemical Company.*—Mr. HUBBELL says that the Nepera Chemical Company, before it was merged in the General Aristo Company, had a capital of \$25,000, while the plant and business and patents were worth 20 or 30 times that amount. (189.)

*d. Photo-Materials Company.*—Mr. HUBBELL says that the Photo-Materials Company was capitalized at \$150,000. Bonds to the amount of some \$90,000 were issued. The company made a perfect failure. The bonds were bought by the Eastman Kodak Company at 50 cents on the dollar, and the property was bought by the same company after the mortgage which had been given on it to cover the bonds had been foreclosed. The company was taken over by the General Aristo Company, a small price being paid for it, because it was manufacturing a competing paper. (189.)

**C. Methods of consolidated company, and results.**—1. *Control of material.*—Mr. CARBUTT, a manufacturer of photographic plates, films, and papers, says that Mr. Eastman, of the Eastman Company, went abroad in 1898 and secured, as he believed, the control of paper for photographic purposes for import to the United States. It is necessary to use foreign paper in order to get the best results. There are two firms in Massachusetts which make a very satisfactory rough paper for photographic purposes, but have not been able to produce a fine, smooth paper. It is said that the water where the foreign paper is made in Germany is peculiarly suitable for the purpose. There are two importers of the foreign paper in New York City who will not sell to anyone outside the trust. Mr. Carbutt has repeatedly tried to buy and has been refused. There are two other importers in New York from whom Mr. Carbutt gets his paper and who do not sell to the trust; but they do not wish it to be known that they furnish the papers to others. Mr. Carbutt also says that he has friends in Germany through whom he can obtain it. The price, however, has been very much increased. On September 11, 1898, he was able to buy imported paper, the same that is used by the trust, at 7 cents a meter. On March 12, 1899, he was charged 8 cents. On December 30, 1899, the price had been raised to 14½ cents a meter, where it still stands. This is an increase of over 100 per cent. Mr. Carbutt believes these prices to be due to the action of the Eastman combination. He has no proof of this other than hearsay. He has no proof that the combination does not have to pay the same price, though he believes it does not. (173-182.)

Mr. DAILEY, a manufacturer of photographic paper, says that the General Aristo Company got control of the raw material of his business, the paper which is imported from Germany, about the first of the year 1899. Some of the American manufacturers had contracts with the manufacturers of the paper which protected them for a certain length of time. Those that were thus protected the General Aristo Company



bought, so far as possible. It did not think it worth while to buy others, because it did not think they could get material to work with. The standard papers have been made for perhaps 40 years by two companies, one in Germany and one in France. Mr. Dailey understands that these companies made a combination under the leadership of the General Aristo Company. The price was advanced from 33 cents a pound to 52 cents. Mr. Dailey has understood from good authority that the General Aristo Company does not pay this price. Mr. Dailey's company was almost completely shut off from a supply of paper for a time, though able to get some of certain kinds. Other manufacturers in Europe commenced making it, however, and Mr. Dailey has a contract with one of them at present at a price considerably lower than the combination price, though the trust is able to undersell him considerably. (183, 185.)

Mr. ABBOTT, vice-president of the General Aristo Company, explains the control which his company has over certain kinds of paper. The company does not, he says, control all the grades of photographic paper made by the foreign paper mills. The control of certain kinds comes about in this way: A factory undertakes to make a distinctive kind of photographic paper. It is necessary to have suitable raw stock. The company will write the foreign manufacturers, stating in a general way what is wanted. It may be months before the exact quality of paper is arrived at, and the obtaining of it involves a great deal of experiment. The sensitizing factory spends a great deal of money in prosecuting these experiments. When it has been to the expense of practically educating the foreign mill to produce that particular paper, it feels entitled to the exclusive use of it. Otherwise a rival could buy the paper and save the whole cost of the pioneering experiments. The American Aristotype Company had arrangements with the foreign paper mills for the exclusive use of certain kinds of paper before the General Aristo Company was formed, and these contracts were practically continued. The American Aristotype Company was the pioneer, not only in this country but in the world, in the manufacture of these particular kinds of paper. The collodion process was a hand process, in which the photographer did his own coating, until the American Aristotype Company made it an industry. It had never been manufactured in a factory and put on the market ready for use. Mr. Abbott supposes that the collodion process has now become more or less a commercial one in Europe, and that European manufacturers can buy the same papers which his company uses. His company has never asked the paper makers not to supply European customers.

There are other manufacturers of raw stock abroad besides those that the Aristo Company deals with. They make a very similar stock, and Mr. Abbott supposes it can be procured in this country. One of these raw-stock factories is in practically the same locality as one of those which supply the Aristo Company, and is able to use practically the same water—the glacier water of the Alps. (196, 197.)

Mr. HUBBELL says that the General Aristo Company has contracts with foreign producers of paper by which it is enabled to control the entire exportation to this country of the paper manufactured by those producers. These companies had been selling paper in this country prior to the making of the contracts, and they agreed that if the General Aristo Company would take only their products they would sell only to that company in this country. The General Aristo Company could not prevent the purchase by business competitors in this country, through foreign purchasers, of the paper produced by these foreign companies. (191.)

2. *Penalties for purchase of competitors' product.*—Mr. CARBUTT states that he was the pioneer manufacturer of gelatine dry plates in the United States. His concern was established in 1878. He has more recently taken up the manufacture of other photographic supplies, including papers. The General Aristo Company was formed in 1898, through the agency of Mr. Eastman of the Eastman Company, and merged a considerable number of makers of photographic papers. The General Aristo Company makes one particular paper, which it is necessary for dealers in photographic supplies to have, because for particular purposes it has not been equaled. With the help of this advantage the General Aristo Company undertakes to prevent dealers from handling any papers other than those of its manufacture. It offers a rebate of 12 per cent on the paper bills of customers who sign a statement that they have not handled any paper made by other parties, and it refuses to supply those who refuse to sign the statement. The statement is presented once in 4 months, and sets forth that the signer has not during the period covered by it "bought, sold, carried in stock or disposed of, either directly or indirectly, any collodion printing-out, or gelatine printing-out, bromide, or developing-out papers, other than those manufactured by the General Aristo Company's factories," and that all such papers have been sold strictly at the list prices, without any arrangement for any rebate, directly or indirectly. Mr. Carbutt presents letters from several dealers indicating that they would

be glad to buy his papers if the trust agreement did not make it impossible. He also presents letters to show that his paper is of the highest quality. He believes that the contracts demanded by the combination are in violation of the United States anti-trust law. It has not occurred to him to complain to the United States district attorney, but he will do so. He has thought of bringing suit, but the Eastman Company is a very rich concern, and it would be too long and expensive a fight. (174-182.)

Mr. DAILEY, a manufacturer of photographic paper, says that when the General Aristo Company was formed its method was to sell its papers at a discount of 15 per cent from its list and then pay, at intervals, an additional rebate of 12 per cent to those who had not bought paper of any other make. Many dealers who were handling large amounts of outside paper thought that it would pay them better to sacrifice the 12 per cent rebate and continue to buy of the independent manufacturers. The prices of the independent manufacturers were from 10 to 25 per cent below that of the Aristo Company, even when the 12 per cent rebate had been deducted. When the Aristo Company found that dealers were following this course, they took a further step. They determined to refuse their goods to all dealers who handled independent paper. Not only that, but the Eastman Kodak Company, which controls the Aristo Company, refused to sell such dealers its cameras and films. A dealer could very well get along without aristo paper, but no dealer in photographic supplies could do business without the kodak cameras and films. No open announcement was made of the fact that goods would not be furnished to independent dealers. A representative of the Eastman Kodak Company went personally to such dealers and said to them that while his company was not making any threats, the dealers would find it very inconvenient not to be able to get the kodak cameras and films. These goods were protected by patents. It would be well to consider these things. If the dealers would give up handling the outside paper, the General Aristo Company would relieve them of what they had and pay them what it had cost them. In consequence of this policy, says Mr. Dailey, his goods were entirely off the market in about 10 days. A few dealers undertook to resist. Mr. Dailey gives the names and addresses of one in New York and one in Newark. Both were compelled to yield after a limited time. The Newark dealer controlled two companies, and undertook to have one establishment handle independent paper, while the other restricted itself to aristo. The Aristo people would not allow that.

There was a company in Newark called the American Self-Toning Paper Company, which was doing a very nice business, and which was not directly attacked by the Aristo Company until several months after the attack on Mr. Dailey. Mr. Dailey's goods were boycotted about January 1, 1899, and those of the Self-Toning Company about September 1, 1899; but when the attack did come, the Aristo Company did not take the stock of the Self-Toning Company's paper off the hands of dealers, as it had done earlier with other paper. Consequently such dealers as had not paid for their paper shipped it back. It was perishable, and great quantities came back on the company's hands and were a dead loss. The accounts were too small to sue, and the result was that the company was thrown into the hands of a receiver.

The only way of selling goods which Mr. Dailey finds is to deal directly with the consumers. He ships to customers in Philadelphia, paying the express, and still underselling the trust. He has an office in New York, and has done considerable business there. He has tried to open offices in various cities, but has found the expense too great. The trust follows him up even in his dealings with consumers. If he furnishes paper at \$1 a gross to a consumer who has been paying the trust \$1.25, the trust will meet the price with another brand, and will place its paper in the hands of dealers, where consumers can get it more conveniently than they can get Mr. Dailey's. Mr. Dailey's only resource is again to underbid the trust; and if he makes too low a price to be met through dealers, the Aristo Company will sell directly to the consumer and meet his prices. The Aristo Company also tries to get consumers under contract for a number of months, and has done so in many cases.

Mr. Dailey believes that the methods of the Aristo Company are unlawful, and that if he went into a suit he might win; but he does not feel able to attempt this because of the expense. He has been gathering evidence, and has thought when the time is ripe he will complain to the United States District Attorney. (183-187.)

Mr. ABBOTT, vice-president of the General Aristo Company, says that this company sells only to the Eastman Kodak Company. Mr. Abbott understands that the Eastman Company offers its goods to all dealers at a trade discount of 15 per cent, and gives an additional discount of 12 per cent to dealers who handle its goods exclusively. He doubts whether the Eastman Kodak Company would sell anything—a camera, for example—to a dealer unless he confined himself to their line. There is nothing, except patented articles, which it is necessary for a dealer to buy from the

Eastman Kodak Company. The company simply gives a dealer the option of handling the Eastman Company's line on their terms or handling other lines. If there is any compulsion put upon the dealer it is not put upon him by the Eastman Company. The compulsion comes from the consumers. Whatever the consumer demands the dealer must handle. If the demand for the Eastman goods is greater in a locality than that for any outside line, the dealer is forced to handle the Eastman goods. The Eastman Company may occasionally give an exclusive agency to 1 dealer in a small place, but such cases are very few. Generally it sells to anybody. There are very few dealers in photographic goods exclusively. Photographic goods are handled by drug stores, department stores, booksellers, and people in various lines of trade. There is no such thing as controlling the dealers in photographic materials. If 1 drug store in a town is selling the Eastman goods there are 7 or 8 other drug stores which are free to sell other makes. If, as Mr. Carbutt claims, he has a better paper than the Aristo Company's, which he sells at a better price to the trade, and is not handicapped in any way in securing his raw materials, the drug store that he sells to should be able to undersell the drug store that the Eastman Company sells to and take away its trade. If the consumer wants some Eastman goods he is free to buy them where they are kept, and then go to the other store and buy the better and cheaper paper of the other make.

Mr. Abbott confirms the account of the dealer in Newark who had 2 establishments, 1 upstairs and 1 down, in 1 of which he handled Eastman goods exclusively and claimed the full discount, while in the other he handled outside goods. Mr. Abbott says, "We have stopped 2 or 3 performances of that kind." (197-204.)

Mr. Abbott also says that the agents which the General Aristo Company has on the road are not sent out to sell goods, but to educate photographers in the proper use of the company's goods. The company has expended a great deal of money in keeping these demonstrators in the field, in educating photographers in the manipulation of its goods, and in advertising. This is one reason for the Eastman Kodak Company's terms to the agent or dealer forbidding its agents to handle the goods of other manufacturers. It would hardly be fair to appoint a dealer as the company's agent, refer to him a vast amount of trade which the company's energy has created, and then allow him to handle imitations or parallels of its goods. (201.)

Mr. HUBBELL says that the Eastman Company agrees by contract with dealers to give a special discount on its goods, provided they handle no others. This discount is uniform to everybody. Similar contracts are made by the General Aristo Company, and were made by some of the constituent companies before the General Aristo Company was formed. When that company was organized, a circular letter was sent out to all the dealers in the United States asking their opinion of that system. Almost all said that it was the best system, and it was because of the nature of their replies that the system was continued. (191, 192, 193.)

Mr. Hubbell holds that the contracts by which a special discount is given to dealers upon their agreeing to handle only the goods of the company giving the discount is not a contract in restraint of trade, as restraint of trade is defined in our statutes. He cites decisions by the courts, which, he says, hold that such contracts are proper and legal. The Eastman Kodak Company does not, by means of such contracts, force its paper upon the trade, because of the fact that the company manufactures other supplies which no other company manufactures and which dealers desire to buy. (192, 193, 194, 195.)

3. *Misrepresentation of competitors' goods.*—Mr. CARBUTT, a manufacturer of photographic paper, presents letters from customers to show that the agents of the Eastman combination tell falsehoods about the material and the quality of his paper and about the prices at which it is sold. He states that when he called the attention of the General Aristo Company to these practices, that company replied that such action was not authorized, and probably resulted from overzealousness on the part of their demonstrators to secure business. (175, 176.)

4. *Economies of combination.*—Mr. ABBOTT, vice-president of the General Aristo Company, says that his company has made considerable economies, which have reduced the cost of production of several papers, or will reduce it. It has taken up the manufacture of some of the raw materials. The cost of marketing has been considerably reduced through the increase of the business and through the concentration of the selling in the hands of one selling agent. Mr. Abbott thinks the number of traveling men on the road is much greater than before the organization of the General Aristo Company. The situation would not permit any relaxation of efforts to sell; competition is too strong. The General Aristo Company has no monopoly, though Mr. Abbott thinks it has considerably more than half of the photographic paper trade. (200, 201.)

5. *Effect of combination on prices.*—Mr. CARBUTT, a manufacturer of photographic paper, states that his prices are 25 per cent below those of the Eastman combination,

although the cost of the imported paper, which is his raw material, has been increased more than 100 per cent within three years, as a result, he believes, of a nearly complete control of the supply by the Eastman combination. Mr. Carbutt presents letters from customers to show that his paper is of the very highest quality and the highest suitability for the purpose it is made for. (175, 178.)

Mr. DAILEY, a manufacturer of photographic paper, says that when the General Aristo Company, controlled by the Eastman Company, got control of the raw material for the manufacture of photographic paper, it raised the price of cabinet size paper, which had sold at wholesale at 55 cents and at retail at 75 cents, to \$1.35 retail and about \$1.01 wholesale. Through its control of the raw paper for sensitizing it was able to raise the price of this material to other manufacturers from 33 cents a pound to 52 cents. This increased the cost of manufacture to Mr. Dailey's company possibly 20 or 25 per cent. Mr. Dailey understands from good authority that the General Aristo Company does not pay this high price for material. Even if it did, the increase of cost would not be over 20 or 25 per cent, while the Aristo company has advanced prices of manufactured paper almost 100 per cent. (185, 186.)

Mr. ABBOTT, vice-president of the General Aristo Company, says that the company continues to make the various kinds of paper that were made by its constituent companies before the consolidation. There has been no raising of prices in any instance. The price of collodion paper is the same that it was, and practically the same that it has been for 12 years. On platinum paper there has been a reduction of 20 per cent. and the average prices of gelatine paper are lower than they were before the organization of the General Aristo Company. (200, 203.)

6. *Growth of competition.*—Mr. CARBUTT, an independent manufacturer of photographic supplies, says that this business has developed very rapidly, and faster since the trust was formed than before, "because it started several of what are called anti-trust makers of paper." (180.)

Mr. ABBOTT, vice-president of the General Aristo Company, gives a list of some 12 manufacturers who sensitize paper in this country, in competition with his company. Probably a third of them, he says, have started within the last year, or since the organization of the General Aristo Company. There are an infinite number of concerns making cameras and photographic supplies and materials of all kinds. (199; 200.)

Mr. HUBBELL says that there are more concerns engaged in the business of manufacturing photographic paper to-day than there were when the General Aristo Company was organized, and that these concerns are competitors of that company. The Eastman Kodak Company manufactures a flexible film which is used instead of a plate. This film was invented by Mr. Eastman, and in the manufacture of those films the company has no rival. In respect to other lines of goods manufactured by the company its success is due to the superior quality of its goods. (192, 193.)

**D. Condition of labor in the industry.**—Mr. CARBUTT says that wages in his establishment, at Philadelphia, run from \$6 a week up for girls, and from \$12 to \$30 for the men. The men work 10 hours and the girls 9. (179.)

Mr. ABBOTT, vice-president of the General Aristo Company, says that there has been no general increase of the wages of that company since it was formed, but at the Rochester factory the hours have been reduced from 10 to 9, with no reduction of pay. The Eastman Kodak Company has put in dining rooms for its men and its women, and serves a lunch to the women for 10 cents, which, Mr. Abbott says, is much below cost. The company has also provided a library for the working people, and allows them to take the books home at night. (203.)

The women employed in the manufacture of photographic paper are used mostly in sorting. Their hands are more delicate, and they are much better at sorting than men. No women are employed at anything that men have done in Mr. Abbott's factory. (204.)

**E. Patents and trade-marks.**—1. *Patents vs. secret processes.*—Mr. ABBOTT, vice-president of the General Aristo Company, says: "There are so many things about a chemical formula that secrecy is relied upon by paper and chemical manufacturers more than the Patent Office." Control can be kept for a longer time by keeping processes secret than by patenting them. It is necessary to rely to some extent upon workmen to keep trade secrets, but generally no one man, except the managers and their understudies, knows much about any department except his own. (203.)

2. *Infringement of trade-marks.*—Mr. ABBOTT states that his company has in several cases had trouble with infringers of its trade-mark; in one case with Mr. Carbutt. Mr. Carbutt put out a paper called Vivax, which the General Aristo Company regarded as an infringement of its trade-mark Velox. Suit was brought but never came to trial. Mr. Abbott thinks the trade-mark in question was withdrawn. (205.)

## IV. THE PLATE GLASS COMBINATION.

**A. History of industry and of combination.—1. Plate glass industry.—**

Mr. PITCAIRN, president of the Pittsburg Plate Glass Company, says that the first substantial success in the manufacture of plate glass in the United States was obtained by Mr. De Pauw, at New Albany, Ind. His factory produced its first polished plate glass in 1873. It was afterwards dismantled on account of obsolete machinery and unfavorable location. The next successful factory was established at Crystal City, Mo. The company was organized in 1872 and reorganized in 1876. The factory has been uninterruptedly successful. In 1883 the factory at Creighton, Pa., was founded. It was here that the use of natural gas in the manufacture of plate glass was first introduced. (226.)

Mr. Pitcairn states that the growth of the plate glass industry has been spasmodic, while the growth of the demand for plate glass has been slow and steady. The result has been great fluctuations of price. For several years large profits were made. This led to the building of 7 new factories, and this again to an excessive production and a depression in price. The industry became unprofitable. Some factories were running at a loss and others at no profit. One was sold by the sheriff and several others were on the verge of bankruptcy. This condition lasted several years, and led to efforts to consolidate the largest factories. (227, 241.)

2. *Pittsburg Plate Glass Company.—a. History.*—Mr. PITCAIRN says that before the present consolidation was formed the Pittsburg Plate Glass Company existed as a Pennsylvania corporation, owning four factories. This corporation increased its capital stock and bought outright the properties of its principal competitors, issuing its own stock to the individual stockholders of the constituent companies. The properties were bought at their actual cash values. Nothing was paid for good will. Some of the concerns desired an inflated capitalization, and the refusal of Mr. Pitcairn and others to consent delayed the consolidation for 2 or 3 years. No weak or insolvent companies were taken in. There were 3 companies which were on the verge of bankruptcy. Their liabilities were such that, on the basis of value used in the purchase of the other companies, their stockholders would have received little or nothing if they had been taken into the consolidation. If the consolidation had been deferred another year or so, some of the companies would probably have become insolvent. The consolidated company reduced the production of its factories, and the independent companies were enabled to run full. By the policy of the consolidated company the independent companies were saved, and they are now competing.

For several years before the consolidation in 1895, says Mr. Pitcairn, there was absolutely no profit in the plate glass business. The average earnings of the Pittsburg Plate Glass Company since the consolidation have been about 9½ per cent a year. No dividends were paid until 1899. In that year 5 per cent was paid, and the dividends in 1900 have been at the rate of 6 per cent. The profits made in 1899 were about 18 per cent, and those for 1900 will also be large, possibly as large as those for 1899. The profits are not excessive in view of the vicissitudes of the business, the changes that are necessary in the way of new machinery and new methods, and the probability that in the course of a year or two there will be a renewal of the conditions of overproduction. The present market price of the shares is about 161. There are about 600 stockholders. One of the factories taken in, the Duquesne factory, has been sold to the Carnegie Steel Company, whose property it adjoins. The company has a sufficient capacity without it. (227, 232, 233, 235, 237, 241.)

b. *Control of trade.*—Mr. ELLIOTT, of the Philadelphia Paint Club, says that the production of plate glass in this country is estimated at about 20,000,000 feet per year, and that the Pittsburg Glass Company is supposed to control about 80 per cent of this amount. (207, 213.)

Mr. MAYER, of the glass department of John Lucas & Co., states that the Pittsburg Plate Glass Company makes probably 80 per cent of the plate glass made in the United States, and the other 20 per cent is made by three outside corporations. Two of them have been running perhaps 10 years or more, and the third is just beginning. Mr. Mayer's firm has not bought any glass of any of these concerns; their product has all been engaged, principally by Western jobbers or men financially interested in their plants. Mr. Mayer does not believe that these companies are really independent competitors of the Pittsburg Plate Glass Company. They are supposed to be working under agreements with it, securing uniform prices. (222.)

Mr. PITCAIRN says that his company controls only what it produces, which is about 72½ per cent of the plate glass produced in the country. It is not able arbitrarily to make prices for American plate glass. It has been possible, in consequence of the

destruction by fire of the Penn Plate Glass Works at Irwin, Pa., to advance prices; and supply and demand are more closely adjusted at present than they have been for several years. The company produces such a large percentage of the glass that under these favorable conditions it fixes its selling prices, and the others follow it. (239.)

Mr. Pitcairn gives a table of the plate glass factories in the United States, showing 10 works owned by the Pittsburg Plate Glass Company, with an annual capacity of 26,000,000 feet, and 3 other factories with an aggregate annual capacity of 3,900,000 feet. The sales for 1900, with the month of December estimated, are given as 13,637,000 feet for the Pittsburg Plate Glass Company, or a little over half its capacity, and 5,159,000 feet for the other companies, or nearly their full capacity. The total sales of domestic and foreign glass in the country during 1900, according to Mr. Pitcairn, were about 21,000,000 feet. In 1876 they were only 6,300,000 feet, of which only 600,000 feet were produced in the country. (227.)

3. *European production and syndicates.*—Mr. PITCAIRN gives a table of the plate glass factories in Europe, with their output for 1900, and in most cases their producing capacity. The total capacity, as shown, is about 69,000,000 square feet a year, and the total product for 1900 about 40,000,000. Nearly one-third of the product comes from Belgium, about one-fifth from France, the same from England, and one-sixth from Germany. The product in Belgium has increased from 1,080,620 square meters in 1895 to 1,619,590 square meters in 1899; and while there are no official figures for other countries, Mr. Pitcairn believes the increase has been similar wherever the manufacture is carried on in Europe.

Mr. Pitcairn declares that "experience has demonstrated that the consumption of plate glass is not elastic and can not be forced so as to absorb an arbitrary increase of production, the consumption depending upon general prosperity, because plate glass is considered a luxury. In the opinion of manufacturers of plate glass in Europe the selling price is not regulated by the general law of supply and demand, the increase of production being spasmodic, while the consumption, although steadily growing, remains limited." In accordance with these views there have always been cooperation or syndicate arrangements among the European manufacturers for regulating prices, and, especially in later years, for regulating production also. In Belgium the sales for all the factories are apportioned, and are all made through one selling office. In Germany the manufacturers are united in one syndicate, regulating production and prices. One large company in France has thorough control of the market, through close connection with other manufacturers in the country, and the condition in England is the same. Moreover, these several national combinations have combined in one international syndicate to regulate and divide the world's markets. They limit production, as may be supposed from the fact that the aggregate production of Belgium, France, and Germany is less than half the capacity of the factories. They assign certain markets to certain manufacturers. They prevent buyers from disturbing the rules of the syndicate, by a "premium of fidelity" and also by a blacklist system. (228, 229.)

**B. Methods of the consolidated company.**—1. *Prohibition of purchases abroad.*—Mr. MAYER, of the glass department of John Lucas & Co., states that though cut sizes of plate glass could be imported from Europe from 10 to 20 per cent below the prices in this country, and stock sheets some 50 per cent cheaper, the combination is able to prohibit dealers from taking advantage of these market conditions. Some sizes of plate glass have to be obtained from the Pittsburg Plate Glass Company, and the company offers a rebate of 5 per cent, payable at the end of the year, to those who have through the year maintained its terms and prices. If a dealer should sell at prices lower than it has fixed, it could cut off his source of supply. But, further than that, there exists an intimation or threat of the plate glass trust that if any considerable amount were imported they would probably reduce the selling price here and leave the importers with a loss. On account of the abnormally high duties it is within the power of the trust, by a sharp reduction of prices, to cause a very serious loss to anybody who should have ventured to import a large amount of glass. Mr. Mayer's firm did import some glass before the edict went out that importation must cease, but has apparently imported none since. Mr. Mayer is not aware that his firm has given offense to the trust by importing. (218, 219, 224, 225.)

Mr. ELLIOTT, of the John Lucas Company, exhibits letters sent by the Pittsburg Plate Glass Company to his firm regarding the importation of foreign glass. On August 27, 1900, the plate glass company wrote: "If you think it is to your interest to place an order for glass under 10 square feet<sup>1</sup> abroad, you are at liberty to do

<sup>1</sup> See Mr. Pitcairn's statement as to the unprofitableness of these sizes under *Effect of combination on prices*, p. 239.

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so, the manufacturers stipulating that a copy of the order be sent to this company." On October 27, 1900, the following letter was sent out from the Pittsburg Plate Glass Company: "We have just been advised by our general office that any permission that has been given to the jobbers whereby they were allowed to import plate glass must be at once withdrawn, and we hereby beg to notify you to this effect.

"We will ask you to send to this office at once a memorandum of any foreign glass that you may have ordered which you have not received." On November 30, 1900, the following letter was sent: "Gentlemen: At a meeting of the manufacturers and 'A' jobbers of plate glass in Pittsburg, on the 14th instant, it was resolved that no 'A' or 'B' buyers would be permitted to import plate glass or to purchase plate glass that had been imported into this country. The manufacturers will expect all the 'A' and 'B' buyers to conform strictly to this resolution."

Mr. Elliott intimates that the paint manufacturers and plate glass dealers regard these letters as not only tyrannical, but insolent. He explains that the "A" buyers are the large dealers and buy what are called "stock sheets" and cut them up themselves. They are, of course, given a lower price than the "B" dealers, who buy what are called "cut sizes." (208, 209.)

Mr. Elliott adds that the consideration which the Pittsburg Plate Glass Company gives to "B" buyers to hold them in line is a rebate of 5 per cent, payable at the end of the year, if they have complied with its terms. He does not think that written contracts are required or that his own firm has any agreement with the Pittsburg Plate Glass Company. An agreement implies the consent of two parties. The Pittsburg Plate Glass Company wrote his firm saying that it would do so and so; his firm continued to buy the glass company's goods, because it could do nothing else. It is a question whether that constitutes an agreement. (211, 212.)

Mr. HERR, of the Pittsburg Plate Glass Company, says that the jobbers, both "A" buyers and "B" buyers, get nearly all their supplies from the outside factories. The Pittsburg Plate Glass Company allows them a rebate of 5 per cent at the end of the year on what they buy from it, in consideration of their buying their glass in this country. There has been no attempt to limit their trade to the Pittsburg Plate Glass Company. They agree to buy all their glass in this country; but there is nothing to prevent their buying in Europe if they choose. The company would not on that account refuse to sell them glass. (243, 245.)

Mr. PITCAIRN, president of the Pittsburg Plate Glass Company, referring to the letters by which the Pittsburg Plate Glass Company is said to have forbidden jobbers to buy glass in Europe, says that there is an organization called the American Plate Glass Association, of which the "A" jobbers throughout the country are members. These members buy their glass from the manufacturers other than the Pittsburg Plate Glass Company, but they also buy glass which can not conveniently be supplied by the outside companies from the Pittsburg company. "That association of jobbers was willing to purchase all their glass from American manufacturers, provided the manufacturers would allow them certain preferential prices, and pursuant thereto that association at a recent meeting passed a resolution that the jobbers should not import any plate glass. There are 91 recognized 'A' and 'B' jobbers in the country, and the letter referred to was sent to 3 of them only; those 3 being located in Philadelphia. The letter was not a demand by the plate-glass company or by the manufacturers, but was intended simply to call the attention of the jobbers to the fact that the jobbers' promise not to import was being broken, and to call to their attention the resolution not to import which was passed by the jobbers themselves."

In reply to the suggestion that Philadelphia jobbers must buy their glass of the Pittsburg company or be cut off from certain sizes which they could not get from independent companies, Mr. Pitcairn says, "the Pittsburg Plate Glass Company has never refused to fill any orders from anyone with good credit." (231.)

2. *Classification of buyers.*—Mr. MAYER, of the glass department of John Lucas & Co., testifies that his firm can not buy stock sheets of plate glass, because it is a "B" buyer. Stock sheets are sheets of glass just as it is finished in the factory, without cutting or trimming the edges. They are distinct from cut sizes, which are glass cut to the required measure. The distinction of "A" and "B" buyers never existed in the trade until the Pittsburg Glass Company established it a short time ago. That company simply announced to the trade that such and such buyers only would be recognized as in the "A" class, and only "A" buyers would be permitted to buy stock sheets. Before that time any dealer could send in a list of his requirements and make a contract for stock sheets at whatever price the manufacturers chose to make. There was not then any uniformity of prices as there is to-day. Dealers preferred to buy in stock sheets, because the glass came cheaper in that form, and business experience showed that it was the more advantageous way to buy. Only one house in Philadelphia is named as an "A" buyer, and no one else in the city is

allowed to buy stock sheets. Mr. Mayer believes that this plan has been adopted as a step toward crowding out the jobber of plate glass, in order to diminish the competition and give the Pittsburg Plate Glass Company more absolute control. He thinks the result of such a movement would be, so far from benefiting the consumer by eliminating the profits of one middleman, rather to enable the combination to put up prices still further. (218, 223, 224.)

Mr. ELLIOTT says that the Pittsburg Plate Glass Company decided to make some people "A" buyers and other people "B" buyers. If one wanted to become an "A" buyer one must give an order for 100,000 feet of glass and agree to become a factor in carrying on the sheet-glass business. (211, 212.)

Mr. PITCAIRN, president of the Pittsburg Plate Glass Company, denies the assertion that the classification of the plate-glass buyers originated with his company. It has existed for many years, he says, and was established by the jobbers themselves. It was the custom of the manufacturers to sell their product to certain buyers called "A" buyers. These in turn recognized a class of houses who did business on a smaller scale and to whom the "A" buyers made preferential prices. These were called "B" buyers. The "A" buyers carried large stocks of glass at their own risk and at the cost of a considerable investment. The "B" buyers did a hand-to-mouth business, involving little risk and little investment. (230, 241.)

Mr. HEROV, of the Pittsburg Plate Glass Company, says that according to his recollection the distinction between "A" and "B" buyers dates back to 1890. A distinction was then made between "A" buyers, who were purchasers of stock sheets, and "B" buyers, who did not carry stock, but had their orders executed by different jobbers and received a commission. The "B" buyers may have had a few sheets of glass in their warehouses, but they did not carry sheets to any great extent. When the Pittsburg Plate Glass Company decided to distribute its own product it cut loose from the buyers of stock sheets. It does not now sell glass except in cut sizes. (242, 243.)

3. *Distributing branches.*—Mr. MAYER says that the profit to jobbers of plate glass is very small. They sell it at the same price at which it is billed to them, and all they get for handling it is a rebate of 5 per cent at the end of the year. The Pittsburg Plate Glass Company has recently established a distributing house in Philadelphia and one in each large city. Mr. Mayer believes that they wish to crowd out the jobbers. He does not think that this can well be done, because it is necessary to handle various other lines of glass in connection with the plate glass. It is true that the Pittsburg Plate Glass Company is branching out into other lines; it is now handling at its branch houses a line of paints, brushes, and similar supplies from an allied factory. (225.)

Mr. PITCAIRN says that his company was forced to undertake the distribution of its own products by the arrogant attitude of the jobbers. When the present consolidation was formed there existed an association called the National Plate Glass Jobbers' Association, which regulated the prices to the consumer and to a large extent fixed the prices that jobbers paid to the manufacturers. One of their resolutions is as follows: "That we will not offer to sell, directly or indirectly, any plate glass or other glass in connection therewith under any circumstances at a lower price or on any other terms and conditions than those specified by the National Plate Glass Jobbers' Association." This association demanded that the manufacturers should not sell stock sizes to any jobber who did not carry at least 50,000 feet of stock. "This was the immediate reason for our going into the jobbing business, though it was expected that for economic reasons we would ultimately do so." There was no desire to crush the jobbers, and when the company announced its policy to market its own product it announced at the same time that it would sustain prices until the jobbers could dispose of their stocks on hand. The company now has more than \$4,000,000 invested in the jobbing branch of its business. It has warehouses in 14 cities, with branch offices for the sale of glass in 3 others. Mr. Pitcairn declares that in proportion to the capital invested the jobber has a larger profit than the manufacturer. It would not be practicable to establish branch houses for the sale of plate glass alone except in the largest cities. Necessity has compelled the company, therefore, to add such allied products as window glass, paints, and painters' supplies. This was not done as a means of coercing the glass and paint trade. It is intended simply to do a legitimate business, each branch of which is supposed to stand upon its own footing. The company buys its window glass from the American Window Glass Company at the same prices that other jobbers pay. It has thought that it should have a preferential rate because it is such a large customer, but it has not obtained one. (227-231, 234, 238, 239.)

Mr. HEROV says that the general prices to the trade are announced in circulars, which are distributed to dealers, so far as the dealers are known to the company,



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and that jobbers receive a rebate of 5 per cent from the prices so announced. This 5 per cent is all that the jobbers would ordinarily have for handling the glass, though in some cases they would make more in selling to the smaller trade who might not be familiar with prices. The Pittsburg Plate Glass Company gives its local agents in control of its jobbing houses a good deal of discretion in selling to superintending architects and builders. (245.)

**C. Effect of combination on prices.**—Mr. MAYER, of the glass department of John Lucas & Co., states that the Pittsburg Plate Glass Company has advanced the prices of plate glass within 3 years at least 150 per cent. For instance, size 12 by 60 inches sold 2 or 3 years ago at 75 cents a light; to-day it sells for \$1.88. Size 24 by 60 sold at \$2.40 a light; to-day it sells for \$6. Size 24 by 84 sold at \$4.55; to-day it sells at \$11.38. These three sizes cover the greater part of the demand. (218, 220, 221.)

Mr. Mayer adds that plate glass was imported much more freely several years ago when the American prices were lower. In reply to the suggestion that if the combination has raised the price in the United States 150 per cent within 3 years, and some kinds can still be imported only 10 or 20 per cent cheaper than they can be bought here, the price in Europe must also have risen greatly, he offers no further elucidation of the facts, but states that he does not know of any trust or combination of manufacturers in Europe to raise the price. (219.)

Mr. HEROV, of the Pittsburg Plate Glass Company, says that since this company manufactures 72½ per cent of the output its prices certainly regulate the general trade prices. There is enough domestic and foreign competition to prevent the company from exacting an unreasonable price. (243.)

Mr. PITCAIRN, president of the Pittsburg Plate Glass Company, presents a table showing the prices of plate glass at intervals of 5 years, from 1875 to 1900. The table shows lower prices in 1900 than in any other of the years given except 1895. Mr. Pitcairn admits that in 1897 prices were very much lower, but he declares that that was an exceptional period, when the business was in its most demoralized condition. It is unfair in making a statement of the advances to select certain sizes and show the advances on them only. "The actual cash returns received by this company show that the average advance of glass from that period has been only from 50 to 60 per cent, and not 150 per cent, as alleged. This is computed upon the entire sales of all sizes of plate glass. Some of the preferential buyers are now buying certain sizes of plate glass at prices lower than before the industrial revival of 1898." Moreover, there has been a great increase in the price of materials. Mr. Pitcairn gives a list of about a dozen materials, with a statement of the per cent of advance in each, and says that the average increase in the raw materials is about 85 per cent. Wages have also advanced. The last increase of wages was made May 1, 1899, and amounted to 5 per cent. (231, 232, 235.)

Mr. Pitcairn declares that about two-thirds of the product of his company is sold in sizes under 10 square feet and sold without profit, and that a very large part of this two-thirds is sold at a large loss. An independent factory is now building for the manufacture of small sizes, but Mr. Pitcairn does not believe that it can compete profitably with foreign glass at the present price. He explains that his company has during the past 2 or 3 years increased the sale of small sizes very materially by replacing what is known as German plates, which are a blown glass, ground and polished, and are sold largely in this country for use in cheap furniture. To get this trade the company has been obliged to sell cast polished plate glass of the same sizes as the German plates much below the total cost of manufacture. "We have figured that in taking this business we would not increase our general expenses and cost of distribution at all, and that if we could get the bare cost of materials and labor entering into its production we could afford to take it, temporarily at least, to keep our works running and our men employed; but if this business is considered on the same basis as our business as a whole, bearing its full share of the general expenses and cost of distribution, then it is done at a loss of from 10 to 15 cents per foot." Mr. Pitcairn's company is giving the furniture factories plate glass which is much better than German plates at the same price. (235, 240.)

**D. Remedies for alleged evils of combination.**—1. *Tariff revision.*—Mr. ELLIOTT presents a protest on behalf of the Philadelphia Paint Club against certain features of the tariff. The club is composed of paint manufacturers and glass dealers. At a regular meeting held December 5, 1900, resolutions were unanimously adopted which contained the following propositions:

The levying of protective duties is intended to produce a revenue, to encourage the establishment of home industries, and to protect American manufacturers and workmen from destructive foreign competition. Prohibitory duties not only fail to produce revenue, but in many cases enable the beneficiaries of them to take undue advantage of consumers in direct opposition to the principle upon

which the whole theory of protective duties rests. The development of American industry in many lines and the consolidation and combination of producers has rendered existing duties on the one hand excessive and on the other has left the consumer without the benefit of competition as a factor regulating prices. The development of American commerce in foreign markets would be greatly facilitated, and may be attained, by reasonable moderation in the duties upon raw materials, which are shown to be in excess of the requirements both of revenue and protection.

In view of these considerations the club resolved to communicate with other organizations of the trade and make an effort to "crystallize the sentiment of the country in the direction of the revision of the tariff on more equitable lines."

The duty to which the club particularly refers is that on plate glass. Mr. Elliott states that manufacturers of plate glass, by a combination of factories, closing some and reducing the output of others, have advanced the price, as it is alleged, from 125 to 150 per cent, according to the size of the plates. Mr. Elliott and the club which he represents are favorable to protective duties as such. They object to "the abuse arising from the duties, when, after the industry has been established, advantage is taken to monopolize the production and distribution." Mr. Elliott quotes President McKinley's message on the subject of taxation, "that reduction should be secured by the revision of those taxes which experience has shown to be the most burdensome to the people." There has been nothing in the condition of the markets or the price of raw materials that would justify the increased price. In the case of sheet glass, a box of glass can be brought on board ship in a foreign port for the mere cost of blowing the same quantity of glass in this country, without saying anything about the cost of material and boxing and profit for the manufacturer. But the skilled labor which cuts so large a figure in the blowing of sheet glass is not to any extent necessary in the production of plate, outside of a few foremen. The plate-glass trust has put up the price so enormously that, in spite of the duty, which on most sizes ranges from 100 to 175 per cent of the cost of foreign glass, with freight added, polished plate can be imported in cut sizes from 10 to 20 per cent cheaper than the extreme selling price of the plate-glass trust. (206-208.)

Mr. Elliott holds that the present conditions of trade demonstrate that we have but little to fear from foreign competition. Interest is as low here as abroad. We hold the key to the position in coal. Workmanship is superior in this country, and we turn out more per capita. In view of facts that Mr. Elliott presents as to the results of what he considers the excessive duty on plate glass, on white lead, and on linseed oil, he believes that the Philadelphia Paint Club, which he represents, is justified "in asking for a modification of duties on the lines suggested by the President of the United States in his message to Congress this year." He suggests as a basis an amount of protection sufficient to cover the difference in labor cost between the United States and foreign countries, with an addition of 5 or even 10 per cent "to cover other contingencies for the rise and fall in the remuneration to labor." When it is suggested to him that an attempt to modify the tariff to suit the paint trade would open the door to a revision of the tariff all along the line, he replies that he and those he represents "think the time has come when we might possibly venture to do something of that kind." While they believe in the theory of protection to American industry, evidence has been presented before the Industrial Commission which proves without doubt that some lines are inordinately protected. The fear of a general agitation of the tariff question is not a sufficient reason for perpetuating such evils. "We say we would be willing to stand any amount of agitation or whatever might follow in order to have those particular matters reduced to a proper basis." (210, 213, 216.)

Mr. MAYER, discussing the monopolistic policy of the Pittsburg Plate Glass Company and the great increase of prices which it has made, says, "The cause for the evil exists and will exist whether we should obtain a speedy remedy from any Federal court or not. It remains in the form of an oppressive, exorbitant tariff, of which manufacturers are taking an undue advantage." (221.)

When Mr. Mayer is asked how the tariff can be the cause of the recent increase of prices and introduction of oppressive conditions in the plate-glass trade, since the present tariff is substantially the same as that of 1890 and 1894, he replies that the interests of the manufacturers are now consolidated as they were not before, and they take advantage of the tariff. The forbidding of importation, for instance, is an evil which would not be possible but for the high tariff. (222, 224.)

Mr. PITCAIRN, president of the Pittsburg Plate Glass Company, presents a table showing the duties on plate glass under the last three tariff laws. It is shown that on sizes up to 24 by 30 inches the Wilson bill made no change, and the Dingley bill made an increase of 3 cents a square foot on sizes up to 16 inches by 24 and 2 cents on sizes from 16 by 24 to 24 by 30. Mr. Pitcairn asserts that glass of these sizes is now sold at less than the cost of production. On larger sizes the Wilson bill reduced the tariff and the Dingley bill maintained the Wilson bill rates. (232.)

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Mr. Pitcairn states that, while European manufacturers of plate glass are united in an international syndicate and divide the world's markets among them, the United States is left out, because the American plate-glass industry has not been able thus far to export and to make its cooperation valuable to the European organization. The European manufacturers, therefore, treat the United States as a dumping ground for their surplus, and make prices for export to this country far below their domestic prices. Thus the European price for polished plate glass, cut to size, for the United States is 40 per cent and 5 per cent discount from a certain price list; for England, 10 per cent discount from the same price list. This makes the price in England 58 per cent higher than that in the United States. For stock sizes the European discount is, for the United States, 30 per cent off the list, and for England 5 per cent off the same list, making the English price 36 per cent higher than the American. In France a different list is used and exact comparisons are less easily made; but Mr. Pitcairn asserts that plate glass is sold in France at least 100 per cent higher than if shipped to this country. Mr. Pitcairn attributes to this policy the recent increased imports to the United States. The imports have been for the first 10 months of each year of the last three: in 1898, 368,797 feet; in 1899, 716,632; in 1900, 1,590,350. Mr. Pitcairn asserts that the prices at which glass is shipped to this country are actually below the average cost to the manufacturers, though not so low as to be unprofitable when the trade is regarded as a surplus trade. (229, 230.)

2. *Antitrust law.*—Mr. MAYER has no faith in the antitrust law as a remedy for excessive raising of prices and other oppressive policies of the plate-glass combination. He believes that the 3 so-called independent companies are working under an understanding with the Pittsburg company, but if so the facts are not obtainable in writing nor in any form that would be competent evidence before a court. The cause of the evil he thinks is in an oppressive, exorbitant tariff, and the one remedy is in a modification of the tariff. (221, 222.)

Mr. ELLIOTT does not consider the antitrust law of any great value. "We have the actual facts before us as to what have been the results from action of this kind, and practically nothing has been obtained." In demanding a revision of the tariff he thinks that "we were really getting to the fountain head by striking at the cause." (214, 216.)

**E. Labor in the plate-glass industry.**—1. *Labor cost of plate glass.*—Mr. PITCAIRN says that the labor cost is about 48 per cent of the cost of manufacture of plate glass. (236.)

2. *Number and nationality of employees.*—Mr. PITCAIRN states that about 10,000 persons are employed in the plate-glass industry in the United States. He thinks from two-thirds to three-fourths are Americans. When the industry was started, it was, of course, necessary to get foreign workmen who were familiar with it; but manufacturers prefer Americans, and very few foreign workmen come now. The American is more steady and more alert and more efficient. It does not take long to learn the business. It does not require the same mechanical skill as window glass or other branches of the glass industry. (240, 241.)

3. *Labor organizations.*—Mr. PITCAIRN says that there are no labor organizations in the plate-glass industry in this country, or, he thinks, in Europe. He has never had to consider the question of dealing with a labor organization. The employees are well treated, "and they have never seen the necessity for an organization. In any company employing so large a number of men as we do there are sure to be some malcontents and disturbers, but we have been fortunate in the fact that the large majority of our men have not allowed themselves to be led or unduly influenced by men of this class." (236.)

4. *Wages.*—Mr. MAYER states that so far as people in the trade can learn the enormous increase in the price of plate glass during the last 2 or 3 years has not been accompanied by any increase in the wages of the workmen. In reply to the suggestion that it is fair to assume that with an increase of the tariff by the Dingley bill there was an increase in the wages, he replies that that is an assumption which he does not think is verified by the facts. He knows that there has been an increase in wages in window-glass manufacture, but that it is an entirely different industry. (218-220.)

Mr. PITCAIRN states that the wages paid at the different factories of his company are practically uniform. The tendency is to increase wages in good times and to reduce them in bad times. The wages paid to-day are 20 per cent above those paid by the Pittsburg Plate Glass Company in the depression of 1893, and 24.6 per cent higher than those paid by other plate-glass works at that time. A 5 per cent increase was made May 1, 1899. (235, 236.)

Mr. Pitcairn adds that his company has established what it calls the employees' gratuity fund. It places to the credit of every factory employee at the end of the

month a sum equal to 2½ per cent of the previous month's wages. On this fund 6 per cent interest is allowed and credited. The fund may be withdrawn semiannually by employees after 2 years of continuous service, or it may be allowed to remain, in which case 8 per cent interest is allowed and credited semiannually. In the event of the death of the employee, or of his wife or of his child, the fund may be withdrawn immediately and without notice. The credit is forfeited if an employee voluntarily leaves the service of the company without giving 30 days' notice, or if he is dishonorably discharged. This fund "is a reward for faithful services and to men who have been long in our service." (236, 240.)

5. *Wages in America and Europe.*—Mr. FITCHURN presents a detailed table of wages in the plate-glass industry in America and in Belgium. He asserts that the average wages in the industry in the United States are about 200 per cent higher than in England and about 300 per cent higher than in Belgium. (233, 234.)

## V. THE SALT COMBINATION.

**A. Description of industry.**—1. *Generally.*—Mr. WHITE, president of the National Salt Company, says that salt is obtained from three sources, sea water, natural brine springs, and rock-salt deposits. Salt deposits are sometimes mined, and the salt is prepared for market in much the same way as anthracite coal. Oftener, however, the purest obtainable water is pumped down from the surface, brought up again saturated with salt, and evaporated. No salt is made from sea water in the United States, except in California. Some is made in Utah from the water of the Great Salt Lake. At Syracuse, N. Y., salt is made from natural brine springs, both by solar evaporation and by artificial heat. The National Salt Company makes some salt by solar evaporation in Texas. Salt is made more economically from an artificial brine produced by pumping water into a rock-salt stratum than from natural salt springs, because the brine is more nearly saturated. The saturated brine contains, theoretically, about 26 per cent of salt. In practice about 25 per cent can be got. The Saginaw Valley brine contains about two-thirds of this amount, and the Syracuse brine not quite so much. (246-248.)

The fuel used in New York is the cheapest quality of coal, usually anthracite screenings, costing about \$1.50 a ton delivered at the salt works. In Ohio bituminous slack is usually used. In Michigan salt is practically a by-product of the lumber industry. The brine is evaporated with the refuse from the sawmills. Some salt manufacturers figure that they can make salt for nothing, because it would cost them about as much to burn up the slabs as to make the salt. Others say it costs them more than they get for it. The lumber business and the salt business are so interwoven that it is hard to tell. (249.)

Salt land is so cheap that a factory usually has 40 or 50 acres. It is impossible to tell what land the salt comes from. It has been found by experiment that two wells may be put down at the same time 1,500 feet apart and in 3 years will be united. Water put down one well will come up the other. (267, 268.)

2. *Working people employed.*—Mr. White says that the cost of producing salt goes, roughly, half for fuel and half for labor. To produce 1,000 barrels of salt by the open-pan system and put it in the warehouse would require about 60 men 1 day. In some systems of manufacture the number is less. Quite as much labor is used, however, in putting the salt into packages and shipping it as in the actual manufacture. About 100 hands would be required, on the average, to manufacture and ship 1,000 barrels of salt a day. About 30 per cent of the employees are women. Probably 130,000 to 150,000 persons are employed in the salt industry in the United States. (255, 256.)

3. *State inspection.*—Mr. WHITE says that there is a pretense of State inspection of salt in Michigan, but that it does not amount to anything. The law is not carried out. In New York all brine springs are under the control of the State, but there also the inspection is of no account. (254.)

Mr. White estimates the production and consumption of salt in the United States, east of the Rocky Mountains, at about 10,000,000 barrels evaporated from brine by artificial heat, about 1,000,000 barrels of solar salt, and about 2,000,000 barrels of mined rock salt, a year. (249.)

**B. National Salt Company.**—1. *Organization and history.*—Mr. WHITE, president of the National Salt Company, says that this company was organized in March, 1899, and acquired at that time 13 plants in New York State. Its preferred stock is 7 per cent, noncumulative. The tangible assets of the concerns taken in at the beginning were appraised, and preferred stock was issued in payment for them. An

issue of common stock was also made to the owners for their good will, earning capacity, trade-marks, brands, etc., at the rate of 5 times their average annual earnings for the 2 preceding years. Each owner had the privilege of taking \$100 cash for 1 share of preferred stock and 1 share of common, each of \$100 par value. One million five hundred thousand dollars preferred and the same of common were offered to the public at the rate of \$100 for 1 share of preferred and 1 share of common. No syndicate was formed to underwrite the securities, but the shares were offered through the Atlantic Trust Company, of New York, which received a fee of \$5,750, or one-half per cent, for its services. After the original organization of the company other properties in Ohio, Michigan, and Texas were bought on the best terms possible. Payments were sometimes made in stock and sometimes in cash. Usually, when payment was made in stock, it was made on the basis of 1 share of preferred and 1 share of common for \$100. Sometimes, however, the stock was issued at its market value at the time. The share of preferred and the share of common have never been worth less than \$100 together, and they have gone as high as \$140. (249-252.)

The company has no bonds, and none can be created without the consent in writing of the holders of 75 per cent of the preferred stock and 75 per cent of the common stock. The following provision also appears in the certificate of incorporation: "At no time shall the total amount of the preferred stock issued exceed two-thirds of the actual capital paid in cash or property." The preferred stock is preferred not only as to dividends but as to the assets in case of liquidation. It has the same voting power as the common stock. It has practically every right of a bond except that the dividends are noncumulative and that it has no right of foreclosure. (259, 269.)

The company has paid since its organization 7 per cent a year on the preferred stock and 6 per cent on the common. The total net earnings in 1900 were, however, about 12 per cent on both preferred and common. The stock outstanding is about \$5,000,000 preferred and \$7,000,000 common. (257, 259.)

The stock is distributed at the average rate of 52 shares to each stockholder, representing an investment of about \$3,100 at the present market prices. The board of directors own perhaps 20 per cent of the stock; possibly 30 per cent. Mr. White guesses that at least 100 or 200 stockholders would be needed to control the corporation. (264, 265.)

2. *Business methods.*—Mr. WHITE says that in most cases the former owners of the plants which the company has bought have been retained as superintendents. There have been no great changes in the working force. Six plants of the 36 have been shut down for purposes of economy. The producing districts—New York, Ohio, Michigan, Kansas, and Texas—are divided into departments, each with its head, and each conducts its business in its own way, under general instructions from the executive officers. The purpose of this method is to keep in close contact with the trade and avoid trying to deal with conditions 1,000 miles away. Reports of sales are received every day, however, from every office; and once a month the books are closed and the company knows what has been made or lost and where and how. The records of the different plants are closely compared and good results are obtained by "rubbing the records of the different managers together." Just as far as it is possible individual effort is recognized in every man from the president down. The president's salary is contingent on results, and that indicates the policy which the company applies wherever it can be applied. (252, 253.)

3. *Control of business.*—Mr. WHITE presents a table giving the capacity of the several plants of his company. The great majority of the plants are in New York. After New York the Kansas plants are the most important owned by the company. Those of Ohio have nearly the same capacity, and the company produces smaller amounts in Michigan and Texas. The company does no salt mining, though it buys and sells some rock salt. Only about 3 or 4 per cent of its product is made from natural brine; the remainder is made by pumping water into and out of rock-salt strata. Mr. White says that the company produced in 1900 between 8,000,000 and 9,000,000 barrels, out of an estimated production of 10,000,000 barrels by artificial evaporation in the United States east of the Rocky Mountains, and a total production in that territory, by all methods, including mining of rock salt, of about 13,000,000 barrels. (247-249.)

Mr. KLINCK, a meat packer of Buffalo, says that he and other packers have been compelled to buy their salt from the National Salt Company. There has been no other source of supply. There are only one or two outside salt companies in New York, and they make chiefly table salt, which is not what packers want. Mr. Klinck and other packers in Buffalo recently formed a company to make their own salt. This company bought 200 acres of land adjoining the plant of the National Salt Company in Leroy, N. Y., and intended to drill a well and pump out of the same brine

basin that it used. The projectors felt some fear, however, that the basin might not furnish brine enough to support two plants. It was thought best to ask the National Salt Company if it would sell its establishment. It, perhaps, felt the same fear of shortage of supply; and it did, in fact, sell its Leroy plant to the new company. It was a condition of the bargain that the new company should sell its surplus salt, above what was used by the stockholders, to the National Salt Company, until January 1, 1902, at \$3.25 a ton, free on board cars. Other conditions of the bargain, however, were the cancellation of a contract, which bound Mr. Klinck to buy his salt from the National Salt Company during 1901, at \$5.70 per ton, and also a contract of Mr. Dold to buy 1,682 tons from the National Salt Company at \$6.40. After January 1, 1902, the new company expects to enter the market as a competitor of the National Salt Company. The plant which it bought is very much out of order. When in good order it has a capacity of a thousand barrels of salt a day. The Buffalo packers use about 4,000 tons of salt a year—only a small proportion of the capacity of this plant. The company could increase its capacity indefinitely, as it has 270 acres of salt land. (270, 271.)

**C. Causes and effects of combination.**—1. *Reasons for combination—Competition.*—Mr. WHITE says that the competition in the salt trade was severe, and resulted not only in low prices but in cheap and poor salt, put up in cheap and flimsy packages. All salt is sold delivered at the point of consumption. From 30 to 60 per cent of the price is freight. Each producing section ought, therefore, to supply the neighboring territory. This was not always done, however, because the salt made in some regions was not acceptable in quality. The result was that salt was shipped to distant and unnatural markets, paying freight that sometimes exceeded the value of the salt at the point of production. The average price received by many manufacturers in Michigan, in July, 1899, was 28 cents a barrel, including the cost of the barrel, which is estimated at 20 cents. The remaining 8 cents did not cover the cost of producing the salt. Much Michigan salt was sold in territory naturally tributary to Ohio and Kansas fields. On the other hand, Ohio and Kansas producers shipped salt into territory which the Michigan producers considered theirs.

It is true that the companies that were well situated and well managed and made a superior grade of goods made money. The Cayuga Company's works at Ludlowville, N. Y., in which Mr. White was interested, made an average of 20 per cent a year for 3 years before the consolidation. But this was a very well located property, and the actual value of the plant was greater than the amount of the capital stock on which the 20 per cent is reckoned. The stock was \$150,000. When the capital was fixed at this amount the capacity of the plant was 1,000 barrels a day, but when the works were sold to the National Salt Company the capacity was 1,800 barrels a day, and the tangible assets were valued, Mr. White believes, at \$240,000. (253, 256, 257.)

2. *Advantages of combination—*a. *Generally.*—Mr. WHITE says that the salt business is peculiarly adapted to unified control, first, because of the improvement in quality that is effected; second, because of the saving of cross freights; third, because of the possibility of shipping mixed carloads. A customer may not be able to use a carload of table salt, but may want a carload of salt of various grades. The freight rate on a carload is less than half that on a smaller quantity. No one plant produces all the various grades. All the great staple commodities, like iron, coal, sugar, oil, and salt, are best manufactured and distributed by large organizations, because by that means the charges for administration, superintendence, etc., are reduced to a minimum. (263.)

b. *Freight rates—Quality of goods.*—Mr. WHITE says that 30 to 60 per cent of the price at which salt is sold delivered is freight. Before the formation of his company salt was sometimes shipped where the freight amounted to more than the value of the salt at the point of production. A special reason was that the manufacturers of salt nearer the purchaser made poor and unsatisfactory goods. The National Salt Company has put a stop to the cross shipping of freight, not only by stopping the attempt to get business for particular plants outside their natural territory, but also by bringing up the quality of the product of all its works to a level with the best. Every consumer can now get good salt from the works most convenient to him. (253, 254.)

Mr. KLINCK says, on the other hand, that the quality of salt has deteriorated since the National Salt Company was formed. More moisture is sold in it than formerly. (272.)

c. *Salesmen.*—Mr. WHITE says that the number of salesmen employed by the National Salt Company is some 30 per cent less than the number employed by the several companies before the consolidation. The number is small, however. Probably it was 50, and is now 35 or 40. The men that ceased to be salesmen were given other employment. (256.)

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*d. Middlemen.*—Mr. WHITE states that one of the savings which his company has tried to make is the getting rid of middlemen and selling directly to the consumer, or at least to the retail grocer. The company has wished not to do violence to established customs, and in some parts of the country the salt is still handled through agents and dealers; but the desire of the company is to get as close to the consumer as possible, and Mr. White believes that this policy is advantageous to the consumer. (253, 254, 266.)

*e. Effect on wages.*—Mr. WHITE presents a table of wages paid in the salt industry in each year from 1890 to 1901. It shows \$1.50 paid to laborers from 1890 to 1892, \$1 to \$1.12½ in 1895, and \$1.50 in 1901; \$1.75 paid to firemen in 1890 to 1892, \$1.35 in 1894 to 1897, and \$1.70 to \$1.80 in 1901. (255.)

*f. Effect on prices.*—Mr. KLINCK, a meat packer of Buffalo, presents a statement of the prices which he has paid for salt by the ton, delivered at the packing house in Buffalo, since 1891. They are as follows: In 1891, \$3.25; in 1892, \$2.85; from 1893 to 1897, \$2.50; in 1898, \$4.05; in 1899, \$4; in 1900, \$4.50; in 1901, \$5.70. He supposes that the great advance is caused by the formation of the trust, the National Salt Company. Probably there was no profit in selling salt at \$2.50, and there may have been a small loss. No business made money during those years. But the price ought not to have been advanced to \$5.70. Mr. Klinck's recollection is that during the eighties the price ran from \$3.25 to \$3.50. (270.)

Mr. Klinck says that the National Salt Company people told him after his company bought out the Leroy plant that it cost them \$2.45 a ton to manufacture salt at Leroy; but with a large plant, with good facilities and everything in good order, salt can be made cheaper. (271.)

Mr. WHITE gives the prices received by salt manufacturers in Michigan each year from 1866 to 1901. These are supposed to be prices at the point of production. They run from \$1.80 a barrel in 1866 down to 40½ cents in 1896 and 38½ cents in 1899, and up again to 47 cents in 1900, and about 55 cents in 1901. Mr. White believes, however, that the average price in the different markets is less than the average price which prevailed 5 years ago. He bases this proposition on the statement that the National Salt Company has endeavored to equalize prices in various parts of the country, in view of the prevailing freight rates. It seems to be based also upon the statement that the salt company has effected savings by the elimination of cross freights; that is, a saving in freight might enable a certain increase of price at the point of production to coincide with a decrease of price at the point of consumption. Mr. White states, however, that freight rates have advanced about 25 per cent. (254, 255.)

Mr. White also points out that it is only necessary to make about 4 cents a barrel on the salt his company handles to pay a dividend of 7 per cent on the preferred stock, and only 5 cents more to pay 6 per cent on the common; that is, the actual dividends that are paid at present only mean 9 cents a barrel on the salt. (259.)

In reply to the suggestion that the retail price of salt at certain places has advanced from 90 cents a barrel to \$1.40 within a few years, Mr. White says that the price of coeperage stock has advanced about 60 per cent, labor has advanced, coal has advanced, and transportation has advanced. The small consumer pays no more at retail than formerly. The grocer used to buy a 5-cent bag of salt for 2 cents and sell it for 5. He now pays about 2½ cents, but he still sells it for 5. (266, 267.)

Mr. White states that the prices of outside salt producers generally follow those of his company, sometimes cutting under just enough to get the business. (260.)

*g. Local price cutting.*—Mr. WHITE says that his company sells low where there is competition and recoups itself off the general market. He considers this perfectly proper, and, on the whole, advantageous to the public. The company does not have a complete monopoly anywhere. There is not a town in the country which its competitors can not reach if they wish to. It is not possible to put up the price in Kansas to an extraordinary point to make up for loss in killing competition in New York. (262, 263.)

**D. Remedies for evils of combination.**—1. *Publicity*—*United States charters.*—Mr. WHITE believes in publicity, and his company gives its stockholders full and complete information. Yet he does not blame others who refuse to give such information. To give it to the public is to give it to their competitors. He does not think the annual statement required by law in New Jersey gives as much information as a company ought to give. The stockholders are not sufficiently informed. He does not think, however, that State regulation of these things is wise. It can not succeed. If one State attempts it, corporations will go to another State. The Federal Government should exercise supervision and issue a Federal charter. (266, 268.)

2. *Antitrust suits.*—Mr. WHITE says that his company has been attacked in the courts of Ohio and of Michigan. Mr. Monnett, who, as attorney-general, brought the suit in Ohio, "is out of business, and in Michigan the attorney-general was defeated for reelection, so that is the end of that suit. I don't think any of them have been sincere. I think it is all the work of demagogues." Mr. White does not know whether the trusts had anything to do with the defeat of these men, but he knows his company had not. (266.)

3. *Competition.*—Mr. KLINCK does not think that it would be possible to maintain a monopoly of salt or an exorbitant price upon it except for a short time. The supply of salt in the earth is so great that it could not be monopolized. A new salt plant would cost \$150,000 to \$200,000. The great trouble is that it takes about 2 years after starting a new plant to begin to make salt. That is because of the necessity of saturating the earth with water and forming a cavity before brine can be pumped. There is one new company starting on Seneca Lake. There is an independent salt company in Ohio, which recently began to sell salt in Buffalo, and caused the National Salt Company to put down its price 30 cents a ton. During the last 6 months salt has been sold cheaper in Cleveland than in Buffalo, and Buffalo parties began to order barrel salt from Cleveland; but the National Salt Company told the man who shipped the salt, as Mr. Klinck has been informed, that if he did not stop the company would stop selling him. (271-273.)

Mr. WHITE says that, generally speaking, his company has the trade and somebody comes in and tries to get it. The only way to get it is to cut the price. His company meets the price and sometimes cuts lower. It is impossible to destroy competition. It may be killed in one place or for a little while, but it comes up somewhere else, and comes up constantly. (264.)

About \$200,000 would establish a thoroughly well-equipped salt plant, say in central New York, which could manufacture salt as cheaply as the National Salt Company. The company is at a certain disadvantage among small purchasers in country districts by reason of the prejudice against trusts. This cuts less figure the higher up you go in the scale of intelligence. Generally speaking, the company has no advantages that its competitors can not get if they are as intelligently managed. Of course capital buys the best ability, and a large company may be able to make experiments which will result in producing better goods or cheaper goods, as, perhaps, an individual could not. (265, 266.)

**E. Importation and exportation—tariff.**—1. *Importation—tariff.*—Mr. WHITE says that foreign salt can only be sold on the seaboard or within 300 or 400 miles of it. The principal competition came formerly from England, where the industry is controlled by the Salt Union. The United States was a dumping ground for their surplus product. It usually came as ballast. A cargo of salt, for example, can be shipped from Liverpool to Savannah at an average rate of 75 cents per ton of 2,240 pounds. The freight from the nearest producing point, which is the New York field, is about \$3 a ton. A ship can not handle salt for 75 cents a ton. The stevedoring at Liverpool probably costs 15 cents a ton, and it costs about 25 cents a ton to get it out of the vessel and on the dock at the Southern port. There is 40 cents a ton for terminal charges, leaving 35 cents of net income. Our tariff is 8 cents per 100 pounds. This enables us to compete with the English salt in the seaboard markets. The National Salt Company is now supplying Savannah with its salt. It makes such prices as are necessary to meet competition, not only there but elsewhere, whether the competition comes from abroad or from home. The prices received by the National Salt Company at the point of production are lower than the prices received at the point of production by the English producers. (260, 262.)

There has been a prejudice in the minds of American farmers in favor of Ashton salt for dairy purposes. They have tried poor grades of American salt and have concluded that all grades of American salt are poor, and have gone to the other extreme of buying the finest of English salt. The amount of English salt now imported is very small. A little goes to Chicago and other Western points and is used for packing meats for export. On this there is a rebate of duty. (261, 262.)

2. *Exportation—prices lower than domestic.*—Mr. WHITE says that his company has been exporting a little salt to the West Indies and a very little to London, though that is like carrying coals to Newcastle. He has just received his first order from Japan for a cargo. The price on this cargo is based on a freight rate of \$2.50 a ton. The price is about 15 per cent less than the current price in San Francisco. (260, 262.)



## VI. THE WALL-PAPER COMBINATION.

**A. History of combination.**—1. *History generally.*—Mr. BURN, president of the National Wall Paper Company, gives a sketch of the history of business conditions in the wall-paper manufacture. For 30 years, he says, manufacturers of wall paper have combined from time to time to maintain uniform prices and terms of credit. The first of these arrangements was a simple agreement on a schedule of prices and terms. There was no penalty for violation of the agreement, yet it was fairly well observed for several years. The hard times that prevailed after the panic of 1873 caused so intense a competition for business that little regard was paid to the agreement, and it was finally abandoned. There was an open market, with depreciation of prices and unprofitable business. Two of these simple agreements existed before 1880, one lasting for 2 or 3 years and one for not more than a year.

About the year 1880 a pool was formed under the name of the American Wall Paper Manufacturers' Association. Nearly every factory in the country was included, and prices were fixed and maintained at a very high point. Each party to the agreement had to furnish security for the performance of his contract. A commissioner was appointed with authority to inflict fines, in his discretion, upon men who failed to live up to the agreement. The commissioner always had money in his hands belonging to all the factories, and if a fine was not paid he simply charged it up; yet the security given was insignificant compared with the volume of the transactions, and forfeiture of it would not have caused great hardship to any of the manufacturers. The penalties proved insufficient to hold the manufacturers to their agreement. They sold goods at less than schedule prices and failed to report the sales to the association. The diminution of profit by cutting prices was perhaps less than the amount which they would have had to pay into the pool on account of these sales if they had dealt honestly. These unfair practices increased, and finally led to the abandonment of the association. In spite of the exceedingly high prices, there was no growth of outside competition during this period, and, on the other hand, the production of the associated manufacturers increased considerably.

During the next 5 years there was an open market; prices were greatly reduced, and several manufacturers retired from business. Mr. Burn does not remember any failures among wall-paper manufacturers in this period of sharp competition; but several, about 4 out of 25 or 26, gave up the fight, closed their factories, and sold their machinery. The more progressive of the manufacturers, however, prospered throughout this period. The situation was very hard upon the dealers. A dealer who had \$5,000 worth of goods in his store at the time of the dissolution of the association found that they were worth perhaps only \$2,500, and prices kept decreasing further from year to year. Under such conditions dealers found it very hard to make anything or even to avoid actual loss. It was perhaps as much the desire of dealers for more stable prices as the desire of the manufacturers themselves to increase their profits that led to the formation of a consolidation.

The National Wall Paper Company was formed in 1892. Most of the manufacturers said at the time that they would be entirely satisfied if the new company earned enough to pay them the same profits that they had been earning for several years. Their good faith in this is shown, Mr. Burn thinks, by their refusing to list the stock upon the stock exchange, and so preventing speculation in it. The manufacturers believed that consolidation would bring about savings that would in themselves give a substantial profit. Acting on this theory, the company as one of its first acts reduced prices 10 per cent. The business of the first year yielded profits about two-thirds as great as the individual manufacturers had previously earned. The reduced profit was attributed to the reduction in prices, the expense of incorporation, and the inability to effect during the first year the economies that were contemplated.

As one of its economies the company decided to dispense with the middleman, or jobber, and offer its goods at a uniform price to all buyers. It established branches in most of the large cities and reduced prices still further, with the idea of distributing to the public the profits that had been earned by the jobber. The company also closed some small factories with a view to concentrating the output in the others. The discontinuance of these factories threw out of employment a number of persons, not workmen, but men occupying higher positions, who were able to interest capitalists in the establishment of new factories. The jobbers, from whom the trade had been taken away, also encouraged the growth of competition, and were able immediately to give a large amount of trade to the new factories. This movement was aided by the popular antagonism to large corporations, or "trusts." Under these conditions, and under the weight also of the general depression of business in 1893

and 1894, the company earned no money during its second year. Further economies enabled it to earn the interest on its debenture stock in its third year. In the fourth year the company absorbed one of its large competitors, reversed its policy of not selling to jobbers, and succeeded in earning about as much as the individual factories earned before the combination. New competition sprung up, however, and the earnings in the fifth year were nominal. The advisability of dissolving the company was now seriously discussed.

The new factories, however, thought that the competition of the old manufacturers as individuals was more to be feared than that of the combination. Says Mr. Burn: "They realized that if the National Wall Paper Company should dissolve, and the former owners of its factories enter the field once more as individuals, the older factories, with their greater experience and resources, would have a decided advantage over the new factories." The new manufacturers therefore made overtures for a consolidation of all interests. A new company was formed, called the Continental Wall Paper Company, which bought the product of all the factories, and by this means was able to make substantial profits. There was no restriction on the output of the several plants, "but as each of these concerns had a certain amount of stock in the Continental Wall Paper Company it was not to their interest to put in more than they expected to draw out." The prosperity of the Continental Wall Paper Company in its first year caused new factories to start. To insure a continuance of prosperity the products of these new factories were also taken; and the knowledge that a new concern could at once obtain a market encouraged the building of still more factories. In the second year of the Continental Wall Paper Company it proved impossible to hold the jobbers to their agreements as to prices. Long before the end of the year it became evident that it would be best to dissolve both the Continental Wall Paper Company and the National Wall Paper Company.

The Continental Wall Paper Company had no property rights in any factory, and the liquidation of it was a comparatively simple matter. The case was different with the National Wall Paper Company. After much effort practically every stockholder was induced to agree to an amicable dissolution of the company without the disastrous proceeding known as a receivership. The majority of the factories were bought back by their original owners and business proceeded without interruption.

Mr. Burn exhibits a copy of the certificate of incorporation of the National Wall Paper Company, and also a copy of the agreement for its dissolution. In the agreement for dissolution, the several stockholders made the directors trustees for the purposes of dissolution, authorizing them to do everything "that the company or the security holders might or could do with respect to the property and assets of the company," and in particular authorizing them, as individuals, to buy such portions of the property of the company as they might please from the board of trustees, on such terms as could be agreed on. (282-286, 288-292, 294, 296-300.)

2. *Capitalization and dividends.*—Mr. BURN states that the authorized capital of the National Wall Paper Company was \$30,000,000 common stock and \$8,000,000 debenture stock. The debenture stock had no voting rights, and was simply an obligation of the company. It was issued in payment for the tangible assets of the plants bought. The common stock was issued on the basis of earning power. The profits of the concerns consolidated, for the single year preceding the consolidation, were ascertained by chartered accountants. These profits multiplied by 16 gave the purchase price. The amount of the tangible assets for which debenture stock was issued was deducted, and common stock was issued for the remainder. The agreement for the dissolution of the company shows that nearly \$28,000,000 of common stock was outstanding, and \$7,418,100 of debenture stock. The stock was taken entirely by the vendors. There were no underwriters or promoters. (288, 296.)

To insure the good will which the company bought, its predecessors were bound by the terms of sale never to engage again in the wall-paper business except in the State of Washington. They were also obliged to place their common stock in trust for 10 years with certain trustees. (291.)

No dividends were ever paid on the capital stock. All the earnings were paid in interest on the debenture stock. (300.)

3. *Extent of control.*—Mr. BURN thinks that the company must at one time have controlled at least 75 per cent of the business, and that at the end of its existence, when it was operating with the Continental Wall Paper Company, it was probably doing fully 60 per cent. (300, 303.)

**B. Economies and effects of combination.**—1. *Freight.*—Mr. BURN says that his company made some savings in freight when it established its own jobbing branches, by sending goods to central points in car lots, and by taking advantage of water rates in the summer. (303.)

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2. *Closing of plants.*—Mr. BURN states that there was an actual economy in the closing of some of its smaller plants, but this was more than offset by the hostility that was aroused. Some of the trade that had gone to each of these factories went to other factories of the company, but some went to outsiders. Men who had held responsible positions in these factories, and who were thrown out of employment by the closing of them, were active in starting new factories in competition with the company. (284, 292.)

3. *Traveling men.*—Mr. BURN states that his company, so far from decreasing the number of traveling men, increased it. The salesmen were directly under the control of the factories with which they were connected, but the appointment of them was confirmed by the directors of the National Wall Paper Company, and the directors exercised a supervision over them all so as to avoid the unnecessary covering of territory by different individuals. (292, 301.)

4. *Middlemen.*—Mr. BURN thinks that the attempt of the company to dispense with middlemen or jobbers and to sell its goods at a uniform price to all buyers reduced its sales, but it is impossible to say how much of the actual falling off was due to this cause and how much to the general depression of the period 1893 and 1894. Mr. BURN does not think that the middleman can be dispensed with in his line of business. For convenience sake, surrounding dealers will patronize him, and he is needed and useful. In the particular case of the National Wall Paper Company the jobbers who were cut off from the business by the company's policy encouraged new factories to start and strengthened and profited by the prejudice of the public against "trusts." (283, 284, 292.)

5. *Effect on competitors—Local price cutting.*—Mr. BURN says that the existence of his company was an advantage to its competitors. Its price was definite and uniform, and the competitors could get a little under it and make one price in one place and another price in another. The larger company could not undertake individual competition, but had to give everybody the benefit of the lowest figures. (295.)

6. *Effect on labor.*—Mr. BURN says that the independent factories, before his company was formed, usually ran about 9 months in a year—sometimes 10 and sometimes not over 7. In 1894 the factories were shut down longer than usual. At the end of that season the skilled workmen demanded an agreement for continuous employment for 11 months. This was granted. The next year it was demanded and granted again. The next year 12 months' employment was demanded and obtained, and the year after that 12 months' employment, with increased compensation. Mr. BURN seems to regard the lengthened period of employment as a disadvantage to the manufacturers, somewhat as higher wages would be. (293.)

Mr. BURN believes from his experience that industrial combination is an aid to labor in enforcing its demands. The workmen are enabled to concentrate their efforts on one concern instead of dividing them among a larger number. The unions are more likely to strike throughout the whole trade when there is a combination than when there is none, and it is much easier to replace the amount of skilled labor required for 1 factory than that required for 20 factories. Wages were very largely increased during the existence of the National Wall Paper Company, besides the prolonging of the annual term of employment. Mr. BURN implies, however, that the outside companies had to make similar concessions, and he says "the demand and competition for the services of these men helped to enforce the demands that the workmen made upon us." He believes, however, that if there is no new consolidation and the open market continues there will have to be modifications, either in the period of employment or in the wages paid. No such modifications have yet taken place since the company was dissolved. (285, 293, 302.)

**C. Sundry conditions of the industry.**—1. *Probability of new combination.*—Mr. BURN says that there is a constant desire among many manufacturers in his line to try some other form of consolidation, but he does not think it probable that any such attempt will go through. He does not think that any manufacturer who has had 8 years of experience with the National Wall Paper Company could be tempted to go into another combination. He might sell out if the price were large enough, but he would not be likely to be an active participant. (300.)

2. *Capital needed to compete.*—Mr. BURN says that to establish one of the larger class of wall-paper factories would need at least \$500,000 or \$600,000, including plant and running capital. A wall-paper manufacturer can turn his capital only about once a year. Yet a man could start in the business in a small way on \$10,000. (294, 301.)

3. *Materials and prices.*—Mr. BURN says that the raw paper used in the business is made by the same mills that make news print paper. It is now bought from the International Paper Company; it can not be bought elsewhere. The advance in the price of paper decreases the profits of the business. It does not enable wall-paper manufacturers to get more for their goods. (295, 296.)

4. *Schools of design.*—Mr. BURN declares that the schools of design do not turn out any designers who are of value in his business. "Every manufacturer is dismayed when he sees one of those people come to show him designs." A designer of the better class must have a technical education in architecture to start with, and must know the classes of decorations to be applied to different kinds of architecture. Then he should begin as a decorator and fresco painter, and have a good course in actual decoration. The idea of teaching ladies designing is all rubbish. (302.)

5. *Copyrights and design patents.*—Mr. BURN states that wall-paper designs are not generally copyrighted, because new designs are put out every year, and, as a rule, it would not make much difference if a design were copied a year after it was produced. Some manufacturers get design patents. The value of this, Mr. Burn thinks, is simply in the effect which the knowledge that a certain design is patented may have upon the customer. The manufacturer is probably able to get a little more for it. (287.)

6. *Tariff.*—Mr. BURN asserts that the tariff on wall paper of 25 per cent ad valorem is of little importance to the manufacturer. Very little paper is imported or exported, and very little would be imported if the tariff were removed. The manufacturers would not fear the removal of it. (295.)

## VII. THE TOBACCO COMBINATIONS.

**A. Description of business.**—Mr. DUKE says that the American Tobacco Company manufactures all forms of tobacco, except cigars and plug tobacco. It has probably a hundred different brands of cigarettes, having stopped the manufacture of only those brands taken over for which there was no demand. The manufacture of the Admiral cigarette was discontinued, because there was no demand for it. The company controls about 75 per cent of the cigarette business of the country. It has recently commenced buying tobacco in Wisconsin. It also uses Connecticut tobacco for wrappers. (317, 318, 329.)

The Continental Tobacco Company makes plug and smoking tobacco. It manufactures from 50 to 75 brands of plug tobacco, and does from 50 to 60 per cent, probably 60 per cent, of the plug-tobacco business of the country. (317, 318, 329.)

Mr. CAMPBELL, president of the United States Tobacco Company, an independent concern, says that this company manufactures all grades of smoking and chewing plug, cut plug, and granulated tobacco. The company sells throughout the United States so far as possible, but the most of its business is done in the New England States. It exports only to a slight extent. (305.)

**B. Organization and capitalization of companies.**—Mr. DUKE, president of the American and of the Continental Tobacco Company, says that the capitalization of the American Tobacco Company is \$70,000,000, of which \$14,000,000 is preferred stock and \$56,000,000 common stock. Of the common stock, \$54,500,000 has been issued. The original capitalization of the company was \$25,000,000, which was increased to \$35,000,000, and then to \$70,000,000. Mr. Duke submits the annual report of the company for the year 1900, showing its assets and liabilities. Its net earnings for the year were \$6,302,498.02. Of this amount, \$1,120,000 was paid in dividends on preferred stock, \$180,834.20 was paid in interest on scrip, \$3,270,000 was paid in dividends on common stock, and the balance was passed to the surplus account. (317, 331, 332.)

Mr. Duke gives the capitalization of the Continental Tobacco Company as \$100,000,000, of which \$50,000,000 is preferred stock and \$50,000,000 common. About \$1,000,000 of each is still unissued. There are no relations between the American and the Continental Tobacco Company, except that the American owns quite a large amount of stock in the Continental company. The officers are all different, with the exception of the president. (317.)

Mr. Duke states that the Continental Tobacco Company owns 35 per cent and the American Tobacco Company 35 per cent of the stock of the American Cigar Company. The capitalization of this company is \$10,000,000, general stock. (329.)

Mr. CAMPBELL says that in most cases the tobacco combinations make agreements with the persons selling out their business to the combination that they shall not go into the tobacco business for a certain number of years. Sometimes a consideration is given for this agreement when the plant is purchased. A great many of the men who sold out to the Continental Tobacco Company were given high offices for a time. (307.)

Mr. DUKE also says that the American Tobacco Company, in buying properties, usually buys the brand and the good will, and requires the vendors to agree not to go into the business again for 10 or 15 years, in some cases 20 years. (323.)

**C. Economies of combination.**—Mr. DUKE says that the main advantage of industrial combinations is found in the combination of talent. There are certain advantages in buying some supplies in large quantities, such as labels, etc. There is also an advantage in marketing goods. It is not necessary to keep so many salesmen in proportion to the business done. Advertising can be done to better advantage; business can be more concentrated, and the number of styles or brands can be reduced. It is not possible in the tobacco business to concentrate the manufacture of goods to any great extent through the closing of factories. (327, 328.)

Mr. CAMPBELL says that the different plants of the tobacco combinations are managed by employees, and are therefore not as economically managed as they would be if managed by owners. The combinations may have some advantages over the independent companies in freights, though they are not supposed to under the interstate commerce act. It is not possible in the tobacco business to ship goods from the plant situated nearest to the vendee, because all of one brand is made in one factory. The companies may be able to buy a few things more cheaply, but in buying raw material they have no advantage. On the other hand, they have very expensive offices and officers. In all probability the advertising of the Continental Tobacco Company costs as much as the aggregate advertising of the constituent companies cost, because of the fact that the Continental sells practically all the brands which were manufactured by the separate companies. Some saving is probably made through a reduction in the number of traveling salesmen; yet, so long as independent companies are continually springing up, the combinations have to keep salesmen in the field. (309, 310.)

**D. Methods of competition.**—1. *Exclusive contracts with dealers.*—Mr. CAMPBELL, president of the United States Tobacco Company, says that the Continental Tobacco Company has made arrangements, orally, with practically all the jobbers throughout New England to give them an extra discount on condition that they do not handle the goods of certain other manufacturers. At the beginning jobbers were allowed a profit of 2 cents a pound on tobacco, and an extra discount of 3 per cent was given to those jobbers who agreed not to handle tobacco made by new companies. Later the proposition was changed and jobbers were given a profit of but 1 cent a pound, while those who refused to handle independent goods got 5½ per cent extra discount. At this time the limitation was made that they should not handle goods manufactured by any company which had started since the Continental Tobacco Company was organized, and should not handle any new brands manufactured by any company other than the Continental Tobacco Company. No jobber can do business on 1 cent a pound, and therefore the making of these arrangements with jobbers by the Continental Tobacco Company made it practically impossible for the independent companies to do business in New England. The Continental Company sells about 80 per cent of all the tobacco sold in New England, and jobbers could not do business profitably without handling Continental goods. One firm, which had been handling the goods of the United States Tobacco Company, and which had expressed satisfaction with the goods, refused, a few days after it had received a visit from Mr. Kingsbury, treasurer of the Continental Tobacco Company, to continue to handle them. Many of the jobbers who have refused to handle the United States company's goods have said that they would be glad to handle them, but dared not do so, and Mr. Campbell's information concerning the proposition of the Continental Tobacco Company has come directly from these jobbers. A few jobbers have been altogether cut off from getting the Continental company's brands, because of their independence. The company has refused to sell them goods. (306, 307, 311, 314.)

At first the damage done the United States Tobacco Company through exclusive contracts made by the Continental company was quite serious. The United States company has been able to overcome the effect to a certain extent by hard work. It has not made the progress, however, which it would have made if there had been no such contracts. (312.)

The United States Tobacco Company has never offered any special inducements to jobbers on condition that they deal exclusively in goods of the United States Tobacco Company, and, so far as Mr. Campbell knows, no such contracts have been made by any of the independent companies. The United States company has one fixed price list, and is not afraid of competition. (317.)

Mr. LANDSTREET, vice-president of the United States Tobacco Company, presents an affidavit from Mr. Harry M. Chapman, of New Bedford, Mass., which states that the firm of which Mr. Chapman is a member was informed by a transportation agent of the Continental Tobacco Company and by a regular salesman of the same company that if the firm would agree to exclude from its stock and refuse to handle any goods made by any other manufacturer than the Continental Tobacco Company it

would be allowed a discount of 5 per cent from the prices which were thereafter to be fixed as the prices of tobacco to jobbers. Upon the refusal of the firm to enter into this agreement the Continental Tobacco Company refused to fill orders for goods, and the firm was informed that the company had concluded that it was not to its interest to maintain business relations with the firm. Other jobbers of tobacco in New Bedford who previously dealt in the goods of other tobacco manufacturers than the Continental do not now keep the goods of these manufacturers for sale. Mr. Landstreet presents an affidavit from Mr. Albini Sumner Hovey, of Lynn, Mass., which states that because of his refusal to exclude the goods of other tobacco manufacturers he had to pay an advanced price for the Continental Tobacco Company's goods, the price which he was obliged to pay being such that he could not sell the goods to retailers at a profit.

Mr. Landstreet also presents an affidavit from Mr. Charles H. Tilton, of Boston, which states that in April, 1900, H. D. Kingsbury, the treasurer, and C. C. Dula, third vice-president of the Continental Tobacco Company, visited the tobacco jobbers and wholesale grocers of New England and notified them that thereafter the jobbers could purchase the goods of the Continental Tobacco Company at a price upon which said tobacco jobbers and wholesale grocers could make 2 cents per pound; but that if they would agree to exclude from their stock all plug-tobacco goods of manufacturers who had begun business since the formation of the Continental company the Continental company would give them an extra discount of 3 per cent upon all purchases. The affidavit states that later the prices were changed so that a profit of but 1 cent a pound was allowed, and a discount of 5½ per cent was allowed to those dealers who excluded from their stock all plug-tobacco goods of new concerns, all new brands of old concerns, and all goods of certain designated old-established concerns. It is impossible for the tobacco jobbers to do business at a profit with an allowance of only 1 cent a pound. The largest retail tobacco dealers in New England were also visited by the officers of the Continental Tobacco Company and informed that if they would refuse to handle the goods of other manufacturers the Continental would put them on its "subjobbers list," which would entitle them to buy from the jobbers at a less price than their competitors by 2 cents a pound.

Mr. Landstreet also presents a copy of a circular, issued by the Continental Tobacco Company, offering a discount of 5½ per cent on purchases "under certain conditions" previously made, and says that the dealer to whom this circular was sent stated that the conditions referred to were that he should deal exclusively in the goods of the Continental Tobacco Company. Mr. Landstreet also presents a circular sent out by the Continental Tobacco Company, stating that it will decline to fill orders from any customer in the New England States, excepting Massachusetts, who sells or offers to sell, either directly or indirectly, any of the listed brands of tobacco manufactured by the company at less than the prices appearing in the jobbers' selling price list. Mr. Landstreet suggests that Massachusetts was excepted because a bill had passed the Massachusetts house of representatives which it was thought would prevent the Continental company from making agreements for the exclusion of the goods of other manufacturers as a condition of handling its own. Mr. Landstreet presents a list of dealers who have been cut off from dealing in the goods of the Continental Tobacco Company because of their handling the goods of other manufacturers. (332-338.)

Mr. Landstreet says that through the making of these contracts the independent manufacturers have been prevented from marketing their goods. It is claimed that the output of the American and Continental companies amounts to between 75 and 90 per cent of the output of the country. Mr. Landstreet does not believe, however, that they manufacture 75 per cent of the output, but they do manufacture enough to give them a practical monopoly of the business in certain localities. (339.)

In one locality every jobber excluded the goods of the independent manufacturers. The Continental Tobacco Company sells probably 80 per cent of the plug tobacco sold in New England, and it takes a man with a great deal of nerve to continue to handle the independent goods, though in most localities some one man is found who is determined to do so. Some of the dealers who entered into the exclusive contracts deal secretly in the goods of other companies. All the firms which deal in independent goods continue to deal in the goods of the Continental company, because it is impossible for a man to do a successful tobacco business without keeping some of the Continental brands. They buy the Continental brands secretly wherever they can. (338.)

Mr. Landstreet has never consulted the United States district attorney in reference to proceeding against the Continental Tobacco Company, because of the difficulty of securing sufficient evidence to establish a case. (338.)

Mr. DUKE says that neither the American nor the Continental Tobacco Company offers special terms to dealers on condition that they handle the companies' goods

exclusively; nor has this been done by agents under authority of the companies. Price lists are sent to dealers, and it is stated on the bottom of the list that no agent has any right to change any conditions fixed by the price list. At one time the American Tobacco Company gave dealers a larger commission for handling its goods exclusively, but that policy was abandoned some years ago. The companies do not rely on the jobber to make the market for their goods; they rely on the demand of the consumer, and Mr. Duke does not know of a single jobber in New England who is not handling everybody's goods for which there is any demand. Exclusive contracts with dealers by their competitors would not prevent the companies from getting their goods distributed. If one dealer did not keep the brand called for by the consumer, the consumer would go to a dealer who did. The Continental Tobacco Company has endeavored to persuade dealers in New England to sell tobacco on a basis of 2 cents a pound profit. It did this at the solicitation of the jobbers. (321, 330.)

Mr. LEE, treasurer of the American Tobacco Company, denies any knowledge of the issuance of any circular letter to dealers on the part of the American Tobacco Company, offering them special terms on condition that they handle only its goods. The jobbing house of which Mr. Lee is president has perhaps as many independent goods as it has goods of the American and Continental tobacco companies and has never been asked to make exclusive contracts. (340, 341.)

Mr. Lee says that at one time the American Tobacco Company gave a rebate to jobbers if certain fixed prices were maintained. This system had been followed by some of the separate companies which were absorbed by the American Tobacco Company. The jobbers are very favorable to this system. It seems to be the only way that a profit can be maintained on staple goods, such as sugar, tobacco, coffee, etc. On staple articles competition is strong, and there is a universal demand from the jobbers for the large manufacturers to protect them in a reasonable profit. The large manufacturer probably gains when he protects the jobber, but if he paid no attention to the question of the jobber's profit he would have no trouble in marketing his goods. The jobber has in a measure helped to build up the trade, and as a rule manufacturers try to work in harmony with him and to maintain a profit for him. In some States the jobbers are maintaining a very good organization of their own, and are maintaining a profit on staple articles independently of any action on the part of the manufacturers. (341, 342.)

2. *Local price cutting—brands.*—Mr. LANDSTREET says that the price of one brand of cigarettes made by the American Tobacco Company has been reduced to \$1.50 per 1,000 in North Carolina and Virginia, while the same brand of cigarettes is sold in the State of New York at a much higher price. Some of the dealers in New York have bought cigarettes of this brand in Virginia and shipped them to New York. The price in New York ranges from \$1.65 to \$2.50. At Wilson, N. C., there is an independent cigarette company, The Wells-Whitehead Company, which manufactures the Carolina Bright Cigarette. This company claims that the American Tobacco Company has cut cigarette prices because of its competition. The price of \$1.50 per 1,000, with a 2 per cent discount off, is 3 cents less than the Government tax. (337.)

Mr. DUKE says that, at times, in order to introduce certain brands, prices have been cut very low. That is only one method of introducing a brand, used instead of spending money for advertisements in newspapers and for bill posters. A cheap price is made, and dealers are left to do the advertising and work up the market for themselves. Battle Ax plug was at one time sold for 13 cents a pound, under a 6-cent tax. American Beauty cigarettes are selling in North Carolina for \$1.50 per thousand, with 2 per cent off for cash, although the revenue tax per thousand is \$1.50. Since the increase of the revenue tax from 50 cents to \$1.50 per thousand the cigarette business has shrunk nearly two-fifths, and the company is making a test to see whether a price which will permit the selling of 20 cigarettes for 5 cents at retail will bring back the business. With a 54-cent tax the company could sell cigarettes at \$2 a thousand, or even less, and make a profit. (319, 328.)

Mr. Duke adds that in the tobacco trade it is not a matter of competition with somebody else. Goods are sold and demanded by the public by brands. The consumer does not ask for tobacco; he asks for a particular brand. Whoever makes the brand best liked by the consumer will get the business. The selling of one particular brand of cigarettes, for instance, at no profit by the company would not prevent the independent operator from getting his brand on the market. The company would have to sell all the brands at no profit in order to do that. (320, 326.)

Mr. CAMPBELL also says that in the tobacco business the brand itself is a valuable asset. When a brand becomes known and the consumer becomes acquainted with it he calls upon the dealer for it, and a brand with an established reputation increases sales materially. (307.)

**E. Effect of combination on the tobacco grower.**—Mr. CAMPBELL says that in Virginia and North Carolina the tobacco is sold mostly on the warehouse floor at auction. The planter brings his tobacco by wagon to the warehouse. It is put out in piles on the floor and sold to the highest bidder. (305)

Besides the independent companies which manufacture tobacco, there are leaf-tobacco dealers who sell to independent factories, and exporters of leaf tobacco, who are buying tobacco in competition with the American and Continental Tobacco companies. Formerly leaf dealers bought for the Japanese market, but now the American Tobacco Company controls the purchase of tobacco for Japan. This has had the effect of materially cutting down the prices of the grades of tobacco that are exported to Japan. Purchasers for the British market procure their supplies in North and South Carolina, Virginia, and Kentucky, but neither the purchasers for the British market nor the purchasers for European governments are competitors to any great extent of the American Tobacco Company, because they buy different grades. The foreign buyers buy mostly dark tobacco, while the American Tobacco Company buys only bright tobacco. (312, 313.)

Mr. Campbell asserts that the formation of the American Tobacco Company compelled the farmers of Virginia and the Carolinas to be content with greatly reduced prices, especially upon cutters. For that grade the farmer does not now realize more than half the price he received when the several companies composing the American Tobacco Company were competing with each other on the warehouse floors. Almost the only competition now is from exporters, and that amounts to practically nothing. Numerous leaf dealers have been driven out of business both in Virginia and in North Carolina because the companies for whom they bought or to whom they sold have gone into the combination. A large proportion of the tobacco used by the Continental company is burley tobacco. The low grades have continued at good prices, but the prices of the finer grades have been very much reduced. Last year the acreage in North and South Carolina was unquestionably reduced 30 to 40 per cent; but even with that short crop prices did not go high. Had there been no American or Continental Tobacco Company, the farmers would have received twice the price they did receive. Bright wrappers, that in 1894 were selling on the warehouse floor at from \$60 to \$75 per hundred pounds, have sold at from \$30 to \$40 per hundred pounds. The independent companies can buy leaf tobacco at as low prices as the Continental or the American Tobacco Company so long as the present system of selling tobacco at auction continues. No one company can control the price of the raw material exclusively for its own benefit. (308, 313.)

Mr. DUKE thinks his companies are at a disadvantage in buying raw materials, because of the large amount which they have to buy. The small manufacturer can pick up bargains. It is not to the interest of the manufacturer to put the price of tobacco down to a point where the farmer can not make money, because if that is done the farmer will grow poorer tobacco. There is no object in beating down the farmer, because the companies can get a profit without that. If there were not a single competitor in the field they would still pay a good price for tobacco. (326, 327.)

Mr. Duke adds that tobacco growing in this country has increased during the last 10 years in eastern North Carolina and South Carolina, and that in some parts of Tennessee, where previously they did not grow tobacco at all, there are now large growers. The increase has come largely through the manufacture of cigarettes, although the trade in cigarettes has been cut nearly in half during the last 3 years on account of the increase in the tax. The consumption of cigarettes, however, has not decreased, because everybody has a package of paper and a package of tobacco and makes his own cigarettes. (326.)

**F. Labor organizations in the tobacco trade.**—Mr. DUKE says that the American and Continental tobacco companies do not care whether or not their employees join a union, and pay no attention to the matter. The companies have never discriminated against union labor. They have no objection to organization, though they do not propose to have their employees lay down rules for the government of the factories. Rules for running their own affairs are all right. The employees are entitled to have something to say in regard to wages and hours of work. The companies have never refused to confer with any employees that came to them for conference. (323, 324.)

Mr. CAMPBELL says that the relations between the United States Tobacco Company and its employees are pleasant. The employees belong to the International Tobacco Workers' Union. The advisory board of the union in each section fixes a schedule of wages, which schedule is confirmed by the international board. This schedule is then offered to the company and the company agrees to it. Ten hours are a working day, though the company can employ men overtime by paying extra. The wages paid range from \$3 to \$12 per week. About two-thirds of the employees are men. (315.)



**G. Prices.**—1. *Effect of combination.*—Mr. CAMPBELL says that the formation of the Continental Tobacco Company has not affected the prices of plug tobacco to the consumer. The prices on it to the dealer have been different in different sections of the country. (307, 312.)

Through the plan adopted by the Continental Tobacco Company of giving 2 cents a pound to jobbers and a special discount to those who would refuse to handle outside goods, the company has maintained a limited price in New England. (310.)

Mr. DUKE says that the prices of cigarettes are about the same as when the American Tobacco Company was organized, notwithstanding the fact that the revenue tax per thousand has been increased from 50 cents to \$1.50. (318, 325.)

2. *Effect of taxation.*—Mr. DUKE states that the Star brand of plug tobacco, which was sold for 50 cents a pound by Leggett & Myers, under a 6-cent tax, is now being sold at the same price under a 12-cent tax. The company is making a little less profit, the dealer is making less, and the farmer is getting less for his tobacco, because the 6 cents could not come off any one of the three. Prices for the same brand are uniform in all sections of the country, with allowances for difference in freight. (318, 325.)

Mr. CAMPBELL says that the increase of the revenue tax on tobacco at the beginning of the Spanish war advanced the price of tobacco to the consumers. Formerly a consumer got 2 ounces of tobacco for 5 cents. After the tax was changed the consumer got only 1½ ounces for 5 cents. On some brands the consumer was made to pay the entire additional tax; on others this was not the case. The reduction of the tax on July 1 by 20 per cent will work to the advantage of the manufacturers and the dealer. Prices to the consumer will remain the same. (309.)

**H. Cigarettes.**—Mr. DUKE says that cigarettes are less injurious than cigars, because purer and better tobacco is used in them. Opium is not used in any form in manufacturing tobacco by his companies. The peculiar odor of the cigarette is due partly to the paper and partly to the fact that bright tobacco, which possesses little substance, is used. (326.)

Adverse legislation has, in some instances, reduced the number of cigarettes consumed, but it has not affected the consumption very much. There has been a decrease of sales, but this has been due to the increase of the revenue tax from 50 cents to \$1.50 per 1,000. The decrease of sales, however, has not meant a decrease of consumption; for now the consumer buys the paper and the tobacco and manufactures his own cigarettes. (320, 326.)

Mr. Duke says cigarettes are mostly made by machinery, and that the same machines are used in foreign countries as here. The patents have run out, and anybody who cares to may use them. (325.)

**I. Foreign trade in tobacco.**—Mr. DUKE says that the American Tobacco Company has established four factories in Australia, shipping all the leaf tobacco from this country. Factories have also been established in Canada. In Japan the company consolidated with a Japanese concern. A company was organized there; the American company sold its business to the new company for one-half the stock and the Japanese concern sold its business for one-half the stock. Afterwards the Japanese company sold 10 per cent of the stock to the American company. The American company also sells goods in China and in India, though no factories are established there. It is opening up business in all European countries, except where excluded because the business is under government control. In Japan the Government controls the trade in leaf tobacco, and the factories there have to buy the leaf from the Government. The leaf is bought in North Carolina by the agents of the Japanese Government. The company sells over a billion cigarettes a year in foreign markets, besides those that are made in the factories abroad. The factories controlled by the American company in Japan make about 8,000,000 a day; in Australia the output of the company's factories is about 200,000,000 a year, and in Canada it is something over 100,000,000 a year. The only way of getting into the English market is to establish factories there, because of the discrimination against manufactured tobacco. The chief competitors of the American Tobacco Company in the cigarette business abroad are in England. They buy tobacco in North Carolina and Virginia and ship it to England, manufacture cigarettes, and then compete in all the foreign markets. This is true of tobacco as well as of cigarettes. There is some competition from Japan, and there is a certain demand for Egyptian cigarettes all over the world.

The Continental company does not sell much abroad, for the reason that plug tobacco is used only in this country. The extension of the foreign trade has materially increased the demand for the leaf tobacco of the South, and the operations of the American Tobacco Company have made a large market for North Carolina and Virginia tobacco. All the trade which has been built up in Japan, and which amounts

to nearly 10,000,000 pounds a year, has come from the efforts of the American Tobacco Company. The company has exported some leaf tobacco to the Japanese Government. The purchase of American tobacco by foreign Governments has had practically no effect on the American price. The poorer grades of Ohio tobacco are also exported. (320, 322, 326, 327, 329.)

Mr. Duke declares that for the same quality of goods the tobacco companies get a higher price abroad than at home, considering the tax that is paid here. On a limited number of cigarettes which are made cheaply, the export price has been made lower than the domestic price in order to get into the foreign market. (325.)

**J. Tariff.**—Mr. DUKE says that the difference of wages between this country and others is such that, if the tariff were removed, the tobacco companies could ship the tobacco to foreign countries, manufacture their cigarettes there, and ship them back to this country cheaper than they could manufacture them here. The companies will make their goods wherever they can make them most cheaply. If the tariff were removed and they could manufacture more cheaply in some other country and send the goods into the United States they would do so. The reduction of the tariff could be met by the manufacturer, but would prove injurious to the workman and to the producers of raw material. If there were free trade in leaf tobacco cigar material would be nearly all imported. (325, 328, 329.)

Mr. CAMPBELL says that tobacco from Cuba would not come into competition with the tobacco grown in Virginia and North Carolina, as it is a different kind of tobacco, but it would probably come into competition with Connecticut tobacco. (313.)

#### VIII. AMERICAN THREAD COMPANY.

**A. Description of business.**—Mr. HOPKINS, president of the American Thread Company, says that the American Thread Company was organized to unite the businesses of the following manufacturers of spool, crochet, knitting, mending, and other cottons, and in some cases the allied businesses of cotton spinning, doubling, twisting, dyeing, bleaching, polishing, and spool making.

Barstow Thread Company, Providence, R. I., including good will and trade-marks of Alex. King & Co.

Glasco Yarn Mills Company, Glasco, Conn.

Glasco Thread Company, Worcester, Mass.

Hadley Company, Holyoke, Mass.

The Kerr Thread Company, Fall River, Mass.

J. O. King & Co., New York City.

Marrick Thread Company, Holyoke, Mass.

National Thread Company, Mansfield, Conn.

Morse and Kaley Manufacturing Company, Milford, N. H.

E. J. W. Morse Company, Boston, Mass.

The Roddy Thread Company, Worcester, Mass.

The Warren Thread Company, Ashland, Mass.

The William Clark Company, Westerly, R. I.

The Willimantic Linen Company, Willimantic, Conn.

In addition to cotton threads the company manufactures also cotton yarns. Its output of sewing thread is probably a little less than one-third of the output of the country. (343, 348.)

**B. Organization.**—Mr. HOPKINS says that the first step toward the organization of the American Thread Company was the securing of options upon the different properties which were afterwards taken over. When operations reached a point where the consolidation could be carried through, the options were taken up and paid for. A good many of the companies that sold out to the American Thread Company took their pay half in money and half in bonds. Some took all money and some took more bonds than cash. (353.)

The prospectus, a copy of which is submitted by Mr. Hopkins, states that the options of the various properties taken over by the American Thread Company were obtained by Mr. John R. Dos Passos, of New York, and that he resold to the company at a profit, out of which he would pay all the expenses of and incidental to the formation of the company. (363.)

**C. Capitalization.**—Mr. HOPKINS says that the capitalization of the American Thread Company is \$12,000,000, being \$6,000,000 5 per cent cumulative preferred stock and \$6,000,000 common stock; of which there has been issued \$4,890,475 of preferred stock and \$4,200,000 of common stock. There have been also issued bonds to the amount of \$5,798,000, an issue of \$6,000,000 having been authorized.

## LXXX INDUSTRIAL COMMISSION:—INDUSTRIAL COMBINATIONS.

The aggregate of the preferred stock and bonds represents about the value of the tangible assets of the company; lands, buildings, machinery, stocks in trade, etc. Common stock was fixed at an amount which it was thought would make a fair business. The total capitalization of the company, taking into consideration bonds, as well as preferred and common stock, is larger than the total capitalization of the companies which went into the combination. Mr. Hopkins submits the company's balance sheet of September 30, 1899, showing the assets and liabilities of the company at that date. (343, 344, 355, 358.)

The capital for the purchase of the several concerns was furnished by the English Sewing Cotton Company, and that company owns a majority of the preferred and of the common stock of the American Thread Company. J. & P. Coats took \$500,000 of the preferred stock. Three of the directors of the English Sewing Cotton Company are directors in the American Thread Company. These 3 directors do not live in this country. (353.)

Mr. Hopkins understands that J. & P. Coats own about \$500,000 of the stock of the English Sewing Cotton Company. The stock of that company is largely distributed and is not held in bulk by anyone. (354.)

**D. Earnings.**—Mr. HOPKINS says that for the first year the American Thread Company, besides paying the dividends on its preferred stock, and the interest on its bonds, paid a 10 per cent dividend on the common stock. A part of this profit was due to the fact that a large amount of cotton was bought before the rise in price. Before the American Thread Company was formed the Merrick Company paid average dividends of 10 per cent on the capital invested. (358.)

**E. Reasons for combination.**—Mr. HOPKINS says that one of the chief reasons for forming the American Thread Company was the desire to avoid ruinous competition. There was quite a rivalry between the different companies, and some were cutting prices in all kinds of ways to get the trade. In consequence there was a very low profit, if any at all, in the business. Another reason was the fact that, by putting the different concerns under one management, an immense amount could be saved both in the disposal of the product and in the cost of manufacture. (346.)

**F. Competition.**—Mr. HOPKINS says that there is still plenty of competition in the thread industry, and that the lowering of the price of some grades of thread immediately after the formation of the American Thread Company was due to outside competition. The chief competitors of the American Thread Company are the Coats Company, the Gardener-Hall Company, and the Wachussetts Company, and a company run by Isaac Einhorn. The aggregate output of the American Thread Company and the Coats Company is two-thirds of the thread output of the country. The Coats Company includes the Clarke Company. It is a foreign corporation controlled by British capitalists. Although the Coats Company owns stock in the American Thread Company there is competition between the two, and there is no agreement in respect to prices, and no division of territory. It is not possible for a monopoly of the cotton-thread industry to be established in this country. A man with a capital of \$10,000 can go into the business. There are very few patents. There is practically no importation of foreign thread. The foreign thread companies have established factories in this country. Previous to the establishment of these factories foreign thread was imported. (348, 350, 356.)

**G. Economies of combination.**—Mr. HOPKINS says that through the organization of the American Thread Company there has been a saving by centralization of management and of manufacture. Before the organization the different concerns had different offices and stores in various cities all over the country. They had employees in all their offices, and each concern had traveling salesmen. By organization all of the offices in each city were united, and in that way a tremendous saving was made in rents and in the expenses of bookkeeping. A saving has been made also through a reduction in the number of traveling salesmen. The new company employs only about two-thirds of the number employed by the separate concerns. An immense saving in advertising has been made. The company now does little advertising. Previous to the organization free spool cabinets were furnished by the different concerns to customers who bought 100 dozen of thread. Now these cabinets are charged for. A saving has also been made through reduction of the stocks carried. Formerly each concern had to carry 100 different colors, kinds, and numbers. The stock of each mill has been reduced almost one-half. Again, each mill makes a specialty, and that reduces the cost of manufacturing, by having the machinery in any one establishment running all the time along one line. A saving has also been made in the buying of supplies. Buying in larger quantities gives an advantage. All the cotton supplies are bought through one office and shipped to the different plants as wanted. There is one man appointed specially as buyer. He keeps

better posted and probably gets better prices than would have been obtainable on the old basis. The saving in buying is at least 5 per cent. (346, 347.)

The producing capacity of the American Thread Company is just about the same as that of the separate concerns was. Two or 3 small concerns located in out-of-the-way places were closed down, but some of the machinery was sent to Willimantic and some of it to Holyoke. (347.)

**II. Effect on prices.**—Mr. HOPKINS says that after the formation of the American Thread Company the prices of some of the brands were lowered, and none of the prices were raised until the price of raw materials went up. The finished product was increased in price by about the amount of difference in the cost of raw materials. The change in price was made in December, 1899, the average increase being about 10 per cent. Since that time some of the prices have been reduced. The price of cotton yarn was put up also when the price of cotton went up. Mr. Hopkins submits a copy of the circular sent out by the American Thread Company in December, 1899, announcing the change in prices. (348, 352, 357.)

**I. Improvement in quality.**—Mr. HOPKINS says that, although the price of thread has remained stationary, the thread is of better quality. The same grade of thread which was formerly bought for 5 cents per spool can be bought to-day for 3 cents per spool. (359.)

**J. Effect on retailers.**—Mr. HOPKINS says that selling arrangements have been somewhat simplified by reason of the combination, in that retailers have concentrated more on the brands of thread that are best known, although all the different brands are put out now just as they were under the old companies. Each brand, however, to a certain extent localizes itself. (359.)

**K. Relations with employees.**—Mr. HOPKINS says that the American Thread Company has never had any trouble from strikes. The effort at all times has been to keep in harmonious relations with employees, pay them a fair price, and see to it that it is to their interest to serve faithfully. The company pays its workmen weekly in cash. At Holyoke, Mass., the company has factory tenements sufficient to accommodate about one-eighth of the persons employed there. At Willimantic, Conn., it has tenements for about one-half the labor employed there. These tenements were built in 1865, and were built because at that time it was impossible for the employees to get tenements. The houses have been kept in repair and supplied with all modern improvements. The company makes no profit out of its rents and would be glad to sell the tenements. At Holyoke, for a tenement with 6 or 8 rooms, the rent is \$5 a month, with free fuel. (345, 349, 350.)

**L. Nationality of employees.**—Mr. HOPKINS says that from one-fourth to one-third of the employees of the American Thread Company are French Canadians; the others are mostly native-born Americans. (350.)

**M. Home ownership by employees.**—Mr. HOPKINS says that nearly all of the overseers and superintendents and a great many of the dresser tenders own their own houses. The so-called common laborers do not get enough wages to build houses, though some of those who work by the day own their own houses and many of them have money in the bank. (350.)

**N. Wages.**—Mr. HOPKINS says that the wages of the women who work by the day range from \$1 to \$1.50; the wages of the men from \$1.50 to \$2.50. The women who do piecework make from \$1.25 to \$1.75 a day. There are not many men who work by the piece. Men and women do not do the same kind of work. Since the formation of the company the wages of the pieceworkers have not varied much, but there has been some increase in the pay of dresser tenders, overseers, and superintendents. The company has always paid a definite rate of wages and has not adopted a sliding scale or tried cooperation, premium payments, profit sharing, or anything of that kind. The rate of wages in the thread industry has advanced gradually but constantly during the past 50 years. (345, 346, 349.)

**O. Hours of labor.**—In Massachusetts the employees of the company work 58 hours a week; elsewhere 60 hours a week. The company does not employ Sunday labor. The employees work on an average nearly 300 days in a year. The matter of the number of hours which shall constitute a working day should be permitted to regulate itself. (345, 346.)

**P. Tariff.**—Mr. HOPKINS says that the removal of the tariff on thread would practically drive the thread manufacturing business out of this country. Thread would then be made in England and sent here, the reason for this being that labor

there gets just one-half what it does here, and the raw material is just as cheap. American manufacturers could not compete at all. This would not be true to as great an extent of cotton yarn as of cotton thread, because not nearly so much labor proportionately goes into yarn as into thread. The American laborer in the thread mills is more efficient than the English laborer. For certain parts of the work payment is made by the piece, however, and in such cases the English manufacturer pays only one-half as much as the American manufacturer.

Mr. Hopkins considers that the present tariff of 6 cents on every 1,200 yards, which is equal to an ad valorem tariff of between 40 and 50 per cent, is just about equal to the difference in the cost of production in this country and in England, and places the American manufacturer and the foreign manufacturer about on a level. He says elsewhere, however, that about one-half the cost of production of thread is labor cost. In the case of the production of yarn the labor cost is from one-fourth to one-half of the total. (349-352.)

**Q. Export trade.**—Mr. HOPKINS says that there is no export trade of consequence in thread. Thread could not be exported in competition with foreign manufacturers, except in the case of some quality which is not manufactured abroad. The retail price of a 200-yard 6-cord spool of thread is 4 cents in London and 5 cents in New York. (352.)

### IX. THE BAKING POWDER COMBINATION.

**A. Organization, capitalization, and extent of control.**—Mr. MORRIS, treasurer of the Royal Baking Powder Company, submits a copy of the certificate of incorporation of the Royal Baking Powder Company, and a copy of the by-laws. (397-404.)

Mr. Morris says that the capitalization of the Royal Baking Powder Company is \$20,000,000, of which \$10,000,000 is 6 per cent preferred stock, and \$10,000,000 is common stock. The preferred stock is on the market, but the common stock is held entirely by the people who were originally interested in the company, except that possibly about 9 per cent of it has been given to their friends. There has been no general sale of it to the public. The entire capitalization of the companies which united to form the Royal Baking Powder Company was very much smaller than its capitalization. Those companies were family concerns, and the value of the business of each was much greater than the amount of the capital stock. The basis of a capitalization is practically the earning power of a company, and therefore any amount on which the business is able to pay a fair profit is a fair capitalization. The names of the various brands of baking powder manufactured by the company are in themselves valuable assets, and form a proper basis for capitalization. It has taken over 40 years to build up the trade-marks. (387, 388, 396.)

If the interest on the preferred stock is in default 4 months, \$50,000 of the preferred stock can call a meeting, elect directors, and take charge of the business. After the preferred stockholders have taken charge of the business the voting power theretofore vested exclusively in the common stock is to vest and remain in the holders of the preferred stock until all arrearages of dividends on the preferred stock shall have been paid or accumulated. One month after the payment of the defaulted dividends upon the preferred stock, or the accumulation of net earnings equal to said defaulted dividends, the voting power then vested exclusively in the preferred stock shall cease, and such exclusive voting power shall be restored to the holders of common stock.

No mortgage can be created or assumed by the company, and the preferred stock can not be increased, nor the company merged into or consolidated with any other company, nor a mortgage placed on the properties of any of the companies which united to form the Royal Baking Powder Company, without the consent in writing of the holders of 75 per cent of the preferred stock outstanding, in case the company is at the time managed by the common stock. In case the company is at the time managed by the preferred stock, the consent of the holders of 75 per cent of the common stock outstanding must be secured in like case. (388, 398, 403.)

The company has paid dividends regularly on the preferred stock at the rate of 6 per cent per annum. Mr. Morris prefers not to say whether or not dividends have been paid on the common stock. The public were not asked to take any of that stock. (388.)

Mr. Morris says that his company probably produces a little more than one-half of the cream of tartar baking powder manufactured in the country. The companies which came together to make up the present company were the Royal Baking Powder Company, the Cleveland Baking Powder Company, the Price Baking Powder Company, the Tartar Chemical Company, and the New York Tartar Company.

Before the consolidation these companies had been competitors. The company manufactures three brands of cream of tartar baking powder, the Cleveland, the Price, and the Royal. There are probably from 15 to 20 different brands of cream of tartar baking powder manufactured in this country, the brands other than the three manufactured by the Royal company being the product of distinct and separate concerns. The Royal Baking Powder Company has no agreement with these companies in respect to prices, or anything of that kind. (387.)

Mr. MORRISON, secretary and treasurer of the American Baking Powder Association, says that the capitalization of the Royal Baking Powder Company is \$20,000,000, of which \$10,000,000 is preferred stock, and \$10,000,000 common stock. The public was given an opportunity to buy preferred stock, but the common stock is reputed to be very largely held by Mr. Ziegler, who formed the combination. The companies taken into the combination were the Royal Baking Powder Company, capital, \$160,000; the Price Baking Powder Company, capital, \$500,000; the New York Tartar Company, capital, \$80,000; the Tartar Chemical Company, capital, \$100,000, and the Cleveland Baking Powder Company, capital, \$100,000; so that the total capital of the companies which combined to form the new corporation was \$940,000. (366.)

Mr. Morrison asserts that in spite of the attacks made upon it the sales of alum baking powder to-day are approximately 100,000,000 pounds per annum, while the sales of Royal baking powder probably do not exceed 13,000,000 to 15,000,000 pounds at the outside, and are not increasing. There are three or four very large manufacturers of alum and alum-phosphate baking powders. One is the Southern Manufacturing Company, of Richmond. It is probable that that company sells as much baking powder as the Royal company. (382.)

**B. American Baking Powder Association.**—Mr. MORRISON, secretary and treasurer of the American Baking Powder Association, says that this is an organization composed of manufacturers of baking powders in the production of which exsiccated alum is used. The association has 64 actual members, and there are some 524 manufacturers of alum baking powder who contribute directly or indirectly to it. The association represents the total alum baking powder interest. It takes no interest whatever in the business affairs of its members, and has no control over their product, sales, or prices. Its chief occupation and duty is to defend its members against the hostile attacks—outside of business competition—which are made by the Royal Baking Powder Company. (364, 365.)

Mr. Morrison submits a copy of the constitution and by-laws of the association. (384, 385.)

Mr. KELLEY, president of the National Health Society, submits a copy of the blank used in making application for membership in the American Baking Powder Association. (709, 710.)

**C. History of the baking-powder industry.**—Mr. MORRISON says that formerly the usual method of leavening bread was through the use of yeast. Later it was discovered that a combination of cream of tartar and soda would throw off carbonic acid gas the same as yeast, and about 1867 cream of tartar baking powder was produced. It originated in the drug store and grew from the mixing of cream of tartar and soda in bulk. About 25 years ago it was found that exsiccated alum was an acid ingredient of double the strength of cream of tartar and considerably less expensive. Therefore alum baking powder began to be manufactured. (365.)

**D. Materials of baking powders.**—1. *Nature and effects.*—Mr. MORRISON says that cream of tartar baking powder is made of cream of tartar, bicarbonate of soda, and starch. Alum baking powder is made of exsiccated alum and an equal amount of bicarbonate of soda and starch. The same effect is produced by the two kinds of baking powder, except that, as a liberator of gas, alum is twice as strong as cream of tartar. When the chemical reaction produced by the mixing of the baking powder in the dough has progressed to its completion, a residuum is left in the food. In the case of cream of tartar that residuum is rochelle salts. In the case of alum the residuum is sulphate of soda and hydrate of alumina; there is no alum left in the food. (365.)

Ammonia is no longer used in the manufacture of baking powders, though it was formerly used by the Royal Baking Powder Company. (380.)

The Rumford powder is a pure phosphate powder. It is made of granular phosphate, which is a peculiar kind of phosphate, covered by a patent. It differs from other powders containing phosphate in the fact that the granular character of the phosphate prevents reaction between the phosphate and the bicarbonate of soda. (379.)

Mr. Morrison admits that in one or two instances white earth has been used in the manufacture of alum baking powder. Upon discovery of this fact the American

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Baking Powder Association immediately passed resolutions condemning the practice and declaring that anyone using deleterious substances in alum baking powders is not worthy of membership in the association. Mr. Morrison submits a copy of these resolutions. (380.)

2. *Sources.*—Mr. MORRISON says that cream of tartar is made of wine lees, known as argol. Originally Italy produced the largest quantity that came to this country. France came next in quantity of production; Spain next. The importations of argol for the last 2 years would average 22,000,000 pounds; the home production does not exceed half a million pounds. The supply of argol is limited by the production of wine, because argol is a by-product. The total production of argol in the world is about 44,000,000 pounds. (365, 366.)

Mr. MORRIS says that cream of tartar is imported from Europe. The European output is about 70,000,000 pounds a year, and about 40 per cent of that is imported into this country. Not all the importations, however, go into baking powder. The Royal Company sells cream of tartar to its competitors, and perhaps 35 per cent of the cream of tartar made by the Tartar Chemical Company is sold to concerns, outside of the Royal Company, which manufacture cream of tartar baking powder. (396.)

Mr. MORRISON says that alum comes from bauxite, a species of white earth that is found in various parts of this country, and also from a substance known as cryolite. A modest quantity comes from Greenland, and it is all manufactured in this country. (366.)

**E. Prices and profits of manufacture.**—Mr. MORRIS says that sometimes the retail price of Royal baking powder is cut to 28 cents, while at other times it is sold for 50 or 60 cents per pound. Alum baking powder sells all the way from 5 to 50 cents a pound. Some of the alum baking powder manufacturers also sell on the prize system. The bulk of the alum baking powder is sold at 25 cents a pound. (388, 389.)

Mr. MORRISON says that although the price of cream of tartar has constantly decreased from 1882 to the present time, the price of Royal baking powder has remained the same. The Price Baking Powder Company, previous to its consolidation with the Royal Baking Powder Company, sold its powder for \$5 for 2 dozen pounds; immediately after the combination was formed the price was raised to \$7.25 for 2 dozen pounds. Alum baking powder has been selling at a constantly decreasing price, until to-day over half the alum baking powder is sold at 10 cents a pound, and the profit on the whole probably does not average over half a cent a pound. The alum-phosphate baking powder (which is a combination of alum, phosphate, and bicarbonate of soda) is sold from 20 cents down to 10 cents per pound. Mr. MORRISON submits a price list of the Royal Baking Powder Company issued in 1882; also a circular sent out by Price's Cream Baking Powder Company previous to its absorption by the Royal Baking Powder Company. (372, 373, 382.)

Mr. MORRISON states that Mr. Ziegler, of the Royal Baking Powder Company, testified in 1888, in a suit, that the profits of the Royal Baking Powder Company at that time (the old company) were \$724,000 on a business of \$2,400,000, after paying \$86,000 in salaries to three men, and with an advertising expenditure of probably \$500,000. The cost of manufacturing Royal baking powder does not exceed 12 cents per pound. The price per pound wholesale is 38½ cents, the profit being 26½ cents. If the company sells 12,000,000 pounds per annum, the gross profit is upward of \$3,000,000. Out of that salaries, advertising, and legislative expenses must be paid, as well as dividends. Mr. MORRISON submits a copy of an extract from the Market Journal of June 2, 1888, giving an account of the testimony in respect to the profits of the Royal Baking Powder Company. (374, 375.)

**F. Wholesomeness of alum baking powder.**—Mr. MORRIS says the cream of tartar baking powder manufacturers have always regarded cream of tartar as a better acid for baking powder than alum. There is nothing to prevent them from going into the alum business if they want to, but they do not desire to do so. Taking it all around, the Royal Baking Powder Company maintains the standard of its baking powders better than the alum baking powder manufacturers, because it compounds them very much more carefully. The Royal Company claims that alum baking powders are detrimental to the health of the consumers; that alum remains in the bread and biscuit after they are baked. The chemists claim that after the bread goes into the stomach the hydrochloric acid of the stomach restores the alum to its original state in the stomach. The great mass of chemical testimony is against alum baking powders. (387, 389, 390.)

According to Mr. MORRIS, the value of the materials of alum baking powders is about one-sixth the value of the materials of cream of tartar baking powders. He

claims that the fact that the material used in the cream of tartar baking powder is more expensive is evidence that it is better, because if it were not better the company would not pay the money for it. (396.)

Mr. KELLEY, president of the National Health Society, says that as far back as 1879 efforts were made by the advocates of pure-food legislation to discourage the use of alum in baking powders. The Massachusetts State Board of Health in 3 separate reports, in 1883, 1884, and 1888, has reported against the use of alum in baking powders. Several years before the organization of the Royal Baking Powder Company the Department of Agriculture, at Washington, made an investigation into the use of alum baking powders, and as a result of that investigation bidders for supply contracts for any department of the United States Government were warned against submitting any bids that included food stuffs in which alum was an ingredient, as no such bids would be considered. Mr. Morrison states that no question has ever been raised as to the wholesomeness of hydrate of aluminum, which, he admits, is left as a residuum in bread which is raised with alum baking powder, but, in *The Law and Chemistry of Foods and Drugs*, by Robinson and Cribbs, a series of experiments are cited showing that biscuits containing alum baking powder had an injurious effect when fed to dogs. Sixty-six chemists testified before the United States Senate committee that the use of alum in food is harmful. Senator Mason, chairman of that committee, states that the only fees received by these witnesses were the statutory per diem allowances for mileage. Mr. Kelley quotes from several of these chemists, and also submits copies of letters written by a number of physicians in Missouri stating that the use of alum baking powder is injurious. (698-703.)

Mr. MORRISON also says that cream of tartar is a more expensive agent than alum, and he adds that it takes twice as much of cream of tartar as of alum to liberate the gas from bicarbonate of soda. Alum baking powder, therefore, is cheaper than cream of tartar baking powder, and has double the strength. The Royal Baking Powder Company found that the price of alum baking powder was being so radically reduced that it presented a competition which they could not meet commercially. They had so reviled alum and so stamped into the public mind the impression that it was harmful that they could not change and manufacture alum baking powder. If alum baking powder is proved wholesome to the satisfaction of the public, there is no logical reason why the Royal Baking Powder Company should not be eliminated from the field within a reasonable time. (372, 373.)

Mr. Morrison declares that the chemical testimony which had been given up to the time of the organization of the American Baking Powder Association was, as a rule, testimony against the use of alum in food, not against the use of food prepared with alum baking powder. The alum baking powder manufacturers have conducted physiological experiments and have found that alum baking powder leaves no residuum; that it has no effect on the system, and is therefore harmless. The opponents of alum baking powder have not presented a single case of malnutrition or physiological disorder from alum goods. The testimony given against alum baking powder in the test case in Missouri and that given before the Senate pure-food committee was given by persons in the pay of the Royal Baking Powder Company. Every physician in Richmond has signed a paper stating that he never came across a case of functional disease which he could trace to the use of alum baking powder. Mr. Morrison presents a copy of a paper signed by physicians, stating that they have never found a case of disease or death which was due to the use of alum baking powder. (379, 383.)

**G. Methods of competition.—1. Advertising.**—Mr. MORRISON says that the Royal Baking Powder Company contracts with newspapers to publish articles, attacking alum baking powder, as pure reading matter. It has also contracted that these articles shall not, at the date of publication or afterwards, be designated, by any article or advertisement in the paper in which they appear, as advertisements, or as paid for, or as emanating from the Royal Baking Powder Company. It is impossible, therefore, for the manufacturers of alum baking powder to reply to them. These advertisements are published in all classes of newspapers, and are published, perhaps, in a majority of the papers in the United States. Mr. Morrison submits a copy of a contract made by the Royal Baking Powder Company with the Knoxville Journal-Tribune for pure reading matter advertisements. He submits also copies of reading articles which appeared in the Knoxville Journal-Tribune, the Rochester (N. Y.) Herald, and the New Orleans Presbyterian; also a copy of a letter to the Royal Baking Powder Company from the Bible Reader and Sunday Magazine of Richmond, and a copy of the reply of the Royal Baking Powder Company. (375-379.)

Mr. MORRIS says that the Royal Baking Powder Company, in urging the sale of its baking powders, finds it desirable to expose the weak points of its opponents' goods, and advertises that alum baking powders are injurious. It does not make contracts



with newspapers to exclude the advertisements of its rivals, except to the extent that its rivals shall not neutralize the effect of the Royal Baking Powder Company's advertising by attacking the quality of its goods. It does not have any contracts that prevent the alum people from defending the quality of their own goods, and Mr. Morris does not know of any publisher who would refuse to publish their advertisements.

Referring to what purported to be a contract between the Royal Baking Powder Company and the Knoxville Journal-Tribune for the insertion of an advertisement as pure reading matter, Mr. Morris says that he supposes that the Royal Baking Powder Company made such a contract. He does not think that the provision made in that contract that the pure reading advertisement shall not, at the date of publication or afterwards, be designated or classed by any article or advertisement in that paper as an advertisement, or as paid for, or as emanating from the Royal Baking Powder Company, would prevent the alum people from replying. Wherever the influence of the alum baking powder people extends the Royal Company finds it difficult to get such advertisements as it wants. The papers in Richmond refused to publish advertisements which the company wanted published. (390-393.)

Mr. MORRISON says that all the literature attacking alum baking powders which has been put out by the Royal Company has been sent to foreign countries, so that whenever an attempt is made to send alum baking powders into these countries the shipments are stopped by the presentation of this testimony. Because of the attacks on alum baking powders which have appeared in the newspapers the manufacturers of alum baking powders do not advertise. (382.)

Mr. MORRIS says that the alum baking powder manufacturers can advertise their goods and are doing so. There are plenty of papers publishing advertisements of the alum baking powders. The New York World has published an advertisement detrimental to the Royal Baking Powder Company. The alum baking powder people send circulars throughout the country. Mr. Morris submits copies of circulars which were sent out by alum baking powder manufacturers. (392.)

2. *National Health Association.*—Mr. MORRISON says that the National Health Association is connected with the Royal Baking Powder Company, and does that company's work. In Missouri it sought to enforce the antialum law, and sent out pamphlets to grocers, stating the danger of handling alum powder, because of its unhealthfulness. Its publications were issued from offices which did not exist. It claimed that it contained in its membership representative men and women of the State, but the American Baking Powder Company has never been able to find a member of the society. It tried to contribute and could not find a treasurer. It has discovered, however, that the president of the National Health Society, Mr. D. J. Kelly, is indirectly connected with the Royal Baking Powder Company. The National Health Society was represented before the New York legislative committee by Mr. L. Boardman, of Tracy, Boardman & Platt, who admitted that he was under a retainer from Mr. Kelly. It is shown by the record of the telegraph and telephone companies that Mr. Kelly reports to Mr. Rose, president of the Royal Baking Powder Company. (368, 369.)

Mr. KELLEY, president of the National Health Society, says that that society was formed for the purpose of promoting the use of pure food, and of discouraging the manufacture, sale, and use of adulterated articles of diet. The society has distributed a quantity of pure-food literature. It has also appeared before legislative committees and State boards to advocate the enactment of pure-food laws in the States where they do not already exist, and the enforcement of regulations against adulterants in foods in the States in which such laws have been passed. This is a work which will develop as the society increases in strength and influence. In addition to working along the lines mentioned, the society has retained counsel to appear before legislative committees in the States of New York and Massachusetts. Mr. Kelley submits copies of pamphlets sent out by the National Health Society. (694, 695, 700-709.)

Mr. Kelley asserts that that society has never received a dollar from the Royal Baking Powder Company, and that he himself is not and has not been employed by or connected with the Royal Baking Powder Company. (694.)

Mr. MORRIS says that there is such an organization as the National Health Society, with headquarters at New York City. He will not say whether or not the Royal Baking Powder Company has contributed to the support of it. As to all other matters, the National Health Society will have to answer for itself. (394, 395.)

3. *Legislative attacks.*—Mr. MORRISON says that Mr. Ziegler, who is at present an active man in the Royal Baking Powder Company, originated the attacks on alum baking powders. This was before the formation of the present Royal Baking Powder Company. After that combination was formed the attack on alum baking powder was continued. The first thing accomplished was the passage of a bill through

the Missouri legislature which on its face was a bill to prevent the use of poisons. The bill provided that it should be unlawful after a certain date to use arsenic, calomel, bismuth, ammonia, or alum in the preparation of foods. The alum baking powder manufacturers did not realize what the provisions of the bill were until it became a law. Immediately after the passage of the law 31 manufacturers of Missouri formed what is known as the Missouri Association to test the constitutionality of the law. The court decided that, although no evidence was offered to show that alum baking powders were in any way less wholesome than any other baking powders, yet the legislature had the right to pass such a law, and that therefore the law was constitutional. In October, 1899, the American Baking Powder Association was formed. Since its organization it has killed some 27 bills, similar to the Missouri bill, in about 16 or 18 different States. Missouri is the only State in which a bill of a prohibitive character against alum baking powder has been passed. In New York a bill similar to the Missouri bill was killed in the senate and immediately introduced in the assembly. This year in New York a pure-food bill was introduced, to which in its original form there was no objection. When the bill came out of committee it had a section added to it, making it like the Missouri bill. Before the introduction of the antialum bill into the Missouri legislature the newspapers had been filled with paid written matter attacking alum, and warning people against the use of unwholesome substances in the preparation of food, such as baking powder that contained alum. The public, it was said, could always test alum baking powder by the fact that it was cheaper. When the papers were asked to publish a retraction, they replied that they could not do so, because the contracts they had with the Royal Baking Powder Company precluded any answer. After the decision of the Missouri court was announced the association offered it to the papers at the highest advertising rates, but they would not take it. The Post-Office Department was asked to take away from these papers the privilege of going through the mails as second-class matter, and in response to a note from the postmaster the papers afterwards accepted the decision at highest rates. Mr. Morrison submits an extract from the Missouri decision. (366, 367, 369, 377, 386.)

When it was attempted to secure the repeal of the Missouri antialum law, great opposition was encountered from the National Health Society. Finally the house of representatives passed the repeal bill by a vote of 109 to 105. The bill was then sent to the senate, was referred to the committee on criminal jurisprudence, and stayed in that committee. The house of representatives passed a resolution stating that it had done all in its power to pass the repeal, and that the people must hold the chairman of the senate committee on jurisprudence responsible for the failure of the proposed legislation. After it had been voted in the senate that no further business should be done, the chairman of the committee on criminal jurisprudence asked unanimous consent to present a report. The report which he presented had been written by himself and had not been considered by the committee. This report recommended that the repeal bill should not pass, and there was embodied in it an attack upon alum baking powder. Mr. Morrison submits a copy of this report. (369-371.)

Mr. Morrison adds that this year, after the antialum bill had been twice defeated in the Arkansas assembly, it was found that a similar bill had been introduced into the senate. The bill was not passed. Five minutes before the adjournment of the senate the chairman of the committee which had the bill in charge asked unanimous consent to make a report, and reported an attack against alum baking powder. Mr. Morrison submits a copy of a letter received from the president of the Arkansas senate, written before the adjournment of the senate. The statement was made in this letter that the bill would not pass, as the members of the legislature were aware of the methods of the Royal Baking Powder Company and of the object which it sought to accomplish. (371, 372.)

Mr. MORRIS testifies that the Royal Baking Powder Company had nothing whatever to do with the passage in Missouri of the law against alum baking powders. In New York and in other States where bills against alum baking powders have been introduced, it has tried by proper means to further such bills. In New York it had an attorney to present the matter before the legislative committee. Mr. Morris makes the charge that the alum baking powder people have been going to legislatures and introducing bills against alum baking powders and killing them, and then calling public attention to the number of States which have rejected bills against alum baking powder. Mr. Morris has no evidence of this fact, but states it as his belief. (393, 394.)

Mr. KELLEY, president of the National Health Society, says that in the State of New York, at the last session of the legislature, a pure-food bill was introduced which included in its provisions a prohibition aimed at alum baking powder. Mr. George L. Flanders, the deputy commissioner of agriculture, informed the committee which

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had consideration of the bill that the bill was prepared in his office. The National Health Society appeared before the New York legislative committee and was represented by Mr. A. L. Boardman as counsel. Two chemists also appeared before the committee to argue in favor of the bill, both of whom stated that they were not in the employ of the Royal Baking Powder Company. The committee, after listening to the testimony and the argument, unanimously reported in favor of the passage of the bill. (695-697.)

Mr. Kelley also says that at the last session of the legislature in Massachusetts 3 general-food bills were introduced by 3 different members and that each bill contained a clause prohibiting the use of alum in baking powders. Seven eminent chemists appeared before the joint committee when the bills were under consideration, and each testified unqualifiedly against the use of alum in any shape or form in baking powders. Not one of these chemists was requested to appear by the National Health Society and not one of them received any compensation from the society for appearing. The only compensation received by them was the statutory per-diem fee paid by the committee. The National Health Society appeared before the committee by counsel. The committee, after hearing the testimony and the arguments, reported the bills favorably by a unanimous vote. (697.)

4. *Methods of selling.*—Mr. MORRIS says that the Royal Baking Powder Company sells through jobbers. It issues a retail price card and tries to induce jobbers to maintain prices by offering a 6 per cent special allowance, paid quarterly, in case prices are maintained. It threatens to refuse to sell to jobbers who cut prices, but sometimes conditions are such that a threat is as far as it goes. (388, 389.)

Mr. MORRISON says that the alum baking powder people sell their goods through traveling salesmen. There are probably 1,500 men traveling for these companies all the time, who go from store to store and offer their goods for sale at competitive prices. (384.)

**H. Foreign baking powder legislation.**—Mr. MORRIS says that there is an English law against the use of alum baking powders. The law as first passed prohibited the sale of injurious food products, and was held to be not applicable to alum baking powder; but the law was amended so as to prohibit the sale of alum baking powder. (395.)

Mr. KELLEY states that the use of alum as a food ingredient has been prohibited by law in England, France, and Germany. Mr. Kelley submits copies of extracts made from the London Grocer reporting prosecutions conducted under the English law for the sale of alum baking powder. (699, 705-709.)

Mr. MORRISON says that there are laws in Great Britain against the use of alum baking powders. It had been the practice of bakers to put alum itself into bread with the idea of whitening poor or yellow flour, and a law was passed prohibiting the use of alum in food. Under that law a case was brought against a manufacturer of alum baking powder. The decision of the court was that the law did not apply to baking powder, because baking powder was not a food. Later the law was amended so as to apply to any article used in the preparation of food. In Canada a ruling prohibiting alum baking powder was reversed by the internal-revenue commissioner upon representations made by the alum baking powder manufacturers. Very little baking powder is sold in France or Germany. (381.)

## X. THE PAPER COMBINATION.

**A. Description of business.**—Mr. CHISHOLM says that the International Paper Company, of which he is president, owns and operates 32 plants, with a total daily capacity of about 1,500 tons of paper, including the kinds of paper that are used in printing newspapers, magazines, and Bibles; manila paper; paper books; cardboard, and a variety of other kinds of paper the material of which is wood. The company owns water powers and timber lands, some of which are in use and others of which are yet to be developed. During the past year the company has been making all of its own wood pulp, its output being about 800 tons per day. The company is probably the largest manufacturer of news-print paper in the world. (431, 438.)

**B. Organization and capitalization.**—Mr. CHISHOLM states that for the purpose of organizing the company a representative committee, consisting of practical men and large owners of the different plants, was appointed. This committee visited and examined each plant which it was intended to purchase. Then all agreed upon the price to be paid for each plant, the representative of each company finally accepting the price fixed. A second committee was appointed to appraise the timber lands owned by the different companies, and their valuations were accepted by the

owners. Each company sold outright all its properties to a purchasing committee, which in turn conveyed them to the International Paper Company upon its formation. The gross amount received by each company was paid to it in the securities of the new company. All the different interests were on the same basis as regards the proportion of preferred and common stock and bonds which they received in payment for their plants. (432, 433.)

The authorized capitalization of the International Paper Company is \$45,000,000, of which \$25,000,000 is preferred stock and \$20,000,000 common. There has been issued \$22,000,000 of the preferred and about \$17,000,000 of the common. The company is authorized to issue \$10,000,000 in bonds, and there has been issued about \$9,000,000. On properties purchased since the formation of the company bonds have been allowed to stand. The properties purchased have been paid for at a fair valuation, everything being taken into consideration. In some cases there was a valuable water power, in other cases the mill was in close proximity to timber lands. The relative position and the question of transportation from pulp mill to paper mill had to be taken into consideration. Some of the companies had been capitalized at a very low rate, which did not by any means represent the value of the property, and Mr. Chisholm questions whether the property now owned by the International Paper Company could be duplicated for its capitalization, including both common and preferred stock, at par.

In the memorandum submitted to the joint high commission in 1899, which Mr. Chisholm submits as a part of his testimony, it is stated that upon the formation of the International Paper Company \$20,000,000 of preferred stock, \$16,000,000 common stock, and \$10,000,000 of bonds were issued, making a total of \$46,000,000; that the appraisal of the various properties purchased, which was made by expert men, who appraised them at their actual value, was \$43,000,000; that the company had \$7,000,000 cash working capital; and that therefore a total value of properties and cash amounting to \$50,000,000 was represented by only \$46,000,000 of securities. (432, 433, 441.)

Not a dollar was paid for promoting. No promoter, underwriter, or any other party was engaged directly or indirectly in the formation of the International Paper Company, excepting the owners and the attorneys who were engaged to do the legal work, and the various committees appointed, which made no charge for their services. (432.)

Mr. NORRIS, business manager of the New York Times, says that the organizers of the company admitted at the time of the consolidation that the common stock, nearly \$20,000,000, represented good will, though they now deny that it did not represent value. A number of the mills purchased by the company were deficient in those factors which are essential to competition. Some of them were located on exhausted water courses and tributary to denuded timber tracts. Of the 98 paper machines which were included in the merger only 48 were of recent construction or of desirable pattern. Some of the mills were using leased water powers. One mill entered the combination on a basis that yielded \$4.50 in the company's securities on every \$1 of original investment. Modern plants with improved machinery and better locations and more economical operation could have been built for \$15,000,000. The overcapitalization of the company is, therefore, \$40,000,000. In the brief submitted to the joint high commission by Mr. Norris and embodied by him in his testimony is given a list of the properties taken over by the International Paper Company and the amount of capitalization allotted to each. (409, 410, 415, 419, 420.)

**C. Extent of control.**—Mr. Norris says that, according to the Commissioner of Labor, the total production of paper in this country per annum is \$97,000,000. This includes book paper, strawboard, writing paper, manila paper, and other articles. The gross production of news-print paper will not exceed \$26,000,000. There are probably 723 pulp and paper mills in the United States, 63 of which are news-print mills. The daily output of news-print paper averages about 2,055 tons, the output of the International Paper Company being 1,300 tons per day. (407, 411.)

All the big and profitable paper mills in the country, with a few unimportant exceptions, 24 mills in all, producing about 80 per cent of the American output at that time, were merged into the International Paper Company. Since that time the number of mills has been increased by purchase to 30. The percentage of output was slightly increased through these purchases, but the new mills of the Great Northern Paper Company have reduced the percentage. In the brief submitted to the joint high commission and embodied by Mr. Norris in his testimony, it is stated that the company owns practically all of the locations in the United States where cheap and ample water power, cheap and good spruce wood, and cheap rates to market can be obtained for a mill of 100 tons daily capacity. In 1898 Mr. Norris advertised for offerings of water powers and mill sites for the purpose of placing a

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large newspaper supply. A great many propositions were received, but there were comparatively few sites that were at all available. The International Paper Company owns 1,600 square miles of woodland in the United States and 2,000 square miles in Canada. (409, 410, 416, 423.)

Mr. CHISHOLM submits tables taken from Lockwood's Directory of the Paper Trade for 1898 and 1899, showing the daily capacity (not production), in pounds, of the paper and pulp mills of the United States then running, as reported by manufacturers. Mr. Chisholm thinks that the International Paper Company produces about 70 per cent of all the paper manufactured in the United States, though it is impossible to tell accurately. There are 1,200 pulp and paper mills in the United States engaged in the manufacture of various kinds of paper. They manufacture about 30 per cent of the total output. The International Paper Company has no connection with these outside concerns. (431, 435-438.)

**D. Reasons for combination.**—Mr. CHISHOLM, president of the International Paper Company, says that before the formation of the International Paper Company there was more news-print paper manufactured than the consuming power of the country could take. There was such reckless competition, and there were such unbusinesslike methods in vogue, that the manufacturers did not receive adequate returns from the capital invested, and bankruptcy was staring them all in the face. The International Paper Company was formed because it was believed by the leading manufacturers of paper that one company which should control the leading and best paper mills could manufacture a more uniform and better quality of paper, and also because it was believed that economies could be made in the manufacture and distribution of the product. (431, 435.)

Mr. NORRIS, business manager of the New York Times, also says that previous to the formation of the International Paper Company there was intense competition between manufacturers of paper. His view is, however, that this competition forced economies and improvements in manufacture and increased consumption. Within a period of 7 years the speed of paper machines was increased from 200 to 500 feet per minute and their width increased to 162 inches. A complete revolution in method was made, and news-print paper was put upon the car at the mill at a cost of less than \$25 per ton. The price was continually reduced. In the year 1897 news-print paper, which had sold 18 years before for 9 cents a pound, was sold, delivered in the news rooms at New York City, at 1.6 cents a pound, with the agreement that all weight in excess of a given standard should be at the expense of the manufacturer, and that the newspaper should have the benefit of any deficiency in case the paper should fall below standard. Other provisions favorable to buyers were also made. During 1897 the price of news-print paper for the large dailies averaged about 1½ cents per pound. These continuous reductions in the price of paper constituted an element in cheapening the cost of producing newspapers, and resulted in the enlargement of the daily and Sunday editions. It also resulted in the reduction of the retail price of newspapers, and in an enormous increase of newspaper circulation. The stimulus given to news-print paper manufacture resulted in an increase in capacity of about 400 tons per day during the year 1896. (408.)

The brief submitted by Mr. Norris to the joint high commission, and embodied by him in his testimony, states that the International Paper Company was formed to protect the proprietors of mills which were situated in poor localities, or on streams that were running dry. Mr. Norris says that the manufacturers who organized the company stated that they did so because they were losing money under the conditions which then existed, but the figures disclosed in the consolidation of the companies did not bear out any such statement. (415, 419.)

**E. Economies of combination.**—Mr. CHISHOLM says that before the formation of the International Paper Company each separate organization had its complete corps of officers, consisting of president, secretary, treasurer, bookkeepers, and salesmen. These have been entirely done away with, and each mill is equipped merely with a superintendent and a sufficient clerical force for keeping manufacturing records. All of the directing powers have been concentrated in one office, and each department of the work is conducted by one person. One of the greatest economies effected is that a better quality of product and a larger amount of it is secured from the same machinery, and from the labor of the same number of men, than was secured by the individual concerns. The gross cost of selling the product has also been much reduced. (438.)

Mr. NORRIS says that when the International Paper Company was launched those in charge of the organization assured the public that through the formation of the company economies would be secured by a reduction in the number of salesmen, brokers, and jobbers; by the purchasing of supplies on a wholesale basis; by savings

in freight charges through the system of furnishing paper from the mill nearest to the purchaser; by increasing the exportation of American paper; by the establishment of a uniform contract, and by the abolition of long credits. Mr. Norris declares that these economies have not been realized and that the cost of producing a ton of news-print paper has increased \$3 during the 3 years of consolidation. There have been some improvements since the consolidation and the labor cost of a ton of paper has been reduced, having been brought down to less than 12 cents per 100 pounds in the best equipped mills. There has not been the same stimulus, however, to improve in manufacture which existed under individual ownership, and the savings made are insignificant in comparison with the increase of expenses in other lines. The company has a president said to receive a salary of \$50,000 per year. Manufacturers who had been receiving salaries of \$7,500 as managers of mills are now paid salaries of \$15,000. Salaries of mill superintendents have also been raised. An elaborate sales department, with a \$15,000 vice-president in charge and with salaried agents in many of the big cities, has been established, while before the consolidation the proprietors of the mills sold their paper without any charge. The company is competing with itself in the purchase of woodlands, and consequently the price of wood pulp has advanced. The manufacturers of wires for paper machines have advanced prices; the manufacturers of felts for paper machines have done likewise. The transportation companies have increased the rates to mills on the branch lines over rates previously made to them to enable them to compete with mills on the main line, and have added 2 or more cents per 100 pounds to all rates. (407, 410, 411, 424.)

**F. Effect of combination on prices.**—Mr. CHISHOLM says that the prices of news-print paper have been increased since the formation of the International Paper Company, because the prices which prevailed before were such that manufacturers were not getting adequate returns on the capital invested. It is impossible to tell accurately what price was then paid for paper, because of the conditions under which paper was sold. The manufacturer was paid only for the number of perfect sheets of paper supplied to the publisher, and payment was based on the number of perfect papers printed. The paper manufacturers have now adopted a standard form of contract, according to which a fixed price on paper is made, and if the paper is not satisfactory, allowance is made. After the Spanish war began, the demand upon the International Paper Company for news-print paper much exceeded its ability to supply. The outside mills and the jobbers found a scarcity on this account, and the price of paper went up as much as a half or three-quarters of a cent a pound. The annual sales of the International Paper Company, however, showed little increase, because of the number of time contracts which had been made before the advance in price. Since the formation of the company, the quality of paper has been much improved, and the poorest mills in the company put out paper which will average 20 per cent better in tensile strength, finish and all other qualities than the paper formerly manufactured by the separate concerns. The consumer of news-print paper in this country gets it cheaper than it can be bought anywhere else in the world.

Mr. Chisholm submits a table showing the price of paper from 1890 to 1900. (433, 435.)

Mr. NORRIS says that immediately after the formation of the International Paper Company the price of news-print paper was advanced. The company started a competition with itself and stimulated prices, thereby increasing the cost of manufacture to an extent. By reducing the number of interests which had to be considered in establishing prices, it was able to increase very considerably the price of paper to the consumer. The system of uniform contracts for newspapers, adopted by the company, was such that \$2 per ton was added to the cost of news-print paper, while price quotations apparently remained the same. The average price per ton for news-print paper before the formation of the company was \$35; now it is \$41. The total increase since the formation of the company is therefore \$8 per ton. Furthermore, a greater disparity of prices has prevailed. One paper is paying the International Paper Company 1.80 cents a pound for a fine quality of news-print paper, while another newspaper in the same city, using four times the quantity, is paying 2.15 cents a pound for paper of an inferior quality. The difference is due to the fact that the prices were made at different times; but the existence of such a disparity contradicts the claim made by the International Paper Company that it would equalize prices. Prices would have advanced somewhat if the International Paper Company had not been formed. The present excessive price of paper was made possible by four incidents: the Spanish-American war, which created an extraordinary demand for news-print paper; the South African war, which deflected the Canadian output of wood pulp to Great Britain; the phenomenal drought of 1899 and 1900; and the adoption by the International Paper Company of the policy of attempting to check

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competition, and thereby marking up the price of wood pulp upon itself and upon all other mills. (411, 412, 413, 424, 429.)

Mr. Norris adds that as a result of the increased price of paper many newspapers have been reduced in size. At one time the New York daily newspapers curtailed 80 tons per week in their consumption. It would be difficult to say who pays the increased price. In some cases the newspaper might, by raising its advertising rates, make the public share part of its burden. In some cases the newspaper can not raise its advertising rate and can not raise the retail price of the paper, and therefore the increase in the cost of paper falls entirely upon the newspaper proprietor. The increase in the price of paper has not affected the wages of newspaper employees. (412, 421, 429.)

If the cost of paper were decreased a newspaper which had been selling for 2 cents might be able to increase the size of the paper and reduce the price to 1 cent. While the margin of profit might be smaller on the 1-cent basis, there would be an increase in circulation and therefore a material increase in its revenues, so that the paper would make as much profit as before. The price of a newspaper is the most important factor in the extent of its circulation. (421.)

**G. Effect of combination on wages.**—Mr. CHISHOLM says that the International Paper Company has increased wages so that the average pay to its mill operatives is greater than when the company was formed. (439.)

Mr. NORRIS also says that he is told by paper manufacturers that as a result of the consolidation the pay of some of their skilled labor has been advanced from \$2.75 to \$3.50 per day. (411.)

**H. Exports.**—Mr. CHISHOLM says that the International Paper Company is establishing agencies for the sale of its product in the principal cities of England, Australia, Japan and South America. Last year the company supplied one-third of the news-print paper consumed in Australia. Other American manufacturers also sent a large quantity there. (438, 439.)

Mr. Chisholm adds that last year the export profits of the International Paper Company, on the prices received, were the highest profits in the business. (440.)

Mr. NORRIS says that the export dreams of the International Paper Company have not been realized. The figures for the year ending June 30, 1900, showed a falling off of over 4,000 tons in volume, and \$179,000 in value, from the year ending June 30, 1898. The brief submitted by Mr. Norris to the Joint High Commission in 1898, and embodied in his testimony, states that American manufacturers were then supplying the Australian and Japanese markets with paper, and were underselling the British, Swedish, and German manufacturers in the British market. (411.)

**I. Competition, actual and possible.**—Mr. NORRIS says that within a few months after the formation of the International Paper Company, and as a result of the methods which it had adopted toward the paper trade generally, a rival interest was created, which has since materialized into the Great Northern Paper Company, with an output at present exceeding 225 tons per day and with a possibility of 500 tons per day. Another mill, with an estimated capacity of 100 tons per day, has been established at St. Regis, N. Y. Before the close of the year 1901 the capacity for production of news-print paper will have increased 450 tons per day, as compared with the period before the formation of the International Paper Company. The possibilities of competition with that company have been barely touched, provided timber or the mechanically ground wood can be obtained from Canada. In addition to 60,000-horsepower development at Sault Sainte Marie, on both sides of the St. Mary's River, there is an opportunity for a further development of 100,000 horsepower. At Massena, N. Y., on the St. Lawrence River, 40,000 horsepower will be available. At a meeting of the American Paper and Pulp Association one speaker said that there was a possible development of 5,000,000 horsepower by water in the United States, and that the development made up to 1890 was only one-fourth of the total. (412.)

The reason why the newspaper proprietors have not built their own paper mills, and thus become entirely independent of the trust, is, according to Mr. Norris, that there has been a general belief that under normal conditions natural laws of trade would work out such readjustment as would bring prices to a fair figure. In those cases where publishers have bought paper mills there has been lack of success. A successful paper mill requires to have cheap and ample water power, cheap and ample spruce timber, cheap routes to market, improved machinery, wholesale production, and concentrated supervision. (413, 422.)

Mr. Norris thinks that patent machinery or patent processes are very inconsiderable factors in the manufacture of paper. He does not know of any that were acquired by the International Paper Company at the time of its organization. One,

the Russell process, for lining digesters, was subsequently purchased by the company. (423.)

The memorandum submitted to the joint high commission, and included by Mr. CHISHOLM in his testimony, states that the cost of construction for a modern complete paper plant would be an amount equal to \$22,000 for every ton of daily output. A complete paper plant consists of a sulphite mill, which would cost \$5,000 per ton of daily output; a ground wood pulp mill, which would cost \$5,000 per ton of daily output; and the paper mill proper, which would cost \$7,000 per ton of daily output. The development of the water power needed for the operation of these mills would cost \$5,000 per ton of daily output of paper. (441.)

**J. Tariff.**—Mr. CHISHOLM says that the paper industry of this country has been built up under the fostering care of the tariff. The aggregate of capital invested in the industry is not less than \$200,000,000, and the value of the output is \$180,000,000 or \$190,000,000. The United States is the foremost producer of paper in the world, and has the largest amount of money invested in its manufacture. The absolute assurance of the home market which manufacturers have enables them to make paper cheaper than their foreign competitors, and also enables them to develop their properties to the fullest extent, and thus make and distribute paper at present prices, and so gradually capture the markets of the world. The tariff, put in ad valorem form, would be about as follows: On mechanical pulp, 9.2 per cent; on unbleached chemical pulp, 8½ per cent; on paper, 15 per cent. These duties are among the lowest imposed upon any manufactured article.

The memorandum presented to the joint high commission, which Mr. Chisholm embodies in his testimony, states that in the four essential items which enter into the cost of finished paper Canadian manufacturers have a large advantage over the manufacturers of the United States. The cost to the Canadian mills of spruce wood delivered at the pulp mill does not exceed \$2.50 per cord, and some manufacturers claim that they are able to procure it for \$1.50 per cord, while spruce in the United States delivered at the pulp mill varies from \$5 to \$7 per cord. The Canadian manufacturer through this one item alone has an advantage over the American manufacturer of \$2.75 per ton on wood pulp, while the tariff per ton on pulp is \$1.67. It states further that the cost of labor in the American mills is fully one-third greater than in the Canadian mills. The difference in labor cost, added to the difference in the cost of wood pulp, amounts to fully \$3 per ton on the finished paper. It further states that the difference in the cost of fuel to the Canadian and to the American manufacturer is not great, but that what difference there is is to the advantage of the Canadian manufacturer. The cost of the development of water power is on an average twice as great in the United States as in Canada. It is further stated that the cost of transportation from the Canadian mills to the principal cities of the United States is in most cases less than from the paper mills in the United States; that in many cases the difference in favor of the Canadian mill is as much as \$2 per ton, this coming about largely from the fact that the Canadian roads have been subsidized by the Government. (439, 442, 443.)

Mr. Chisholm says that in his opinion the removal of the duties on paper and wood pulp would, to a degree, lessen production in this country; lessen employment and diminish wages. There is no doubt that a great effort would be made to bring about the establishment of large mills in Canada. If the pulp and paper mills should be transferred from the United States to Canada it would be absolutely within the power of the Canadian government to regulate the price which the consumer of paper in the United States would be obliged to pay. The great majority of timber lands in Canada are owned by the provincial governments or by the general government. Licenses to cut upon these lands at a nominal annual rental per square mile are granted, and once a year the price per cord is fixed for all the wood cut during the year. This price can be increased from time to time to any sum that the government may see fit to fix. The memorandum submitted to the joint high commission, and embodied by Mr. Chisholm in his testimony, states that if pulp and paper were put upon the free list the parties interested in the paper industry would hasten to cut off the spruce timber which they now own and convert it into cash before mills enough could be constructed in Canada to supply the American market with paper. The result would be that great waste would occur and that the forests would be ruined for all time to come. (443, 446.)

Mr. NORRIS says that no paper for news print is imported into the United States. Even before the increase of the tariff on news print paper by the Dingley law, no news print paper was imported into the United States, because the American mills could make paper more cheaply than any other mills. The brief submitted by Mr. Norris to the joint high commission, and embodied in his testimony, states that the total importations of wood pulp in the 12 months ending June 30, 1898, were 29,846



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tons, valued at \$601,642. The importations in 1897 amounted to 41,707 tons, valued at \$800,886. (409, 414.)

Mr. Norris says that if there had been no tariff on wood pulp the establishment of American paper mills would have been very much larger than that which has actually occurred under the tariff. So far as the tariff on paper is concerned, the natural laws of trade will work out and paper will be cheapened under normal conditions regardless of the tariff. The tariff, to the extent that it has stimulated prices, has had a tendency to put a premium on competition. The retention and the increase of the tariff on wood pulp has resulted in Canadian retaliation upon the American users of Canadian logs. The Province of Ontario has prohibited the export of any logs cut from crown lands; the Province of Quebec has imposed a license fee of \$1.90 per cord upon logs cut upon crown lands and gives a rebate of \$1.50 in case the logs are used in Canada. (413, 425, 428.)

The abolition of the present duty on wood pulp would reduce the cost of the manufacture of paper to the International Paper Company as well as to others, and to an extent would reduce the cost of paper to the consumer. A well-equipped American paper mill can meet the product of any nation of the world. The American manufacturer is protected by his location. He is in the market where his product is consumed, and he is therefore protected against competition because of the cost of transportation. If wood pulp were introduced free of duty the cost of the construction of paper-mill plants would be reduced to \$3,000 per ton of daily output, and paper mills at that small capitalization could be established in the United States at points which are now impossible because of the fact that the grinding of the pulp requires a great deal of power in order that it may be done cheaply. The result would be that the price of all kinds of paper would be reduced, and at the same time the forests of this country would be protected, while the paper manufacturers would not be seriously menaced. The loss of revenue from the abolition of the tariff on wood pulp would be slight because very little wood pulp is imported. The persons employed in the American paper mills would not be affected by the removal of the tariff because a greater stimulus would be given to the development of the manufacture, and there would still be a very considerable manufacture of pulp from timber in the United States. The newspapers would participate in the general prosperity following the removal of the tariff on wood pulp. The greater prosperity in the newspaper trade would be reflected in larger pay for all the employees, and the number of laborers employed by the newspapers is 40 times as great as the number of laborers employed in the paper mills. As a result of lower prices of news print paper there would be an increase in consumption, and therefore there would be more persons employed in the printing of newspapers. The removal of the tariff on wood pulp would not necessarily open up the general tariff question. It could be secured through the establishment of reciprocal trade relations with Canada.

In the brief submitted to the joint high commission by Mr. Norris, and embodied by him in his testimony, it is stated that the tariff on paper is prohibitory and that on wood pulp excessive, and that free paper and free wood pulp offer the only strong and permanent assurance of protection from the exactions of the International Paper Company. (413, 414, 417, 425, 428, 429, 430.)

**K. Forest protection.**—The memorandum submitted to the joint high commission, and embodied by Mr. CHISHOLM in his testimony, states that many of the large holders of spruce lands have of their own volition instituted a system of forestry by which the forests will be preserved. The size of the timber cut is limited, and the smaller trees are left to grow up and produce another crop. This is the system adopted in Germany. In the Adirondack forest the proportion of spruce is less than 10 per cent of the entire growth, and by cutting only those trees which are above 10 or 12 inches in diameter at the butt little or no impression is made upon the forest. One of the chief causes for the organization of the International Paper Company was the necessity of a proper system of forestry for the spruce lands in the United States. The small individual holders, in their competition with each other, were cutting down trees which were only 5 or 6 inches in diameter. The International Paper Company has already adopted a system of cutting which will give to its mills a perpetual supply of spruce timber. (444, 445.)

Mr. Chisholm states that according to the United States official record 37 per cent of the area of the United States and 50 per cent of the area of the 13 Southern States is covered with wood. The paper industry consumes less than 2 per cent of the total amount of wood cut, so that for the future development of the paper industry in this country there are ample resources within the borders of the United States. (439.)

Mr. NORRIS says that spruce is the best wood for use in the manufacture of paper. It makes a whiter sheet, and the surface of paper made from it is smoother and better than that produced from poplar. There are other woods from which sulphite

pulp is made, but for them more chemicals for clearing purposes are required than when spruce is used. (423.)

Mr. Norris also says that the Chief of the Bureau of Forestry of the National Department of Agriculture has reported that the original forests can not long suffice to supply the increase in the demands for spruce which are made upon them. Three commissions in New Hampshire have reported that the present methods of cutting, if continued, will entail baleful scenic, climatic, and economical results, injuring the health and property of citizens, impairing the industrial development of the State, and rendering intermittent the flow of the rivers which are most important to agriculture and manufactures.

In the brief submitted by Mr. Norris to the Joint High Commission, and embodied by him in his testimony, it is stated that the denudation of our forests by pulp mills and sawmills in the 4 States of Maine, New Hampshire, Vermont, and New York has progressed at the rate of 1,700 square miles per annum, while the Chief of the Bureau of Forestry calculates that forest fires are causing an annual loss of \$20,000,000. The latest records of the Geological Survey show that the low-water level of our important lakes and rivers has been declining for the last 10 years, and many lakes in the Northwest have entirely disappeared. There is no available spruce in the United States west of New York, except a limited amount in West Virginia, a tract of 50,000 acres in Michigan, and a similar area in Wisconsin. In the State of Maine there are 420 timber townships, but all of the townships accessible to large rivers are entirely denuded of their valuable timber. In New Hampshire, at the present rate of cutting, according to the State forest commissioner, the entire forest resources of the State will be exhausted in 12 years. Vermont has already reached a point where it can barely supply its home demands. Mr. Norris says that the reports referred to in this brief cover periods immediately prior to 1899. He says that while the International Paper Company may be taking steps to conserve the forests, they are not doing so to any extent that will compare with the denudation that is now going on. (413, 417, 418, 427.)

Mr. Norris adds that there is an almost unbroken area of spruce timber in Canada, from Labrador to the Yukon, and from the St. Lawrence to Hudson Bay. There are other timbers included in this region, but there is more than enough of spruce to meet all the possible demands or requirements of any interests in the United States. With the ordinary capacity of these forests for reproduction all of the timber cutting there for the supply of pulp wood for paper would be more than offset. (426.)

Mr. CRISWOLD thinks that there is a very exaggerated opinion as to the amount of spruce forest which there is in Canada. The International Paper Company owns over 2,000 square miles of woodland in Canada, and it does not find nearly so large an amount of spruce to the acre as is found in Maine, New Hampshire, Vermont, the Adirondacks, or the South. (447.)

## XI. THE IRON AND STEEL COMBINATION.

**A. United States Steel Corporation and Competitors.**—1. *United States Steel Corporation.*—*a. Organization.*—Mr. SCHWAB, president of the United States Steel Corporation, says that his company is simply the owner of nearly all the capital stock of the companies which it consolidated. It was organized in the same manner as the Federal Steel Company. Its control is indirect, and rests simply on its power to elect directors of the subordinate companies. If the directors of a subordinate company should choose to disregard the policy of the United States Steel Corporation, nothing could prevent their carrying out their own ideas until their year expired; then new directors would be elected.

In making up the working force of the United States Steel Corporation Mr. Schwab was careful to put in no controlling or directing officers. His policy is to throw the whole responsibility for manufacturing and results upon the subsidiary organizations. The United States Steel Corporation will try to make itself largely a clearing house of information for the constituent companies. All supplies are bought by each company separately, and all sales are made by each company separately, except that where similar goods, as rails, are sold by different companies, only one sales agent for all will probably be appointed in any one place. To illustrate the independent action of the constituent companies, Mr. Schwab says that when the presidents of the Federal Steel Company and the National Steel Company and the Carnegie Steel Company met to consider how the sales of these three companies might be managed to the best advantage, Mr. Schwab did not attend the meeting. Mr. Schwab even finds one of his chief difficulties in the eagerness of the officers of each of the constituent companies to make a good bargain for their own company in dealing with the others. It is hard to get them to agree. (450, 452, 453, 468.)

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b. *Capitalization.*—Mr. SCHWAB submits the prospectus, the certificate of incorporation, and the by-laws of the United States Steel Corporation. The authorized capital stock is \$1,100,000,000, half 7 per cent cumulative preferred and half common. The preferred stock has a preference to the extent of its par value in the event of a dissolution of the corporation. Bonds of the corporation were issued to pay for the bonds of the Carnegie Company and for 60 per cent of its stock. For each \$100 par value of the stock of the other constituent companies, the following amounts of the stock of the United States Steel Corporation were offered in exchange: Federal Steel Company, preferred stock, \$110 new preferred; common stock, \$4 new preferred and \$107.50 new common. American Steel and Wire Company, preferred, \$117.50 new preferred; common, \$102.50 new common. National Tube Company, preferred, \$125 new preferred; common, \$8.80 new preferred and \$125 new common. National Steel Company, preferred, \$125 new preferred; common, \$125 new common. American Tin Plate Company, preferred, \$125 new preferred; common, \$20 new preferred and \$125 new common. American Steel Hoop Company and American Sheet Steel Company, both preferred and common, dollar for dollar. It was stated in the prospectus that the net earnings of all the constituent companies for the calendar year 1900 were sufficient to pay dividends on both classes of new stock, besides providing for sinking funds and for the maintenance of the properties. (475-487.)

Mr. Schwab declares that the answer to the question, what proportion the capitalization of the United States Steel Corporation bears to its tangible assets, must depend upon the value which one sets upon the ore and coal which it owns. According to his valuation of these things, the capitalization is not big enough. The company has, for example, over 500,000,000 tons of ore in sight in the Northwest. He thinks one ought to get a profit of \$2 to \$2.50 on every ton of that ore that is dug. This alone would cover the capitalization of the company. The company has something like 60,000 acres of Connellsville coal. "There is no more Connellsville coal. You could not get it for \$60,000 an acre. It is not there." If the consumption of steel increases as it has increased, the Connellsville coal will be exhausted in 30 years, and the Lake Superior ore now known may last some 60 years. There are other coals, but the Connellsville is an ideal coking coal for manufacturing purposes. The Connellsville field is very clearly defined and every acre of it is very highly prized. It is all owned by these constituent companies. There may be developments of coal in other directions, but nothing like this coal. Manufacturing plants can be replaced, but beds of ore and coal can not be. (See *Coal—supply for steel making*, p. ci.) (464, 467, 472.)

Mr. Schwab states that all the constituent companies had added considerably to their assets since they were organized. He adds, however, that the consolidation of them was expected to enhance the value of them by reason of the economies that were expected to be effected. (467.)

Mr. Holt, secretary of the tariff reform committee of the Reform Club of New York City, says that the original capital of the United States Steel Corporation consisted of \$304,000,000 of bonds, \$425,000,000 common stock, and \$425,000,000 preferred stock. This was issued in exchange for the stocks and bonds of the 8 companies taken over and for \$25,000,000 in cash. Since then \$72,355,280 of common stock and \$70,828,890 of preferred stock has been authorized and is in process of issue, which is to be exchanged for the stocks of additional companies. The total of stocks and bonds of the constituent companies was \$894,988,800. Therefore the new capitalization exceeds the old by \$402,195,370, an increase of 45 per cent. A fair estimate of the value of the actual assets of the old companies would be that two-thirds of their capital was water. As the consolidation of these companies has added nothing to their value except \$25,000,000 in cash and an increased monopoly power, it is fair to say that the actual visible assets of the United States Steel Corporation are only about \$300,000,000, or the amount of its bonds, and that all of both kinds of stock is what is commonly called water. In this estimate no allowance is made for good will. (556.)

c. *Constituent companies generally.*—Mr. SCHWAB remarks that the several constituent companies were, to a large extent, in different lines of business, and not competitors of each other. Thus the tube company, the tin plate company, the wire company, and the hoop company had each its separate business. The Carnegie Company was largely a maker of structural iron, which the others did not make. They were hardly competitors in billets, since the billets made by the National Steel Company, the Carnegie Steel Company, and others were consumed by the several organizations. They were competitors in rails; "but it would have been impossible to put these great companies together without having had them as competitors in some lines previous to the organization." (450.)

d. *The Carnegie Company.*—Mr. SCHWAB, who was formerly president of the Carnegie Steel Company and the Carnegie Company, states that the original Carnegie Steel

Company was a partnership. When it went into the mining of ores a separate organization was formed for that purpose. Almost every other branch of the business was handled in the same way; for instance, the shipping industry on the lakes, the railroad, the coke interest, and the limestone interest. There were thus some 26 or 27 separate organizations. The controlling interest in all, however, was held by the same people. In fact, Mr. Carnegie himself held a controlling interest, something over 50 per cent, in each of the companies. It was finally thought best, for the sake of harmony among the partners, to put all these varied interests into one corporation, to be known as the Carnegie Company. Mr. Carnegie's idea was that a partner ought not to have a greater interest in one branch of the business than in another, as, for instance, in coke than in steel, because it might affect the contracts between the two companies. The conditions of a close partnership were, so far as possible, retained. The shares were made \$1,000 each in order that they might not be traded in; and Mr. Schwab believes that during the existence of the company only one sale of stock, of 10 shares, was made. Practically all the stockholders in the Carnegie Company, except Mr. Carnegie, were people without capital, who were given stock for their services and who retained it. (449, 459.)

The Carnegie Company manufactured perhaps a larger general variety of steel articles than almost any other manufacturing concern. It produced from 20 to 30 per cent of the steel made in the United States. Of structural materials, plates, etc., it made 50 per cent; of rails, 30 per cent; of armor, 50 per cent. Its exports were 70 per cent of the steel exports of the United States. It mined all the ore that it consumed, amounting to over 4,000,000 tons a year. It had 12 ore-carrying boats on the lakes, on which it transported a large part of its ore. It had more boats under construction at the time of the consolidation with the United States Steel Corporation. It carried a large part of its ore over its own railroad to its Pittsburg works. This railroad, known as the Bessemer and Lake Erie Railroad, runs from Conneaut Harbor to Pittsburg, about 156 miles. It is especially designed for heavy traffic. The road carries passengers and general freight, but the great bulk of its business is Carnegie business. (448, 449.)

The workmen at the Carnegie Works have never been asked to contribute to any benefit fund. The firm itself has taken care of sick and disabled men. Mr. Carnegie has now put aside a fund of \$5,000,000, the interest of which is to be devoted to the pensioning of injured, disabled, and worn-out workmen. This is not to be in place of the previous customary provision, but in addition to it. The fund is under the control of 3 superintendents who are familiar with the workmen; those of the Homestead, the Braddock, and the Duquesne works. Mr. Schwab thinks the practice of all the constituent companies is similar to that of the Carnegie Company. (463.)

Mr. Schwab asserts that no more is done on Sunday in the Carnegie works than is absolutely necessary. Much of the work must be carried on continuously. The mills stop on Saturday at 2 o'clock and start Sunday night at 5. That is about as long as it is possible to interrupt them, on account of the accumulation of material. He has told the men that he would, if they wished, run the works late Saturday night and start early Monday morning. Indeed, a vote was once taken on the question. The majority of the men voted to continue the practice of working Sunday night and having Saturday off. (462.)

*e. The American Steel and Wire Company.*—Mr. HOUR, secretary of the tariff reform committee of the Reform Club of New York City, says that the Consolidated Steel and Wire Company, which was known as the barbed-wire trust, was incorporated in 1892 with a capital of \$4,000,000. Various pooling agreements were formed in 1894, 1895, and 1896, between all the barbed-wire manufacturers. In the fall of 1895 prices were fixed by agreement, according to the Iron Age, and the price of 100 pounds of barbed wire was \$2.85, the price in the previous April having been \$1.90. In December, 1895, the combination broke and prices fell.

Early in 1895 wire nails were selling at from 75 to 80 cents a keg. In May, two associations, one for cut and one for wire nails, were formed, and put the price up to \$1.20. These associations regulated the amount of nails offered for sale each month and the prices of them. Understandings were had with Canadian manufacturers, nail-machine makers were subsidized not to sell to those outside of the association, and prices were steadily advanced for a year. In December, 1896, the pool went to pieces and prices dropped. According to the Iron Age, high prices had reduced consumption from over 9,000,000 kegs in 1891 and 1892 to less than 8,000,000 kegs in 1895, and to probably a smaller amount in 1896. In 1898 the American Steel and Wire Company, of Illinois, was formed. This was absorbed by the new American Steel and Wire Company, of New Jersey, formed in January, 1899. The new American Steel and Wire Company has an authorized capital of \$90,000,000, of which

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\$40,000,000 is 7 per cent cumulative preferred stock. The value of the plants and other property absorbed is about \$20,000,000. Admitting the \$18,000,000 other capital claimed there would still be over \$50,000,000 of water. The balance sheet for 1899 shows net profits of \$12,162,530. In 1900 the company claims to have made only \$7,000,000 profit. (559, 560, 562.)

The company includes practically all the wire, wire rod, and wire nail mills of the country. It has a monopoly of the drawn and barbed wire business, but has considerable competition in woven and fence wire. It also does a large business in copper wire and electrical goods and in fencing, poultry netting, baling wire, and bale ties. The company owns its own sources of supply. (560.)

Mr. Holt presents tables showing the prices, by months, of wire nails and barbed wire during the years from 1893 to 1900. According to these tables wire nails were selling in January, 1899, when the American Steel and Wire Company was formed, at \$1.59 per keg; in January, 1900, at \$3.53 per keg, and in December, 1900, at \$2.35 per keg. Barbed wire was selling at \$2.05 per 100 pounds in January, 1899; at \$4.13 in January, 1900, and at \$3 in December, 1900. It is true that the material entering into the manufacture of wire nails advanced very materially during 1899, but this did not affect the American Steel and Wire Company, because it owned everything from the mine to the factory. It mined its own ores and transported them, and was not affected by the increase in the cost of the materials. In 1899 a number of the company's mills were shut down for a considerable time, because prices had been put to a prohibitive point. In April, 1900, the price of wire nails was reduced \$1 per keg simply to increase consumption. (561, 576, 577.)

Mr. Gunton says that there has been no abnormal rise in the price of wire nails. In 1887 wire nails were \$3.15 per keg. The price fell in 1891 and 1892, rose a little in 1893, and then went up until in 1900 the price was \$2.76. In 1901 the price fell to \$2. In 1887 cut nails were \$2.30; they are now \$2.48. The difference is nothing considering the immense increase in the price of the raw materials of which nails are made. (632.)

*f. The American Tin Plate Company.*—Mr. Holt says that the capitalization of the American Tin Plate Company was \$50,000,000, of which \$20,000,000 was preferred and \$30,000,000 common stock. The total cost of duplicating the plants controlled by the company would have been not more than \$6,000,000. The value of the real estate purchased and the cash with which the trust began business probably made the actual value of the assets of the company at its foundation between \$10,000,000 and \$12,000,000. The amount paid for the plants by the company is said to have been \$18,000,000 of common and \$18,000,000 of preferred stock. In a statement put forth when the company was being formed in November, 1898, it was stated that on the basis of the operating expenses as they then were, \$2,671,754 was made by the mills when prices of tin plate were lowest. Mr. Holt says that from careful estimates based on the stated profits of 1898 it may be concluded that the profits of the company in 1899 were not less than \$4,650,000, even if the saving of \$1,000,000 anticipated through consolidation was not made. The statement for 1900 shows total profits of \$5,857,417, from which \$1,500,000 was deducted for depreciation. That the company did not show greater profit in 1900 was probably because of juggled book-keeping, or some other kind of juggling. (558, 559.)

The company controls about 40 plants and 280 mills. It owns practically every mill in the country making tin plates for the general trade. To maintain its monopoly it had 5-year agreements with the 6 or 8 manufacturers of tin-plate machinery, which prevented them from constructing mills for outsiders. Furthermore, even before the formation of the United States Steel Corporation, it was so interlocked with the other trusts which produced tin-plate bars that it is doubtful if any real competitor could have obtained bars and other raw materials. The gross output of the mills in 1898 was stated to be 7,633,556 boxes. (558.)

In November, 1898, says Mr. Holt, the price of tin plate at the Pittsburg mills was \$2.65 per box, which was within 5 cents of the price of foreign plates in New York without duty. In December, 1898, the American Tin Plate Company was organized. Not only did the trust advance prices immediately, but in March, four months after the trust was formed, prices were within one-fifth of a cent a pound of the importing price, the duty being 1½ cents. On July 14 the trust raised the price of tin plate to \$4.37½ a box, and on August 26 to \$4.65 a box. It is not true, as is often asserted, that the advances were caused by the increased cost of raw materials. On the contrary, the advances in the prices of tin plate preceded the advances in the prices of billets and tin. The trust advanced prices arbitrarily, and with more regard to the price at which foreign plates could be imported under a protective tariff than to the increased cost of raw materials.

Mr. Holt submits a table showing the average prices, by months, of tin plate at New York in 1898, 1899, and 1900. (557-559.)

Mr. GUNTON says that the American Tin Plate Company was formed in 1899. The average price of tin plate for 1898 was \$3.75 per box. The price of tin went up toward the end of 1899, and early in 1900 was \$5 a box. During the year 1899 the cost of everything which enters into the manufacture of tin increased; wages also increased, so that the net increase in the cost of the materials which enter into a box of tin was \$1.02; \$1.02, therefore, of the increase in the price of tin was directly attributable to the increased price of raw materials. The price of tin has now fallen to \$4.20 a box, while wages have not fallen, the reduction being caused by economies made in other things than raw material. (630.)

Mr. LAMB, president of the New England Free Trade League, says that there are no evidences in the market conditions of any benefit to the consumer from competition of independent manufacturers of tin plate with the American Tin Plate Company. In some cases the plants of the independent manufacturers have been abandoned; in other cases the plants have been sold to the American Tin Plate Company, thus wiping out the competition. The fact that the price made by the American Tin Plate Company is the price that must be paid for goods in the market is evidence of the fact that the independent plants have not had an effect in keeping the price down. The fact that there is inordinate profit in a business controlled by a trust would induce others to engage in it were it not for the existence of allied combinations, which would prevent them from obtaining materials. In the tin-plate business the combinations allied with the American Tin Plate Company can practically prevent competition for a considerable time. (592.)

*g. Control of business.*—Mr. SCHWAB says that the United States Steel Corporation controls between 65 and 75 per cent of the steel industry of the United States. In very prosperous times the percentage will be smaller, and in very dull times it will be much larger. (455, 465.)

*h. Distribution of ownership.*—Mr. SCHWAB remarks that, while the Carnegie Company was owned by a few people, the stock of the other constituent companies was sold upon the market, and it is a question whether the open distribution of the stock of the United States Steel Corporation has resulted in a wider distribution on the whole. (459.)

*2. Sloss-Sheffield Steel and Iron Company.*—Mr. HOPKINS, president of the Sloss-Sheffield Steel and Iron Company, says that this company makes pig iron, foundry iron, and forge iron. It does not make steel. Its outstanding capital stock is \$6,700,000 preferred and \$7,500,000 common. It owns 64,000 acres of coal and 48,000 acres of ore lands in Alabama. The ore is 14 feet thick and dips to an unknown depth. A calculation that was once made indicated that it would supply the output of the company for 300 years. The company is entirely independent of outside sources of supply of coal, ore, and limestone. (510, 511.)

Mr. FLINT submits the subscription agreement of the Sloss-Sheffield Steel and Iron Company, and some correspondence relating to its organization. He says that he and Mr. Frederic P. Olcott acted as trustees, and it was provided that the new company should purchase additional properties. It was not a case of a consolidation of large independent interests, but it was a provision whereby the Sloss-Sheffield Company obtained additional cash to buy additional mining properties and to construct more modern machinery. The subscription agreement submitted by Mr. Flint stated that each accepted subscription would entitle a subscriber to the amount of his subscription in the preferred stock of the new company at par, together with an equal amount of common stock. A memorandum submitted by Mr. Flint states that the authorized capitalization is \$10,000,000 in 7 per cent noncumulative preferred stock, and \$10,000,000 in common stock. Mr. Flint states that the properties purchased were all bought at what were regarded as sound valuations. The principal value of the business in the case of this company is in the tangible assets and in the fact that the plant is located at a favorable point. (54-57.)

The properties which were to be acquired were as follows: Sloss Iron and Steel Company, Philadelphia Furnace, Ensley Furnace, Gulf Coal and Coke Company, Corona Coal and Coke Company, Brown Ores at West Point, Tenn., and Russellville, Ala. (56, 57.)

*3. Jones & Laughlin.*—Mr. KING, vice-chairman of Jones & Laughlin, Limited, says that this company operates under the limited partnership law of Pennsylvania. Its business is the manufacture of steel, bar steel, structural steel, cold-rolled shafting, fittings, spikes, and railroad specialties. It has a yearly capacity of about 750,000 tons of pig metal, and about 600,000 tons of finished material. At the prices prevailing in 1900 such an output would represent about \$20,000,000. The firm has existed about 50 years. It was changed from a partnership to a limited partnership about 20 years ago, and its capital stock was fixed at \$5,000,000. Somewhat more than a year ago the capital was raised to \$20,000,000. (499.)

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The company has only a single plant, located at Pittsburg. It sells practically throughout the entire country. It could not sell its entire output east of Chicago, and probably one-third goes farther west. Its chief competitors for the Western market are in Chicago and Milwaukee, and it has sometimes found competition difficult because of the distance and the freight rates. Three-fourths of its output goes west of Pittsburg and one-fourth east. (503.)

4. *Ore.—a. Ownership.*—Mr. SCHWAB says that of the Lake Superior ores, which are chiefly used in the United States for steel products, the United States Steel Corporation controls about 80 per cent. The remaining 20 per cent or so is in the hands of a great number of people. Most of the titles to ore property were obtained by lumber people through lumber purchases. There is a great complication of ownerships in fee, leases, and subleases. The United States Steel Corporation has some leases. It mines all its own ore. It sells ore, not, apparently, because Mr. Schwab considers it wise to do so, but because it was obliged to assume contracts which had been made by its constituent companies, and which have still years to run. (450, 470, 471.)

Mr. KING, vice-chairman of Jones & Laughlin, says that his company uses about 1,250,000 to 1,500,000 tons of ore. It all comes from Lake Superior. The company is now able to supply all its wants from its own mines. It was not able to do so before it made some recent purchases. It has, perhaps, from 20 to 30 years' supply. (499.)

b. *Prospect of exhaustion, and value.*—Mr. SCHWAB says that there is a known quantity of ores in the United States, and so far as the best geologists can determine this ore region is not likely to be extended. This ore is going to be exceedingly valuable in future years. Mr. Schwab is constantly trying to impress upon his associates the need of valuing the ores highly enough. English manufacturers thought years ago that they had an unlimited supply of raw material. To-day the question of the manufacture of steel in England is largely one of getting the ore. The value of the ore in the ground in the United States is not generally appreciated. The United States Steel Corporation, owning 80 per cent of the ore deposits which are most suitable for its purposes, ought to fix a price on them commensurate with their real value, and ought to maintain that price under all conditions, in times of depression as well as in times of activity. It ought to get a profit of \$2 or \$2.50 on every ton. (457, 472.)

Mr. HOPKINS says that the so-called backbone of the Birmingham district in Alabama is a vein of red ore about 14 feet thick, which dips to an unknown depth, and is regarded as inexhaustible. The supply owned by his company has been estimated to be enough to cover its consumption for 300 years. (511.)

The Alabama iron ores are of 3 varieties, hard red, soft red, and brown. The average composition of the hard red ores gives about 38 per cent of metallic iron. Soft red ores have been worked running as low as 35 per cent, while others run to 50 or 54 per cent. The brown ores, properly washed, should show about 50 per cent. The red ore is regarded as practically inexhaustible. The value of it in the ground has been reckoned at 10 cents a ton, and is now called 25 cents a ton in cases that Mr. Hopkins knows of. A man owning a good brown ore, mining and operating it himself, can produce his ore and get it into his furnace at probably 50 cents a ton less than he could if someone else owned the mine. Mr. Hopkins is not prepared, however, to criticise Mr. Schwab's valuation of the ore owned by the United States Steel Corporation. That is a 65 per cent ore. Mr. Hopkins understands that the supply of it is limited, and there is no other 65 per cent ore in the United States. The highest in the South is 54 per cent, and that exists only in limited amounts. While the ore beds in the neighborhood of Birmingham are expected to last hundreds of years, they contain only some 36 per cent of metallic iron. If a furnace is running on low-grade ore, it is probably necessary to put in 5 tons of material at the top to get 1 ton out from the bottom. If one has 65 per cent ore, less material has to be used. The iron is got out very quickly, and it is of a higher grade. (509, 510, 514, 515.)

Mr. KING does not think that the present visible supply of iron ore ought to be regarded as the total supply. "As in the case of oil and gas, it is generally found when it is needed, and the higher priced it becomes, the greater effort is made to find it." The charts of the Geological Survey seem to be quite accurate, and little Lake Superior ore which they do not show has been found by researches of individual firms. Until recently, however, research has not gone below what is known as the greenstone in the ore formation. Lately some ore has been found below that stone; so it may possibly be found deeper than has been supposed. Even if none beyond the present visible supply is found in that immediate region, Mr. King has faith that more will be found in Canada or other available places. Some good ore, though not much, has already been found in Canada. He believes the Lake Superior district can supply

ore for the steel manufacture of this country for 80 or 100 years; indeed, he would not like to put that limit on it. He would not say, therefore, that the present value of the ore in the mine ought to be estimated materially above its present selling price. (500.)

Mr. King states that the price fixed this year on standard old-range ores, which are regarded as the best from the Lake Superior mines, is \$1.25 a ton less than last year. The United States Steel Corporation, owning so large a part of the ore, necessarily has much to do with the fixing of the price, and the reduction is regarded by iron men as attributable to it. (499, 500.)

*c. Mining and marketing of Lake Superior ores.*—Mr. SCHWAB says that though there has been an allotment of output among the Lake Superior mines, the mines have not, as a rule, taken out as much as has been allotted to them. The owners of the 20 or 30 per cent of the Lake Superior ores which are outside the combination have many markets for their product. Not nearly all the pig iron is used for steel. All the valley furnaces and makers of foundry pig iron are purchasers. He implies that there is no limitation of the market of these mines by the consolidation. (471, 472.)

*d. Foreign ores.*—Mr. SCHWAB states that his company has not acquired any iron ore or coal outside of the United States. It does not use any Cuban or other foreign ores, except manganese ores. Manganese ore is nearly all brought from other countries, but the amount is small. Not over 5,000 tons a month are consumed in the United States. (464.)

*5. Coal.*—*a. Buying by United States Steel Corporation.*—Mr. SCHWAB says that the constituent companies buy some coal, but only, apparently, because some of them, which have not their own mines, had outside contracts for coal at the time of the consolidation, which had not been filled. It seems to be intended to supply all the wants of the corporation from the mines which it controls. (457.)

*b. Supply for steel making.* (See above, *Capitalization*, p. xcvi.)—Mr. KING says that while the United States Steel Corporation, owning the Connellsville coal field, may perhaps have an advantage in the coal of the Pittsburg region, there are other fields of coal in West Virginia and elsewhere that are as good for coking as the Connellsville. The Jones & Laughlin Company gets its coal from a point on the outskirts of the Connellsville region. It owns its own mines there and has certainly 35 or 40 years' supply. The coal is not regarded as strictly Connellsville coal, but is abundantly adapted for purposes of the business. (501, 506.)

Mr. HOPKINS states that the 3 coal fields in Alabama contain over 8,000 square miles, and are estimated to contain 41,000,000,000 tons of coal. This is enough to maintain a larger output than the present for a thousand years. Much of this coal is of excellent quality for coking. It is generally screened; the slack is coked and the lump is sold for steam purposes. (510.)

*c. Production in Alabama.*—Mr. HOPKINS presents a table showing the production of coal in Alabama in each year from 1896 to 1900. The amount increased gradually from 5,750,000 tons to 8,500,000 tons. The amount of coke produced increased from 1,700,000 to 2,000,000 tons. While there was a moderate increase in the production of pig iron and of coke, Mr. Hopkins remarks that the production of coal increased much faster. The coal is absorbed in the many industries which are arising in the neighborhood of Birmingham, such as cotton mills and foundries. (508.)

*6. Transportation agencies.*—Mr. SCHWAB says that the constituent companies of the United States Steel Corporation own their railroads from the mines to the lakes, and one railroad from the lakes to Pittsburg, and nearly all the steamboats on which their ores are transported. The boats number 112. The railroads owned amount to not far from 1,000 miles. (471.)

Mr. KING, vice-chairman of Jones & Laughlin, says that his company has an interest in a few vessels, but does not own them entirely. They carry only a small part of its ore. Its custom has been to make yearly contracts with vessel owners. There is still a considerable vessel tonnage outside of the United States Steel Corporation. (501.)

*7. Economies of combination.*—Mr. SCHWAB, president of the United States Steel Corporation, mentions first, as one of the greatest advantages of the consolidation, the ability to provide from ores owned by the several constituent companies a mixture suitable for any purpose. The United States Steel Corporation controls about 80 per cent of the Lake Superior ores; but the ores of different Lake Superior mines are of different kinds, and not equally suitable for all purposes. The Illinois Steel Company, for instance, owned some excellent ores in northwestern Minnesota; but it was in the habit of selling those ores and buying others at about the same price which would enable it to make a better mixture. The Carnegie Company was in a similar position. Through the consolidation the several interests can attain absolute perfection in the mixture of ores.



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The second advantage which Mr. Schwab mentions is in transportation on the lakes. When 8 or 10 individual companies owned or leased their own fleets, ore was never carried in the most economical way, because when a boat reached a dock it had to wait perhaps a considerable time until it could be loaded with ore belonging to its particular company. Now, with all the fleet, 112 boats, under one control, it is possible to load a boat with any ore that is at hand and dispatch it immediately. Even its destination need not be determined until it is well down the lakes. Mr. Schwab adds that it is also possible to make the distribution at the other end of the lakes, over the docks and the railroads, more economically.

Another advantage is in turning each works on the product which it is best suited for by location or by other conditions. For instance, the National Steel Company was making rails at Youngstown, while the Federal Steel Company is better located for the distribution of them, and the Lorain Steel Company is better situated for the manufacture of them, by reason of its proximity to the ores. One of the first things the new company did was to put the works that are best suited to making rails entirely on them, and the works at Youngstown on other commodities.

There is a saving in the cost of superintendence. No matter how small a steel business may be it requires certain skilled men in different lines; a skilled melter, a skilled superintendent, a skilled chemist, a skilled draftsman, etc. By adopting the same methods at each of the works 1 chief chemist and 1 chief engineer can be made to take the place of several. Moreover, methods which have proved themselves the best can be applied in all the works. The steel business is one in which experiment is constantly going on for the development of new improvements. When the results of experiments tried in one place can be applied in many others a great economy and a rapid advance are effected.

Some savings can be made in selling. There are 8 or 10 selling offices in New York, each with its leased wires, its telephone wires, and other apparatus. The consolidation of these offices into one building, though not necessarily under one head, will enable various savings to be effected.

Mr. Schwab does not think that the superintendents of the several works are likely to take a less active interest in the business than they would if they were owners. Every superintendent in the Carnegie Company was individually interested in the profits of his company in some other way than through his salary. He had a percentage based on his profits, or his costs, or his output, or his quality, or whatever it was most important to develop in his particular department. Mr. Schwab hopes to conduct the business of the United States Steel Corporation in the same way. If there were, for instance, 3 open-hearth departments in the same works, most managers would put those 3 departments, making the same lines, under the management of some one good man. He never did. He put one good man at each of them, and pitted one against the other. The large consolidation will do the same thing.

In the United States Steel Corporation each head manager surrounds himself with a staff of officers who are accustomed to working with him. A man that has been trained many years in manufacturing will probably want men of business ability about him, and vice versa. The great thing is the selection of the staff and the ability to give the staff one's ideas of management. The present managers are for the most part practical men rather than business men, though both are employed. In these great consolidations of capital practical men are likely to be chosen to rule the manufacturing part of a business.

Detailed reports are received every month of the cost of operation in every department and the cost of every article manufactured. This was the method of the Carnegie Company, and it is the method of the new company. Careful comparative statements are made, and the results in one department are compared with those in another, and the managers have opportunities to make such explanations as are necessary.

Mr. Schwab thinks that there will be an economy, in that there will be a great specialization of plants, and that expenditure will be put into improvements and additions to 2 or 3 plants—for instance, for making rails—instead of into building a larger number of separate plants.

Mr. Schwab is not prepared to say whether any of the less economical plants will be closed for purposes of economy. At present all the works are running full.

Mr. Schwab, has not discovered any disadvantages from consolidation. (450-452, 456, 463.)

Mr. King thinks that the chief sources of saving by a combination of iron and steel establishments are in shipping the material from the mill nearest the market and in dispensing with many high-priced officers and superintendents and consolidating the clerical force. He believes that a separate concern like his own has a certain amount of advantage in being under the control of men who largely own it,

and have a more direct personal interest in it than any salaried officer of a great corporation could have. (504.)

8. *Possibility of competition.*—Mr. KING says that a mill making 2,000 or 2,500 tons a day can manufacture as cheaply as one making 5,000 tons a day. An iron works of this capacity and of the best construction would require a capital of \$20,000,000 or \$30,000,000. His own company steadily progressed after the formation of the several companies which have now united in the United States Steel Corporation, and Mr. King is confident that it can still progress in the presence of the greater combination. The great difficulty for a new competitor would be to get the raw material. One must have his own mines of ore, as well as a mill equipped with modern machinery, in order to compete with the United States Steel Corporation. That company has some advantages that no competitor would be likely to have, as in the ownership of its own railroads. The profit of those roads could be counted either as railroad profit or as profit in the manufacture of steel. (504-506.)

Mr. HOPKINS says that the Birmingham district can make iron cheaper than any other place in the world, and he does think it possible that its iron business could be crushed out by competition. The Tennessee Coal and Iron Company are making very fine steel and exporting it. Before they went into the business they shipped thousands of tons of high-class iron to Pittsburg. If steel can be made in Pittsburg out of Southern iron, it can be made in the South. (511, 514.)

Mr. TAYLER says that there are several strong concerns, independent of the United States Steel Corporation, which are able and will be able to do everything that is necessary for the production of finished products in iron and steel. (603.)

Mr. WATERBURY is president of a steel company with a capital of \$750,000. It is situated on Long Island. Its raw material is scrap instead of ore. It buys all sorts of scrap in New York and turns out billets and rods. Mr. Waterbury does not see how the United States Steel Corporation can interfere with it. It has a local market, and the raw material is locally produced. If the big company should reduce prices locally, the little company would have to seek a market farther off. If the big company should reduce prices all over the country, the question would be whether it could lose \$10,000,000 a year longer than the little company could lose \$100,000 a year. (137.)

9. *Further combinations.*—Mr. HOPKINS says that the United States Steel Corporation has no furnaces or plants of any kind south of the Ohio River, so far as he knows. If the United States Steel Corporation should absorb his company and the Tennessee Coal and Iron Company, and should put in new and improved machinery and larger and stronger furnaces, and conduct the business after the fashion of Mr. Carnegie (which is much better because of his great wealth than anything the Southern manufacturers have been able to do), the output would be increased, more labor would be employed, and the South would be benefited. If they closed up the furnaces it would not be a benefit. But he believes that if they were to put money into the South it would be to build up and not to tear down. (511, 513, 514.)

Mr. SCHWAB does not think it possible to form a world combination in the iron and steel industry. (465.)

**B. The iron and steel industry generally.**—1. *New uses for iron and steel.*—Mr. BUTLER, a jobber of iron and steel, says that, speaking of his particular branch of the business, heavy plates, more plates are used in building cars to-day than would be represented by the entire production of steel plates 10 years ago. (496.)

2. *Function of the middleman.*—Mr. BUTLER does not think that the middleman or jobber can be eliminated from the iron trade. He is a buffer between the manufacturer and the consumer. He supplies the unexpected and the occasional want. He is the banker; he enables the manufacturer to operate when there is a sudden cessation of orders, and he enables the consumer to have his wants supplied regularly. He is the fly wheel of the business. Yet in another connection, and considering as middlemen all who stand between the primary producer and the ultimate consumer, Mr. Butler attributes to the speculative purchases of middlemen the excessive fluctuations of iron and steel prices. (487, 488, 495.)

3. *Advantages of large-scale production.*—Mr. HOPKINS says that an important advantage of production on a large scale is this: If a company has 6 or 7 furnaces, it can pay a man, say, \$6,000 a year to superintend them, and at the same time have foundrymen to look after the details of each. If there were only one furnace, it would have to be managed by a cheaper man. (509.)

4. *Iron manufacture in the South.*—Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, Birmingham, Ala., says that there are about 10 makers of pig iron in Alabama. His company competes not only with them, but also with the iron makers of Ohio and Pennsylvania. When it was thought that Lake Superior ore was to be \$5 a ton, his company was able to ship pig iron very freely into Ohio and

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Pennsylvania. He thinks that it was a surprise to everybody when the United States Steel Corporation consented to a price of \$4.25 a ton. That permitted the independent furnaces in the valleys to make iron cheaper, and Mr. Hopkins's company, while not exactly shut out of that region, can ship to the West at a better price. There is a difference of about \$3 a ton in market value between Southern pig iron and that of the Mahoning and the Shenango valleys. (511, 513, 516.)

Mr. Hopkins presents a table showing the production of pig iron in Alabama in each year from 1896 to 1900. There was a gradual increase from 922,000 tons to 1,156,000 tons. (508.)

Mr. Hopkins says that it would not take many new industries in the South to use up the pig iron that is now produced there. The new steel mill of the Tennessee Coal and Iron Company will take 700 tons of the 1,000 tons a day that it produces. There is a very successful stove concern at Sheffield, Ala., and similar industries are going up all through the South. (511.)

5. *Prices.—a. Fluctuations.*—Mr. BUTLER calls attention to the extreme fluctuations to which the iron and steel market is subject. For instance, steel bars have sold in Chicago at the following prices per ton of 2,000 pounds: In 1898, minimum \$19; in 1899, maximum \$45; in 1900, minimum \$22; in 1901, up to May 16, maximum \$33.

During these great fluctuations Mr. Butler doubts whether the actual consumption increased or diminished more than 15 per cent. It was the speculative buying of the middlemen which caused the increase of demand upon the manufacturers and the consequent increase of price. Mr. Butler includes among the middlemen, in this connection, all who stand between the producer of steel and the ultimate purchaser of the finished product. He includes, therefore, the country storekeeper and the country blacksmith as well as the great manufacturer and the great jobber. As soon as there is thought to be a prospect of good times and a probability of an advance, every one of these buyers, small or great, rushes in to anticipate the advance. If the blacksmith normally carries 1 ton of iron he buys 2 tons, and the same process goes on all along the line. When uncertainty and doubt come everyone buys from hand to mouth. The demand upon the producers of raw material falls off sharply. During the rush they have been unable to fill their orders. Now they are unable to run their mills. But the great variation in the demand is almost entirely speculative. Consumption goes on nearly at the same rate. Large consumers are affected by these variations of price, but the small consumer pays the same for shoeing his horses, or repairing his farm machinery, whether steel billets at Pittsburg are high or low. (487-489, 496.)

Mr. KING says that during the last 5 or 6 years prices have generally been extremely low, and in many years have been quite unprofitable. A boom occurred early in 1899, following the long depression. Prices for bar steel went up to 2½ cents a pound. As an inevitable result, the reaction came in the spring of 1900, and prices went below 1 cent. During the period of depression the business was scarcely profitable. Prices are probably \$5 or \$6 a ton higher now than in 1897 or 1898. It would require an average of 8 or 10 years to bring the manufacturer's profit to a point where he could live. (501.)

*b. Structural steel prices.*—Mr. KING names 6 principal manufacturers of structural steel. There are several others making some sizes, but no other that makes a full line. Though there was a great scarcity of structural material a year or two ago, because of the strong demand, the price did not go as high as the price of competitive material; that is, material that everyone makes, like bars. It is true that some manufacturers asked a higher price for very prompt shipments. If one goes back 12 or 15 years, the price was considerably higher than that of ordinary competitive material; but the cost is greater. There is no difference of price between building structural steel and bridge structural steel. (502.)

*c. Agreements.*—Mr. KING says that as far back as his recollection goes manufacturers have at different times had more or less consultation regarding prices. There have been gentlemen's agreements, but nothing that he would call pools. The rail business should perhaps be excepted. In it there have been agreements restricting each manufacturer to a certain per centage of the output. Outside of rails there has been no such allotment, nor any limitation of output or division of territory. There have been simple agreements to maintain prices. They have not been enforced by any forfeit. They do not last unless the market conditions are in their favor. If prices are advancing they stand; if prices fall, they go to pieces. (501, 502.)

Mr. BUTLER states that trade agreements or combinations in iron and steel have always been connected with upward movements of value, but he does not consider that they are properly the cause of such movements. They are rather the formal and public announcement of an advance which arises from the conditions of the market. Those who have entered into such agreements have had in view very moderate and reasonable profits. But manufacturers and other buyers, scenting higher

prices in these combinations, have increased their purchases in a speculative way, and thereby have caused the advance which they have anticipated. The abnormal demand creates a supposition that the stocks of the country are exhausted. Prices advance in spite of the efforts of the producers. Increased competition follows, over-production results, profits disappear, and the combination goes to pieces. Then, under stress of low prices, new economies in manufacture are introduced and new forms of consumption are developed. Prices again advance and new trade agreements are entered into. Up and down prices go, and ever will go; but after every upward wave there has followed a lower level; lower, Mr. Butler thinks, than if there had been no combination. The combination calls public attention to an increase of profits which is presumably great, and the resulting competition and the ultimate fall of prices are greater than they would have been without the combination. (488.)

*d. Effect of combination.*—Mr. KING, vice-chairman of Jones & Laughlin, thinks that the chief effect of the formation of the United States Steel Corporation on prices will be to prevent the great and harmful rises and falls in the market. He believes that the average prices of iron during the next 10 years will not greatly differ from the average of the last 10 years, but that there will not be as many fluctuations. (505.)

Mr. SCHWAB states that since the formation of the United States Steel Corporation prices have remained the same, and he thinks the tendency will be to somewhat lower prices. He does not think that prices will be raised unless conditions of cost make it necessary. These great companies are interested in seeing their works running full, and they try to keep prices on a basis which will keep them running full. If prices go too high, consumption drops off. Since the organization of the several large companies which are now consolidated in the United States Steel Corporation prices have been both very low and very high. This has been the result of supply and demand. The tendency of the organizations, Mr. Schwab thinks, is to keep prices moderate. While he seems to admit that the chief benefit of the savings of consolidation goes to the stockholders, he believes that there is likely to be an advantage to the consumer in the long run. (453, 454.)

Mr. Schwab does not think that the control of 65 or 75 per cent of the steel industry will enable the United States Steel Corporation to dictate prices. A man owning 30 or 40 per cent can usually collect about him enough people who think as he does to determine a policy; therefore 70 per cent can not absolutely fix a policy. In times of great depression the company will be unable to fix prices with a control of anything like 70 per cent. It is when the demand is such that everybody can run full that better prices can be got, and that would happen if there were no consolidation. (455, 465.)

*e. Competition a sufficient regulator.*—Mr. HOPKINS thinks that competition will prevent any unfair profits in the iron and steel business. (513.)

*f. Effect of high prices.*—Mr. HOPKINS says that what constitutes a fair profit depends upon the supply and demand. Mr. Hopkins believes that high prices for iron products are advantageous to the public. If you ask a man who is complaining about combines and trusts and the high price of steel rails, you will probably find that the high price of steel rails does not injure him; and everybody in the country is more prosperous when rails are \$26 than when they are \$14 or \$16. (513.)

*6. Freight rates.—a. Discriminations.*—Mr. SCHWAB asserts that neither the Carnegie Company nor any of the constituent companies of the United States Steel Corporation has any special contracts with the railroads, or pays lower freight rates than all competitors pay. The present condition of railroad affairs is, fortunately, one of uniform charges. (470.)

Mr. HOPKINS says that his company pays the published tariff rates, and he does not know of any freight discriminations at the present time. His company sometimes feels that if it ships a good deal of iron over a road, the road ought to favor it with reference to a coal contract, or the like; but there is no understanding about such things. (515, 516.)

*b. Variation.*—Mr. HOPKINS says that when pig iron has been very high the railroads have advanced the rates from Birmingham, Ala., 50 cents a ton to Mobile and 50 cents a ton to the Ohio River. The rate to the Ohio River has ranged from \$1.75 to \$2.75. At the time of Mr. Hopkins's testimony it was \$2.25. If iron is high and the country is prosperous, the railroad will, very properly, get a little more money. (516.)

*c. From the South.*—Mr. HOPKINS is not inclined to complain of the rates to the Northeast, though he can not now sell iron in that region. If he had a furnace in Buffalo, he would expect to get a lower rate than that from Birmingham. (516.)

*d. Rail and water.*—Mr. HOPKINS says that all his shipments to seaboard points are made by rail and water. They could not be made otherwise. From Savannah

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and all coast points the rate would be \$3.75 to New York, and \$3.85 from Florence, Ala., as against \$5.54 by rail. (516.)

7. *Tariff.—a. Iron and steel.*—Mr. SCHWAB says that on lines of steel in which labor does not form an important part of the cost we have reached a point where we do not need the tariff. The tariff could be taken off rails, for instance, without hurting the United States Steel Corporation, except as to the trade on the Pacific coast, where rails can be carried as ballast from England, while the cost of shipping them overland from the Eastern United States is far higher. But if the tariff were removed from more highly finished products like tin plate, into which labor enters more largely, either the trade would be lost or wages would have to be cut down. This applies to the wages of both skilled and unskilled labor, but especially to those of the skilled. We are exporting billets and rails and things of that sort, but not tin plate. (456.)

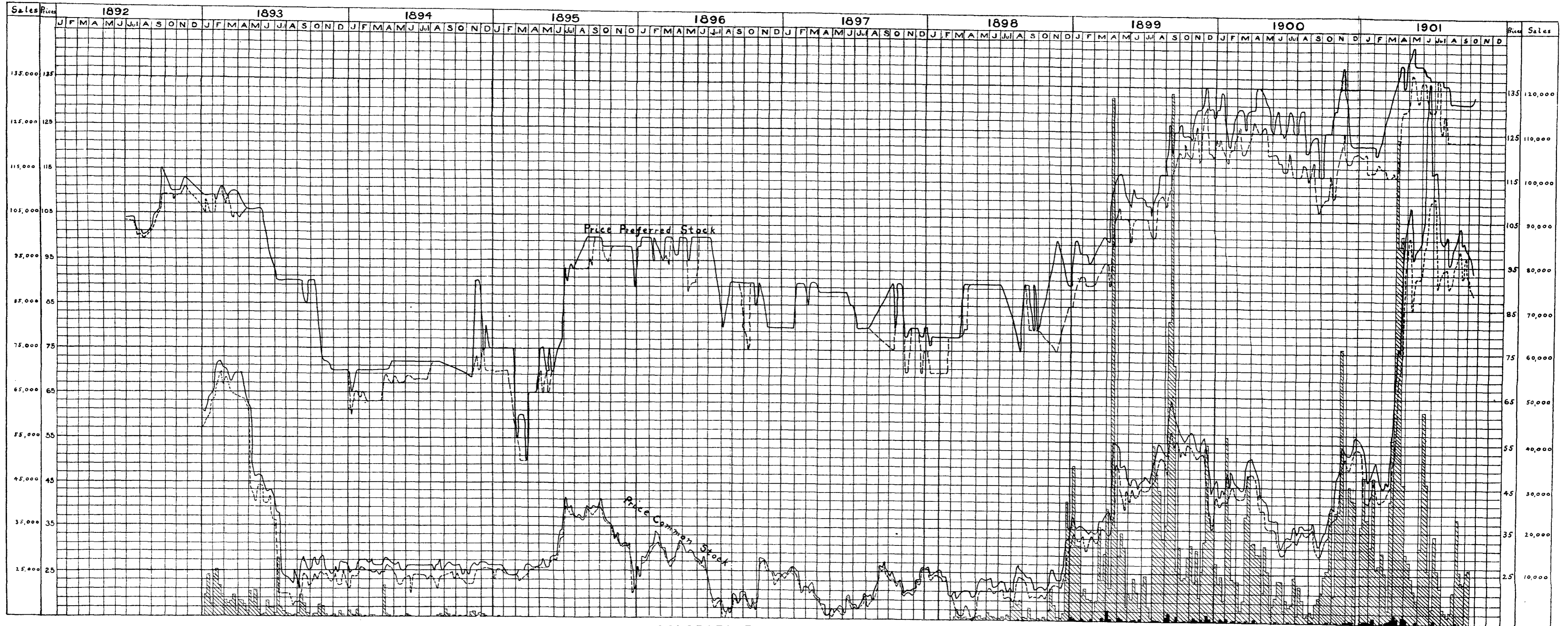
Mr. Schwab does not, however, wish to see the tariff revised. He thinks it unwise to disturb the matter. On goods which are of a high class and on which much money is expended for labor we ought to have a tariff to protect the labor. It is often forgotten that while there may appear to be only 50 cents worth of labor in \$5 worth of steel, everything that goes into the finished product has had labor expended on it at some time, and labor is the one really important item of cost, aside from whatever value is set upon the raw materials in the ground. He does not see that the repeal of all duties on steel products would do anyone any good. It would not hurt anybody in those lines where we do not need a tariff, and in those lines where we do the only people it would hurt would be the working people. (466.)

Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, of Birmingham, Ala., would not complain if the tariff were taken off iron. If there were no tariff, it would cost \$2 a ton at least to get iron from Middleboro, in England. It is true that to the seaboard iron could probably be sent more cheaply than from Birmingham. While Mr. Hopkins would not complain at the removal of the tariff on his own product, he does not think the tariff ought to be disturbed or even discussed. "If you discuss it on one article, you will discuss it on others right along the line. It is largely sentimental, and I think tariff agitation would be very harmful." (516.)

Mr. BUTLER, a jobber in iron and steel, dealing especially in boiler plates, bar iron, and heavy sheets, is under the impression that we have reached a point where the tariff ceases to be of any service to us. Iron and steel can not be produced in Europe nearly as cheaply as here. We have been free exporters during the last 2 or 3 years. Mr. Butler's own firm has shipped steel tanks to the South African mines in competition with European producers. American competition is very easy on engines, machinery, and all things of that kind. In certain forms of sheet steel, however, in the lighter weights, involving a great deal of hand labor, prices are higher here than in England. (493, 494.)

b. *Ore and scrap steel.*—Mr. KING says that imported iron ores are used to some extent near the seacoast. They come principally from Cuba; some from Spain. He believes no scrap steel is imported at present. If the tariff of \$4 a ton were removed, scrap might be used to a greater extent in the Eastern section of the country, but the railroad freight would prevent the use of it in the Pittsburg region in any case. The tariff on ore, 40 cents a ton, is so small that the removal of it would not be likely to reduce the price of Lake Superior ore nor to enable Eastern manufacturers to ship into the West. He does not think the change would have much effect upon the general situation in the United States. At the same time he does not think the import duty should be repealed or even reduced, because, while it seems largely a dead letter at the present time, "the time will come when it will be just as necessary as it has been in the past to protect the American manufacturer and the worker." To the suggestion that the New England machinery makers would be better off if they could buy steel from establishments close at hand, he replies that they have thriven abundantly in the past, and he thinks they will continue to thrive under the same conditions. If they have to pay freight on their bar steel, they usually sell their manufactured product right at home. If they ship some machines to the South, where the outgoing freight is a factor, "they manage to sell them." Jones & Laughlin ship a quarter of their product to the east of Pittsburg. They would feel that they were in very bad shape if that quarter of their business was cut off. The greatest good to the greatest number ought to be the basis of tariff legislation. (499, 506, 507.)

Mr. SCHWAB does not think that his business would be injured if all iron ore were admitted free of duty. Indeed, ores are practically free now; that is, any manufacturer of steel will probably export enough finished steel to get a rebate of the duty on his imported ores. Free ore might have some effect upon the mines in the Eastern district, as in New York, but the great bulk of the supply must come from the North-



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west in any case, and would not be affected. The Maryland Steel Company, being on the coast, would undoubtedly be affected favorably by free ore, but Mr. Schwab still maintains that in practical effect ore is now free.

He says much the same as to the duty on scrap iron. His company has imported some scrap from Canada, but has shipped enough steel out to get a rebate on it. The quantity is so trifling in any case as scarcely to affect the general situation. (457, 458, 466.)

*c. Possibility of steel manufacture in New England.*—Mr. KING does not think it likely that steel works could be successfully set up on the New England coast, even if the duties on iron ore, scrap iron, and steel were removed. The ores of Nova Scotia are not suited for making Bessemer steel, though open-hearth steel might, to a certain extent, be made. However, he does not think that the Nova Scotia coal, or any foreign coal, could be used, because it contains too much phosphorus and sulphur. (506.)

Mr. SCHWAB thinks it possible, though hardly likely, that the tariff on scrap iron may do some local injury on the Atlantic coast, by preventing the starting up of some manufacturing industries there. (458.)

*8. Export trade.—a. Expected increase.*—Mr. SCHWAB thinks that the export business in steel will be greater hereafter than it has been, because some of the smaller companies which are now in the United States Steel Corporation had not been organized to conduct an export business. It would not have paid them, because the percentage which they would have exported would have been so small. Now, through a consolidation of foreign agencies, they will be able to export. The Carnegie Company has exported 70 per cent of all the steel exported from the United States. (455, 465.)

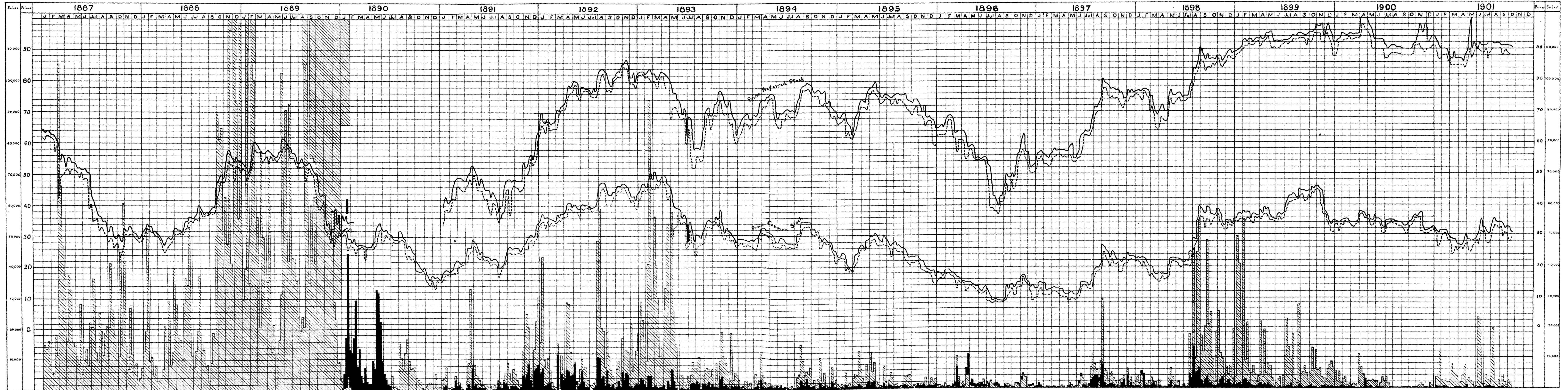
*b. Export and domestic prices.*—Mr. SCHWAB declares that it is true that exports are made at much lower prices than domestic sales. The reason is that these export sales are made in order to keep the works running full and steady. When manufacturers have as much as they can do at home they do not care to sell at low prices; but when business is slack they take orders, even at a loss, in order to keep running. It is very difficult to start an export business, and when it is once started one does not want to let it slip. So, even in prosperous times, some export business may be done at low prices merely to keep in the market. Again, a contract may be made when there is a prospect of poor business which may have to be filled when business is better. For instance, when the demand for steel fell off in the spring of 1900, and American manufacturers thought that a protracted period of dull business was coming, Mr. Schwab contracted to ship a great deal of steel abroad; and when a great home demand immediately arose it was almost impossible to ship it. That was one of the risks that a business man has to take to insure his works running full. He had rather be sure of running his works full at a known loss than not to run them at all.

Mr. Schwab considers the working people the chief beneficiaries of all measures taken to increase export business. The sellers of supplies will generally make specially favorable prices for goods to be used in the export trade; the railroads will carry export goods cheaper; but the working people get the same on export products as on those for the domestic market. While the export business is profitable for this country by reason of its raw material and its superior facilities for manufacture, Mr. Schwab seems to doubt whether it would be possible to maintain existing wages if all business were done at export rates.

Mr. Schwab asserts that the making of especially low prices for export trade is a general practice, not only in America but in Europe. American steel has, to be sure, in times of extreme depression, been sold as low in the American market as it has been sold in the foreign markets; but it was sold without profit. When business is in a normal condition export prices are always somewhat lower than home prices. (454, 455.)

Mr. Schwab states that when steel rails were \$26 and \$28 a ton at home the export price was about \$23. Export prices are not uniform; they vary with the competition. (464.)

Mr. BUTLER, a jobber in iron and steel, says that his house does some export business, and it has made distinct efforts during the last 2 or 3 years to get special prices for export business, but has not succeeded. At the same time it is in accordance with the general principles of business to give lower prices for foreign trade. In this connection any trade is foreign which is outside of the normal territory of the seller. Chicago merchants, for instance, sell cheaper in Omaha than in Peoria, because they have to meet there the competition of St. Louis and St. Paul. Probably they will sell cheaper in Denver than in Omaha, and cheaper in San Francisco than in Denver. If a Chicago merchant wants to get business in Portland, two methods are open to him. He may send a salesman there at very great expense or



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he may give a reduction in prices to the dealers there. Either way the expense comes out of the profits. (493.)

Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, says that his company has been getting about the same prices on its export shipments as on its domestic sales. He does not think, however, that this will be the best policy for the future. Rather than shut down any American mills, it would be well to let the English and the Germans have the iron at a low price. "If I had a surplus of iron I would sell it at a fair profit. I would not sell it at a price that did not net me a fair profit." (512, 513.)

Mr. KING, vice-chairman of Jones & Laughlin, says that his firm does no exporting of any considerable amount. Such exports as it has made have generally consisted of some specialties in the more highly finished state, like cold-rolled shafings. It generally sells delivered at the foreign port. The prices have been, during the last year or two, perhaps a dollar or two a ton below the domestic price; and most of that is made up by the greater cost of delivering to the foreign market. If one sells abroad he must meet the foreign price; and it is better, if the manufacturer has a surplus that can not be sold in this country, to sell it abroad, even a little cheaper, and save the loss that would result from limiting the output. (502.)

*c. Export freight rates.*—Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, says that his company at Birmingham, Ala., ships abroad by way of Mobile, New Orleans, and the Atlantic ports. The railroad rates on export shipments at the time of his testimony were \$1 a ton to Pensacola and Mobile, \$1.40 to New Orleans, and \$1.25 to the South Atlantic ports. Under ordinary conditions it has been possible to get a through export rate from Birmingham, Ala., to Liverpool, of \$3 to \$3.25, and to the principal ports on the continent of Europe, of \$3.25 to \$3.75. (512.)

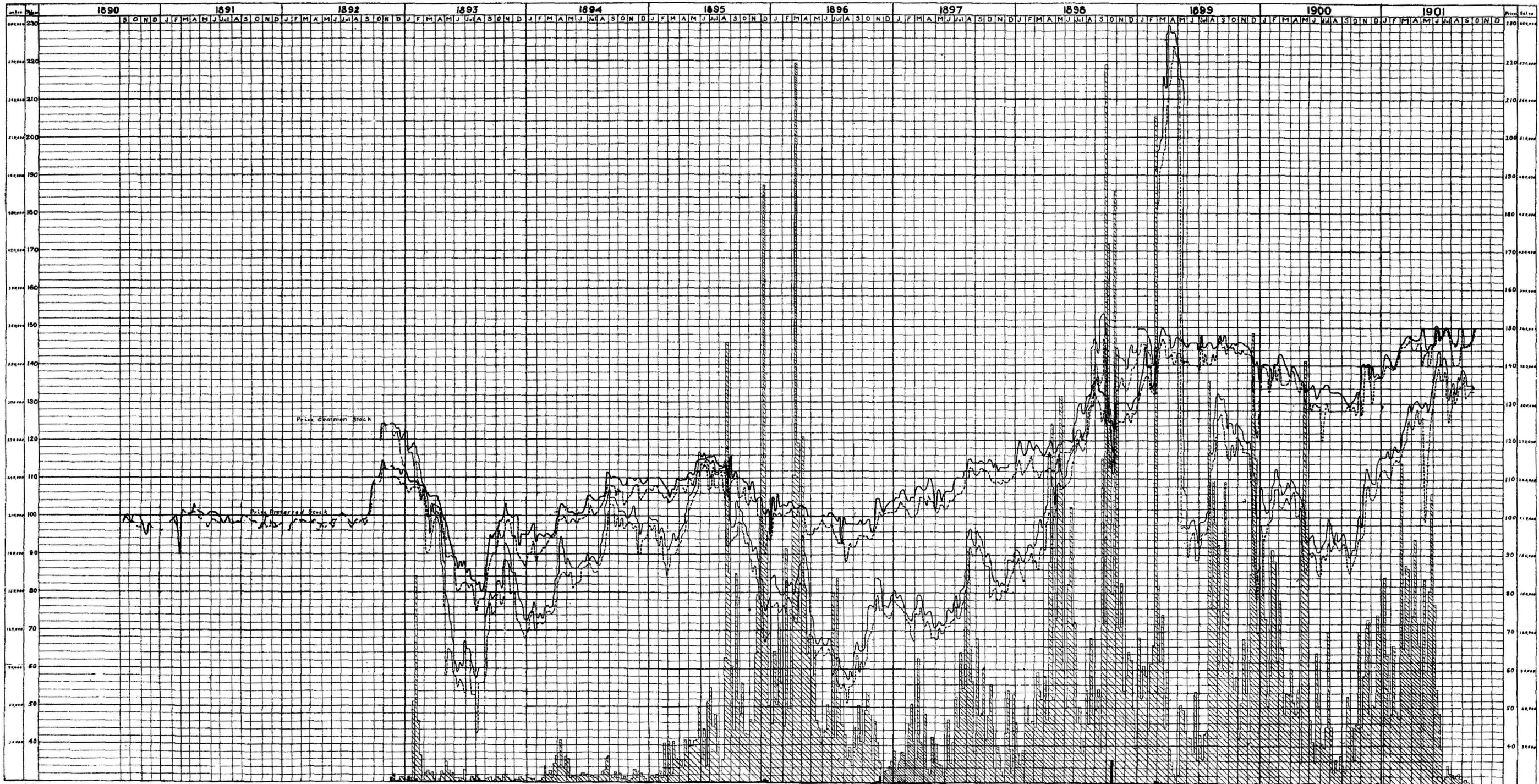
Mr. KING says that, generally speaking, the ocean freight on steel to English ports is  $1\frac{1}{2}$  to 2 times the rail freight from Pittsburg to the seaboard. (502.)

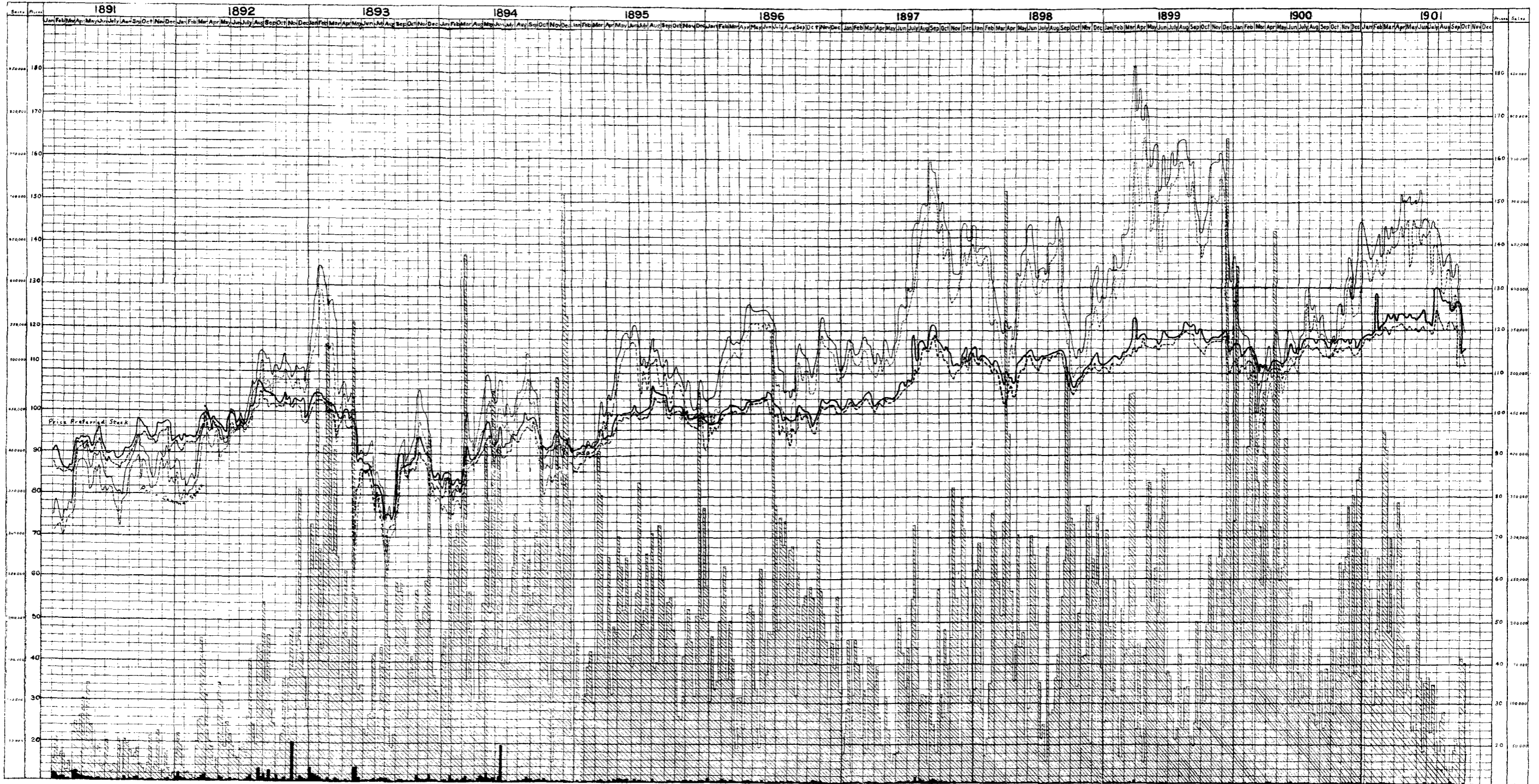
*d. Exports from Alabama.*—Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, presents a table giving the total export business of his company. It began in 1894 with 100 tons. It rose to 57,000 tons in 1898, and was 27,000 tons in 1899 and 40,000 tons in 1900. Mr. Hopkins explains the large exports of 1898 by saying that it was just at the beginning of the awakened demand all over the world, and his company was making iron cheaply, because labor had not received any advance. Though prices were not as high as now, there was hardly any market in this country, and the company shipped abroad. The total exports from the Birmingham district in 1899 were 167,000 tons of pig iron and 12,000 tons of pipe. There had been very few export shipments in 1901 up to the time of Mr. Hopkins's testimony, May 18. (512.)

**C. Labor in the steel industry.**—1. *Wages.*—*a. Rates and changes.*—Mr. SCHWAB, formerly president of the Carnegie Company, says that the average wage received by the employees of the Carnegie Company since 1892 has been greater in each year, even during the depression of 1893 and 1894, than it was in any year before 1892. The highest wages are not so high as they were. Before 1892 Mr. Schwab has known individual men to draw wages exceeding \$100 a day. Mr. Schwab does not know what the present maximum is, but it is not nearly half that. The average wage, however, earned by every man and boy employed at the whole works (and there are a great many boys and a great many foreign laborers), excluding salaried men, and reckoning every man and boy for every working day, whether he worked or not, was during 1900 nearly \$4 for every day in the year. The lowest wage paid to men is \$1.50. That is for common laborers, largely unable to speak English and unable to take any position requiring anything but the commonest manual work. The proportion of men who get as low wages as this is not very large. (460, 462.)

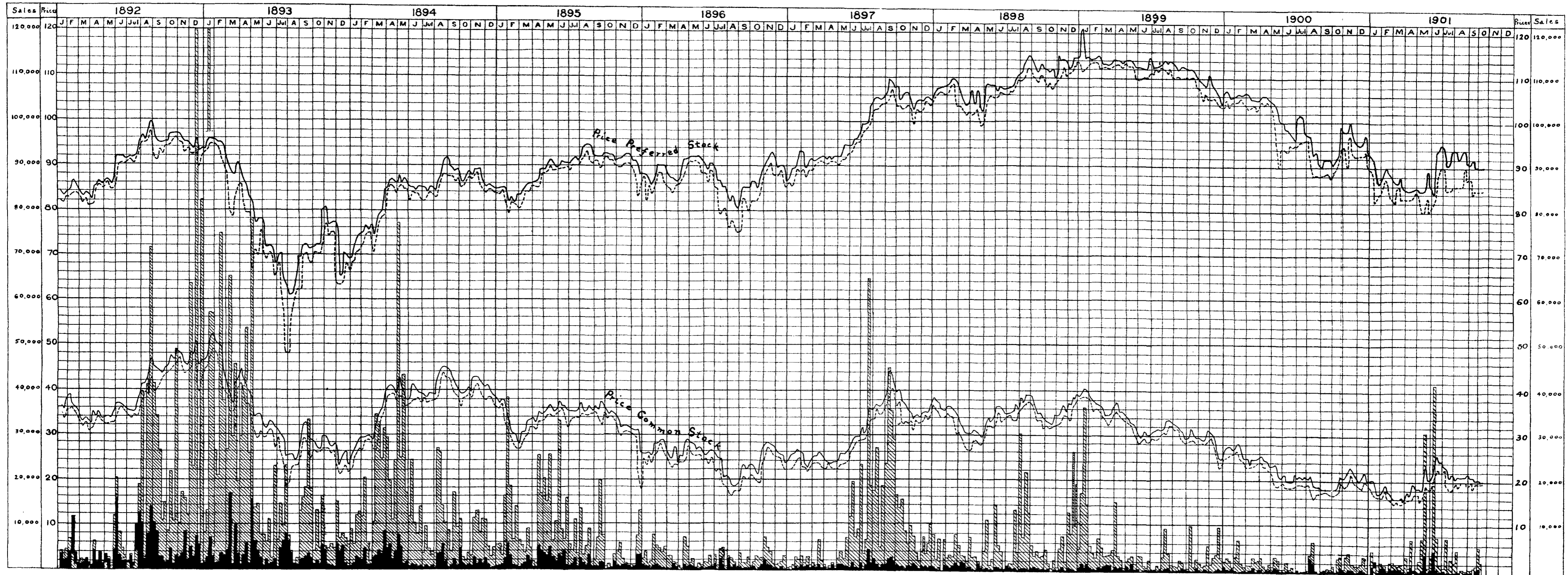
Mr. KING, vice-chairman of Jones & Laughlin, says that wages in his company's mill decreased during the hard times of 1893 to 1895 and have risen since. They are now considerably higher than in 1891 or 1892, upon the average, though he can not give detailed figures. The highest rate now paid is \$20.50 a day; the lowest \$1.35 a day. In the old days, when the mill was under the Amalgamated Association, some few men made as high as \$30 or \$40 a day. The head rollers hired their own crews and paid them out of their own wages, but they had a handsome residue left for themselves. Jones & Laughlin have abolished this system of crews. The introduction of labor-saving machinery has diminished the pay of a few skilled men, but has distributed the wages more evenly. (503, 504.)

*b. Sliding scale.*—Mr. SCHWAB has no objection to a sliding scale. Wages at the rail mills at Braddock, which are nonunion, are now regulated by one. A minimum is fixed, below which wages shall not go down, so that the workmen may not suffer because of too keen competition on the part of the company. There is no maximum. (461.)





AMERICAN SUGAR REFINING CO.



NATIONAL LEAD COMPANY.

2. *Labor organizations.*—*a. Recognition and disputes.*—Mr. SCHWAB, formerly president of the Carnegie Steel Company, says that that company had labor organizations in its steel works up to 1892, but has had none since. He does not know what part of the workmen were in the organization, but he thinks not over 20 per cent. The effect of the organization was to fix unjustly high wages for a small minority. The association fixed a rate for rolling, in a given district, at a certain rate per ton, based on the average output of a mill. The mills of the Carnegie Company made 3 or 4 times the average output, and, in consequence, the men who worked there made 3 or 4 times what it was intended they should make. They had to be paid that rate per ton in order that the men employed in a poorer mill might make a fair wage. Mr. Schwab has known individual men to draw wages exceeding \$100 a day. When this injustice was put an end to, the whole amount paid out in wages was distributed more equitably, so that, though the highest wages have been reduced much more than half, the average wages of all the workmen have been higher than they ever were before 1892. (460, 462.)

Mr. Schwab declares that the troubles that he has seen with labor organizations have never related primarily to wages. They have related to the management and operation of the works. At the Homestead Steel Works the labor associations undertook at one time to select their own foremen and to select the men who should succeed them in case of a vacancy. He does not think that any commercial business can grow and prosper under such conditions. (461.)

Mr. KING, vice-chairman of Jones & Laughlin, says that his company dealt with the Amalgamated Association of Iron and Steel Workers up to about 3 years ago, but has not done so since. It had a disagreement with the association over wages. It does not ask its men whether they are union men or not, and Mr. King can not say whether any of its employees belong to the Amalgamated Association. (503, 504.)

Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, of Birmingham, Ala., says that this company deals regularly with committees of the men and recognizes the union, but employs nonunion men also. It makes no distinction between union and nonunion men. (508.)

*b. Leveling effect.*—Mr. SCHWAB says:

If I were a workman—as I was—if I was a workman now in one of these mills, especially if managed under the broad policy under which I hope the steel manufacture is administered, I would not want to belong to a labor organization. It puts all men, no matter what their ability, in the same class of work, on exactly the same level. If I were a better workman—quicker, smarter—than the other men I would want to reap the benefit. I would not want to be put in the same class with the poorer man, which they must do. If we have 500 men employed at the same class of labor, the wages paid will be the same—must be the same paid to the same class. The level is that of the poorest man in that department. As a workman I would not advance, and I would not be able to show superior ability over any other if I were in an organization. That is my own personal view. (461, 462.)

*c. Limitation of output.*—Mr. SCHWAB says that, in his judgment, one of the two chief reasons why England can not compete with America is in the unreasonable rules adopted by the English labor unions. Comparison has shown that the same machines produce only about one-third as much in England as in America. This is due to the rules of the union. Without adding much to the wages of the men it adds to the cost of production, because the capital in the plant is producing only one-third of what it ought to produce. (460.)

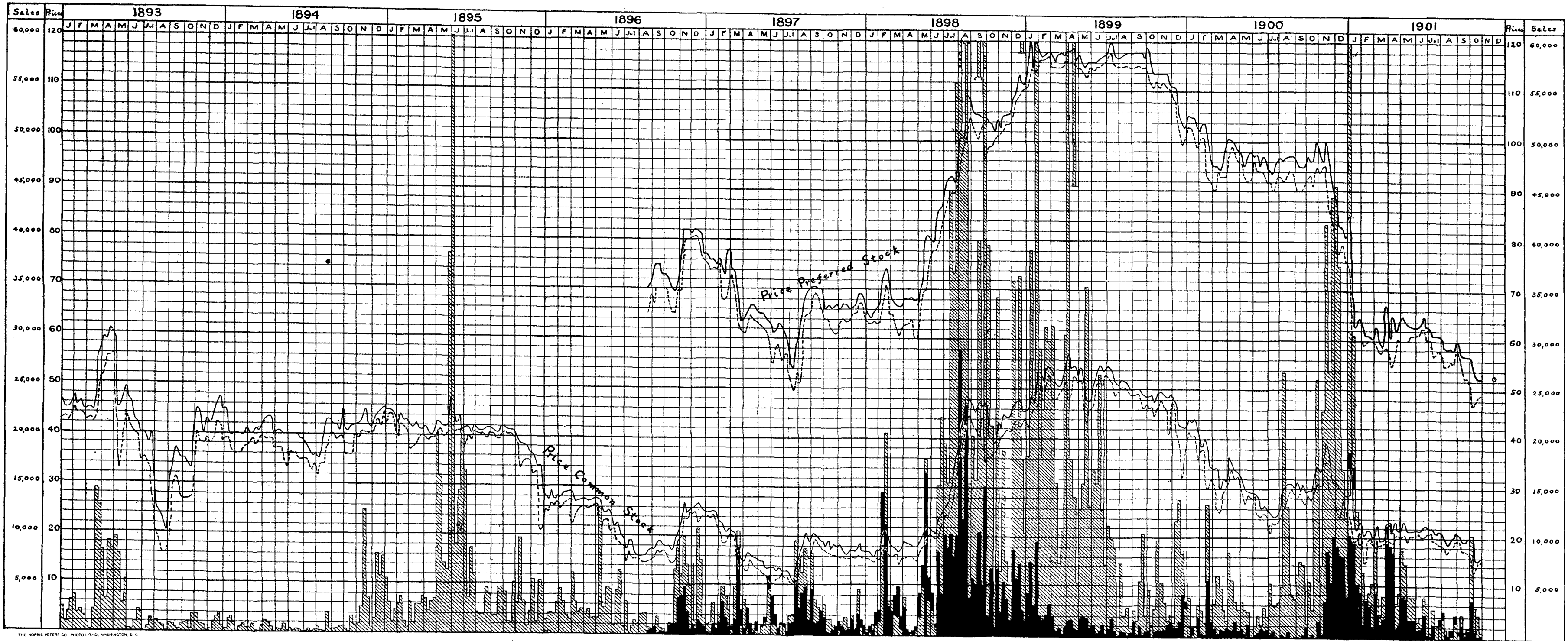
Mr. BUTLER, whose firm has exported some steel tanks to the South African mines, says that they were able to get that business, first, because the price of raw material in this country was favorable as compared with the price in England, but more largely because the methods of handling material in American shops are much better than in English shops. He attributes the difference to the control of labor organizations there. Their policies, he says, make American competition very easy on engines, machinery, and things of that kind. (494.)

3. *Woman labor.*—Mr. SCHWAB, president of the United States Steel Corporation, states that women are employed to do some of the lighter work in the nail factories and in some of the tin-plate factories. He has never favored the employment of women. None were employed by the Carnegie Company. He can not say what will be done in the future. (469.)

4. *Accidents.*—Mr. SCHWAB says that the percentage of accidents is much smaller in large steel works than in small ones. (463.)

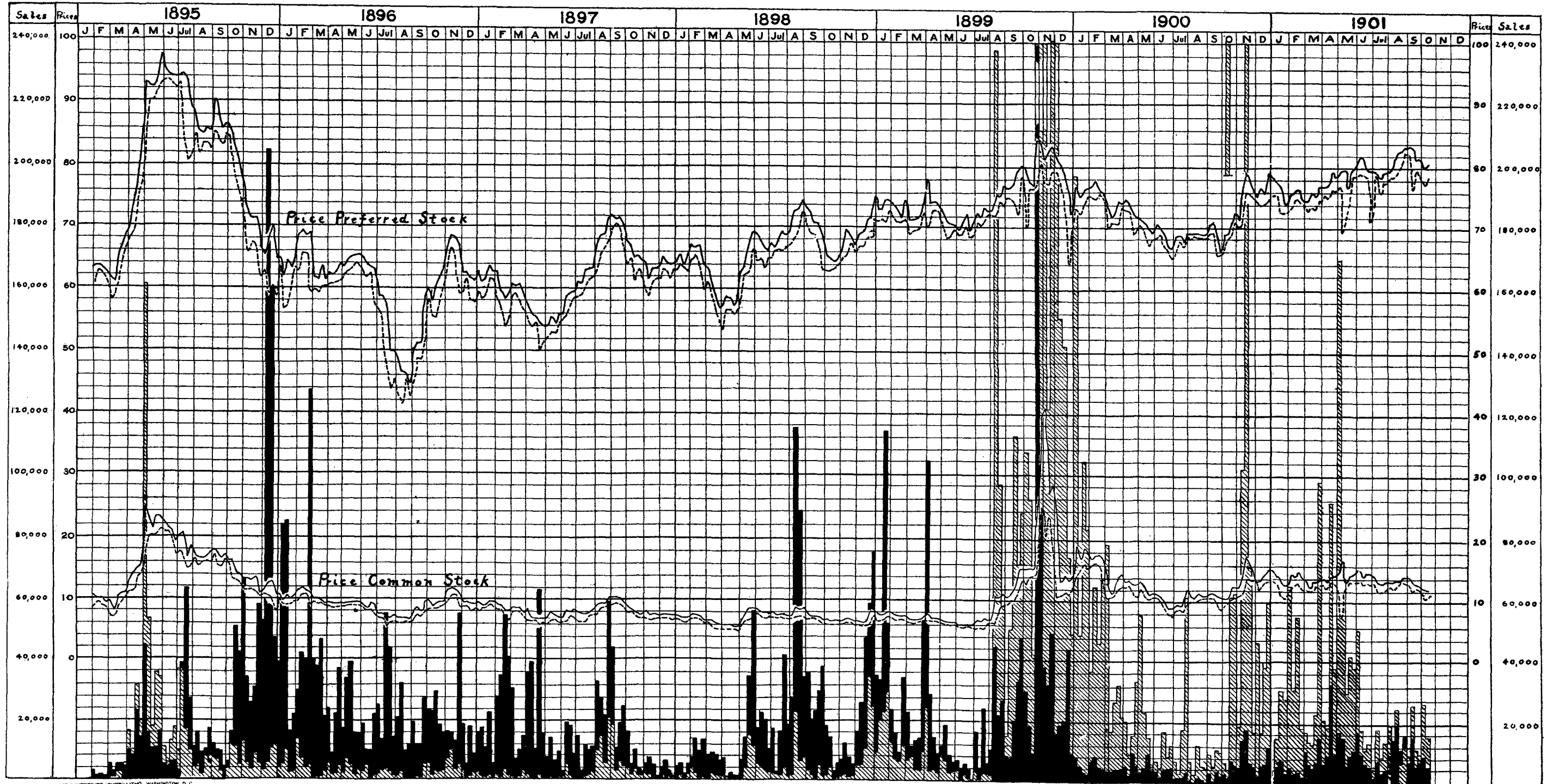
## XII.—AMERICAN SMELTING AND REFINING COMPANY.

**A. Organization and capitalization.**—Mr. CHAPMAN says that the first move in the organization of the American Smelting and Refining Company was to place options upon the various plants and businesses which it was desired to consolidate at the lowest price the owners were willing to take. The vendors were given the



THE NORRIS PETERS CO. PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES RUBBER



THE MORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES LEATHER CO.

## OX INDUSTRIAL COMMISSION:—INDUSTRIAL COMBINATIONS.

right to subscribe for such proportion of the proposed capitalization of the new company as they might desire upon the same basis as cash subscribers; that is, par of subscription in preferred stock and a bonus of 70 per cent in common stock. The options were then taken over by the bankers who were financing the operation. A syndicate was formed for the raising of the capital required to purchase the properties, or such proportion of the properties as it might be necessary to purchase in excess of the amount taken by the vendors of the properties. The syndicate was organized under a subscription agreement. When the subscriptions were paid the amount was deposited in the trust company. A contract was made by the new corporation with an individual designated by the syndicate managers for the transference to the new corporation of all the property rights and franchises of the companies whose properties were taken over, and for placing in the treasury of the new company an agreed amount of cash to be used as working capital. Expert accountants were employed to examine the books and accounts of the vendor companies to determine the reasonableness of the prices paid for the properties, and attorneys were employed to examine the titles and to prepare the proper deeds and conveyances. The vendors received checks for the entire amount of their purchase money, and immediately handed back to the syndicate managers checks for whatever amounts they had subscribed for upon the same basis as other subscribers. The syndicate subscribers and the vendors received for each \$1,000 of subscription 10 shares of preferred stock and 7 shares of common stock. (93, 94.)

Thirty per cent of the common stock was given to those who had been instrumental in bringing the companies together or in figuring out the proper basis for the purchase of the properties, etc. This amount covered all of the expenses of organization and all of the pay of the different parties concerned in effecting the organization. (94, 95.)

The authorized capital is \$32,500,000 of preferred stock, carrying a 7 per cent cumulative dividend, and \$32,500,000 of common stock. Upon the organization of the company \$27,400,000 of preferred stock was issued. This amount represented the tangible assets of the properties taken over. A like amount of common stock was issued. The common stock represented what might be called the "good will" of the constituent companies. A great many patents were owned by the various vendor companies and constituted valuable assets. Many of the companies had special methods of treating ores. These, too, were valuable. It is impossible to say whether \$27,400,000 in cash would have purchased the properties taken over. Some of the vendors undoubtedly took into consideration the fact that they would have an opportunity to subscribe for the stock of the new company on the same basis as cash subscribers. (94, 95, 96.)

Mr. Chapman says that the method of organization employed in the case of the American Smelting and Refining Company is the usual method, and is the one which has been followed in practically all the combinations with which he has been connected. There have been some combinations effected where the purchasing company took over the capital stock in the vendor companies and undertook to make a combination in that way, but the plan followed in the case of the American Smelting and Refining Company is the later and the better way. (95.)

**B. Earnings.**—Mr. CHAPMAN states that the net earnings of the company, according to the report of the president for the year ending October 31, 1900, exceeded \$4,500,000. Dividends at the rate of 7 per cent have been paid on the preferred stock, the total amount paid being a little over \$2,000,000. No dividends have been paid on common stock. (99.)

**C. Reasons for combination.**—Mr. CHAPMAN says that the company was formed because evils had grown out of competition and because of the anticipation of economies which could be effected in transportation charges through combination. (93, 98.)

**D. Economies effected—freight.**—Mr. CHAPMAN says that the smelters of various States would buy ores at distant points and have them shipped long distances. Through combination of the various interests it was arranged so that Montana smelters would purchase the ores of Montana, and that no ore would be shipped from Montana to other points, and that Utah and Colorado smelters would follow the same course. It was estimated that the saving in transportation charges would be over \$5,000,000 per year. (98.)

**E. Control of business.**—Mr. CHAPMAN says that the bulk of the business of the American Smelting and Refining Company is in the smelting of silver and lead ores. The company also smelts gold ores. In some cases it buys the ore; in others it smelts it on commission. It sells its products through an agency. It does prac-



tically all the smelting business of the country, excepting that controlled by the Guggenheims. Leaving out the Mexican interests of the Guggenheims, and counting their 2 smelters in this country, the business done by the American Smelting Company is about 85 per cent of the entire smelting business of the country. There may be small concerns doing a small business for a few local men. (97.)

**F. Effect of combination on prices of ore.**—Mr. CHAPMAN says that it would not be to the advantage of the company to reduce the amount paid for ore. The higher the price they could pay for the ore the more mines would be operated and the more raw material they would be able to get. (98.)

**G. Relations with labor.**—Mr. CHAPMAN says that since the organization of the company there have been one or two strikes. One in the Colorado smelters was precipitated shortly after the organization of the company and lasted several months. The company suspended operations in the plants in that vicinity and continued their business in districts where there was no strike. (98.)

### XIII. PITTSBURG COAL COMPANY.

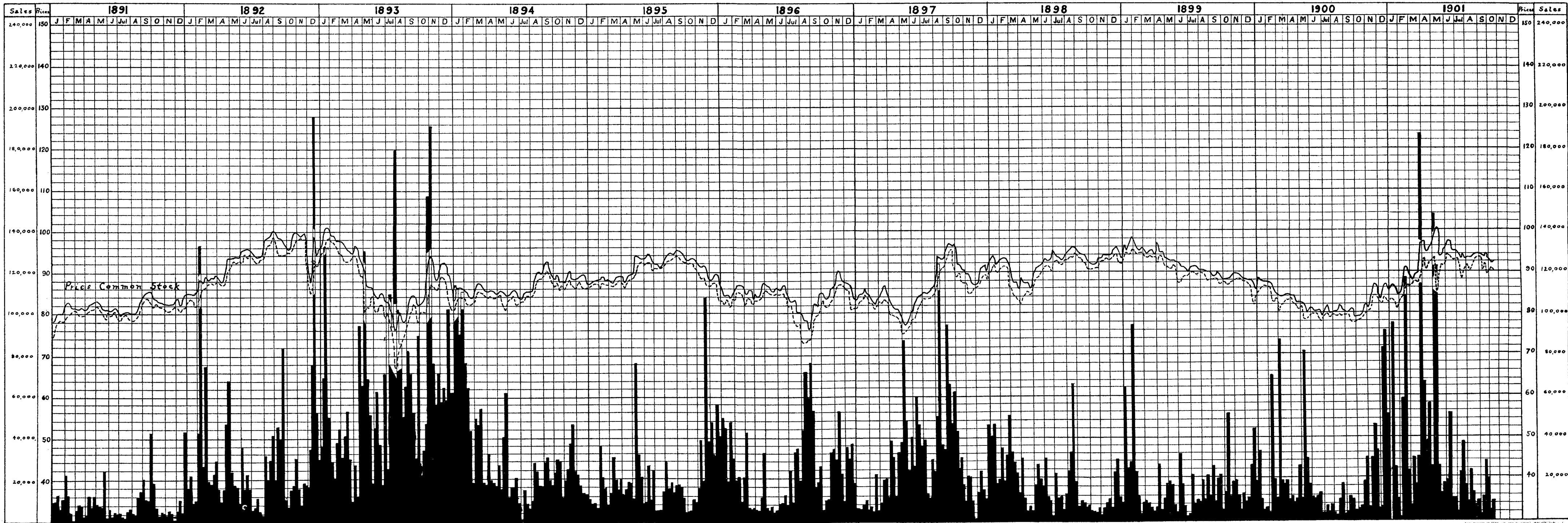
**A. Description of business.**—Mr. CHAPMAN states that the 140 properties controlled by the Pittsburg Coal Company are all in Pennsylvania within a radius of 75 miles of Pittsburg. These properties include practically all of the bituminous coal mines in that part of the State except those that are owned by the Monongahela River Coal Company. That company controls all the coal mines that are situated along the rivers. Its business is principally the mining of coal and sending it by barges down the Ohio and the Mississippi. In the territory controlled by that company such coal as can be loaded on cars from any of the mines is handled by the Pittsburg Coal Company. The Pittsburg Coal Company owns docks and loading and unloading facilities at various points on the lakes, including Fairport, Erie, Ashtabula, Cleveland, Chicago, Milwaukee, and Duluth. It owns a railroad at Duluth, the Northwestern Coal Railway, and a considerable mileage of railroad in the Pittsburg district. Mr. Chapman does not think that there is any community of interest in ownership between the Pittsburg Coal Company and the Pennsylvania Railroad Company. The Pittsburg Coal Company is the largest freight producer in the world, and to that extent there is a community of interest between the railroads and the company. The company owns little of the coking coal property. It furnishes coal to the various mills of the United States Steel Company which are located in the Pittsburg district. (100, 101, 103.)

**B. Organization and capitalization.**—Mr. CHAPMAN states that the company was organized in a way similar to that in which the American Smelting and Refining Company was organized. The Pittsburg Coal Company was organized under the laws of the State of New Jersey. The titles to the property and real estate, however, were lodged in a corporation organized under the laws of the State of Pennsylvania, and the Pittsburg Coal Company acquired title to all of the stock in this Pennsylvania company. Each subscriber got with his preferred stock 70 per cent of common stock as a bonus. The stock issued was \$32,000,000 7 per cent cumulative preferred and \$32,000,000 common. (99.)

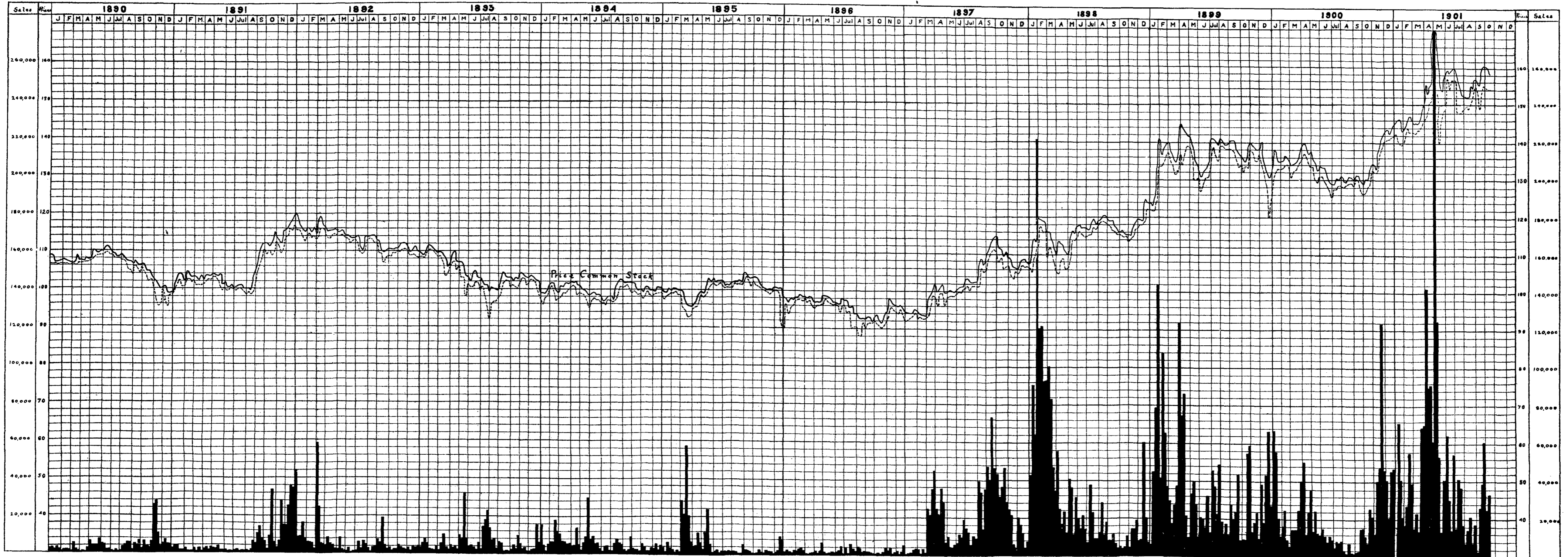
**C. Reasons for combination.**—Mr. CHAPMAN says that the Pittsburg Coal Company was formed because competition between the proprietors of the 140 different properties located in the Pittsburg district had gradually reduced the price of coal to a point which was in most cases below the cost of production. (99.)

**D. Earnings.**—Mr. CHAPMAN says that the net income of the Pittsburg Coal Company for the last year was between \$4,500,000 and \$5,000,000. It has paid a regular dividend of 7 per cent on its preferred stock, but no dividend on its common stock. Since organization something over \$3,000,000 out of the earnings of the company has been expended in the acquisition of additional coal mines. (101.)

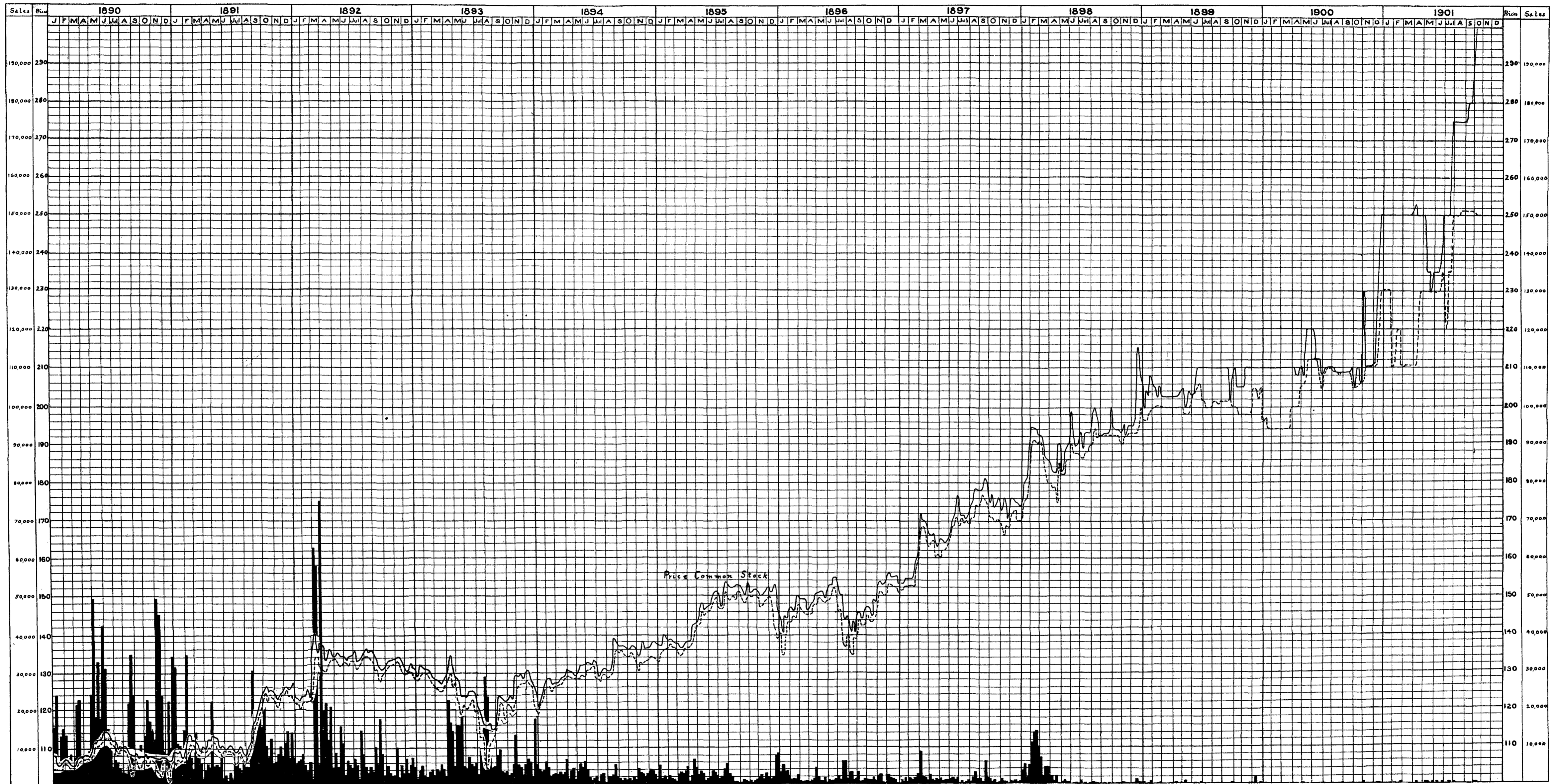
**E. Effect of combination on prices.**—Mr. CHAPMAN states that the price of coal has generally advanced since the formation of the Pittsburg Coal Company, owing to the fact that it has been impossible to meet the demand. The company is getting the same price for coal as that charged by independent companies. Large contracts are perhaps taken below regular rates. The company would for a time be able to maintain a price above what would be reasonable, but in the end that would correct itself. It would stimulate the opening of mines on lands owned by others. If the company raised the price to such a point that freight could be paid into the district from other districts it would bring in outside coal. (100, 102.)



WESTERN UNION TELEGRAPH CO.



NEW YORK CENTRAL AND HUDSON RIVER RAILROAD COMPANY.



LAKE SHORE AND MICHIGAN SOUTHERN RAILROAD

## CXII INDUSTRIAL COMMISSION:—INDUSTRIAL COMBINATIONS.

**F. Advantages to consumers.**—Mr. CHAPMAN states that although the price of coal has been higher since the combination, it is stable; and there is an ample supply of coal. The small producer will sometimes be unable to supply his customers with coal, but the combination can always divert coal from one point to another and supply its customers. (99.)

**G. Possibility of competition.**—Mr. CHAPMAN says that the Pittsburg Coal Company controls the bulk of the lake trade in coal, but that there is some competition from southern Ohio and West Virginia. Pittsburg coal is of superior quality. There are very few producing properties in the district where the properties of the Pittsburg Coal Company are situated that are not controlled by the company. An independent company with reasonable capital could compete with the Pittsburg Coal Company if it owned coal land and could produce coal. At a time of depression, with the market glutted, it would be at some disadvantage. It would be very difficult, however, to get capital to go into the Pittsburg field with a view to competing with the Pittsburg Coal Company. (101, 102.)

**H. Wages.**—Mr. CHAPMAN states that wages are adjusted on a sliding scale, which is arrived at every year after a series of conferences with the United Mine Workers' Association of America, and that the miners participate in any advance in coal. There is a minimum below which wages do not go in any case. (101, 102, 104.)

**I. Attitude toward labor.**—Mr. CHAPMAN says that he found that the leaders of the labor organizations were fully alive to the advantages of dealing with one concern rather than with 140; that it is his understanding that labor interests are well satisfied with the combination. The Pittsburg Coal Company deals with the representatives of organized labor, and prefers so to do. There has been harmony between the company and the Union Mine Workers' Association. The most enlightened managements of industrial combinations to-day admit the right of labor to protect itself by combination. (102, 102.)

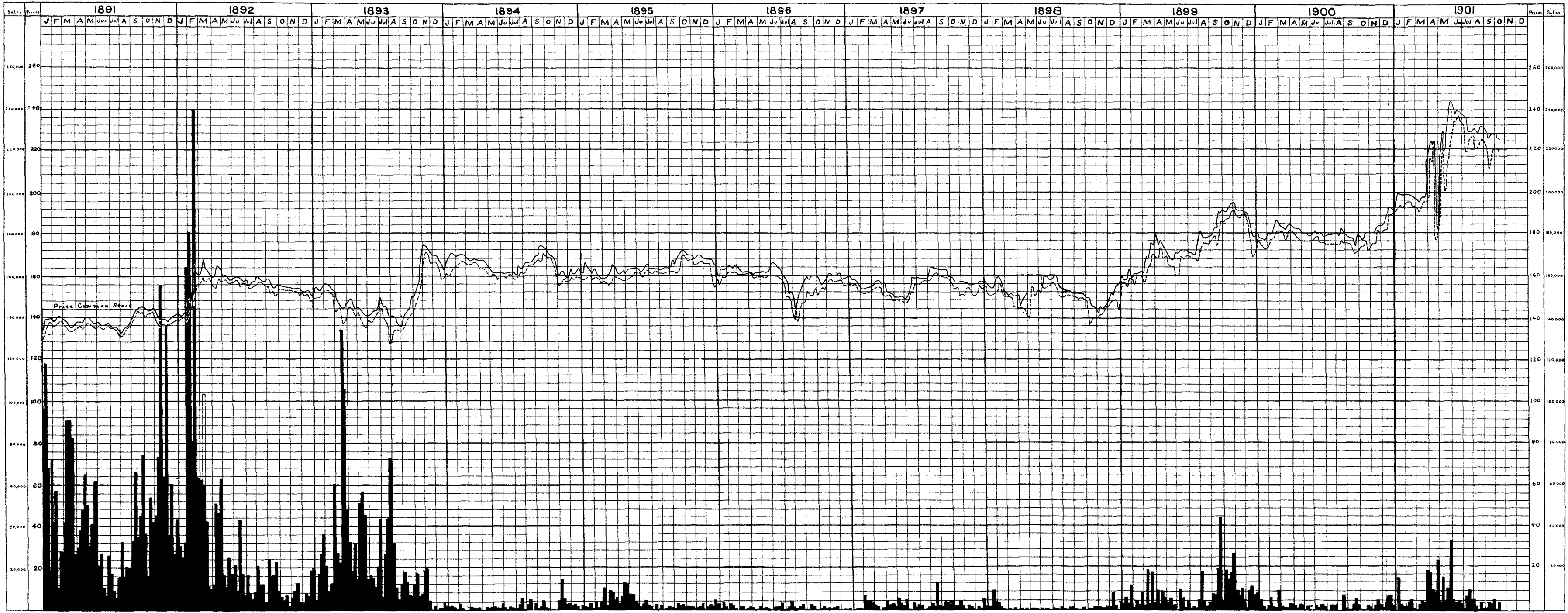
## XIV. NATIONAL STARCH COMPANY.

**A. Description of business.**—Mr. FLINT states that the National Starch Company manufactures about all the box starch made in the United States. The sale of the starch is dependent upon trade-marks. Many of the concerns in the combination have been in existence for over 30 years and have established a reputation that is represented by their trade-marks. Starch is a very important by-product of glucose.

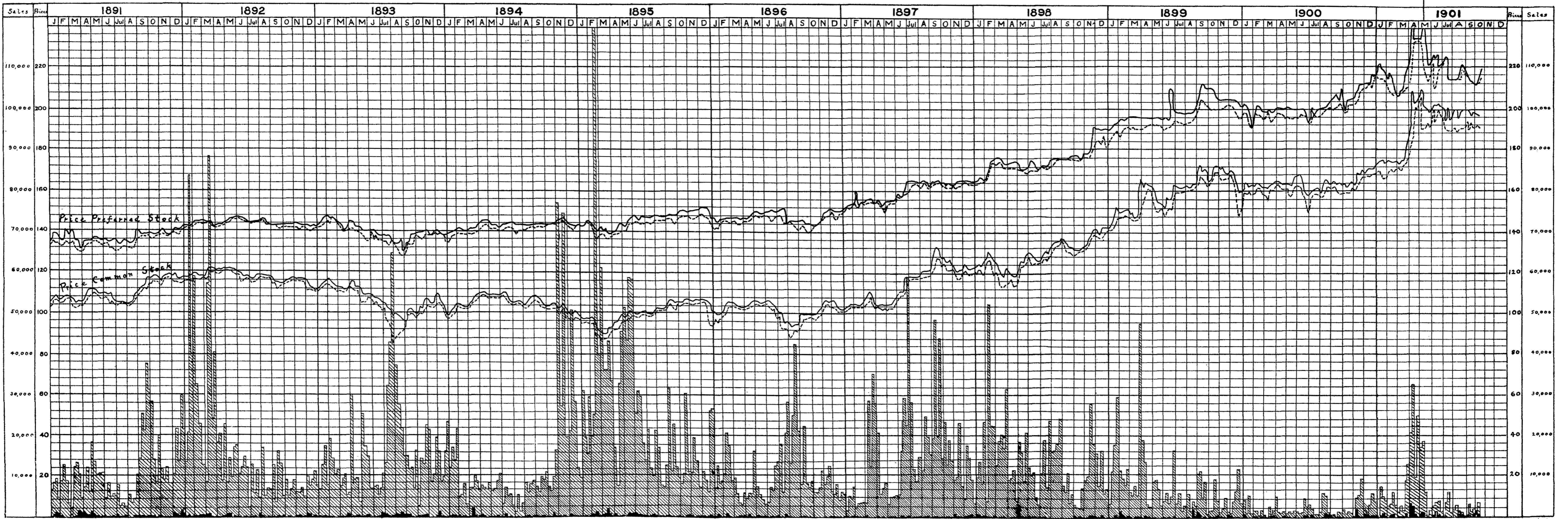
The papers submitted by Mr. Flint show that the National Starch Company includes the following concerns: George Fox Factory, Cincinnati, Ohio; Kingsford's Oswego Factory, Oswego, N. Y.; A. Erkenbrecher Factory, Cincinnati, Ohio; Duryeas' Glen Cove Factory, Glen Cove, L. I.; Wm. F. Piel Factory, Indianapolis, Ind.; Gilbert S. Graves, Buffalo, N. Y.; C. Gilbert Factory, Buffalo and Des Moines; Niagara Starch Factory, Buffalo, N. Y.; Excelsior Factory, Elkhart, Ind.; Sioux City Starch Company, Sioux City, Iowa; Argo Factory, Nebraska City, Nebr. (66, 67, 71.)

Mr. PIEL, president of the National Starch Company, says that his company produces probably 85 per cent and upward of the entire output of the country. (673.)

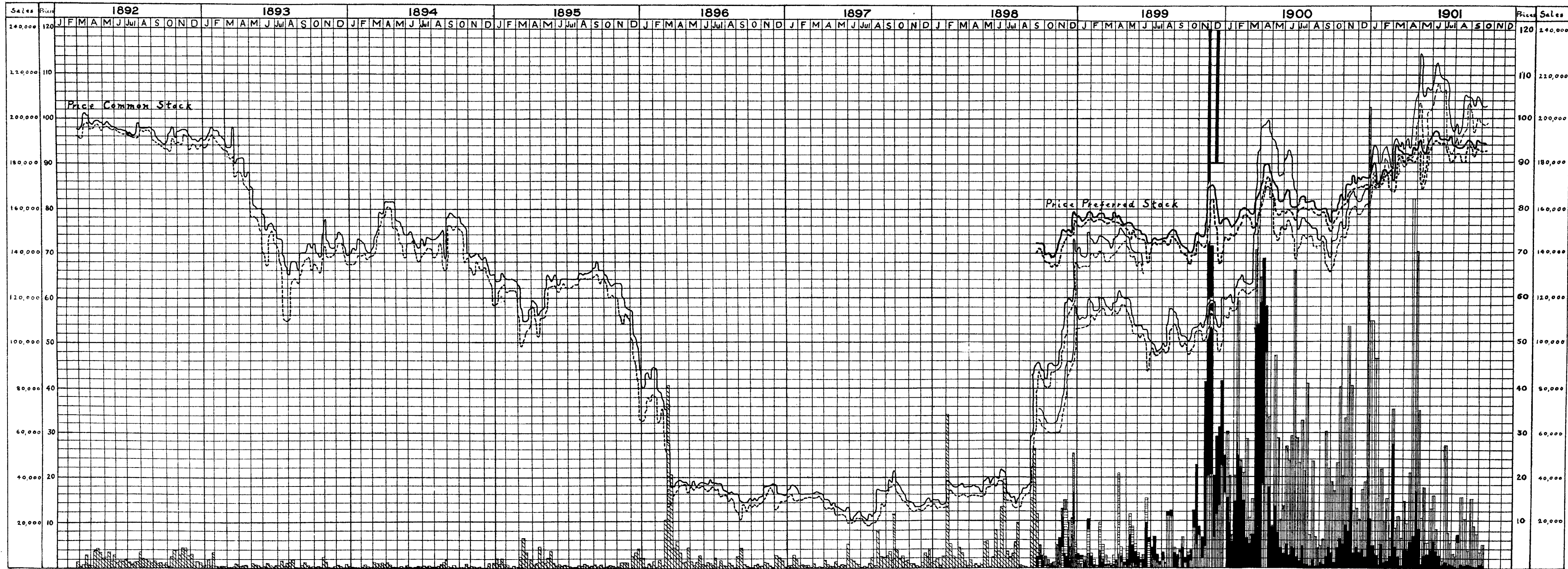
**B. Organization and capitalization.**—Mr. FLINT states that the first step taken in connection with the organization of the National Starch Company was the organization of a company known as the United Starch Company. The United Starch Company consolidated the manufacturers of box starch that were outside of the National Starch Manufacturing Company. A reorganization committee was then appointed for the National Starch Manufacturing Company. The holders of shares in that company were asked to deposit their shares with a trust company, subject to the orders of the reorganization committee. Over 90 per cent of the stock was deposited. The papers submitted by Mr. Flint show that the reorganization committee then negotiated with the owners of a controlling interest in the securities of the United Starch Company. As a result a large majority of the stock of that company was deposited with a committee appointed from its shareholders. Then the National Starch Company was formed, and a controlling amount of the capital stock of the National Starch Manufacturing Company, the United Starch Company, and the United States Glucose Company was acquired by the new company. The holders of stock in the separate companies were given the option of taking their pay in shares of the new company or in cash. In addition to \$4,500,000 preferred stock and \$5,000,000 common stock, the company issued \$4,000,000 of 25-year 5 per cent sinking-fund redeemable gold debentures. Mr. Flint states that the value of the tangible



DELAWARE LACKAWANNA AND WESTERN RAILROAD CO.

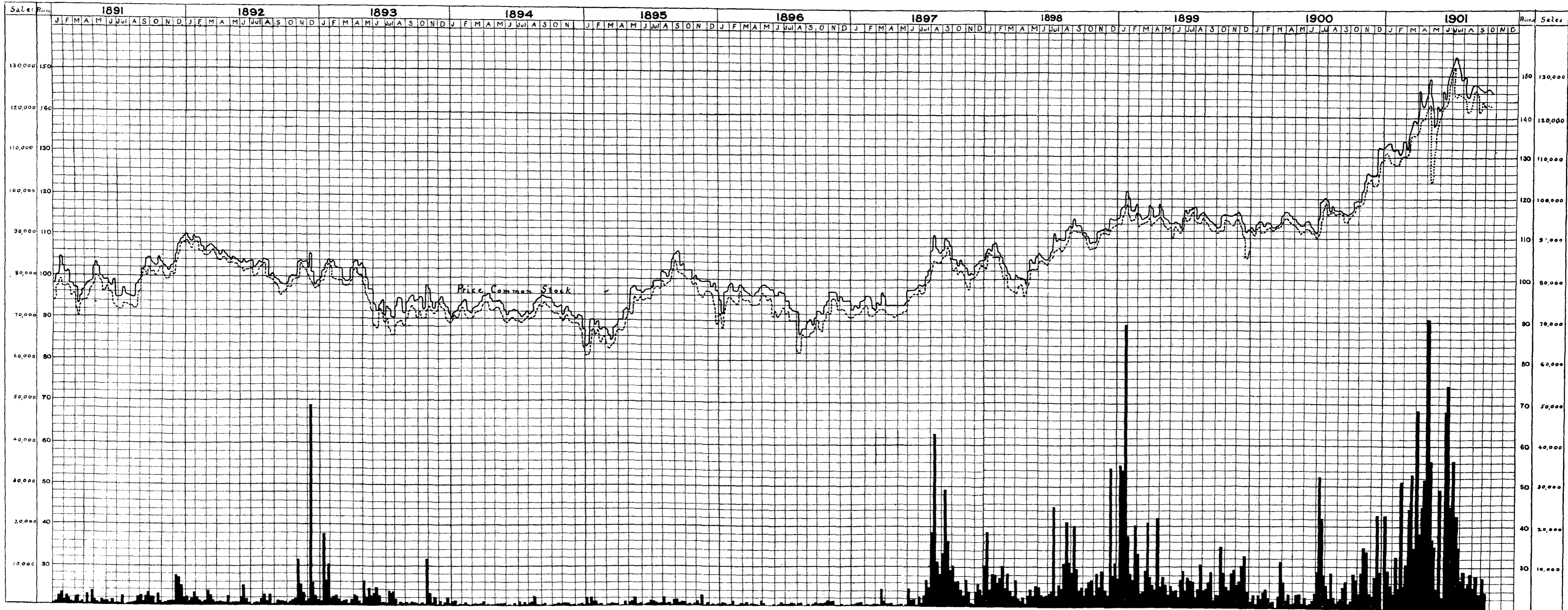


CHICAGO AND NORTHWESTERN RAILROAD CO.



BALTIMORE AND OHIO RAILROAD





ILLINOIS CENTRAL RAILROAD CO.

THE NATIONAL CITY AND TRUST CO., WASHINGTON, D.C.

assets exceeded the amount of the bonds and the preferred stock. Each subscriber received for a \$100,000 subscription \$37,528.20 in debentures and \$92,714.40 in preferred stock, or, at his option, \$37,528.20 in debentures, \$61,809.60 in preferred stock, and \$61,809.60 in common stock, those subscribing for smaller or larger amounts participating in like proportion. The only advantage the promoters received was that they had an opportunity of purchasing common stock at a price which, though substantial, was such as, in case the business was unusually prosperous, would show a satisfactory return. (66, 67, 69, 72, 73.)

Mr. Flint submits copies of the agreement for the reorganization of the National Starch Manufacturing Company and reports of the committee; and the certificate of incorporation and by-laws of the National Starch Company. (67, 80.)

Mr. Piel says that the National Starch Company was formed by the consolidation of the National Starch Manufacturing Company, which controlled more than 21 factories, and the United Starch Company, which operated 4 factories. (671, 672.)

Mr. Piel declares that the National Starch Company is not overcapitalized. The bonds and preferred stock of the company represent substantially the tangible assets. The common stock represents the good will, including the brands and the special processes of the company. Some of the brands are very valuable. (673.)

**C. National Starch Manufacturing Company.**—1. *Organization and capitalization.*—Mr. Piel states that in the organization of the National Starch Manufacturing Company a promoting company was formed to buy in the separate plants. It is believed that this promoting company paid for the plants in cash and in the various securities issued by the National Starch Manufacturing Company. The pay of the promoters was to be taken out of the sum total of the securities issued. The National Starch Manufacturing Company had an authorized capital of \$10,500,000, of which \$5,000,000 was common stock, \$3,000,000 preferred stock, and \$2,500,000 second preferred stock. There was also an authorized bond issue of \$4,500,000. Unquestionably, says Mr. Piel, the capitalization was excessive. (672, 673.)

2. *Reasons for formation.*—Mr. Piel says that the National Starch Manufacturing Company was formed because of the ruinous competition which had existed for some years, and because it was expected that economies could be realized through consolidation. (672.)

3. *Economies secured.*—Mr. Piel says that by the organization of the National Starch Manufacturing Company a saving was made through closing the poorer plants and concentrating the business in about 10 of the best establishments, which were run at their full capacity. Savings were also made through avoiding cross freights, through better organization of the traveling men and of the local agents, and through a better concentration of the managing talents of the different superintendents and heads of departments. (672, 673.)

**D. Effect of combination on prices.**—Mr. Piel says that the prices of starch have been more profitable to the organization than they were to the individual producers, that being due in part to the methods of production and in part to the greater ability to regulate the supply in the market to the normal demand. Mr. Piel submits a table giving the average prices of corn and starch during the years 1890-1900. (673, 674.)

**E. Effect of combination on wages.**—Mr. Piel says that higher wages have been paid in several departments, but that on the whole there can not be noticed much of any change, though there would probably have been an advance in the last 2 years had it not been for the fact that during the period of depression from 1893 to 1895 there was no reduction in wages. Wages are higher now than they were in the years 1888 and 1889, before the organization of the National Starch Manufacturing Company. (673.)

**F. Export trade and prices.**—Mr. Piel says that the company has a large export business, its market being substantially the world. It sells in practically every civilized country. The prices for export are made on substantially the same basis as the home prices. (673.)

## XV. UNITED STATES BOBBIN AND SHUTTLE COMPANY.

Mr. Flint submitted copies of the prospectus, the bond-subscription agreement, and the underwriters' agreement of the United States Bobbin and Shuttle Company. The prospectus stated that the company was to be organized for the purpose of acquiring all the plants, franchises, and other assets of the following manufacturers of bobbin and shuttles: The James Baldwin Company, Manchester, N. H.; Fall River Bobbin and Shuttle Company, Fall River, Mass.; Wm. H. Parker & Sons, Lowell,

## CXIV INDUSTRIAL COMMISSION:—INDUSTRIAL COMBINATIONS.

Mass.; L. Sprague Company, Lawrence, Mass.; Woonsocket Bobbin Company, Woonsocket, R. I. These concerns, it was stated, supplied bobbins to over 6,000 textile manufacturers, and did about 85 per cent of the business of the country.

The authorized capital of the company was to be \$800,000 in 7 per cent cumulative preferred stock and \$1,200,000 in common stock. Of this, \$600,000 preferred stock and \$950,000 common stock, or so much thereof as might be necessary, together with \$300,000 of bonds, were to be issued for the acquisition of properties and for working capital. It was provided that the aggregate of the bonds and preferred stock issued should not exceed the actual appraised value of the tangible assets. It was also provided that the tangible assets of the properties purchased should be appraised on the basis of their actual value to the respective businesses of the manufacturers as going and operative concerns, irrespective of either book or liquidating value. In making the appraisals no allowance was to be made for the value of any franchises, labels, or trade-marks, or for earnings or output.

Mr. Flint states that an issue of bonds was made for the purpose of providing cash for the treasury of the new company and for carrying out the plan of organization. The trust company advanced funds upon these bonds and upon the responsibility of the underwriters. The bonds were then offered for sale to the public, and, when sold, the money was paid to the trust company. Before the expiration of one year the bonds were all sold and the trust company was repaid. The trust company received a commission of 1 per cent on its advance, together with interest at the rate of 6 per cent per annum. The underwriters received stock. (57-66.)

### XVI. AMERICAN CHICLE COMPANY.

The memorandum submitted by Mr. FLINT states that the company owns the following properties: Beeman Chemical Company, Cleveland, Ohio; Kis-Me-Gum Company, Louisville, Ky.; S. T. Britten & Co., Toronto, Ontario; W. J. White & Son, Cleveland, Ohio; J. P. Primly, Chicago, Ill.; Adams & Sons, Brooklyn, N. Y. The company produces all the standard brands of gum, and its output represents about 65 per cent of the output of the United States. There is not much export business as yet. (53, 80.)

In the organization of the company \$3,000,000 in 6 per cent cumulative preferred stock and \$6,000,000 in common stock were issued. There was no formal appraisal of the tangible assets, but their value was accurately ascertained. In round numbers, the preferred stock was 3 times the amount of the tangible assets and the common stock was double the amount of preferred stock. The most valuable property of the Chicle Company is its trade-marks. It has been shown that the capitalization of the company was on a conservative basis as compared with its earning capacity, since the company earns about 6 times the dividends on its preferred stock and has paid 8 per cent on its common stock, and the market price of the common stock is \$80 per share. The price of preferred stock is about the same. (50, 51.)

The promoters were free to buy the properties of the separate companies at as low a price as possible and to keep whatever stock was left, out of the total issue of \$3,000,000 preferred and \$6,000,000 common stock, after the properties were paid for. (51.)

The subscription memorandum submitted by Mr. Flint stated that each accepted subscription of \$100,000 would entitle the subscriber to \$100,000 par value in preferred stock and \$50,000 in common stock, subscriptions for larger or smaller amounts to participate in like proportion. (52.)

Mr. Flint says that the remarkable earning capacity of the American Chicle Company has resulted from the putting out of good goods through a long series of years. The manufacturers interested in the company had for years produced goods that the public found to be of superior quality, and they spent hundreds of thousands of dollars in advertising their products. When they came together they brought trade-marks which represented the good will that they had built up. There are perhaps 30,000,000 people who want to buy the brands of gum manufactured by the company. The earning capacity is largely dependent upon these trade-marks and upon good will, and dependent only to a slight extent upon tangible assets. (53.)

### XVII. AMERICAN CARAMEL COMPANY.

Mr. FLINT states that the American Caramel Company manufactures only caramels. It has trade-marks for all its products. All the caramels that are widely distributed are controlled by it, but the companies which manufacture what are supposed to be the highest grade of caramels, the sale of which is limited to people who pay high prices, are not included.

The method of organization was similar to the method of organization of the rubber companies and of the American Chiclé Company. The value of the business is largely dependent on the value of the trade-marks. The tangible assets are relatively larger than in the case of the American Chiclé Company. (54, 65.)

### XVIII.—WINDOW-GLASS COMBINATIONS.

Mr. HOLT, Secretary of the Tariff Reform Committee of the Reform Club of New York City, says that the history of the glass industry for the last 20 years has been, on the part of the manufacturers, a succession of combinations, pools, lockouts, price-list committees, and agreements fixing prices and wages and limiting production; and, on the part of the labor unions, a history of strikes, wage committees, and wage-scale agreements. The result is that we usually pay double price for our glass, and both the industry and the workers are in a backward state of development. Instead of making the best and cheapest glass and dominating the world's markets, we are only partially supplying our own market; and that with inferior goods, which sell at double the price of better goods in Europe.

Instead of the workers being the most skillful and independent of any on earth, they are not as highly skilled as the Belgians, who are continually coming over to recruit our skilled-labor ranks. By means of the tariff, the manufacturers make the American consumer pay \$2 for \$1 worth of glass. The labor unions, by their alien contract labor laws and stringent apprenticeship rules, hold up the manufacturers and get about 25 cents out of every extra dollar wrung from the consumers. From 1880 to 1888 the American Window Glass Manufacturers' Association was in existence, and decided how many and what works should be closed, what wages should be paid, and what prices charged. Since 1880 there have been periods of comparative competition and low prices, but during such periods the trust people have been playing for a new deal and a new grip on the industry. Since 1890 the United States Company, a corporation owning 17 of the 108 plants which were in existence in 1890, has formed the backbone of the window-glass trust. From 1893 to 1895 the trust was not in good working order, and prices were comparatively low. In 1895 the American Glass Company, a selling pool for 85 per cent of the factories, was formed. This was succeeded by the American Window Glass Company, a corporation with \$17,000,000 capital, which was formed in October, 1899. The estimated value of the 40 or 50 plants absorbed by this company is said by one of the organizers to have been \$6,190,000. Mr. Holt quotes from the Commoner and Glass Worker of October 21, 1899, which says that "the pool is said to have made \$700,000 in 1896, and \$1,750,000 in 1897, and \$2,100,000 in 1898." (564-566.)

The company owns factories with a capacity of 1,900 pots out of a total capacity of about 2,600 pots. It does not possess a complete monopoly; it is said to "hold the umbrella" under which new factories outside of the trust have been built and have made great profits. (565, 566.)

From 1860 to 1890, according to Mr. Holt, prices of window glass in this country declined an average of only 8 per cent, although foreign prices declined 54 per cent from 1867 to 1890. Our prices for ordinary sizes are now higher than in 1890 or in 1860. In general, prices for the last 4 years have been nearly double what they were for the previous 3 years. Prices are about double what they are in Belgium and England. Mr. Holt quotes from the Commoner and Glass Worker of October 21, 1899, to the effect that the price of glass at that date was fully double what it had been in 1893. Prices were comparatively low early in 1900, but advances were made later, and prices are now about back to the high level of 1899. In no other industry, perhaps, are prices adjusted to the cost of imported goods with such precision. The prices at interior points are higher than on the seaboard. Customers at Pittsburg, in the shadow of the factories, had to pay 14 cents per box more for ordinary window glass than customers at Boston, and 20 cents more than Pacific coast customers. The country was divided into 6 districts, and the prices for each were determined by the cost of the imported glass in each district after payment of duty. (565, 566.)

Mr. GUNTON says that the price of foreign glass has risen since 1880, while the price of American glass has fallen. The glass trust was formed in August, 1899, and since the formation of the trust the rise of prices in this country has been 16 per cent, while the rise of prices abroad, where there is no tariff trust, has been 22 per cent. Mr. Gunton submits a table, giving the average prices of domestic and foreign window glass, in 5-year periods, from 1880 to 1900. (631.)

Mr. HOLT says that during the last 2 years, since the window-glass trust has been formed, and since the workers have had an agreement with the manufacturers, the factories have been closed an average of 5 or 6 months each year. The workers

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recognize that that is the only way of sustaining the manufacturers' profits and the present rate of wages. The workmen share in the tariff profits of the industry and ally themselves with the manufacturers against the whole consuming public. Many of the leaders of the workmen in the window-glass industry say that it would be better for the workers if they could work as ordinary workmen; that is, at a somewhat lower wage, but continuously. (579.)

### XIX.—BORAX CONSOLIDATED WORKS, LIMITED.

Mr. HOYT says that the borax trust is a world trust, and consists of an amalgamation of the 12 principal borax producers and refiners in the world. According to the Oil, Paint and Drug Reporter of January 30, 1899, nearly the whole supply of the world is obtained from them. (567, 568.)

The principal borax mines of the world are in California and Nevada, in Asia Minor, Peru, and Chile. The largest, most easily worked, and most productive mines in the world are those in California. They were discovered in 1856, but not much worked until 1873. Because of the limited area in which the mines are found and the difficulty of reaching and operating them, it is but natural that they should fall into a few hands and that the few owners should combine to prevent competition. As early as 1878 an agreement was entered into between the California producers by which production was to be curtailed. A more formal combination was formed in 1879. In 1885 the borax board, including about all the producers upon the Pacific slope, was organized. In 1890 the Pacific Coast Borax Company absorbed nearly all the producers. This company has usually worked but 1 or 2 of the 10 or 12 mines which it owns. Prior to the latter part of 1894 there was an understanding between the foreign syndicate, which controlled the European market, and the Pacific Coast Company, so that the latter was left to the enjoyment of the American market. After the reduction of duties in 1894, our producers began an aggressive warfare on the foreign monopoly. In June, 1896, the Pacific Borax and Redwood's Chemical Works, Limited, was incorporated in England with a capital of \$2,550,000 and \$500,000 in bonds. It took over the business and properties of the Pacific Coast Borax Company, and of Redwood & Sons, chemical manufacturers in England. In 1899 a new combination, the Borax Consolidated Works, Limited, with a capital of \$7,000,000, under the control of the California producers, was formed. The prospectus issued at the time of the amalgamation of the Pacific Coast Borax Company and Redwood & Sons stated that the earnings of the 2 companies (the Pacific company being by far the larger) were \$446,000 in 1892-93, \$405,000 in 1893-94, and \$267,000 in 1894-95. The reduced profits of 1894-95 were due to the reduction in the price of borax by the American company. (567, 570.)

*Labor in the borax industry.*—Mr. HOYT states that practically all the labor employed in the borax beds when the Wilson law was under discussion was Chinese and Indian, hundreds of the laborers working for \$1 a day. (570.)

### XX.—CLEVELAND AND SANDUSKY BREWING COMPANY.

Mr. CHAPMAN says that the method of organization of the Cleveland and Sandusky Brewing Company was similar to that employed in the other companies with which he is connected, except that bonds, as well as preferred and common stock, were issued. Only American capital entered into the capitalization. Brewers took about 50 per cent of the stock. The company sells its beer outright to the retail saloons. It owns a great deal of real estate where the saloons are situated. To some extent the brands of the different concerns have been retained under the combination, but the great bulk of beer is sold under the general name. Through the consolidation, the cost of delivery of goods has been enormously reduced. Formerly each brewer delivered beer to every part of the city; now the deliveries from each brewery are confined to the portion of the city in which the brewery is situated. (104, 105.)

### XXI.—BROOKLYN UNION GAS COMPANY.

Mr. CHAPMAN states that in organizing the Brooklyn Union Gas Company the franchises of 7 different gas companies in the city of Brooklyn were purchased. Each of the companies was bought with all its rights, privileges, and franchises. Those effecting the consolidation had to go into the market and purchase the stock from the owners. When two-thirds of the stock of each of the companies had been acquired an agreement was made for the organization of another company, the Brooklyn Union Gas Company, to take over the separate companies at a consideration

which had more reference to the cost of the properties in the market than to their value. The Brooklyn Union Gas Company issued \$15,000,000 in bonds and \$15,000,000 in common stock. Privileges, franchises, extent of business done, and that sort of thing were taken into consideration. The properties had become very valuable. For some of the stock which was bought in open market \$400, and in one case \$500, per share was paid. (104-106.)

### XXII.—STANDARD OIL COMPANY.

The following (excepting statements taken from the testimony of Mr. Gunton) is a summary of certain affidavits in confirmation or in rebuttal of testimony contained in Volume I of the Reports of the Industrial Commission.

**A. Prices as affected by competition.**—Mr. LEE, president of the Pure Oil Company, states that a comparison of the price of oil in March, 1896, in New York, as given by Mr. Archbold, with the average price for March, 1898, as given by him, is confirmatory of the deponent's statement that there was a rapid reduction in price after the Pure Oil Company began the sale of oil in the city of New York. The price given by the deponent as the average price for July, 1898, is correct, and Mr. Archbold, in giving a higher price as the price for July, included all the business of the Standard company for that month, and included not only the sales made in July, but previous contracts for July, some of which were possibly made before the Pure Oil Company began business. (660.)

Mr. Lockwood, a producer of petroleum at Zelenople, Pa., presents sworn evidence and statements from the export books of the independent refiners to prove the truth of the statement previously made by him that competition was putting refined oil into tank steamers for the competitive markets of Germany for 2 cents a gallon, while the Standard was forcing the people of Texas and Arkansas to pay 25 cents a gallon for oil. He quotes from the export books of the independent refiners, giving pages and dates, to show that at various times during the year 1894 oil was sold for export to Germany at prices which netted the refiners from 1.9275 cents per gallon up to 2.7 cents per gallon. He also presents sworn affidavits from several citizens of Texas stating that in April and May, 1901, they were paying 20 cents per gallon for oil, and that that was the regular price charged for oil at that time. In one of the affidavits presented it is stated that the deponent, for a period of 7 years next preceding the year 1898, had paid 25 cents per gallon for oil. He also presents a sworn affidavit from a former citizen of Florida, stating that from 1885 to 1890 he paid not less than 25 cents a gallon for oil, and that that was the usual retail price for oil at that time in that State. (652, 653, 656.)

Referring to the affidavit of Mr. Lockwood, Mr. ARCHBOLD states that Mr. Lockwood simply shows that the independent refiners exported oil which, after deducting commissions and other expenses, netted the refiners something over 2 cents per gallon. This is very far from proof of the assertion that oil is put into tank steamers for Germany at 2 cents per gallon. In reference to the prices of oil in Texas, Mr. Archbold states that the affidavits submitted by Mr. Lockwood showed that 20 cents per gallon was charged for oil in Texas, but did not show how many middlemen's profits had been added to the wholesale price. That was the retail price in a remote section. Oil transported such a distance in cans is not expected to be the cheapest. (669.)

Mr. GUNTON says that the Standard Oil Company has not practiced extortion on the public. It gives the public just as much for a dollar as any competing refinery gives. There are nearly a hundred competitors of the Standard Oil Company, and there is not one of them that sells oil any cheaper than the Standard Oil Company. (637, 638.)

**B. Effect on crude-oil market.**—Mr. GUNTON says that the Standard Oil Company fixes the price of crude oil in this country. The company buys all the crude oil there is, no matter how much or how little there may be. It pays the same price to everybody. If the stock on hand is getting too large it lowers the price, and keeps on lowering it, if oil continues to come, until it does not pay to sink more oil wells. On the other hand, if the stock on hand is getting low, the company raises the price. There was no universal price in oil previous to the formation of the Standard Oil Company. The pipe lines never worked together. (635, 636.)

Mr. Gunton declares that the Standard Oil Company has been a positive benefit to producers of oil. The company pays the oil producers more for their oil than anybody else could give them, and more than they could obtain if they took the oil to the market themselves. The evidence of this is that all the producers are glad to sell to the Standard Oil Company, and many of the small producers say that it would not pay

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them to market their oil themselves, and that they have never done so well as since they have sold their oil to the Standard Oil Company. The Standard Oil Company has reaped a benefit also, because, by reason of its superior facilities, it is able to utilize the oil to great advantage and to refine it at a lower cost than anyone else can. (636.)

**C. Competitive methods.**—Mr. GUNTON says that it is not the general practice of the Standard Oil Company to follow the small producer into a given market and undersell him in that market. That has been done here and there, but in the case of those refining concerns which have \$1,000,000 or \$2,000,000 of capital, prices are fixed by nothing of that kind. (638.)

**D. Railroad discriminations.**—1. *Contracts for discriminations.*—Mr. LLOYD, author of "Wealth Against Commonwealth," says that the official publications of Congress and of the State of New York show that the South Improvement Company had contracts with the railroads of the oil regions binding them in substance:

First. To increase the oil freight rates.

Second. Not to charge the South Improvement Company with the increase.

Third. To collect the increase from its competitors.

Fourth. To put the rates of freight up or down as might be necessary to overcome its competitors.

Fifth. To spy out the details of the business of its competitors, and make reports to the South Improvement Company of all shipments made by these competitors, with full reports as to how much they shipped; to whom, etc. (640, 641.)

The identity of the South Improvement Company and the Standard Oil Company is shown by the fact that 10 of the 13 members of the South Improvement Company were active members of the Standard Oil Company, among them the president and a majority of the directors. The New York assembly committee of 1879 officially stated that the controlling spirit of both organizations was the same. (641.)

Mr. Lloyd further states that official reports, such as the decision of the supreme court of Ohio in 1885, show that the Standard Oil Company made contracts with various railroads similar to the contracts which had been made by the South Improvement Company for the making of freight discriminations by the roads. A decision of the supreme court of Ohio revealed the fact that in 1875 the Standard Oil Company secured a contract from the Lake Shore Railroad to the effect that the road should keep the price of transportation "down for the favored customers, but up for all the others," the effect of which contract was to enable the Standard Oil Company to establish and maintain an overshadowing monopoly. Because of this contract the company was enabled to make a contract with a firm of Cleveland competitors, by which that firm was put under bond to refine only about half of its capacity for the ensuing 10 years. That such a contract was made is shown by the exhibits, affidavits, and decisions in the case of *The Standard Oil Company v. W. C. Schofield et al.*, which was decided in Ohio in 1880, the court setting aside the contract as unlawful and in restraint of trade.

Testimony taken by the Interstate Commerce Commission in Boston in March, 1898, seems to show that the Boston and Albany Railroad was underbilling cars of the oil trust to such an extent that in some cases half of such shipments within Massachusetts went free. Evidence taken in an investigation made in the early part of 1900 by the Canadian Parliamentary Committee seems to indicate that the Canadian railroads had been putting the price of transportation "down to the favored customers and up for the others." "Wealth Against Commonwealth" quotes from the reports, decisions, and testimony of the Interstate Commerce Commission, showing that the principal matters litigated before the Commission have been discriminations made by the railroads to the profit of the oil monopoly; that the cases referred to cover the oil business on practically every road of any importance in the United States, and on the steamship and railroad association controlling the South and Southwest; and that from ocean to ocean, and from the Gulf of St. Lawrence to the Gulf of Mexico, wherever the American citizen seeks an opening in this industry, he finds it a privilege of a few and shut against the common people. (641, 642, 645.)

2. *Pennsylvania Railroad.*—Mr. LLOYD states that in "Wealth Against Commonwealth" is reproduced the final finding of the New York assembly committee of 1879 that, in 1877, the railroads of the East united in a railroad war against the Pennsylvania Railroad, and "joined hands with the Standard Oil Company and proceeded to enforce by a war of rates" a sale by the Pennsylvania Railroad to the oil monopoly of its entire outfit, pipe lines, cars, and refineries in New York and Pennsylvania. There is quoted also the testimony given by Mr. A. J. Cassatt, president of the Pennsylvania road, who was friendly to the oil trust, to the effect that after this sale by the

Pennsylvania road of its oil business and oil outfit, all the remaining competitors of the oil monopoly who were doing business over the Pennsylvania lines were notified that thereafter the Pennsylvania Railroad would give lower rates to the members of the oil monopoly than to them, and that they would not be allowed to put cars of their own on the road, though the Standard Oil Company was allowed to do so. (642, 643.)

Mr. Lloyd also states that "Wealth against Commonwealth" quotes Mr. John D. Archbold, when put on the witness stand in the proceedings brought by the State of Pennsylvania against the Pennsylvania Railroad in consequence of the discriminations made by that road, as stating under oath that he was not allowed a rebate amounting to 64½ cents per barrel, but immediately afterwards, upon being compelled to produce his books, admitting that there was a total allowance of 64½ cents per barrel. Judicial inquiry in Pennsylvania and legislative inquiry in New York show that the Pennsylvania and other railroads paid to some of the members of the Standard Oil Company, under the name of the American Transfer Company, in 1878, an allowance of 22½ cents a barrel on all oil which these railroads carried from the oil regions. Mr. A. J. Cassatt, then third vice-president of the Pennsylvania Railroad, now the president of that road, stated in his sworn testimony in the case of Commonwealth of Pennsylvania v. The Pennsylvania Railroad et al. that this allowance was paid to the American Transfer Company on oil which the American Transfer Company never handled. It was paid on all oil received and transported by the road. (643.)

3. *Monopoly of pipe lines secured through railroad discriminations.*—Mr. LLOYD states that in "Wealth against Commonwealth" official findings are quoted to show that the monopoly of pipe lines now held by the Standard Oil Company was secured through railroad discriminations. The report of the New York Assembly of 1879 is quoted to show that the rates made by the railroads to the pipe lines of the Standard Oil Company were such that the company "could overbid in the producing regions and undersell in the markets of the world." The Tide Water Pipe Line, the first trunk pipe line built to the seaboard, was built by competitors of the Standard Oil Company. The railroads made war on the Tide Water line by reducing rates to such a point that, according to a witness friendly to the Standard Oil Company, they were "not enough to pay for the wheel grease." As a result, the Tide Water Pipe Line passed into the control of the National Transit Company, which is the pipe line branch of the oil monopoly. (642.)

4. *Monopoly of oil terminal facilities.*—Mr. LLOYD states that in 1879 the New York Assembly committee found that the oil combination was in control of the oil terminal facilities of the four great trunk lines at New York, Philadelphia, and Baltimore. In 1892 the western traffic manager of the Erie testified before the Interstate Commerce Commission that he would not receive at the Weehawken oil docks of the Erie road a shipment of oil in competition with the oil of the monopoly, and the Interstate Commerce Commission found that in 1892 the oil combination had a monopoly of those facilities. (643.)

5. *Discriminations against George Rice.*—Mr. HENRY D. LLOYD, author of "Wealth against Commonwealth," in his affidavit states that "Wealth against Commonwealth" quotes decisions of a Federal court, of the Interstate Commerce Commission, of the supreme courts of New York and Ohio, the testimony of friendly railroad men, and of men connected with the Standard Oil Company, to the effect that discriminations were made against Rice by many railroads; that his freight rates were doubled and more, while they were not only not increased to the monopoly, but were actually lowered to it; and that freight rates collected from Rice were paid over to the Standard Oil Company. The railroads refused to Rice, after the passage of the interstate-commerce act, the right to put on his own cars, and in repeated cases refused him information even as to what would be the freight rates charged him if he undertook to ship anything. The testimony of one of the men of the oil monopoly, given before the Interstate Commerce Commission, is quoted to the effect that arrangements were made for having Rice's business spied out for the oil monopoly. In this discrimination against Rice nearly all the railroads of the Mississippi Valley and on the Pacific coast took part. The Ohio supreme court, in deciding a case brought by the State of Ohio against certain railroads to forfeit their charters for the treatment of Rice, decided that these railroads had charged "discriminating rates" which "tended to foster a monopoly." A large part of the time and attention of the Interstate Commerce Commission was taken up for several years in hearing the complaints of Rice, and in the large proportion of the cases brought by Rice before the Commission, the Commission found his complaints justified, and ordered the roads to give him relief. The Interstate Commerce Commission makes mention of the fact that Rice was misled and misinformed by the railroad officials, and it noted "that it was not a subordinate agent or servant who made the mistake in any instance, but it was the man



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at the head of the traffic department, and whose knowledge on this subject any inquirer would have a right to assume must be accurate." (643, 644.)

6. *Later discriminations.*—Mr. LEE states that the letters submitted by Mr. Archbold, on pages 517 to 526 of his testimony,<sup>1</sup> are inconsequential. The deponent has knowledge of a case in which the general freight agent swore that no discriminations in rates were made, but where the auditor of the road testified that discriminations were made, and submitted written statements showing discriminations to the amount of thousands of dollars. (660.)

Mr. GUNTON says that there is no doubt whatever that in the early seventies the Standard Oil Company got rebates from the railroads. Everybody got rebates, and it was simply a question of who could get the biggest. The Standard Oil Company did the best it could along that line. There is no such thing now, and the railroad rates are nearly as fair as they are likely to be. (637.)

**E. Burning of books.**—Mr. MONNETT refers to the sworn testimony of witnesses who helped burn the books of the Standard Oil Company, and of draymen who helped to haul them to the fire, which he previously presented; and states that since that time one of the traveling auditors of the company has admitted that he was out collecting the books and records that were shipped in to the office and burned, and that he himself was ordered, if subpoenaed, to answer no questions, but to go to jail in contempt. (658.)

Mr. ARCHBOLD says that the Standard Oil Company has been vindicated by the court of the charge of burning its books, and that there was in the evidence given by Mr. Monnett before the Industrial Commission both suppression of truth and suggestion of falsehood. Mr. Archbold submits extracts from the testimony in the case and affidavits made and filed in the case by Charles C. Hogan and S. H. Tolles. (665-668.)

**F. The bribery case in Ohio.**—Mr. MONNETT states that on the day on which he began to take testimony to establish the allegations made that the Standard Oil Company had offered a bribe to him and to the former attorney-general, the chief justice of the supreme court, at the request of the attorneys of the Standard Oil Company, verbally ordered him not to take the testimony, and that the charges were thereafter dismissed by the court without the hearing of any testimony on the part of the State to establish the same, the court holding, among other things, that it had no jurisdiction over the question of contempt as charged. (658.)

Mr. ARCHBOLD says that the court has completely vindicated the Standard Oil Company of the charge of bribery. In December, 1899, the court unanimously entered the following order in the bribery case:

"It is ordered that the information herein filed by the attorney-general on the 15th day of April, 1899, be stricken from the files, it not appearing that there is any competent evidence to connect the defendant with the alleged offer to the attorney-general."

Mr. Monnett did not begin to take testimony as he swears. He did give notice that he would take testimony before a notary public, a proceeding which he knew to be illegal and contemptuous. This proceeding the court peremptorily stopped. Mr. Archbold submits extracts from various newspapers commenting upon Mr. Monnett's charge of bribery, a copy of a letter written by the Standard Oil Company's attorneys to Mr. Monnett, a copy of the motion made by the attorneys of the Standard Oil Company in answer to the bill of information filed by Mr. Monnett, and a copy of a denial of any attempt at bribery stated to have been made to the press by Charles B. Squire. (660-665.)

**G. Standard Oil Company a violator of law.**—Mr. MONNETT, ex-attorney-general of Ohio, states that the Standard Oil Company and affiliated companies in Ohio have, each and every one, openly and notoriously violated their charters and the statutes of the State, and do not dare go into court and answer the charges of such violation. He submits a copy of an affidavit presented to the court by Henry H. Rogers, president of the Standard Oil Company, stating that the answer of the Standard Oil Company was not verified because the admission of the truth of certain facts stated in the pleadings might subject the defendant and its officers to a criminal or penal prosecution and to a forfeiture of the company's charter, franchises, and privileges; and that the interrogatories were not answered for the same reason. (657.)

**H. The Mathews case.**—Mr. MATHEWS, a producer and refiner of petroleum, of Buffalo, N. Y., says that after the Buffalo Lubricating Oil Company had secured a promise from the Atlas Oil Company that the latter company would give the Buffalo company a 5-year contract to furnish crude oil at a rate of 10 cents a barrel for

<sup>1</sup> Reports of the Industrial Commission, vol. i.

piping, the Standard Oil Company got control of the Atlas Oil Company and advanced the carrying charges from 10 to 25 cents per barrel, and afterwards to 35 cents per barrel. The railroads also advanced all rates on oil going out of Buffalo, although the rates on other commodities were generally reduced.

The first still of oil which was run at the Buffalo works was run under such extraordinary heat and pressure that an explosion occurred. The superintendent of the company, one Miller, fled under suspicious circumstances, and was secreted by and placed on the pay roll of the Vacuum Oil Company, which company was under the control of the Standard Oil Company.

The Standard Oil Company also brought a number of groundless suits for infringement of patents against the Buffalo company, the subsequent course of which showed that the object of the Standard people was to involve the Buffalo company in expensive and harassing litigation.

In February, 1886, an indictment was found by the grand jury against H. B. Everest, C. M. Everest, John D. Archbold, Henry M. Rogers, and Ambrose McGregor for entering into a conspiracy to destroy the business of the Buffalo company by corrupting its servants, by bringing vexatious suits at law, and by blowing up its works. The trial was delayed by the Standard people on different pretexts. When the case finally came to trial the State's attorney made out a convincing case against the defendants, but the trial judge, Judge Haight, directed the jury to acquit Archbold, Rogers, and McGregor. This was done, although the judge had in his hands the sworn answer of Archbold, Rogers, and McGregor, given in a civil action for damages, admitting that they advised their co-defendants, H. B. and C. M. Everest, to bring the actions for the infringement of patents and to re-employ Miller.

It was also shown at this trial that the Standard interests had been paying one of the employees of the Buffalo company to make daily reports concerning that company's business to Mr. Dodd, the Standard's attorney.

The affidavits of the six jurymen, submitted by Mr. Archbold, were taken a year after the trial. When they were first presented the district attorney offered to prove that money was offered to procure affidavits from other jurymen of the panel. A reading of the record of the trial will show that the Standard officials would have been convicted if the case had gone to the jury. They had been unanimously decided against by two grand juries and two petit juries in Buffalo.

The Buffalo company continued to be so harassed and discriminated against that it became involved and was thrown into the hands of a receiver. The Standard interests made an offer of \$85,000 for the refinery and for the cancellation of all the company's suits against the Standard. Although all the stockholders of the company and the creditors asked to have this proposition refused, Judge Haight, before whom this motion also came, ordered the receiver to accept it. (647-650.)

Mr. ARCHBOLD says that it will be easily seen from the record in the Mathews case that there was not in that case a particle of evidence against any member of the Standard Oil Company upon which any court could have held them, and that the record supplemented by the subsequent affidavits of several of the jurors shows that the Everests were convicted only of enticing away a workman under contract. (669.)

**I. Standard Oil Company opposed to free pipe line law.**—Mr. LEE states that he desires to reiterate that the Standard Oil Company was absolutely opposed to the passage of the free pipe line law in Pennsylvania in 1883, and to the attempted passage of a similar law in 1879 and 1881. It was a matter of common and general knowledge at the time, and their agents forwarded hundreds of telegrams in opposition to the measure.<sup>1</sup> (659.)

**J. Offers of combination by the Pure Oil Company.**—Mr. LEE, president of the Pure Oil Company, states that he never made any suggestion of sale or even of combination to any officer or employee of the Standard Oil Company. (660.)

Mr. ARCHBOLD reiterates his former statement,<sup>2</sup> that approaches were made to the Standard Oil Company by many of those connected with the Pure Oil Company in relation to sale and combination, and says that Mr. Lee's suggestion did include a combination of the interests of the competitive pipe lines. (669.)

**K. Pure Oil Company not a trust.**—Mr. LEE states that the Pure Oil Company is not now and never has been in any sense a trust. The fact that a portion of its stock is held in a voting trust does not make the company a trust. The voting trust was created for the express purpose of preventing monopoly in the business. (659.)

<sup>1</sup> Reports of the Industrial Commission, vol. i, Testimony, pp. 262, 267, 513.

<sup>2</sup> Reports of the Industrial Commission, vol. i, Testimony, p. 580.

**L. Standard Oil Company less progressive than independent refiners.**—Mr. MATHEWS, a refiner of petroleum in Buffalo, N. Y., states that from his experience as an oil producer and refiner for about 30 years he has found the independents more progressive, more scientific, and more practical in the art of refining oil than the Standard people have been, and that the small percentage of the refining of oil now done by them is due almost entirely to freight discriminations and rebates in favor of the Standard combine. The Standard fought in every conceivable way the laying of the United States Pipe Line. The Tide-Water Pipe Line, the first long-distance line, was built by the independents. (651.)

**M. Wealth against Commonwealth.**—Mr. LLOYD, author of "Wealth against Commonwealth," says that the statements made in that book charging that the Standard Oil Company had secret and unlawful contracts with railroads by which they secured preferential rates are, in all things essential and controversial, a transcription from the documentary records of State and Federal courts, civil and criminal, of legislatures, of Congress, of the Interstate Commerce Commission, and of sworn testimony given in legal proceedings and official inquiries, corrected by rebuttal of testimony and cross-examination, with no changes in substance or in form other than those necessary for condensation and simplification. Every controversial statement made is supported by exact references, by page and volume, to the official sources of information on which it is based. The witnesses, on whose testimony the decisions of the courts, legislative committees, and other findings are based, came from every point of importance in the oil industry. Sufficient reference has in all cases been made to and frequent quotations taken from the testimony given in behalf of the Standard Oil Company. (639, 640, 645.)

**N. Control of oil refining.**—Mr. LOCKWOOD, a producer of petroleum at Zelienople, Pa., states that Mr. Archbold, in presenting figures<sup>1</sup> to show that during the years 1894 to 1898 the aggregate percentage of business done by the Standard Oil Company was 82.3 per cent of the total business, selected years which preceded the absorption of the Cudahys and Manhattan refineries; furthermore, that he included in his list of independent refineries 26 which Scofield, Shurmer & Teagle, of Cleveland, declare to be shut down and gone out of business, and that he also included among the independent refineries the Tide-Water Oil Company, although that company is a part of the Standard Oil combination. (654.)

**O. Control of Lima oil production.**—Mr. LOCKWOOD states that the statistics given by Mr. Archbold<sup>2</sup> to show the aggregate percentage of Lima oil production by the Standard Oil Company began with the year 1890, which was after the time when the Standard Oil Company had driven out many of the independent producers in the Lima oil field. It was in the latter part of 1886 that railway discrimination was applied to the man who had developed the Lima oil field. At that time the Standard owned practically nothing in that field. In 1890, as shown by Mr. Archbold's figures, it controlled over 55 per cent of the output. In 1887 the price of crude Lima oil was forced down to 15 cents a barrel. In 1895, when Lima oil went to \$1.27 a barrel, the producers of Lima oil were able to reduce the Standard Oil Company's percentage of production to less than 32 per cent. (654, 655.)

**P. Output of Standard Oil Company in Ohio.**—Mr. MONNETT states that, according to the figures of the Standard Oil Company, as reported to the excise board, that company shipped from the oil fields of Ohio to its various refineries an average of upward of 30,000,000 barrels per year, and that the gross receipts for refined oil and by-products received by the Standard Oil combination from Ohio's crude oil would reach \$120,000,000 a year. This is not the amount consumed in Ohio; it is the amount extracted from Ohio and mostly sent out of the State.<sup>3</sup> (657, 658.)

**Q. Production of Pennsylvania oil and of Lima oil.**—Mr. FOSTER submits tables, which he swears to be approximately correct, showing the total production in barrels, by years, from 1859 to 1900, inclusive, of crude petroleum known as Pennsylvania petroleum, in Pennsylvania, West Virginia, New York, and eastern Ohio, and the aggregate sum realized for it at the average price for each year; also the total production in barrels, by years, from 1886 to 1900, inclusive, of crude petroleum known as Lima oil, in Indiana and northwestern Ohio, and the aggregate sum realized for it at the average price for each year. (670.)

<sup>1</sup> Reports of the Industrial Commission, vol. i, Testimony, p. 560.

<sup>2</sup> Reports of the Industrial Commission, vol. i, Testimony, p. 561.

<sup>3</sup> Reports of the Industrial Commission, vol. i, Testimony, pp. 311, 315, 544.

**XXIII.—GENERAL CHEMICAL COMPANY.**

Mr. BAGG, secretary of the General Chemical Company, in the affidavit submitted by him, states that the business of that company is the manufacture of heavy chemicals. The company bought the property of 12 previously existing companies, including 19 separate plants. Three other plants have since been acquired. (674.)

No promoter was concerned in the organization of the company, and there was no underwriting syndicate. The consolidation was effected entirely by agreement among those engaged in the business. An appraisal committee was formed to determine the fair cash value of the plants taken over. The valuation of the intangible property was based in part upon the net earnings of the several constituent companies for 5½ years before the consolidation. The plants were paid for with securities of the consolidated company, common stock being issued in payment for intangible property, and for some of the plants, which were earning less than 8 per cent per annum net profit. (674.)

The company was formed because it was hoped that the severity of competition which existed would be done away with, and because of the expectation that economies in production and sale would be effected. Considerable economies have been realized. The greatest gain has been the economy in production, which has been due to the control by the central office of the manufacturing department and of the buying. An appreciable saving in the cost of raw materials is effected through buying for all the plants together. A saving has been made through the avoidance of cross freights. The number of traveling salesmen is practically the same as before consolidation. It has not been possible as yet to close any of the plants, but it is expected that some of the smaller and less efficient plants may be closed in the future. (674, 675.)

The selling price of chemicals has in some cases gone up, but that this has been because of advances in the prices of raw materials. The foreign sales are made on practically the same basis of prices as the domestic sales. The only difference is in the prices charged for packages. (675.)

Wages have been very generally increased since the formation of the company. (675.)

The tariff has very little effect upon the business. Competing foreign goods are not likely to be imported under ordinary conditions. Special facilities for transportation, which the company has, make foreign competition practically impossible. The tariff, however, is a safeguard against the sale of surplus stocks in this country by foreign manufacturers. (675.)

Mr. Bagg submits a statement made to the stockholders of the General Chemical Company in February, 1901, giving the net profits of the company for the year 1900, the dividends paid, and the surplus account, and the balance sheet of the company, of December 31, 1900, showing the assets and liabilities at that date. (676.)

**XXIV.—NATIONAL ASPHALT COMPANY.**

Mr. SEWALL, secretary and treasurer of the National Asphalt Company, in the affidavit submitted by him, states that the National Asphalt Company is not an operating company. Its property is almost exclusively in the stocks of other corporations. Fifty-eight corporations are now under its control. A large number of them have been eliminated as active organizations. The business of the subordinate companies which the National Asphalt Company owns and controls is the importing and refining of asphalt and the selling of it for paving purposes. One of the constituent companies quarries and crushes rocks for paving and similar purposes. The National Asphalt Company, through its subordinate companies, handles probably 85 or 90 per cent of the asphalt sold in the United States, and does perhaps 75 per cent of the asphalt paving in the United States. (676, 677, 678.)

No promoter was concerned in the formation of the National Asphalt Company. The consolidation was arranged between the principal owners of the companies absorbed. The several stockholders exchanged their stock in the subordinate companies for stock and collateral gold certificates of the National Asphalt Company. (677.)

The Asphalt Company of America, which is the principal company subordinate to the National Asphalt Company, was a consolidation of the majority of the concerns engaged in asphalt paving. When this company was formed, it gave 5 per cent collateral gold certificates in exchange for the stock of its constituent companies, and secured the certificates by deposit of the stock bought. Thirty million dollars of these certificates were issued. The company also issued 600,000 \$50 shares of

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stock, not as paid up, but as subject to call. Afterwards \$10 in cash was paid on each of these shares by the stockholders. The \$30,000,000 paid by the company in its gold certificates for the stock of its constituent companies is believed to have been the fair cash value of the properties. (677.)

The National Asphalt Company, in exchange for the \$6,000,000 of cash which had been paid in by the stockholders of the Asphalt Company of America, issued \$4,200,000 of preferred stock, \$6,000,000 of common stock, and \$6,000,000 of collateral gold certificates. The preferred and common stock, which was given in addition to the \$6,000,000 of gold certificates, represented the value of the organization and good will of the Asphalt Company of America as a going concern. The National Asphalt Company also issued \$3,550,000 of preferred stock and \$5,100,000 of common stock in payment for the capital stocks of the other companies which were absorbed. (677.)

The principal reason for the formation of the company was the desire to diminish the severity of competition. The second important consideration was the desire to effect economies through a unified management. The prices of asphalt paving have not been raised in consequence of the formation of the National Asphalt Company. The number of employees has been greatly diminished through the consolidation, especially the number of superintendents and the office force. (678.)

The formation of the company has had no noticeable effect on wages. In every instance wages are as good as before, and in some cases they are better. Mr. Sewall submits a table showing the wages paid by the Barber Asphalt Paving Company to foremen and other experts in various cities during the month of August, 1900. The wages paid to common laborers by the Barber Company he states are from \$1.50 to \$1.75 per day, though in some Western cities it has been necessary to pay as much as \$2.00 a day for ordinary labor. The relations of the National Asphalt Company with labor organizations are very friendly, and almost all the work of the company is done by union labor. (679.)

The National Asphalt Company is able to push foreign trade with an energy which smaller organizations are not capable of. The prices of work in foreign countries are on substantially the same basis as in the United States. (678.)

## CXXV.—AMERICAN COTTON OIL COMPANY.

Mr. RALPH, secretary and treasurer of the American Cotton Oil Company, states in his affidavit that the business of the company is the crushing of cotton seed and the manufacture and sale of the resulting products. The volume of business done by the company has steadily increased since its organization, though its proportion of the entire cotton-seed business of the country is less than at the time of the organization. The company owns a refinery and other properties in New Jersey, but the greater part of its assets consists of the capital stocks of subordinate companies.

The capital stock issued and outstanding is preferred stock, \$10,198,600; common stock, \$20,237,100. There is also outstanding \$3,000,000 of gold debenture bonds, making the aggregate capitalization \$33,435,700. The valuation of the tangible property and assets was \$15,773,936 in August, 1891, and \$17,949,863 in August, 1900. The company has paid dividends of 6 per cent upon its preferred stock continuously since June, 1892, and has paid dividends averaging 3½ per cent per annum upon its common stock during the last 3 years.

In Mr. Ralph's opinion centralized organization produces important savings in both buying and selling, and increases the commercial standing and importance of the company by reason of the volume of business transacted. There is also an advantage in the facility with which processes of manufacture are made more widely effective. There is, of course, some disadvantage in the conduct of a business in which the manufacturing units are so widely separated. On the whole the advantages outweigh the disadvantages. (680.)

## CXXVI.—STANDARD MILLING COMPANY.

Mr. McINTIRE, director of the Standard Milling Company, says in the affidavit submitted by him, that this company was formed by the reorganization of the United States Flour Milling Company. It is the largest milling organization in the world, although it controls only a small fraction of the milling business of the United States. Its mills are equipped to grind over 175,000 bushels of wheat daily. It also produces specialties in cereals.

The company has issued \$6,900,000 in 5 per cent noncumulative preferred stock, and \$4,600,000 common stock. It has also issued \$5,750,000 in 5 per cent bonds.

The United States Flour Milling Company was formed by consolidating the Hecker-Jones-Jewell Milling Company with other concerns. In some cases the plants were bought and in some cases the capital stock of the constituent companies. The United States Flour Milling Company issued \$5,000,000 preferred and \$3,500,000 common stock, together with \$7,500,000 of bonds. The aggregate capitalization did not exceed the fair value of the properties on the basis of their previous earnings.

The Hecker-Jones-Jewell Milling Company was formed by the combination of 5 mills, which made all the flour ground in New York City. Mr. McIntyre bought these companies and sold them to the Hecker-Jones-Jewell Company. Not more was paid for the plants than the previous earnings justified. The Hecker-Jones-Jewell Milling Company issued \$3,000,000 preferred and \$2,000,000 common stock, besides \$2,500,000 in bonds. The tangible assets were appraised at \$5,804,000. Valuable patents and brands were also acquired, which were not included in this valuation. The average net profit of the companies consolidated for the previous 5 years was over \$500,000.

The principal reason for forming the milling consolidations was the hope of effecting certain economies. A large saving in cross freights has been made; a saving in the cost of selling has also been effected, and the number of traveling men employed is smaller in proportion to the business transacted, though probably the actual number employed is as great.

Wages have been increased since the Hecker-Jones-Jewell Milling Company was formed; that company having begun business just about the time of the industrial depression of 1893. Mr. McIntyre believes that the tendency of the combinations has been to keep the men more steadily employed. (681, 682.)

#### XXVII.—AMERICAN FISHERIES COMPANY.

Mr. Church, vice-president and manager of the American Fisheries Company, states in the affidavit submitted by him that prior to the formation of the American Fisheries Company the northern branch of the menhaden industry was carried on by 20 different concerns. The American Fisheries Company purchased the factories, steamers, and good will of 17 of these plants. Six of the factories bought have since been dismantled and the machinery used to increase the capacity of some of the other factories. The company has since its formation built a new plant at Port Arthur, Tex., where it handles the fish caught in the Gulf of Mexico. Altogether the company has facilities to take care of from 50,000 to 60,000 barrels of fish in a day of 10 hours. This is double the capacity of the combined plants at the time of their consolidation. The company handles a little more than half the total catch of menhaden. While the business of the company has increased, the business of the outside companies has likewise increased. Oil for dressing leather, tempering steel, making rope, and compounding with other greases is manufactured. The refuse fish, mixed with other materials, is used extensively as a fertilizer. The company has established its own boiler shop, machine shop, and shipyard, and does almost all of its own work in these lines.

Since consolidation it has been arranged to have the steamers land their fish at the factory nearest to the place where the fish are caught. By delivering the fish as soon after catching as possible a better quality of oil and guano is produced and time is saved. New and improved machinery has been introduced and a uniformity of method adopted, the result being that the merchandise produced is of an even quality. Consolidation has made it possible also for the company to enter into contracts for the sale of its entire product. Buyers realize that there is only one channel through which they can purchase, and so there is no waiting on their part for some manufacturer to become embarrassed and cut prices.

Since the formation of the company the prices of the products have increased, owing, in a large measure, to the method of selling the goods. The increase of price has been especially beneficial to the outside manufacturers.

Owing to the fact that fish oil is produced in foreign countries, where the rate of wages is much less than in this country, it would not be possible for the manufacturers in this country to make a profit if the duty of 8 cents per gallon on oil were taken off. (683-685.)

#### XXVIII.—UNITED STATES LEATHER COMPANY.

Mr. LAPHAM, vice-president of the United States Leather Company, says that his company carries on the manufacture of leather and business incident thereto, the manufacture of sole leather being the principal business. The company was formed by the union of 25 or 30 firms which were doing perhaps one-half of the sole-leather

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business of the United States. The proportion of the business done by the consolidated company is about the same. In most cases the properties are held directly by the United States Leather Company. In some cases, because of State laws which forbade ownership of real estate by a foreign corporation, subordinate corporations were formed and their stock purchased by the United States Leather Company. No promoter was concerned in the formation of the company and there was no underwriting syndicate. The stock was all taken by the previous owners of the properties and none was offered to the public. The properties acquired were all paid for in stock of the company. The basis adopted for the valuation of the properties was that of vat capacity. Bark and other stock were taken at cost, and standing timber was taken at so much per estimated cord of bark. The preferred stock represented the fair cash value of the tangible property; the common stock represented the good will of the business. Six million dollars in debentures was offered to the public and was underwritten by a syndicate which received \$600,000 of common stock for its services. All the rest of the stock was issued to the owners of the properties purchased. Thus far the common stock has received no dividends, and the preferred stock had not, up to January 1, 1900, received the dividends due to it by about 34 per cent.

The chief saving effected by the consolidation has been through the introduction of the best methods in all the tanneries. There has also been more active and systematic experimenting than was done by the individual tanners, and great improvements have been made because of this. Considerable saving has been made in cross freights. Fewer traveling men are employed in proportion to the size of the business and the number of warehouses has been diminished. It is hard to say whether or not there has been an increase of administrative expenses. The management, however, has been more efficient since consolidation. There is competition between superintendents, and good results are obtained. It is possible also through the centralization of management to apply the experience of a large number of men at any point where there is trouble.

The organization of the company has tended to keep prices steadier and to diminish fluctuation. It would not be possible for the company to squeeze the public on prices, if it desired. There has been no change in wages which can be attributed to the formation of the company. Wages were reduced in 1893 and 1894, but have now been put back to about where they were in 1892.

The tariff on hides is a serious handicap on the business of the company. The price of domestic hides is increased by the amount of the duty. Canadian tanners buy South American hides and send them through the United States in bond. The American tanners have to meet the competition of the Canadian tanners in European markets. There is a drawback on hides which are re-exported in the form of leather, but it takes about a year and a half from the time the hides are imported for the leather to be exported and the drawback collected. Before the Dingley tariff American manufacturers could hold their own with their Canadian competitors in European markets, but that can not be done now.

Mr. Lapham submits a statement issued to the stockholders of the United States Leather Company, giving the company's assets and liabilities as of December 31, 1900. (685-688.)

### XXIX.—AMERICAN BICYCLE COMPANY.

Mr. POPE, vice-president of the American Bicycle Company, in the affidavit submitted by him, says that the American Bicycle Company was incorporated on May 12, 1899. Its business is the manufacture of bicycles and automobiles. It bought the property of 48 concerns which had been engaged in making bicycles and bicycle parts. In 1900 the company sold about 65 per cent of all the bicycles sold in the United States. The company did not buy the stock of the previously existing corporations, but took conveyance of their real estate and personal property. Mr. A. G. Spalding personally bought the properties from the previous owners on such terms as he could make and sold them to the American Bicycle Company. Whatever of preferred and common stock was left in his hands after the properties were paid for belonged to him. It is understood that the method and terms of payment were similar in all cases, and that the owners in each case received 30 per cent of the appraised value of their property in cash or, at their option, in 5 per cent debenture bonds of the American Bicycle Company at 92½; 30 per cent of the appraised value in preferred stock, and 50 per cent in common stock.

The authorized capital of the American Bicycle Company is \$35,000,000 preferred and \$45,000,000 common stock, of which \$10,000,000 preferred and \$20,000,000 common has been issued. There has also been issued \$10,000,000 of bonds. Speaking

roughly, the debentures and preferred stock represented the tangible assets of the constituent companies and the common stock the intangible assets. The earnings of the properties before consolidation were stated to have been, in 1895, about \$5,119,000; in 1896, about \$7,763,000; in 1898, about \$3,329,000. The net profits for 1899 were estimated at \$3,894,000.

The chief reason for forming the combination was the severe competition which existed. Through the consolidation of ownership savings have been made. A stop has been put to patent litigation, and valuable patents owned by any one concern may be applied by all. There has been a saving in administrative expenses from a diminution in the number of officers. Buying is concentrated in the hands of one officer and his assistants, and this saves energy and expense. A smaller aggregate quantity of supplies is carried than was carried by the constituent companies. The expense of selling has been considerably reduced. It is possible to get lower rates for advertising than had been secured by any of the constituent companies. There has been some saving in the number of traveling men employed, only about 85 per cent of the number employed before consolidation being now necessary. The management is more efficient. Concentration of manufacturing activity has reduced the actual cost of production. The company has closed 8 bicycle plants, besides turning 2 from the production of bicycles to the production of automobiles. There is every reason to believe that as many plants would have been closed if there had been no combination, because of the failure of the companies which owned them. The American Bicycle Company gives as many days' work a year as were given by its predecessors, and the employment is steadier.

There has been no change in the prices of bicycles sold through established retail agencies. On jobbing goods there has been a tendency to stronger prices. The export trade of the company is attaining considerable importance. In general, the export prices are based substantially on wholesale prices in this country.

There has been no general change of wages since the formation of the company. The attitude toward labor organizations is determined by the managers of the different factories, and some of the shops are union and some are nonunion.

The tariff has no noticeable effect upon the business of the company. (688-691.)

### XXX.—OTIS ELEVATOR COMPANY.

Mr. BALDWIN, president of the Otis Elevator Company, says that this company was formed in November, 1898, for the purpose of manufacturing elevators and hoisting machinery. It bought the property of 11 companies which were doing 80 or 85 per cent of the elevator business in the United States. The proportion of the total business done has rather increased since the formation of the Otis Elevator Company. Only one factory has been closed. Mr. Baldwin says that he personally bought the property of each of the constituent companies and sold it to the new company. No stock was offered to the public, and there was no underwriting syndicate. Payment was made for all the plants in stock exclusively, with the exception of one which was paid for in cash. Preferred stock to represent the fair cash value of the tangible property was given. Common stock in the proportion of  $1\frac{1}{2}$  shares to 1 share of preferred was given in payment for the intangible property. The cost of production has been lowered by the specialization of the work at the different plants and the building of particular types of machinery in large lots. The number of traveling men is about the same as before consolidation, but the business handled is 20 per cent larger. There has been an advantage in the common use of patents previously owned by single establishments and in the stopping of patent litigation.

Prices since consolidation have been no higher than the prices charged by Otis Bros. & Co., though they have been somewhat higher than the prices which were charged by some of the other companies. There has been no noticeable change of wages, but the men are being put on a 9-hour basis with the same wages which were formerly paid for 10 hours. The attitude of the company toward labor organizations is entirely friendly. Some of the shops are union and some are not.

The export business of the company is assuming considerable proportions. The elevators exported are of a cheaper grade than those sold in the United States. (691, 692.)

### XXXI.—ORFORD COPPER COMPANY.

Mr. THOMPSON, president of the Orford Copper Company, in the affidavit submitted by him, states that his company is engaged in the refining and selling of nickel and cobalt. There is no nickel mine in the United States which is now productive, and nickel ore is imported from Canada, New Caledonia, and Norway.



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Some of the Canadian mines fell off largely in their production in 1899 and 1900, and the freight on ore from New Caledonia fully doubled from 1898 to 1900. These facts contributed largely to the increased cost of nickel in the United States. Coke cost 60 per cent more in 1900 than in 1899, and coal 35 per cent more. This helped to increase the price of nickel. The primary cause of the increased price, however, was that the demand far outran the supply. The increase of price was not due to any combination or agreement. There is only one other company besides the Orford Company which refines nickel in the United States, and there is no agreement between this company and the Orford Company in respect to prices, neither is there any agreement between the American refiners and refiners in other countries.<sup>1</sup> The 2 American companies do not control the United States market, but a considerable amount of nickel is imported. The Orford Company is not a combination, and all the stock, except 20 shares, Mr. Thompson says, is owned by him. (692, 693.)

## XXXII.—CAUSES, METHODS, AND EFFECTS OF INDUSTRIAL COMBINATION.<sup>2</sup>

**A. Causes** (see also *Relation of tariff to trusts*, p. cXLV).—Mr. SPALDING says that, in his opinion, trusts are due to the protective tariff, to centralized legislation, and to the development of the powers of Congress under the interstate-commerce clause of the Constitution. Most of the trusts in the United States have grown out of the protective tariff. The inducements offered to trusts and combinations by certain States, notably, West Virginia, New Jersey, and Delaware, have been an auxiliary cause of the formation of trusts. (1-4.)

Mr. LATASTE says that the monopoly of natural opportunities and our present system of taxation are the fundamental causes of the formation of trusts. (29.)

Mr. HILLYER considers the primary reason for the formation of trusts to be the desire of those in control of them to make more money. The tariff is an auxiliary cause. (13.)

Mr. FLINT, a merchant of New York City, who has been connected with the organization of a number of industrial combinations, says that, in general, the reasons which lead to the formation of these combinations are the desire to secure economies and the desire of persons to have their property in such a form that it will have a current market value and be readily realizable. The holding of property in the form of realizable securities would, in case of the death or disability of the holder, prevent depreciation in the value of the property, because there would be an identity of interest with the best intelligence in the particular industry in which the property was invested. Another reason for the formation of industrial combinations, in some cases, is the cutting of prices through competition. (33.)

**B. Capitalization.**—Mr. CHAPMAN does not think that the amount of the capital stock of a combination is a matter of any concern to the public. Overcapitalization is not going to affect the earnings. The stockholder and the public are interested in earnings rather than in capital. Capital has no relation to earnings whatever. It would not make any difference to the earnings whether the company had a large amount of water in its stock or not. Properly managed the business will pay so much money; it does not make any difference whether it is distributed over \$1,000,000 or \$10,000,000 of stock. So far as prices are concerned, they are influenced by other conditions rather than by the amount of capital stock. A manager will make all he can out of his business whether his capital is 1 or 10 million. To keep out competition he must keep the margin between the cost and the selling price as low as he can. A 20 per cent dividend would not necessarily be more likely to attract competition than a 2 per cent dividend. The protection of the investor is another matter. To protect the investor there should be some supervision of the capitalization of the company. There should be publicity in its affairs to such extent as may be necessary to enable the investor to know what his company is doing. (107, 108.)

Promoters are sometimes given a specified sum or a specified percentage for their services. Mr. Chapman has never known a case where the bankers were paid any specified amount of money. They take over a given percentage of the stock and settle up the claims of promoters, lawyers, and others as best they can. Whatever stock is left after these charges are paid they have for themselves. (96, 97.)

Mr. FLINT thinks that there have been many cases of overcapitalization, but that the banking houses which have indorsed unsound capitalizations have been discredited to such an extent that they can not repeat the operation. Investors have become less

<sup>1</sup>See volume on manufactures, p. —.

<sup>2</sup>Testimony as to the causes and effects of particular combinations which are treated in detail in this volume is summarized in connection with the other testimony regarding them.

careless, and the wisdom of using greater care in forming organizations is being recognized. (92.)

Mr. PIEL, president of the National Starch Company, considers that the chief disadvantage of industrial combination is found in the tendency to overcapitalization. There is a certain safeguard against this, however, in the fact that overcapitalization tends to bring in competition. (673.)

Mr. SCHWAB does not think that overcapitalization enables a corporation to increase its exactions from the public. If too large dividends were exacted, other people with a lower capitalization would do the business at a lower price. (467.)

Mr. CHAPMAN says that dividends which on the surface appear excessive might upon investigation be found to be no more than fair, because of the fact that the properties owned by the company in question had advanced in value in a long course of years, and that therefore the capitalization of the company was below what it ought to be. (109.)

Mr. FLINT says that the formation of industrial combinations gives the public opportunities for profit that they would not otherwise possess. Figuring the earnings of 47 important industries, and not including the Standard Oil Company, he finds that the average earnings are over 7 per cent of the capitalization and are over 11 per cent of the present market prices of the industrials; while the average earnings of 37 railroads, which he figured, he found to be 4½ per cent on the market price and a little more than that on the par value of the securities. (91.)

Mr. HOLZ, secretary of the tariff reform committee of the Reform Club of New York, says that the tariff is undoubtedly indirectly responsible for a large part of the water in trust stocks. Had there been no tariff to enable prospective trusts to pay dividends on watered stocks, the trust promoters could not have offered sufficient inducements to coalesce the producers in any particular industry. Promoters have been unable to form trusts in many industries not actually benefited by tariff duties. The most highly protected trusts are generally the most highly capitalized. It is useless for a trust to attempt to pay big dividends on watered capital unless it enjoys special privileges of some kind. (554, 583.)

Mr. BURLER considers tangible and assured assets the proper basis of capitalization. Applying the question to his own business, that of a jobber of iron and steel, if good will were capitalized the payment of dividends on it would require unusual effort and the creation of profits which would probably be hard to maintain. The result would probably be an attempt to increase dividends through prices rather higher than normal, and this would almost inevitably bring new competitors into the field. The new competitors would have an advantage in not being burdened with an excessive capitalization. (497.)

Mr. BURN, president of the National Wall Paper Company, understands good will to mean the reputation of the manufacturer and his established connection with dealers who are likely to continue dealing with him. (287.)

Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, thinks that the effect of the great combinations in the iron and steel business is likely to be good, in that they will maintain prices. Their high capitalization is itself advantageous, since a company with a large capitalization, on which it wants to pay dividends, will be restrained from ruinous competition. Combinations that can prevent such competition are best for the country, "because whenever we have ruinous competition the evil goes right back to the laborer." This happens not only by cutting wages, but by bankruptcy and actual stoppage of establishments. Three furnaces which the Sloss-Sheffield company has recently bought and started up were bankrupt concerns, which had not run for 4 years. They were idle, the ore mines and the coal mines that depended on them were idle, and the whole town of Sheffield, Ala., was dead. Now, with the starting up of the furnaces, rents are advancing, wages are going up, and everybody is happy. (509, 512.)

**C. Secrecy.**—Mr. HOLZ, secretary of the tariff reform committee of the Reform Club of New York City, says that one of the evils which has grown out of the formation of trusts is the juggling of prices and statistics. The sugar trust refused to comply with our census laws in 1890, and would give no information concerning its business to the Census Department. As a result of this the census abstract states that the value of our product of sugar and molasses dropped from \$155,000,000 in 1880 to \$123,000,000 in 1890, and that the value of this product in New York State dropped from \$71,000,000 to \$17,000,000 in 1890. As about one-half of the sugar refined in this country in 1890 was refined in New York State, it is probable that the value of this product in New York was about \$100,000,000 instead of \$17,000,000, as given by the census. (554, 555.)

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**D. Economies.—Salesmen.**—Mr. FLINT says that in the companies with which he has been connected there has been a considerable saving through reducing the number of traveling salesmen. Care must be taken in economizing in this direction lest the efficiency of the selling department be reduced. In the case of the United States Rubber Company there has been a saving of 25 per cent. In the case of the Rubber Goods Manufacturing Company the saving has been less, because it has been the policy of that company to maintain the individual independence of each concern in the combination. (35.)

Mr. LA TASTE has no statistics in respect to the number of traveling salesmen who have been thrown out of employment through the formation of industrial combinations. He knows of some men who have been displaced, but does not know why. Possibly they were not as competent men as the companies wanted. He has made no investigation along that line, however, and there might have been other reasons. He was told by a traveling man in the employ of the Royal Baking Powder Company that, prior to the organization of that company, the 3 companies which entered into the combination employed 100 traveling men, and that very soon after the formation of the combination 64 of the 100 were discharged. (26, 32.)

Mr. LA TASTE has no definite information as to the re-employment of traveling men who have been discharged, though it is quite likely that a man who loses an opportunity of earning a livelihood in one line will utilize his abilities in some other line if he can; and that has probably been done by traveling men. He thinks that, as a rule, traveling men would be more likely to find employment in other lines than men of any other class, except in cases where a long term of service has unfitted a man for other vocations. A traveling man loses his local identity, so to speak. (30.)

Mr. LA TASTE believes that traveling salesmen are almost unanimously of the opinion that the formation of trade combinations is inimical, not only to the interests of traveling men, but to the entire interest of the country. As a general rule, the men have not clearly defined reasons for their opinions. When reasons are given, the chief ones are that industrial combinations result in depriving traveling men of their means of support, and that they reduce them to such a state of uncertainty that they do not know one day whether or not they are going to have employment the next day. Mr. LA TASTE quotes from the minutes of the Convention of the Traveling Men's Protective Association, which was held at Louisville in May, 1899, showing that two separate anti-trust resolutions were tabled, and giving the discussion of them in convention. Mr. LA TASTE says that the vote must have been a very decisive one, because there was no demand for a division. He does not believe, however, that the action of the Traveling Men's Protective Association in tabling those resolutions indicated the sentiment of the members. There were about 205 delegates at the convention, and Mr. LA TASTE believes that if each of these members were asked separately his opinion concerning industrial combinations, not one would hesitate to say that such combinations are not beneficial. Personally, Mr. LA TASTE is of the opinion that trusts are injurious to commercial travelers. (21-24, 27, 28, 32.)

2. *Advertising.*—Mr. FLINT says that economy is secured through combination by reducing the amount of advertising. The same results can be secured at considerably less expense, owing to a more intelligent distribution and method of advertising. Also, advertising in a very large way permits the securing of more favorable rates. (35.)

Mr. DUKE thinks that the American Tobacco Company expends as much in advertising as was expended by the independent companies. Of course the company does a larger amount of business than the concerns it bought out did. (318.)

3. *Middlemen.*—Mr. FLINT says that in certain industries there have been substantial economies through direct sales. Great care has to be taken, however, in securing economy in this line. Some kinds of business permit of greater economy through direct sales than do others. Where goods are sold through the popularity of a trademark more economy can be secured through direct sales than in other cases. (34, 35.)

4. *Bad debts.*—Mr. FLINT says that through combination there comes a better knowledge of credit conditions, and that therefore bad debts may be guarded against. Last year the United States Rubber Company, doing a business of about \$25,000,000, lost less than \$1,000 by bad debts. Business conditions were favorable last year, but the average loss by separate companies on that volume of business would be over \$100,000 per year. (36, 37.)

5. *Price of raw materials.*—Mr. FLINT says that there is not much saving, through combination, in the prices which have to be paid for staple merchandise, unless the combination uses a very large percentage of a particular kind of raw material produced. In considering the raw-material market it is necessary to take into consideration all the raw material in the world, because of the present facilities for quick transportation. (36.)

6. *Reduction of stock carried.*—Mr. FLINT says by centralization there has been a reduction in the carrying of stocks; that thereby interest, insurance, storage, and shop-work charges have been reduced. The reduction in stock carrying results from the fact that, through combination, it is possible to keep a better balance between supply and demand. (35.)

7. *Transportation charges.*—Mr. FLINT says that through combination a saving in freight charges is secured. A well-managed combination takes advantage of the cheapest transportation facilities. The large combinations have storage facilities at Western points, and ship their goods during the summer when they can get the advantage of low water freights. (35, 36.)

8. *Machinery.*—Mr. FLINT says that, in general, centralized manufacture permits the largest use of special machinery, and that economies are secured through the adoption of the more economical methods which are made possible by the large volume of business. In the case of the production of reclaimed rubber, the business has been centralized in one factory instead of being done in different factories, and the cost has thereby been reduced by about 20 per cent. (34.)

9. *Running full time.*—Mr. FLINT says that by running a factory full time, which can be done through the centralization of manufacture, a substantial saving is made. From recent calculations made, it has been found that the percentage saved in the cost of production by running a factory full time instead of one-half time is from 4 to 8 per cent. (34.)

10. *Administration.*—Mr. FLINT states that through centralization there is some saving in the cost of superintendence, but it is not a large item. (85.)

Mr. BUTLER, a jobber in iron and steel, mentions the reduction of the number of men engaged in superintendence and in selling as a result of combination. There is not necessarily a saving, he says, in money, but there is a saving in the number of people doing a certain kind of work. He adds that new departments to deal with cost keeping and statistical records must be established, or old ones must be enlarged and carried to a refinement that is unnecessary in smaller concerns. This would absorb much of the labor that the organization might seem to make superfluous. (488-490.)

**E. Limitations of combinations.**—Mr. BUTLER, a jobber of iron and steel, declares that his house has never made any money by combination, but has always suffered from it. It did formerly enter into combinations. It has not done so in recent years because it does not pay. When, on one occasion, it bought out a competing house it immediately reduced its prices, because it knew that its customers would think that by means of its apparent monopoly it would enjoy for a short time a chance to take advantage of them. Mr. Butler believes that most business men would feel the same responsibility and act in the same way. (498.)

Mr. BURN, president of the National Wall Paper Company, sums up his conclusions as to the effects of consolidation as follows:

First. That consolidation does not benefit unless it controls, especially industries in which prices are not based on intrinsic value alone.

Second. That consolidation invites competition and antagonizes the public.

Third. That it aids labor in enforcing its demands, enabling it to concentrate its efforts on one concern instead of dividing same among a larger number.

He explains his meaning in using the phrase intrinsic value, by saying that the price of wall paper does not depend on the intrinsic value of the articles that are used in making it, any more than the price of an oil painting depends on the value of paints. The value is purely esthetic. It depends on the taste that is brought to bear on it, the field in which it is placed, the probable output, and many other considerations. (285, 287.)

Mr. WHITE, president of the National Salt Company, says that one great disadvantage that large corporations labor under is their inability to cater to the whims, prejudices, and ignorance, or to the tastes of individual customers. It would be impracticable to have a combination for the manufacture of clothing or millinery goods or gas fixtures or any goods as to which the public taste is capricious. Organization means system, and system means uniformity. (254, 263.)

Mr. FLINT also says that through combination the number of styles of products is reduced; that this results in reduction in the cost of manufacture and in the amount of stock carried. (35.)

**F. Effects of combination.**—1. *Generally.*—Mr. WHITE, president of the National Salt Company, declares that the trusts will become trustees for the conservation of labor and capital and energy. They will stop overproduction and waste and extravagance, which is the curse of labor and capital and consumer. (264.)

Mr. WATERBURY, former president of the National Cordage Company, is confident that no combinations will succeed but those that introduce economies and are able

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to maintain them, so that the people get cheap goods and outsiders can not compete with them. They are a real benefit to the country. (132, 133.)

Mr. BUTLER believes that the great industrial combinations work for the benefit of the people, especially in the elimination of unnecessary expenses. There are, for instance, two large concerns in the West making agricultural machinery. Fifty per cent of the cost of their product is in the distribution of it. Yet if those two concerns should combine and reduce their price 25 per cent, as they might do and still make a much larger profit than now, there would be a clamor that the farmers were being robbed. (497.)

Mr. GUNTON says that large corporations are a positive benefit. We can not go back to small concerns and recede into inferior methods without paying the price in inferior results. The natural growth of corporations is along the lines of greater productive efficiency, and the effect of such organizations on prices is a benefit to the community. The effect on wages is definitely beneficial. Labor organizations can deal better and more effectively with large corporations than they ever could with small corporations.

Some of the concerns which entered into the United States Steel Corporation, perhaps, had poor management. The corporation can bring the management of those concerns up to the standard of the best company in the consolidation. It can place an exceptional man at the head of the poorer concern, whereas this could not have been done if that concern had continued a separate enterprise. The great combination has at its disposal more managing ability and can give efficient distribution of that managing ability. (634, 635.)

Mr. ATKINSON says that there are some combinations which have used great economy in doing their work, which are managed with great skill, and which have resulted in the making of lower prices. There would have been no possibility of the low prices that have prevailed either for oil or for sugar, or for some other articles, except for the combination of the ablest possible men, working on a very big scale for the lowest possible margin. The combination of railroads has resulted in a steady, consecutive reduction in the freight charges, and a lessened margin of profit, with higher wages for the workmen, and general benefit to the public. (533.)

Mr. SPALDING says that there are some economic advantages to be derived from industrial combination. Some of the advantages are the cheapening of production, the enhancing of the quality of the output, and improvement in methods of distribution. Many of our foreign markets have been opened up by industrial combinations. Trusts are probably more competent than individuals to gauge the relation between supply and demand; but their power so to do contains a dangerous element, in that, if they choose, they can make the supply a little short and thereby cause an advance of prices. They are able to furnish greater continuity of labor, and they could effect a greater uniformity in wages, though as yet wages in this country have not been affected a great deal by the formation of trusts. (9.)

Mr. Spalding believes that trusts are hurtful because they snuff out individual effort and deprive the individual of the opportunity of rising. They destroy competition, and put it in the power of the parties in control of the trust to put up prices extortionately; and the public is at the mercy of a monopoly. It is pretty hard to say that one has direct knowledge of instances where the trusts have advanced prices, though it might be asked if there is anything, except cotton, in this country under the control of trusts the prices of which have not advanced. It is natural for a man to charge all he can get. The manner in which trusts are capitalized is another great evil. They capitalize on the basis of earning capacity, without regard to the substance behind it. When the earning capacity is gone a collapse will come, and the result will be the worst panic ever seen in this country. (2, 6, 11.)

Mr. Spalding says that, in speaking of a trust, his idea is that reference is made to combinations and pools that result in snuffing out competition. (1.)

Mr. LAMB, president of the New England Free Trade League, says that a trust, as the word is used now, means an organization which has a practical control or monopoly. The formation of trusts, in addition to permitting extortion to be practiced on the consumer, and to putting a tax on our export trade, has resulted in doing away with services that were formerly rendered. The trusts have crowded out the middleman, and the services he used to render are not now rendered at all. Under a system of competition there is rarely a time, even in a brisk period of business, when it is not for the interest of some mill to agree to furnish its goods promptly to would-be purchasers; but where there is one seller, the trust, it has been proven by experience that the order will be filled when it is for the advantage of the trust to fill it. Wherever competition ceases, the spur to produce better goods becomes less sharp, and deterioration in the quality of goods has resulted from the formation of trusts. (584, 587, 588.)

Mr. TAYLER says that nothing could be more ideal than combination not governed by the selfish demands of men, because, through combination, the thing produced would reach the consumer with the least possible expense. But Mr. Tayler does not think that any set of men can be trusted with the power possessed by those in control of the industrial combinations as we now find them. There has never been any combination or any individual that had power that exercised that power wisely in any other way than selfishly. (603, 606, 607.)

2. *Effect on competitors and competition.*—Mr. BUTLER, a jobber in iron and steel, does not think the various consolidations have made any attempt to stifle competition. He is confident that the ultimate result of them is to increase competition. "If every manufacturer would keep his profits down to a 6 per cent basis he would not have much competition, but if by any apparent monopoly he magnifies those profits it is an encouragement to other people to enter into competition with him." (490.)

Mr. Butler declares it to be a general law that combinations are always advantageous to the small concerns outside of them. "A large concern has to appear under a formal, and generally under a public, programme; a small concern has the advantage of keeping its methods and its operations to itself. It can seek specialties on which there is a larger profit. It can conform its operations to the peculiar requirements of its customers, and it has the right to make a slight concession at all times, and in a way that is not known to the large concern." The smaller a manufacturer the greater his percentage of profit must be, however, because the fixed charges of a small concern are proportionately great. (492.)

Mr. FLINT says that the only way in which a concern can destroy competition is by creating and maintaining facilities for a lower cost of production and by making a lower price to the consumer than others can make. Industrial combinations, unless they are favored by Government franchises or by Government patents, are subject to the law that "the lowest price makes the market." (89.)

Mr. BURN, president of the National Wall Paper Company, does not think that the public need fear the trusts. If they attempt to become oppressive by advancing prices they arouse competition, and the problem solves itself. He can conceive that so absolute a control of an article might be obtained that it could be made permanent; "but even then it might not be anything very oppressive, because if the parties handled it rightly they would not try to squeeze too much out of the public." The experience of his own company tends to show the effectiveness of competition. Mr. Burn believes that many great corporations existing to-day would dissolve if they possibly could, but are so involved that they can not. (293, 301, 304.)

Mr. CHAPMAN does not believe that large combinations are necessarily going to keep out all competition. If the combination is not managed wisely it will build up a lot of small competitors who will find a place to sell their goods, even in competition with a big monopoly. (110.)

Mr. SPALDING says that any advance or price in an article tends to invite competition, and that the problem of trust regulation has a tendency to solve itself through the existence of that fact. Mr. Spalding does not think, however, that there is any real competition in the sugar industry. Competition in that industry is alleged for speculative purposes. All the competition in this country in the oil industry has pretty well passed away, and the Standard Oil Company is doing the business. (10.)

Mr. TAYLER says that theoretically a monopoly, other than a natural monopoly, so called, is impossible, but practically we have monopolies in some lines of business. The popular understanding is that the Standard Oil Company fixes the price of oil in this country. According to newspaper report, they have made contracts for securing the output of the Texas oil fields. (607.)

Mr. ATKINSON says that combinations try to eliminate competition. It is doubtful if they will ultimately succeed. Not less than 2 years after the organization of some big combinations they were about to be subjected to competition from new works, which produced three-fifths as much as the concerns which went into the combination. Competition is the great force that animates trade and commerce, and can not be suppressed by combinations or other devices. Through competition the volume of product is augmented, and the cost of each unit is diminished; the rates of wages are raised, and the margin of profit is lessened. (534.)

Mr. HOLZ, secretary of the tariff-reform committee of the Reform Club, of New York City, says that not only does the modern trust include the full control of one industry, but it includes the control of all allied industries whose plants could be easily turned from the production of one to another of the products. It also includes some of the industries which produce different but competing products. The same set of men now practically controls the supply of petroleum, of iron ore, of iron and steel, of coal, of copper, of salt, and of hundreds of products and by-products made

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from these articles. They also own many local municipal monopolies in gas, electricity, street railways, etc. They also, through a "community of interest," control our principal trunk lines of railroads, nearly all of our lake steamers, and many of our ocean transport lines. (553.)

3. *Effect on prices.*—Mr. FLINT says that, in his judgment, the ultimate result of industrial combinations will be a reduction in prices. In general it has been demonstrated that the most successful industrials have been those that have recognized the advantage of large value and low prices. (90.)

Mr. BUTLER, a jobber in iron and steel, has no doubt that the effect of combinations is, in the long run, to lower prices. This results partly from the stimulation of new competition. It is also partly due to the increased ability to introduce improvements and economies, which results from the temporary increase of profits. Thus, in Mr. Butler's judgment, the tin plate manufacturers of Wales have been unable to introduce labor-saving devices such as American manufacturers have introduced, for the very reason that their profits have been small, and they have not been able to accumulate the necessary capital. When profits have for a time been increased by a combination and the reaction comes, through competition and other causes, the manufacturers are driven to adopt every possible improvement in order to carry on their business without loss, and their accumulated profits make it possible to adopt improvements. (490, 491.)

Mr. CHAPMAN says that self-preservation will always prevent any combination from putting the price of its products up to a point which will invite and build up competition. The interest of the combination is in keeping the price as low as possible. The history of combinations thus far in this country shows that prices have been steadily reduced as savings have been effected. In certain lines the margin between cost and selling price has been reduced. Where the cost of production has been largely decreased, the policy has been to give the purchaser as much of that reduction as possible, allowing for a fair interest on the capital invested. Through combinations economies have been effected and consumers have had a part of the benefit of those economies, so that ordinarily there has been an absolute lowering of prices to the consumer. In cases where a combination has a monopoly through patents or trademarks it would be natural to make prices higher. In cases where a combination had a monopoly in any line through complete control of the raw material, there would be danger. (103, 104, 107, 110.)

Mr. Chapman states that although the Brooklyn Union Gas Company has the monopoly of the entire city of Brooklyn, the price of gas has been reduced. The average price of gas under the separate companies was \$1.25 per 1,000; the price has been reduced by 5 cents each year until now it is \$1. The act was voluntary and not caused by legislative action. There has been no material difference in the cost of production. (106.)

Mr. HOPKINS says that any attempt at an inordinate profit in the carrying on of any considerable business is an assured invitation to rivalries and competition. The only protection is to keep the price low and to rely for returns upon magnitude of transactions and not upon an extravagant rate of profit. Low prices mean enlarged output, and combination makes low prices possible. For a combination to be successful it is essential that the character of the product be kept up to the highest possible standard, and be furnished at the lowest possible price. (344.)

Mr. WHITE, president of the National Salt Company, declares that the only evil that can result to the public from combination is the ability to demand extortionate prices; but industrial organizations have no such power because they have no protection from competition. Their success depends on their ability to produce better goods and sell them cheaper than their competitors. Exorbitant prices can be demanded only by a monopoly, created by the Patent Office or by a franchise from the State. (263.)

Mr. GRIMWOOD thinks that in these days, with the experience that many managers of combinations have had, the tendency is to make the best goods at the lowest price, and put them on the market at a fair profit, so as to keep the price of the manufactured goods down. (123.)

Mr. GUNTON says that none of the large combinations are able to fix prices arbitrarily. A large concern has not the power to put prices up abnormally. The only power it has, and which it can exercise absolutely, is the power to put prices down. A real monopoly can put the prices up, but so long as there is a competitor outside the so-called monopolies can not put prices up without the consent of their competitors. If steel rails go up, it is not chargeable to the large concerns any more than to the little ones.

Mr. Gunton presents a table giving the average freight rates for the years from 1873 to 1900, and showing that there has been a continuous reduction of rates. He

also submits tables giving the prices of iron and steel products, of other metals, and of sugar and petroleum during the years 1900 and 1901, that being, Mr. Gunton states, the time during which the tremendous amount of industrial organization and consolidation has been going on. (626, 627, 635.)

Mr. SCHWAB sees no wrong in the system of basing the prices of goods, wherever they may be shipped from, on a fixed price plus the freight from an assumed central point, as Pittsburg. Indeed, this is the only way of obtaining uniformity of price. If shipments are actually made from a point which has a lower freight rate than Pittsburg to the given market, that mill has the advantage of its location, which is entirely legitimate. (469, 470.)

Mr. HILLYER says that, in general, industrial combinations are formed for the purpose of putting up prices. That has been the case in the instances that have come under his observation. Combinations are enabled to dispense with a large number of traveling salesmen and agents, and can make savings through concentration of management. These facts would enable them to put prices down, but there is some doubt as to whether the body politic is sufficiently benefited by the small amount of reduction which has been made in certain articles to pay for the loss suffered through the throwing of people out of employment. Although in some cases there has been a reduction of prices, there has also been a larger net income to the company on account of the savings made through combination. It is difficult to say that the lowering of prices on articles manufactured by combinations has been due to the formation of those combinations. The enormous improvements which have been made in methods and the new inventions would have brought about a great reduction in the cost of production anyway. The concentration of energy brought about through combination may have aided to some extent in lowering the cost of production. (12, 13.)

Mr. TAYLER says that undoubtedly, through combination, there is greater opportunity to reduce the cost of production, but he has no idea that the public is going to get very much benefit from it. The properties of the United States Steel Corporation did not cost one-third of the amount at which they are capitalized. The stocks were sold to the public upon the basis of their supposed earning power, and their earning power was determined in the public mind by the fact that the concern is nearly a monopoly and therefore can control the market and fix prices. The people who bought the securities are going to demand a return upon them; and if they receive any full return for what they have paid for those securities in the market, they are going to extract something from the public. It is said that the Standard Oil Company has reduced the cost of oil, and it undoubtedly has; but the cost would have been reduced still more if competitive enterprise had continued in the business. It can not be said that there has been any great service rendered to the public when the market value of the securities of the Standard Oil Company is approximately \$800,000,000, based solely upon the earning power of that which cost approximately one-tenth of that amount. (606, 609.)

Mr. LA TASTE says that, in his opinion, there is no reduction of prices to the consumer through the formation of industrial combinations. There has been no reduction in the retail price of baking powders since the formation of the baking powder combination. (28.)

Mr. KLINCK, a meat packer of Buffalo, says that the Western packers have their agents in Buffalo who sell to the local butchers and have gone so far as to sell at retail. They can compete in the Buffalo market and undersell Mr. Klinck, though Mr. Klinck has the same facilities for manufacturing the by-products that the Chicago packers have. Mr. Klinck buys his cattle in the Buffalo market, and the supply is abundant. When he has to buy cattle in Chicago, he figures on paying about 35 cents more per hundred pounds. That is on account of freight and shrinkage. Mr. Klinck does not think that the system established by the great packers of distributing all over the country is advantageous to the consumers. They sell close in cities like New York and Buffalo, "but when they go into a country place where there is no competition the people have to suffer." (275.)

Mr. Klinck presents tables showing the prices which he has paid for various supplies used in his business during the last 10 years. In most cases the figures show a decline from 1891 to about 1897, and then an increase to the time of Mr. Klinck's testimony in 1901. (276-281.)

Mr. LAMB, president of the New England Free Trade League, says that prices are made arbitrarily by the tariff trusts, and are not based on the law of supply and demand, or upon the general run of the market. When a trust, for its own reasons, desires to drop the price of its product, it does so without warning. The price of lead, for instance, was arbitrarily dropped without warning in the year 1900; and, when the objects which led the trust to drop the price were obtained, the price was arbitrarily put up again. (586, 587.)



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Mr. HOLT, secretary of the Tariff Reform Committee of the Reform Club of New York City, says that if the trusts have not at any time collected from the American consumers all that the tariff has permitted them to collect in the way of prices, it is either because they have not fully appreciated the situation and have not gotten together sufficiently to stop all internal competition or because the full-limit price would greatly lessen consumption and would not yield as great a net profit as lower prices. (552, 553.)

Mr. Holt gives figures to show the effect of trust control on the prices of window glass, tin plate, wire nails, and barbed wire. (557-559, 561, 565, 566, 576, 577.)

Mr. HILLYER, a lawyer of Atlanta, Ga., says that because of the combination of the cast-iron pipe manufacturers, the city of Atlanta was obliged, for 2 years, to pay \$6 or \$7 per ton more for pipe than it should have paid. Mr. Hillyer understands that certain territory was awarded to particular members of the combination and that there was an agreement among the manufacturers that bids in territory allotted to another should be above a certain figure and that the company to whom the territory had been allotted should put in the lowest bid. Since the decision of the United States Supreme Court declaring an agreement of this sort illegal, the pipe companies have sold out their capital stock, so Mr. Hillyer has been informed, to one another, and have formed a combination of ownership. (11, 12.)

4. *Efficiency of management.*—Mr. FLINT says there is always a disadvantage in combinations which are not properly managed. Unless substantial economies can be secured by combination, it is better for the parties to run their business independently. Centralized management is most desirable, if there are men of sufficient intellectual capacity to administer an extended business. One of the dangers to the success of industrial combinations is that such men are not always to be had. Where the business is of such a character that its conduct can not be reduced to rules, where its success depends on local ability and local judgment, and where the efficiency of the selling department is involved in long-time personal relations, it would be wiser to sustain the independence and individuality of the separate concerns, because in that way the individual interest that is essential to success is sustained. (84, 91.)

Mr. BURN, president of the National Wall Paper Company, believes that factories operated by individual owners are likely to be more profitable than they would be if looked after by hired labor. (295.)

Mr. WATERBURY, former president of the National Cordage Company, says that the outsiders have an advantage in nearly every combination. In the cordage business and in most businesses a large mill properly run is better than a combination of mills. It is partly a question of executive ability. To run a number of plants together is very difficult and requires a high order of intellect. (132, 133.)

Mr. FLINT says that in case of a world-wide combination in the rubber industry the manufacturing would be done in countries where the merchandise could be produced to the best advantage in relation to the market for it. Mr. Flint does not think a world-wide combination practicable. The chief difficulty experienced by combinations is the finding of men of sufficient capacity to handle such extended business. (87, 88.)

Mr. SCHWAB says that while a point might possibly be reached at which the size of single businesses might be too great for any personal administrative capacity that could be found, he thinks that point a long distance off. Mr. Schwab does not, however, think it possible to form a world-wide combination in the steel business. (463, 465.)

Mr. BUTLER holds that the efficiency of administration ought theoretically to be greater in a large establishment than in a small one. He would secure this efficiency, however, by giving a share of the profits to those who take part in securing the profits. This is the method which has been followed in his own business, and he thinks it is the way the successful concerns in general have followed. (490.)

Mr. FLINT says that in all the companies with which he is connected reports of the separate concerns are compared every month. Through this system of comparative accounting it is possible to measure the different managements, and the system tends to bring the standard of all up to the standard of the best. When a man knows that his work is to be compared with that of others his pride acts as an added incentive for doing his best work. Details as well as general results should be compared. (84, 85.)

5. *Effect on employment and wages.*—Mr. BUTLER believes that the influence of combination on wages has been beneficial. The concerns that are the most successful pay the highest wages. The wage earner can secure better terms from one who is making money than from one who is not, and he has greater opportunities of learning the facts about a large organization than about a small organization of an individual owner. (488.)

Mr. SCHWAB believes that the result of these great consolidations of capital will be advantageous both to the investor and to the employee. Workingmen will receive the greatest benefits when capital is earning a fair return. Capitalists desire to pay employees good wages. Things go smoothly then and business gives little trouble. These great consolidations will bring about the sale of finished products at reasonable prices, will permit the extension of the use of steel, and will permit the payment of good wages to the workmen. Mr. Schwab thinks, however, that the formation of a consolidation like the United States Steel Corporation adds very much to the power of the employers against any particular class of employees. (473, 474.)

Mr. Schwab says that some men of the class that directs and superintends are thrown out of employment by consolidation, but that the working people feel no such effect. It is only the superintendents and the higher-salaried class. (459.)

Mr. FLINT says that, through the formation of combinations, wages are to a large extent sustained. In respect to the combinations with which he is connected, there has not since their formation been any substantial change in the rates of wages paid. Work has, however, been more permanent. In general, although combinations, in order to produce under the most economic conditions, throw workmen out of employment, there is in the United States sufficient employment during periods of prosperity to enable a workman to find employment in other lines, and the general effect is that the workman gets more money for his work and more produce for his money. The wage-earner has never been as well off in this country as he is to-day. It is largely due to the prosperity which has to a great extent been brought about through industrial combinations. There is a growing feeling on the part of the workingmen that they are being benefited by the conditions now existing. (89, 90.)

Mr. GUNTON says that he has taken from the census reports of 1880 and 1890 the number of persons employed and the wages paid in those years in 64 different industries in which large capital has been employed; and that he has found in every case, except one, that, while the product per man has been increased through the use of machinery, the number of employees has also been increased and the wages per laborer have risen. The one exception was in the manufacture of watch cases. Mr. Gunton submits a table giving the number of hands employed in these 64 industries in 1880 and 1890, the yearly wages paid per employee in each of these 2 years, and the amount and percentage of the increase in wages. (637, 638.)

6. *Effects on individuality and opportunities for advancement.*—Mr. SCHWAB declares that, under the old plan of individual business, the skilled worker had only a limited opportunity for increased pay and practically none for participation as a partner. Mr. Schwab tries to put his whole business on such a basis that the skilled operator and the valuable man may make something other than a salary; something in the form of a holding in the company, just as was done in the Carnegie company. The opportunities for any man, workingman, or manager, or any man who has to use his brains, were never so great as they are to-day. Never has there been such a scarcity of the special men that great manufacturing concerns and capitalists desire. The man of exceptional ability has a better opportunity than ever, Mr. Schwab thinks, to become a large owner. As to the man with a small capital to start with, his opportunities are not increased. (459.)

Mr. ATKINSON says that it is an error to suppose that the big department stores or manufacturing enterprises are absorbing the little ones. There are more small shops for distribution in ratio to the population now than ever before. There are more small workshops scattered throughout the land than ever before, especially in the South. Not more than 10 per cent of the working forces can be gathered as operatives under the collective system of the great factory and of the great workshop. (522.)

7. *Regulation of production.*—Mr. WHITE, president of the National Salt Company, considers that the power of a large company to regulate production is chiefly of importance in that it prevents a piling up of goods to depreciate by holding, and that it results in a regularity of producing activity instead of ups and downs. (264.)

Mr. FLINT says that one of the great advantages of industrial combination is that production is regulated. Where there are a large number of competing concerns and no general understanding, there is a tendency to overproduction, with the result that markets become demoralized, failures ensue, and panics occur. Regulation of production through combination tends to prevent these evils. (35, 92.)

Mr. CHAPMAN says that combination, through being able to regulate production, will have an influence in averting panics. The United States Steel Company, if wisely managed, will prove to be a regulator of production. (109.)

8. *Diffusion of ownership.*—Mr. FLINT says that there are a hundred times as many people interested in industrials now as there were 25 years ago, and there will probably be a hundred times as many more at the end of the next 10 years. In general the managers of industrial combinations are the largest stockholders. (91.)

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9. *Effect on invention.*—Mr. SCHWAB declares that the great consolidations, so far from checking invention, most effectively promote it. The manufacturing world has never been so anxious for an invention as to-day and never ready to pay such high prices for it. Men are receiving better compensation for invention and new processes than ever before in the history of the business. The salaries of skilled men have never been so high, and Mr. Schwab thinks they will continue to increase. (463.)

10. *Relation to money market.*—Mr. SPALDING says that the cornering of money is not done by any industrial trust, and the interstate-commerce restrictions on trusts would not reach the cornering of money. (9.)

11. *Corruption of politics.*—Mr. HOLT says that the evils of trusts have extended into political life, and it is because the protected trusts have completely corrupted politics and have sent their agents to Congress that the protected interests have for years dictated tariff legislation at Washington. (554.)

Mr. HILLYER says that the aggregation of power which has been brought about through combination is a dangerous element—a menace to the political independence of the people. It has in a high degree corrupted the choice of rulers, and after a while will perhaps become corrupting to their conduct. The great evil of industrial combination lies in the fact that it creates monopolies. (15, 18.)

## XXXIII.—LEGISLATIVE REMEDIES FOR THE EVILS OF COMBINATION.

Mr. CRISHOLM, president of the International Paper Company, says that in his opinion no legislation concerning industrial combinations is necessary. All combinations that manufacture and distribute goods at a lower cost to the consumer will succeed, and no legislation can prevent it; and any combination formed for the purpose of artificially raising prices by buying up competing firms will fail in the end without any legislation. (438.)

Mr. WATERSBURY, former president of the National Cordage Company, does not think that legislation on the subject of combinations is necessary, because a combination which does not benefit the public will be killed by outside competition. (137.)

Mr. BUTLER, a jobber in iron and steel, has no faith in legislation as a remedy for any possible evils of combination. The public has not benefited by its attempts at legislative restraint of railroads. Mr. Butler is an advocate of "free and unrestricted competition, operating under our laws of to-day." Competition is slower in its operation when large enterprises are involved, but in the end the result is the same. Any legislative interference seems to Mr. Butler to involve a restraint of trade, and to lessen competition rather than to increase it. If the combinations themselves make any effort to restrain trade the results will react upon them. They and not the consumer will suffer. Competition will not cease so long as there is a human mind. It is to be hereafter on a larger scale, with less waste and more intelligence, less speculation and more openness. (489, 497, 498.)

Mr. CHAPMAN does not think it wise to attempt to control the business of the citizen by legislative enactment. If the time ever comes when a monopoly has become established it may be necessary to legislate about it. Any general legislation at this time might seriously interfere with the position this country is taking in the markets of the world. (110.)

Mr. GRIMWOOD thinks that legislation inimical to agreements among manufacturers would be very hurtful, not only to the manufacturers, but to laboring men. As soon as there is no money in a business two results follow: The manufacturer is tempted to get even by making inferior goods—though this is a false policy; and he is tempted to cut wages. (123.)

Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, does not know whether the good times have caused the combinations, or the combinations have caused the good times. He thinks a little of both. At any rate, he believes that anything that will hurt these combinations will be harmful to the people. (513.)

Mr. WHITE, president of the National Salt Company, says that trusts must be regulated, and that, since they derive the right to live from the State, the State has the right to say how they shall use that right. They are moved by the same motives that move all humanity to get all they can, particularly under the system of individualism under which we are living. If the subject is handled intelligently, and perhaps some tax placed on what might be considered excessive earnings, there will be no excessive earnings. (265.)

Mr. FLINT says that, in general, affairs of trade are best regulated by natural laws. It is difficult to suggest legislation of any radical character that can supplant to

advantage the natural law of supply and demand. While it is desirable that there should be a proper system sustained, of auditing and accounting, and that there should be regulation as to the issuing of securities, the evils which have developed in connection with the organization of industries are being corrected by natural laws. (92, 93.)

Mr. McINTYRE, director of the Standard Milling Company, thinks that the watering of stock should be checked by law and the capitalization of industrial combinations restricted to the actual value of the properties. (682.)

Mr. CHAPMAN thinks that there might be cases where the amount of capital stock ought to be limited. An unlimited issue of stock without any reference whatever to the property for which it is issued might result in imposition upon the public. With an unlimited issue of stock there would be no way of ascertaining the value of shares except by going into the question of the assets and earning power of the company. The limitation of stock issued will be for the protection of the investor. (108.)

Mr. CAMPBELL says that corporations whose stocks are sold to the public on exchanges should be under governmental control. There should be government examiners for industrial corporations, and the corporations should not be allowed to sell goods at different prices in different States. They should also be prohibited from making contracts with purchasers of their goods that the goods of other companies should not be handled. These exclusive contracts are in restraint of trade, but there is difficulty in getting redress under the Sherman Anti-Trust Law, because it is impossible to get voluntary evidence. If there were a law compelling the men who had entered into these contracts to go up and testify under oath, redress might be had. A law has recently been passed in Massachusetts forbidding the making of such contracts by any person, firm, or corporation doing business in the State, and providing penalties for those violating the law. A national law would be better if it were enforced. It may be that the national law covers the ground now, but so far it has not been thought worth while to bring the matter before the United States district attorney. In Massachusetts the facts are well known, and the State district attorney would probably take proceedings if the law were violated. (311, 315, 316.)

Mr. LANDSTREET also says that a distinction might be made between corporations whose stocks are listed and sold on the public market, and those whose stocks are not. (339.)

Mr. LAMB, president of the New England Free Trade League, says that legislation is desirable which will not interfere with the benefits of industrial combinations, but which will insure the sharing of the benefits with the community. In the case of tariff trusts, the only remedy is the removal of the protective tariff. (588.)

Mr. SPALDING says that dealing with trusts is a national question. Their existence is a national evil, and the remedy will have to be a national remedy. The separate States can not handle the question. There is one set of laws in one State and another set of laws in another State. It produces an irritating local condition if an attempt is made to deal with a question which is national from a local standpoint. If any regulative law is enacted it will be necessary to provide machinery for the carrying out of the law. (3, 8.)

Mr. Spalding believes that it is practicable to enact national legislation which will forbid any trust, combination, pool, or monopoly to put prices down so as to destroy competition, or to put them up to a point of extortion. He thinks that legislative regulation of prices should not go further than that. There is a difference between industrial combinations and railroads. The railroad company is a quasi-public corporation. It discharges public functions and has the right of eminent domain. It is of necessity a monopoly, because there can not be two railroads side by side. Therefore, the law against discriminations in freights does not present a principle which can be followed in the regulation of prices of industrial products. (5, 7.)

Mr. GUNTON holds that large corporations ought to have their charters from the Federal Government, and be under Federal control. Whatever restrictions are necessary could be put into the Federal charter. (638, 639.)

Mr. Gunton also says that one thing which ought to be accomplished in respect to large corporations is that the prices of the products of any one concern shall be the same in all localities, the cost of transportation considered. If a large concern makes the price of its product in one vicinity double the price which it makes for its product in another vicinity, where the cost of transportation is substantially the same, that is not competition; it is persecution, and it ought to be prohibited. (634.)

Mr. HILLYER also considers that the remedies for most of the evils of trusts lie with the National Government. It is beyond the power of the State governments to reach all the evils. There are a few evils, however, which are within reach of the municipal governments. The first step to be taken is to enforce the Sherman law,

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amending it so that it will reach the case of combined ownership as well as of combination, and also perhaps amending it so as to deny to combinations the right to ship their products across State lines. Also, wherever the trust is dependent on the tariff for getting a higher price for its product, the tariff ought to be taken off, unless there is some reason for doing otherwise. If, in the judgment of Congress, the Constitution is in the way of effectual legislation against trusts, the Constitution should be amended. The most hopeful remedy for trusts, however, is to be found in Government ownership, and if trusts can not be done away with through any of the other means suggested, the Government should go into the business of manufacturing the products manufactured by trusts. (15, 16, 17.)

Mr. SPALDING also suggests that trusts might be abolished by the passage of a law by Congress similar to the law which broke up the lottery business; a law which should provide that they should not use the mails, or a law which should prohibit their shipping their products across State lines. It could be made a misdemeanor for a trust to send goods from one State into another, and a misdemeanor for a transportation company to handle the products of trusts in interstate commerce. If the trust should, for the purpose of evading the effects of this law, build a plant in every State for the supplying of wants of that State, that would do away with a great many of the offensive features of trusts and combinations, because it would do away with the centralization of the industry, and would compel the trust to maintain a plant and a separate organization in each State.

The requirement that the trust give publicity to its operations would be a good thing. Mr. Spalding would advocate any method of dealing with trusts which could constitutionally be adopted, either under the power to regulate interstate commerce, or under the taxing power. (4-6, 8.)

Mr. PREL, president of the National Starch Company, says that the requiring of a reasonable publicity regarding the condition of the business of industrial combinations from year to year is desirable. (673.)

Mr. SCHWAB does not favor publicity of the accounts of corporations. Certain statements stockholders are entitled to, and to give them to stockholders amounts to publishing them; but he would not regard a high degree of publicity of accounts as desirable. (474.)

Mr. TAYLER thinks that the requirement of publicity in respect to trust affairs would be but a scratch on the surface in remedying trust evils. The different States can, to a degree, control industrial combinations, since they permit the corporations of other States to do business only under such rules as they see fit to lay down. The States are, of course, powerless in the matter of interstate commerce. An approach to dealing with industrial combinations through the power to control interstate commerce was made at the first session of the Fifty-sixth Congress, when a bill was introduced which provided for a method of making it unlawful to transport goods that are made by illegal combinations. (606, 608, 609.)

## XXXIV.—THE PROTECTIVE TARIFF.

**A. General historical statements.**—Mr. Edward ATKINSON says it is not true that the fiscal policy of this country from 1789 to the present time has been that of protection. Hamilton's tariff and all tariffs prior to 1816 were almost purely revenue measures. They would all be scouted to-day as being the most extravagant of free trade measures. It was not until after the war of 1812 and the unwholesome stimulus given to certain branches of industry by the exclusion of British goods that there was any real protective effort, and that effort did not really take shape until 1824. It is true that ocean freights were higher then and raised the cost of the imported products. Just as fast as the cost of transportation has been diminished we have put up a legal obstruction. (544.)

Mr. GUNTON says that in 1820 Daniel Webster spoke in favor of free trade, but later he recanted and attributed his remarks to his youth and immature judgment. In all his speeches after 1824 Webster was pronouncedly for protection. Mr. Gunton quotes from a number of speeches made by Webster in favor of a protective tariff. (623, 624.)

Mr. ATKINSON says that the tariff of 1846, being a horizontal tariff, putting up the duties on wool while it put down the duties on goods, had a very disastrous effect. The effect was attributed to free trade, but it was really due to the advance in the duties on wool. The period from 1857 to the beginning of the civil war showed the most steady and constant development of the textile manufactures of this country that has ever been known. The panic of 1857 was purely a financial panic and did not interfere with the progress of arts and industry, and in 1858 great prosperity had returned. (541.)

Mr. Atkinson also says that the industrial depression during the years immediately following the enactment of the Wilson law was not in any degree the result of the tariff policy embodied in that law, but was entirely due to the silver craze. Every industry that rested on credit was affected, and there was a change in the tariff policy that happened to accompany it. The evil influence of the panic of 1893 was vastly greater than the beneficial influences of the Wilson law, but, in spite of all that, the specially protected arts which had feared the Wilson bill became more and more prosperous. (530, 543.)

*Tariff legislation in England.*—Mr. GUNTON says that from the time of Edward III down to 1842 England pursued very persistently a protective policy. She would not allow machinery to go out of the country, and even prohibited the exportation of patterns or blue prints of machinery, and prohibited also the emigration of mechanics who could build or set up machinery. She had a 50 years' start of the world in machinery, and had practically a monopoly of all the steam machinery in the world. She had the factories, she had the products, she wanted the markets; she could produce, but she could not sell. It was wise for her to take the duties off from her manufactures because there was no necessity for these duties. It was not wise for her to take the duties entirely off from breadstuffs. There is not a spot in Christendom where wages have not increased since that time, except the agricultural districts of England. Land is actually going out of cultivation.

The position of this country at the time of our adoption of the protective system was just the reverse of that of England. We could buy, but we could not produce. What we wanted therefore was not foreign markets but our own market. To become a manufacturing country it was necessary for us to adopt the protective tariff system. (622, 623.)

Mr. ATKINSON says that in 1840 the number of paupers and the general poverty and distress in England were greater than at any period before or since.

Hume's report on the British tariff in 1842 disclosed the fact that there were 1,250 separate specifications, that the average duty was 28 per cent, and the amount of revenue about £10,000,000. It also disclosed the fact that less than 50 of those specifications yielded more than 75 per cent of the revenue. In Peel's first great act, 500 petty articles, which had previously yielded £2,000,000, were put on the free list. Such was the instant beneficial effect of the removal even of these 500 petty taxes that at the end of 3 years the 750 articles remaining dutiable yielded the full sum of £10,000,000. In Peel's second measure of 1845 the duty was removed from about 700 articles, and only 50 were left subject to duty. These 700 had yielded £3,000,000. In 3 years, although the Irish famine ensued and the corn law went by the board, the revenue from the 50 remaining articles was again about £10,000,000. In 1863 the shilling duty on corn was remitted, and there remained for many years, down to a very recent period, only 6 or 8 dutiable articles, yielding as much income as the 1,250 articles had yielded when the reform began. (525, 526.)

**B. Effect of tariff on industry.**—Mr. LAMB, president of the New England Free Trade League, says he does not believe that a high tariff always injures trade and that a low one always promotes it. The great factors that affect trade are far beyond any control through changes in the tariff policy. Our tariff history is a confirmation of this fact. Under the tariff of 1846, which was a tariff made in the direction of free trade, the prosperity of the country was very great. There were great reasons entirely independent of the tariff for the wonderful prosperity of the country; among others, the discovery of gold. During the years from 1873 to 1878, under a high protective tariff, there was widespread industrial depression. There was an inflated currency at that time and the country was in bad condition to meet hard times. There was depression in business in the year 1893 under the McKinley tariff. It continued under the Wilson tariff and for a time under the Dingley tariff. Our present prosperity is due to the general commercial activity that has swept over the whole world, and further to the very fortunate combination of circumstances that has enabled us to supply large exports of agricultural products at a time when there was a short supply and a great demand for them. During the years from 1894 to 1897 we shared in the very general commercial depression that existed all over the world, aggravated by the condition of our currency. The industrial depression of these years was not caused to any great extent by our tariff policy. Business generally improved after the passage of the tariff in 1894, and there has been a steady improvement from then on. The importation of goods in respect to which there had been a change in the tariff in some cases increased for a while under the Wilson tariff and fell off again when American producers, through a lowering of the cost of production, were able so to meet competition that it was no longer advantageous to purchase goods abroad. In some, but not in most, cases, the reduction in the cost of production was secured by a reduction in wages. The effect of the election

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of 1892, so far as may be judged by the state of the stock market, was absolutely nothing. Conditions in 1892 were regarded by the best observers as "shaky."

The increases in price made by the tariff trusts stop consumers from buying, and therefore check trade. The steel trusts, for instance, have imposed a great check on building operations. Almost the whole year 1899 was a time of great oppression to those engaged in building operations, and the steel trusts finally learned that the exorbitant prices they were asking affected their own business so injuriously that for their own interests they lowered their prices. (586.)

We had thriving manufactures in this country before the Constitution of the United States was framed. The high cost of transportation at that time was a protection to the manufacturers in this country, in that it was not possible for anybody abroad to render to our people the service which was being rendered by our own manufacturers. When the cost of transportation became very much reduced it became possible for others to render a greater service. Had our manufacturers been permitted to retain all their natural advantages they could in most cases have competed with foreign producers in spite of the disappearance of the protection given to them by the high cost of transportation. (586, 589, 590, 595, 598, 599.)

Mr. ARKINSON says that this country has never been a purely agricultural country from the time of the settlement of the colonies to the present time. The progress of manufactures has gone on since 1750. The manufacture of iron and steel, of wool fabrics, of cordage, of flax, of hats, and many other branches was well established in the colonies before the Revolution. Alexander Hamilton in his report on manufactures names all these arts as being "successfully established." (518, 544.)

Nearly all our manufactures have been established here from necessity rather than from choice. The great body of small industries that constitute the real manufactures of this country have gone on progressing and prospering through all periods, without any regard to ups or downs in the tariff, because the tariff has no effect upon them, except as consumers. The inventions of the country, the development of wages, and the application of science and inventive genius, have gone on irrespective of the tariff policy. At different periods of our history there has been a policy more or less protective, or more or less free trade; and accompanying either one of these policies, without any apparent reference to what that policy might be, inventors have gone on inventing because they could not help themselves. In no other country is the cost of labor per unit of product so low; in no other country have so few men been diverted from the constructive work of peace to the destructive pursuit of war. So far as the principle of liberty has been permitted to take its free course our domestic industry has been promoted and our home and foreign markets have been established and assured. So far as liberty has been restricted by the perversion of public taxation for the promotion of a very few special private interests, manufactures have been retarded; the protective system has retarded the manufacturing progress of the country. By our duties on raw materials we protect the ironmaster of Great Britain in the commerce of the world. The little petty duties on scrap iron and scrap steel still retard the small industries of the coast. It is impossible to establish and maintain woolen and worsted manufactures without the untaxed import of the wools of the world. In our treatment of raw cloth and unscoured wool we fail. When our Southern cotton growers give as much attention to quality and preparation as they give to quantity, we shall cease to depend on Egypt, even for the cotton needed in our finest work. When the attention of intelligent men is given to sheep breeding on the cotton fields of the Piedmont district, wool will be protected, and we shall then compete on more than even terms with the semibarbarous methods of the ranches of Australia and the pampas of South America. If we could have free sugar we could establish an enormous export trade in fruits and condensed milk. Some of the industries now existing in this country might not have been established except for the protective tariff, but other better branches would have existed, because we can not buy foreign goods without exporting our own. The growth of the iron industry in the South in competition with the ironmasters of Pennsylvania, and of the cotton industry in competition with the textile factories of New England, affords an example of the development of industry which can be had through skill and capacity without other protection. (519-521, 539-541, 543.)

Mr. GUNTON, on the other hand, declares that the South has not developed a single manufacturing industry out of its own conditions. It is enjoying great prosperity to-day, but it is because the instruments of production have been transplanted from New England, where the struggle under protective conditions has been going on for 30 years or more. The South, instead of having developed its prosperity independent of protection, has had it given to it ready made, because of the development under protection which has taken place in New England. (621.)

Mr. ATKINSON says that the protective tariff system has made many of the specially protected arts among the most variable, and has been productive of the greatest bankruptcy. There is hardly a woolen mill in Massachusetts to-day that has not been bankrupt. In wool manufacture there will be found more variation, more fluctuation, more bankruptcy than in almost any other. Cotton manufacture has not paid 6 per cent right along. The record of calico print works for 50 years is a record of bankruptcy. Hardly one exists that has not been bankrupt once; some twice. In the manufacture of boots and shoes, on the other hand, there has been constant development and there have been almost no bankruptcies. The tariff on boots and shoes is entirely inoperative, except on the high-priced, handmade English goods. Many other tariff obstructions have in like manner been overcome through science and invention. Among them are the large duties on steel and iron; they have become inoperative. (537, 539, 540.)

By enabling the steel manufacturers of Pittsburg to sell their goods in the South at points where the transportation charges are greater from Pittsburg than the water rates from England would be the tariff is a protection to Pittsburg. If, however, pig iron were admitted free of duty steel manufactures might be established on the coast which would not be subject to the handicap of the long haul over the railroads. (534.)

Mr. HOLT, secretary of the tariff reform committee of the Reform Club of New York City, says that our protective tariff system has undoubtedly caused the transfer of some industries to this country, but we should have made greater progress and should have been more at peace with the rest of the world if we had done without tariffs. We have got the wrong industries through our tariff system. Without the protective tariff we should have had the natural industries that the ordinary course of evolution would have given us. The establishment of these has been prevented by the increasing of the cost of materials through the imposition of a tariff. Without duties on sugar, on tin plate, and on glassware we should have supplied the world with canned goods and should have employed probably three times as many people as are employed by the tin plate and sugar industries which protection has given us.

Some of the leading glass manufacturers do not hesitate to say that if there had never been a tariff on glass our glass industry would now be twice as large as it is, and would be employing twice as many men and using twice as much coal, gas, lumber, etc. Without a duty on tin, or at least without an increased duty, the tin-plate industry would have been established in this country within a few years anyhow. It is true that previous to 1890 we had made several attempts to establish the tin-plate industry in this country, but we failed because of the tariff combinations in black plates. The manufacturers held black plates at a price which was prohibitive to the tin-plate industry.

Because of the tariff, steel rails are sold at comparatively higher prices in this country, and it costs therefore relatively more to build railroads, and we have to pay for this additional cost in the freights on goods and in passenger fares. It is true that before the tariff was put on steel rails we were paying \$100 a ton for them, and that since the imposition of the tariff great industries have been built up in the United States; it is probably true also that the cost of freights has gone down. Nevertheless, the tariff on steel rails may have prevented freights from going down as far as they otherwise would have gone.

It is not of any importance whether \$10 goes out of this country or \$10 comes into it at any particular time. Money can not go out unless something comes in for it. A man does not pay out \$10 unless he thinks that he is getting at least \$10 value for the \$10 that he parts with. (565, 571, 572, 578, 582.)

This country has acquired its great wealth by utilizing its natural resources. It would have been developed to a far greater extent without our protective system. There will always be money where there is wealth, and we have here the natural resources for producing great wealth. It is because we are such a great nation within ourselves that we have been able to stand the burden of tariff duties. The prosperity of the country depends directly upon its ability to produce more cheaply than other countries can produce. (579, 583.)

Mr. GUNN says that the steel and iron industry is due to the protective tariff on iron and steel. Without a tariff on steel rails we should not be able to make a steel rail now. At the time when we began to protect our iron industry England could beat us in about everything in the line of iron and steel. Steel rails, for instance, could be produced in England for \$65.70 a ton, while the cost of production in this country was \$120.12 a ton. When protection was applied so as to permit the American iron manufacturers to control the American market, capital began to be invested in the steel and iron industry, because of the assurance that foreign producers could not sell below a certain point. As a result of American competition and invention,



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and the development of large concerns, the price of steel rails has continually declined. The chief reason for this is found in the development of machinery which has taken place in this country. Americans have surpassed foreign manufacturers in the application of capital and invention and ingenuity during this protective era when they have had an exclusive guaranty of the American market. If it had not been for the protection given to iron and steel, we should probably not have had half our railroads; we could not have developed our iron industry, many of our factories would not have been in existence, and we should have been practically an agricultural nation. Our freight rates would have been several times what they are now, simply because of the lack of work for the railroads and because of the expense of running them with a large fixed cost. (620, 621.)

Mr. ATKINSON says that it is possible that the putting of a duty on tin plate by the McKinley law hastened the transfer of the tin-plate industry from Cornwall to this country, but it would have come in the nature of things, and the development of the industry in this country was going on at the time the McKinley tariff was enacted. The real work has been that machinery has been adapted in this country to the dipping of the tin plate, which in Wales was a manual occupation. The transfer of the industry to this country has come from our having attained supremacy in the manufacture of thin sheets of steel and from inventions which have enabled the whole coating to be done without manual work. When the tin-plate mills first opened in this country they had to import their black sheets, and the industry would have been promoted at that time by the free import of black sheets. The steel-plate industry which had begun to be developed in this country would have gone on in any case. It would have developed, as all other steel works have, by the improvement of American methods and the ability of American workmen. The tin-plate industry is one of the crucial cases where during the existence of a high protective tariff a special art has made a great advance. The invention of the improved machinery used in the industry was going on at the time of the enactment of the McKinley tariff. Inventors were at work in both the United States and England. In putting a tariff on tin plate the whole community is taxed in order to support the 12,000 persons employed in that industry. (535, 536, 537, 539.)

Mr. LAMB, president of the New-England Free Trade League, says that the increase in the amount of tin plate produced in the United States from practically nothing in 1889 to about 750,000,000 pounds in 1900 was due to the fact that we were not allowed to buy tin plate elsewhere. It is hard to say what would have happened if there had been no protective tariff on tin plate; but it is probable that, so far as supplying the western part of this country is concerned, the industry would have been established without the change in the tariff which was made in 1890. If the duty on black sheets were repealed there is reasonable assurance that the manufacturers of tin plate, outside of the American Tin Plate Company, would get them cheaper than they do now, and it is probable that the eastern part of the country would import them. It is doubtful, however, if it would be possible to freight them very far into the country in competition with American sheet steel. (591, 592, 593.)

Mr. TAYLER, a member of Congress from Ohio, says that the inevitable result of the removal of the tariff on tin plate would be that the United States Steel Corporation would be the only concern in this country that would make a pound of tin plate. A very large independent tin-plate plant has been started in Mr. Tayler's district. If the duty were taken off from tin plate that concern could not possibly live. The United States Steel Corporation would go on and manufacture tin plate if the duty were removed. The first thing it would do would be to reduce wages, but the probabilities are that it would not reduce wages to the point to which an independent plant would have to reduce them. If the reduction of the tariff or the removal of the tariff would not reduce the rewards of labor and would not prevent the establishment of independent tin-plate plants, then Mr. Tayler would think that the abolition of the tariff would be a most excellent method of dealing with the trust question. (603, 604.)

Mr. ATKINSON does not think the tariff on hides has benefited the farmers or that they have ever got an additional cent because of it; and that it has retarded the export of leather manufactures. Referring to the statement made that the abolition of the duty on hides was followed immediately by a rise in the price of imported hides, Mr. Atkinson says that the increase in price increased the purchasing power of the man who sold the hides and that he could buy more goods of us in exchange. Unfortunately this was not the case, so far as South America was concerned. It is impossible to make the round voyage to South America, because we shut out so large a part of the wool and the copper ore of South America, and the materials produced there, which would make up the round trip. (535, 536.)

Mr. ELLIOTT, a paint manufacturer of Philadelphia, says that the paint manufacture in this country is in many respects in advance of that of Europe. This has been caused by the greater demand for paint. The demand has been greater here because houses are largely of wood and because the people have had the money to pay for paint. Mr. Elliott, while a believer in a protective tariff on general principles, does not think the tariff has had much to do with building up the paint trade. The Wilson bill did not affect his business, and he would not care if free trade in paints were introduced, so far as any benefit to his trade is concerned. The tariff on paints in general has always been very moderate, rarely above 25 per cent. The duties on linseed oil and white lead, however, are excessively high, and result in unnecessarily high prices to the consumers and in hampering foreign trade. (210, 211, 213.)

Mr. FLINT says that rubber manufacturers have given practically no consideration to tariff on rubber, except in the case of rubber clothing, which is less than one-half per cent of the industry. Mr. Flint can not say whether the tariff is of any advantage to the rubber combination or not. But in the manufacture of rubber goods, and particularly the manufacture of rubber boots and shoes, the great percentage of labor is hand labor. In an industry where that is the case the removal of the tariff would be likely to lead to the transfer of the industry to Europe, so that the benefit of the cheap European wages could be taken advantage of. If the tariff on rubber were removed Americans would be very likely to establish factories abroad and then bring their products into this country. With the advantage of cheap foreign labor they would be able to produce goods more cheaply than they could produce them in the United States. The most important rubber factory in Great Britain, for instance, was established by an American, who took the machinery over there.

The question of the tariff is of very little importance as relating to the starch industry. In the manufacture of starch the labor is largely machine labor, and in that labor the American is more efficient than the European, so that the American manufacturer gets more for his money than the European manufacturer.

In cases where trade secrets possessed by Americans are of sufficient importance to counterbalance the difference between American and European wages the American manufacturer would not necessarily be forced to go abroad by the removal of the tariff. Such cases, however, would be limited in number. In the rubber trade that situation would not exist in reference to the trade in general, though it would apply in some specific cases. In view of the growing value of our export trade we should tend to freer trade. The only danger to international trade at present is the danger of a war of tariffs. Great caution, however, should be exercised in making any changes. Tariff tinkering creates unrest and uncertainty. (82, 83, 85-87.)

**C. Rebates on exported goods.**—Mr. ATKINSON says that a rebate is apt to be a snare and a delusion and exceedingly difficult to collect, being sometimes so small that it does not pay the cost to try and keep the figures separate. This has not been the case so far as the Standard Oil Company is concerned. They do business on such a large scale that they reap a benefit from the rebate system. The rebate is a benefit where the imported material which enters into the exported product can be easily identified. (536.)

Mr. HOLT says that the United States allows a rebate of 99 per cent of the duty paid on imported tin plate when the plate is reexported, but the cost of collecting the rebate is about 25 per cent. There is a firm in New York City that gets 15 per cent for doing this whole business for different concerns, and that commission comes out of the drawback. Tin-plate manufacturers are to-day selling tin plate at \$1 a box less to exporters of tinned goods than to ordinary customers, and the small manufacturers prefer to pay 50 cents more for American plate than they would have to pay for foreign plate rather than take the trouble of collecting the drawback. (571.)

Mr. LAMB says that the rebates paid on reexported goods, while of assistance to an industry with an export trade already established on a large scale, is not possible in the case of a small business or, if possible, is extremely difficult to obtain. There is difficulty in demonstrating that a given material has been used. It involves considerable expense and a publicity that many manufacturers do not desire. (586.)

**D. Relation of tariff to trusts.** (See also *Proposed tariff changes*, p. CLVI.)—Mr. ATKINSON says that the protective tariff gives the opportunity for the organization of trusts and combinations and monopolies. To some extent it allows the trust more of a monopoly than it would have without the tariff. It is rather extravagant to say that the tariff is the mother of trusts. So far as the tariff prevents the importation of foreign articles it tends to help the trusts, but the trust would exist either in a

free trade or a protective country. Mr. Atkinson would not remove the tariff from products simply because there are trusts engaged in the manufacture of those products. There are plenty of trusts in England. They are not peculiar to any country. (533, 542, 543.)

Mr. SPALDING says that trusts exist in foreign countries; that there is a general tendency in monarchical governments to concentrate and combine everything. (2.)

Mr. HOLT, secretary of the tariff reform committee of the Reform Club of New York, says that the only other countries which have trusts comparable to ours are the protected countries of Continental Europe, notably Germany and Austria. In free-trade England the trusts are few in number, and they lack the many evil propensities of tariff trusts. There are numerous syndicates and joint stock companies in that country, which are sometimes called trusts. They are, however, with few exceptions, comparatively harmless. They can not control prices unless they can produce at a lower cost than any and all other competitors, because they have free trade in their home market and must meet the lowest prices at which goods manufactured anywhere on earth can be sold. They can exist only so long as they produce cheaply and sell at low prices. Because they are not coddled by their Government they do not support extensive lobbies, do not make great campaign contributions, and do not corrupt politics, as do the trusts in this country.

Trusts not protected by the tariff can not prevent competition for any considerable time, and soon come to grief if they attempt to imitate the protected trusts and to put up prices unduly. (552, 553, 583.)

It is self-evident, says Mr. Holt, to those who think at all clearly on the subject that high tariff duties, by shutting out foreign goods, make it easier for our manufacturers in any particular line to combine to control prices, and that the object lessons during the last few years have been so numerous, so clearly seen, and so generally commented upon that the fact that the tariff aids trusts is no longer open to discussion among intelligent men. Tariff duties practically alienate us from the rest of the world, so far as many industries are concerned, and make it easier for our producers in any one line to combine. Except for the protective tariff there would not have been that great accumulation of wealth in the hands of a few, which makes easy the formation of great industrial and transportation combinations. In many industries internal competition has become so great that the tariff can not be utilized unless it is accompanied by a monopoly of natural resources. The tariff therefore is not only responsible for the earlier and smaller trusts, but it has hastened and been instrumental in the formation of the gigantic trusts of to-day. The tariff is not the mother of all trusts, but it is the mother of many trusts and the foster mother of nearly all others. It is the most important and the most conspicuous of the special privileges which make monopoly possible, and monopoly is the mother of all trusts. In the case of the borax industry American warfare from behind a protective tariff wall made the business unprofitable in unprotected countries, depreciating the value of foreign plants and mines, and made it easy for our Government-supported trust to buy up its foreign competitors and to form a world-wide trust. Our borax tariff is therefore the real mother of this great world trust. (552, 553, 569.)

Mr. Holt says the tariff was most certainly responsible for all of the profit made by the American Tin Plate Company in 1900. The tariff is probably responsible for much of the profit made by the National Steel Company and by several of the companies which produce the raw material for the tin-plate industry. It is probable that at least \$5,000,000 of the \$7,000,000 profit which the American Steel and Wire Company claims to have made in 1900 is to be credited to tariff duties. It is entirely reasonable to suppose that one-half of the \$108,000,000 made by the constituent companies of the United States Steel Company in 1900 was tariff profits, absolutely unnecessary to protect any of the industries. (559, 562.)

Mr. Holt says that he does not claim that the abolition of tariff duties to-day would kill all or even most of the gigantic trusts. The first step in the solution of the trust problem, however, is to remove the protective tariff. When the field has been cleared of tariff trusts it can be determined what other kinds of trusts there are to deal with and how the special privileges which make them dangerous and harmful instead of beneficent and useful can be taken away from them. (553, 584.)

Mr. LAMB, president of the New England Free Trade League, says that the class of trusts which he calls tariff trusts are those which are protected by the protective tax in the tariff. The evils in other trusts are almost always limited. The evils in the tariff trusts are generally limited only by the rate of the protective duty. The trust, in general, to succeed must render a service better than anyone else can render it. The tariff trusts are enabled to prevent others from rendering the service which they render whether others can do it better or not. There are many trusts

in this country which are not directly protected by the tariff, yet which are the creatures of the tariff in that they have been formed for self-protection against the tariff trusts. In that sense organizations of middlemen are trusts. (584, 585, 587.)

Mr. SPALDING says that if the protective tariff were abolished, that would regulate trusts, both in home and foreign markets, and would break up monopolies. The removal of the tariff would not necessarily affect the Standard Oil Company. It would affect the anthracite coal trust, because, although there is no tariff on anthracite coal, there is a tariff on other coals, and the use of other coals is bound to have its effect on the anthracite-coal trade. The abolition of the tariff would not affect the ice trust or other trusts which produce articles on which there is now no tariff, unless it should affect the machinery used by those trusts in the manufacture of their products. (3.)

Mr. WATERBURY thinks that the removal of the tariff on the product of a combination might have a serious effect upon the combination, but in hurting the combination it would hurt the country. Combinations that do not charge too much are an advantage to the country, and those that do charge too much will fail, and competition will ensue. (136.)

Mr. TAYLER, member of Congress from Ohio, says that trusts have only an incidental relation to the tariff. The fact that there are trusts in a protective tariff country does not prove that the trusts are the outgrowth of protection. So far as the tin-plate industry is concerned, the industry would not have been established without the protective tariff, so in that way it may be said that the tariff is responsible for the trust. In the pottery business there would be no industry at all but for the tariff, and there is no trust in the pottery industry. The Babcock bill, which proposes to remedy the evils of trusts by removing the tariff from trust products, is objectionable because such legislation would destroy the possibility of the manufacturing by independent plants of the goods which are now protected under the tariff, and would simply put strength into the large combinations. The passage of the Babcock bill would be to the advantage of the United States Steel Corporation more than to that of any other concern or person. (601, 607, 608.)

Mr. FLINT says that the rubber combination was in no way due to the tariff. Any legislation that should discriminate against trusts in general would be most disastrous to labor interests, and would create an industrial panic. The lowering of the tariff would injure the manufacturers who are outside of the combination more than it would injure the combinations, because the former would have less financial ability to deal with the situation. (83, 87.)

Mr. GUNTON says that the tariff has no essential relation to trusts as such. These large concerns have come into existence by virtue of their superior development. The tariff, instead of helping to give them a monopoly, is the one thing that prevents them from having a monopoly, because it sustains their smaller competitors, who could most easily be driven out by foreign competition. If the tariff were removed from the whole iron and steel industry, it would punish most those who have now the smallest margins of profit. (633.)

**E. Effect of tariff on prices.**—1. *Generally.*—Mr. LAMB says that if the tariff were removed from the products manufactured by the trusts, the trusts would cease to export their products at a price lower than that which they charge to the American consumer, for the reason that otherwise those products would be reimported. While it may be true that it is the practice in all exporting companies to charge lower prices for export than in the domestic market, it can not be the practice to any great extent in a country which has no protective tariff. It is not an established fact that the trusts sell abroad now at a loss, and it is probable that they would continue to export if the tariff were removed. In some cases the whole surplus would be consumed in this country at a lower price. (594, 595.)

Mr. Lamb adds that the people of this country are obliged to pay higher prices than they ought to pay, not only for those goods which are produced by the trusts, which are protected by the tariff, but also for the products of other protected industries. What the whole world is striving for under the competitive system is cheapness. Our protective tariff has interfered with the bringing about of cheap production. (595.)

Mr. GUNTON says that whether or not the tariff is added to the price of an imported product is determined by purely economic law. In any competing group of products of the same kind the prices in the open market will be very near to the cost of the production of those products in the group which are produced at the greatest disadvantage. When all the product produced can be sold, the manufacturers who produce at the greatest advantage are not going to put the prices down. They are going

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to get as big a profit as they can. It is the man who produces at the greatest disadvantage, the one to whom the cost of production per unit of product is greatest, who practically fixes the price. When there is a down move in trade and not all of the product can be sold, the price will go down. Upon that principle the prices of products are fixed in the international market. In the international market the dearest product is the American product, and the cheapest product is the foreign product. If a tariff is levied on the foreign product it will depend entirely on where that tariff is put and how big it is whether it will be added to the price that is put on the American product. The duty is added to the price only when it is laid upon the dearest portion of the product.

From 1881 to 1891, and afterwards, the duty on washed wool was about 20 cents a pound. The actual average increase of the price of wool during that period was only 2.4 cents. The duty on wool is a protective duty, and therefore the foreigner pays more than half of it. The Wilson law took nearly 15 cents a ton off of Nova Scotia coal. The price of coal was not affected in the least, because American coal was the dearest product and the Nova Scotia people could get what the American producers could get. Therefore when the 15 cents a ton was taken off the Nova Scotia coal, the Nova Scotia producers got 15 cents more profit. Bermuda potatoes afford a similar illustration. The duty on sugar, on the other hand, is a revenue duty, and when a duty of 1 cent a pound was placed on raw sugar the price rose a cent a pound. The reason for this is that the great bulk of sugar is raised abroad.

The cost of any imported article here, when we are not producing it in this country, is very much higher than its cost to the foreign consumer. When English steel rails were selling in England at \$65 a ton, American buyers could not buy them at \$65, nor at \$65 plus the cost of transportation. The English manufacturer charged American purchasers nearly double what was charged to English buyers, simply because no rails were manufactured in this country. When a new industry is established in this country through the tariff, usually there is a little higher price paid for the products than was paid before, but in the long run the price is lowered through the establishment of the industry here, because of the development which takes place. (617, 618, 619, 621.)

Mr. Holt states that in computing the additional amounts which consumers have paid for products because of the protection given to various industries by the tariff, he has taken the difference between export and domestic prices. The export prices may fairly be considered as being profit-making prices, because they are not mere deliveries of surplus products. In the case of steel rails and iron billets, orders have been taken for future deliveries and it may be considered, therefore, that the goods have been sold at a profit. (581.)

2. *Borax*.—Mr. Holt says that previous to 1883 there was no duty on borate of lime and crude borax. The tariff of 1883 made the duty on refined borax and pure boracic acid 5 cents a pound, on commercial boracic acid 4 cents, and on borate of lime and crude borax 3 cents. The tariff of 1890 made the duty on all boracic acid 5 cents. The tariff of 1894 reduced the duty on all borax to 1½ cents, and the tariff of 1897 made the duty on borax and boracic acid 5 cents. Four days after the McKinley tariff became effective the trust raised the price of borax, which had been 8½ or 8¾ cents, to 9¼ or 9¾ cents per pound. According to the Oil, Paint, and Drug Reporter of December 31, 1894, the net decline in price, which up to that time had taken place since the enactment of the Wilson tariff law, was 2¾ cents per pound on crystals and powdered, and 2½ cents per pound on refined in bags. According to the same paper, in February, 1895, the prices for borax were lower than those for which borax could be imported or produced in this country except under the most favorable conditions. In January, 1898, after the Dingley law had gone into effect, the Oil, Paint, and Drug Reporter said: "The advance in the rate of duty on borax in the act of 1897 from 2 cents per pound to 5 cents has caused a rise in the price here from 5½ cents in carloads, which was the market quotation when the tariff became operative, to 6¾ cents. \* \* \* It is evidently the determination of the refiners to raise the price by slow and easy stages until they shall reap the full increase of benefit which the new act gives them."

Mr. Holt presents a table giving the wholesale prices per pound of refined borax in New York at different dates during the years 1891 to 1899. (568, 569.)

3. *Steel rails*.—Mr. Holt says that we consumed about 2,000,000 tons of steel rails in 1900. It is probable that the average export price of rails was considerably more than \$5 per ton lower than the home market price. Protection of steel rails, therefore, costs us about \$10,000,000 per year. We consumed about 500,000 tons of structural steel beams in 1900. It is safe to say that Americans paid \$5,000,000 more for the structural steel beams used in 1900 than they would have paid if there had been no tariff, and it is entirely reasonable to suppose that one-half of the \$108,000,000

profit made by the constituent companies of the United States Steel Corporation in 1900 was due to the protection afforded those industries by the tariff. (562.)

Mr. GUNTON says that before we began to manufacture steel rails in this country and relied upon England for our supply, it cost Americans \$120.12 in gold for a ton of steel rails, such as were sold in England for \$65.70. The duty was at that time about \$29.50 per ton, so that it is plain that when we bought steel rails almost entirely from England we paid \$25 a ton more than the English price with the duty added. After sufficient protection was afforded to warrant the investment of American capital in the steel-rail industry the cost of production was steadily lowered, both here and abroad. Under protection we have in this country reduced the price of steel rails since 1867 \$92 a ton, while in England, under free trade, the price has been reduced only \$36.48 a ton.

Mr. Gunton submits a table, showing the American and foreign prices of steel rails during various years from 1867 to 1901, together with the amount of the duty per ton. (625.)

4. *Barbed wire and wire nails.*—Mr. HOLT says that perhaps 1,800,000 tons of barbed wire were sold in this country in 1899 at an advance over the export price of at least the full amount of the duty, which is four-tenths of a cent per pound. The tariff on barbed wire therefore costs us about \$1,440,000 per year. On 400,000 net tons of drawn wire in various forms which were sold to Americans, the duty of from 1½ to 2 cents per pound was probably utilized, and therefore the tariff on these products cost the consumer \$3,000,000. About 700,000,000 pounds of wire nails were sold in 1899 in our home market. The average difference between export and domestic prices was probably considerably over one-half cent per pound. Consequently we paid \$3,500,000 more for our wire nails in 1899 than we should have paid had there been no duty. (562.)

5. *Tin plate.*—Mr. Holt also states that the price of tin plate is lower to-day than it was in 1890, but that it is not as low as it should be with the development in the industry since that time. The whole steel industry has been revolutionized in the last 10 years, and the whole method of manufacturing tin plate has changed, machinery now being used where hands were used before the industry was established in this country. At the present time there is a difference between the in-bond price and the New York price of American plate of 1.4 cents per pound, the duty being 1.5 cents per pound. The difference between the in-bond price of foreign plates and the New York price of American plates shows how much more we are paying for plates than we should be paying if there were no duty. Practically all countries on earth, except the United States, are getting their tin plate about 1.5 cents a pound lower than we are and have been. Before the industry was established in this country, we paid the foreign producers more than we are paying now for tin plates; but that was before the industry had developed as it has now, and to-day we should be paying the price they charge every foreign consumer. The high tariff has given the American manufacturers control of the American market; it has not lessened the demand for Welsh tin plates, but it has lessened the demand for them at the price which we should have to pay. The production of tin plate in Wales has been diminished because we do not draw upon it for our supplies, and in the course of time the factories will decrease in size and number, and the product will not be turned out so cheaply there. If the United States had continued to be a customer of Wales we should probably be buying tin plate at a lower price than Welsh tin plates are now selling, because Wales would be producing 2 tons where it is now producing 1, and could afford to sell tin plate cheaper. There has not been a benefit to the United States, so far as prices are concerned, by the establishment of the tin-plate industry here. The cheapened production all over the world is due to invention, and has benefited other countries more than it has benefited us, because foreign countries buy tin plate about 1½ cents a pound lower than it can be bought here. The prices of American plates in the American market are made higher than the prices of in-bond foreign plate by the tariff. It is true that the cost of the materials entering into tin plate has increased, but the increased cost of materials operates in foreign countries as well as here, and there has not been the same relative increase of price in foreign markets as in this country. (570-575.)

The extra amount paid by wholesale dealers and metal workers, and ultimately by the American people, during the years from 1891 to 1900, because of the protection given to tin plate by the tariff, amounts, according to Mr. Holt, to over \$100,000,000. This estimate is based on the difference between the import prices, without duty, of tin plate, and the actual selling prices of tin plate in this country during those years. Mr. Holt submits a table showing the consumption and the prices of tin plate, with the differences between the prices of tin plate in bond and in the New York market during the years from 1891 to 1900. (557, 573.)

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Mr. LAMB submits a table showing the prices of tin plate in bond in the New York market during the years from 1889 to 1901. (591.)

Mr. GUNTON says that in order properly to understand the effect of the tariff on the prices of tin plate it is necessary to compare the difference between the price of tin in England and in America for a period of 10 years or so before the tariff with the difference between the price in England and America since there has been a tariff on tin plate. During the 10 years preceding 1890 the average difference between the foreign and the domestic price of tin plate was \$2.16 a box. The average difference between the American and foreign price since 1890, and since, through protection, tin plate has been produced in this country, has been \$1.76 a box. In other words, the difference in price was about 23 per cent greater under free trade than it was under protection. If we adopt Mr. Holt's reasoning and regard the \$104,612,946 difference in the foreign and domestic price from 1891 to 1900 as the price paid for protection since 1890, and apply the same reasoning to the difference in price from 1880 to 1890, we find that the price paid for not having protection was during those 10 years over \$130,000,000. Since we have made our own tin we have reduced the price by \$1.40 a box, while England has increased the price by 90 cents a box. Mr. Gunton submits tables showing the American and foreign prices of tin plate per box for the years from 1880 to 1901. (629, 630.)

6. *Paints and chemicals.*—Mr. ELLIOTT, a paint manufacturer, of Philadelphia, says that white lead and linseed oil are usually about a third higher in the United States than in Europe. Pig lead, from which the white lead of commerce is made, is subject to a duty of 2½ cents. The price in England at present is 3½ to 3¾ cents a pound, while the price of domestic lead in New York is 4¾ cents. Flaxseed, from which linseed oil is made, is subject to a duty of 25 cents a bushel of 56 pounds, and the oil to a duty of 20 cents a gallon. The difference which usually exists between the European prices and the American prices of oil has at present nearly disappeared, because of the failure of the seed crops in India and other countries. The price of linseed oil in England at present is about 51½ cents per gallon, and the price here is nearly the same. Usually it is from 10 to 20 cents higher here than abroad. (209, 210.)

Mr. ATKINSON says that aniline dyes and certain other chemical products are subject to a higher price in this country than in Germany and England, because of our protective tariff. He does not know what proportion the imports of these products bear to the domestic output, but he says that the price of the whole is maintained in some measure above the relative price on account of the tariff. (533.)

**F. Relation of Tariff to Wages.**—1. *Generally.*—Mr. ATKINSON says that the high rates of wages in this country are generated by the conditions. There are hundreds of manufacturers who will say that the readjustment of wages which would follow an equal chance with their competitors in foreign countries would be toward the raising and not the lowering of wages. If, however, a revision of the tariff would cause a reduction in wages, Mr. Atkinson would still favor a revision. (532.)

Mr. LAMB says that the restriction of the American market to American products may, in a few cases, have caused a rise in wages, but it has not done so generally. The great drops in wages which occurred in the years 1894 to 1897 came before American manufacturers were enabled to meet foreign competition. These drops were not occasioned by other causes than those that led to a reduction of wages in many lines not at all affected by changes in the tariff. There were a few cases of increase of wages under the McKinley tariff, and there have been increases of wages since 1897 under the Dingley law; but these increases have been caused by the revival of commercial activity. It is very difficult to make comparison between the wages paid in this country and the wages paid abroad. The figures commonly cited in comparison are wages by the day or month; whereas the cost of labor depends upon the amount that the laborer produces in a day or in a month. One of the prime causes for the high rate of wages in this country is the opportunity which exists for men who can not be employed in the manufacturing industries to seek employment on the land. Then, again, there is more produced in this country and more to divide, and labor gets a share. (590, 591, 594, 597.)

Mr. GUNTON says that wages are not affected directly by the tariff. They are affected by social conditions and by the efforts of the laborers themselves; but the existence of industries and the development of social conditions, which are due to the protective tariff system, are influences which stimulate wages. (619.)

2. *Proportion of workers protected by the tariff.*—Mr. LAMB says that, as a general thing, the proportion of American labor which has been protected by the tariff has varied from 5 to 7 per cent of the whole. This percentage represents the proportion of workers who would be directly exposed to injurious competition from imported foreign products if protective duties were removed. The man who is

above and beyond competition is not counted in this percentage, even though, because of the tariff, he has been enabled to raise his price. (596, 597.)

Mr. ATKINSON says that there are not 5 per cent of the people of this country who can be protected by a duty on foreign imports. It is doubtful whether there are to-day 1,000,000 persons in the United States occupied in the arts, mental, manual, and mechanical, who could under any conditions be subjected to foreign competition. Of course there can be no foreign competition with those who are occupied in professional or personal service, or in trade and transportation. In agriculture about the only products subject to foreign competition (except in our dealings with Canada, to whose people we sell nearly double the products of agriculture that we buy) are sugar, wool, hemp, flax, tobacco, and a few fruits. Not over 2 or 3 per cent of the products of the farmers of this country can be subjected to foreign competition, while from 10 to 20 per cent, varying in different years, depend upon the export of our surplus for their entire income. Very few of the useful and necessary textile fabrics, except linens, must be imported even now, and that proportion can be very much lessened if wool, dyestuffs, and the like can be supplied to our textile manufacturers free of tariff taxation.

The number of persons whose whole income rests upon the export of our surplus products, especially in agriculture, will be found to be three times the number of those whose work would require readjustment if there were a revolutionary change in our revenue system. No change in the tariff can affect any considerable number of persons in the so-called protective industries, because the whole number is small, while the expansion of the foreign market will create a greater demand for all of our principal products, coal included. (523-525.)

Mr. ATKINSON also states that from the census of 1880, and from other sources, it appears that of common laborers about 47½ per cent were occupied in agriculture, 20 per cent in professional and personal services, 10½ per cent in trade and transportation, and 22 per cent in manufactures, mechanical arts, and in mining. In 1890 the proportion in agriculture had slightly diminished, and the proportion in trade and transportation had slightly increased. The tendency to change these proportions, however, is slight. In 1880 there were nearly 9,000 people employed in the pottery industry in the United States, and more than one-half of them were absolutely free from foreign competition. There has been a slight increase in the number employed since that time.

In 1880 there were not 100,000 people employed in mining the coal for the iron furnaces, in mining the ores, and in converting the ores into pig iron. It is doubtful if there are more than 200,000 or 250,000 persons engaged in these occupations now.

The largest wool clip of any one year has been about 300,000,000 pounds, and the total value of the wool clip has rarely, if ever, exceeded \$60,000,000. Estimating the average product of the average farm to be worth \$500 a year, the product of wool would represent the work of only 120,000 persons. In Ohio in 1880 the wool clip constituted less than 4 per cent of the value of the total product of agriculture, and it is doubtful if it now exceeds 2 per cent. The value of the hen's eggs of Ohio is much greater than the value of the wool clip. The profit of the average farm can never rest on wool. (521-524, 530.)

Mr. GUNTON says that the benefits of the tariff are not limited to those who work in the protected interests. The existence of the iron industry, for instance, in this country has given rise to hundreds of other industries which have no direct relation to the tariff. It has given us our railroads, it has given us our machinery, and has led to the establishment of factories. These in turn have given us our cities and have created our commerce. (619.)

Mr. TAYLER says that it is labor that is chiefly interested in and chiefly protected by the tariff. All labor is affected by the tariff. It affects every laborer whose handiwork is in the finished product, whether he makes the pick that digs the coal, whether he digs the coal or transports it, or whether he is engaged in making the final product. It is true that there is a very powerful combination of labor which has succeeded in maintaining a fairly high level of wages, but no matter how strong that organization is, it could not maintain wages if there were no employment. Labor has never yet been able to maintain wages in hard times. It does not matter much that the laborers get their share of the price of the finished article if that share is not enough for them to live on and to give them a surplus. If the price of the finished article is low, the reward of the labor is low. In the last analysis capital can be idle and labor can not. There ought to be no distinction between the application of the tariff to the industrial combination and to the individual manufacturer in the same industry. The principle of protection is always to be applied for the benefit of labor, and where labor needs protection to maintain wages it does not matter who employs that labor. (601, 602, 603.)



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The establishment of industries in this country by our protective tariff has caused more money to be paid out in wages and has therefore increased the consuming power of the American people. That enormously increased power of consumption is sufficient to recoup the farmer for whatever supposedly increased price he may have to pay for manufactured products. The vast majority of the farmers in Mr. Tayler's district, a district which has been made prosperous by the iron and steel industry, are undoubtedly in favor of a moderate protective tariff, and would not consent for a moment to the proposition that we ought not to have had, and ought not now to have, where necessary, a duty on iron and steel products. (602.)

3. *Relation of wages to cost of production.*—Mr. LAMB, president of the New England Free Trade League, says that in some industries, beyond question, the American laborer produces so much more than the foreign laborer that the actual labor cost of the article is lower in this country than abroad. The American laborer works better because he feels that this is a free country and that it is possible for him to rise. In many lines our market has always been open to the competition of the world, and yet other countries have not been able to touch us. Furthermore, in the case of some industries, we are able to send our products abroad. This is true in respect to some commodities into which labor enters to a great extent. It has never been necessary to encourage this development of skill on the part of American laborers. It has existed from the beginning and the attempt to repress it was one of the causes that led to the War of the Revolution. (594, 595.)

Mr. FLINT says that in general, American labor is more efficient than European labor, though this applies especially to industries where the American workman is bossing the machine. In industries where the greater part of the work has to be done by hand, a manufacturer can get more labor for his money in Europe than in the United States. (83.)

Mr. ATKINSON says that high wages in this country are not the antecedent, but rather the resultant, of low cost of production, due to the vast possessions of fertile lands, of mines, and of forests. That the rate of wages governs the cost of labor in any art to which modern science and invention have been or can be applied is a fallacy. Low wages and low costs are the complement of each other only in those branches of industry which remain handicrafts; that is, which are conducted by hand work or manual labor. The highest rates of wages are earned at those points in each country where the materials used in each art are most abundant, or where they can be procured at the lowest cost, whether of domestic or foreign origin; also where the conditions of life are most conducive to the health and energy of the workmen; where the functions of government are most justly and honestly conducted, and the taxes in ratio to production the lowest; where common education has been established; and, in respect to competing nations, where the least part of the product is diverted from constructive service to the destructive purpose of war or of preparation of war.

If the rate of wages governed the cost of labor in a product, not a dollar's worth of our exports of cotton, corn, cordage, wheat, flour, machinery, etc., could leave our shores. The earnings of the Egyptian and India laborers are not one-fourth the earnings of laborers in our cotton fields; hardly one-tenth, including Russia, of those of the laborers in our wheat fields; yet our cotton and our wheat constitute the chief supply of the world. We have proved, especially in iron and metallurgy, that the highest rates of wages in the world are paid here, and yet we beat the world at lower cost. (518, 520, 531.)

Mr. GUNTON says that high wages tend to create a low unit cost of production, but it is not true that high wages are always simultaneously accompanied by low cost of production. Where the methods of production and the high wages are both developed together, the high wages will always, in any considerable length of time, result in a lower cost of production, because the high wages, which are the basis of large consumption and growing intelligence, are, for the most part, the real cause of the superior methods which give the great economy in the cost of production. Where the best machinery is transplanted into a community in which it has not been evolved, and where there are low wages, the low cost of production is the result of the low wages. (615, 616.)

Mr. ATKINSON says that there is no possible competition from China or Japan, or any of those countries, in the arts to which modern mechanism has been applied successfully in this country. In the cotton mills of Bombay they employ 3 to 5 hands where we employ 1. In a factory in Brooklyn which manufactures gunny cloth, the man at the loom was paid \$1.50 per day, as against 12½ cents per day which was paid to the weavers in Calcutta; yet the cost of weaving a yard of gunny cloth in Calcutta was 2½ cents, while the cost of weaving a yard on the loom in Brooklyn was 1½ cents. In the manufacture of boots and shoes, other countries have adopted

our machinery, but they do not get as efficient service. An illustration of this is afforded by the comparative amount of revenue which has been returned from machines for the sewing of the soles of shoes to the uppers, which have been leased on even terms in the United States and in Great Britain, France, and Germany. The high nutrition of the workmen of this country enables them to do a larger amount of work. (532, 533, 538.)

4. *Iron and steel tariff.*—Mr. HOLZ says that the removal of the tariff from the manufactures of steel and iron would increase wages, because it would increase the consumption of goods and would therefore increase the amount manufactured. The total number of wage-earners employed is what affects wages, and the increase of product would increase wages. It is true that iron and steel workers are paid on a sliding scale, but that scale is only a temporary arrangement and can be changed. The establishment of the scale is due to an attempt on the part of the laborers to participate in the tariff profits of the mill owners. It is the supply of labor and the demand for it that makes wages, and any artificial arrangement that the laborers have with their employers would be soon done away with if the tariff were removed. A lower day rate of wages would not necessarily mean a lower actual wage. The day rate of wages might go down and the actual rate of wages might go up because of the cheaper cost of living. If the tariff were abolished, the manufacturers in this country would have to supply us with goods at the same price at which they now supply foreigners. Therefore it would cost less to live in this country, and, though money wages might go down slightly, the reduced cost of living would more than compensate laborers for that slight reduction. (577, 578.)

The abolition of the duty on tin plate would not throw the men employed in the tin-plate mills out of work. The tin-plate industry is beyond destruction by the removal of tariff duties. If the tariff were removed from tin plate wages would go up, because there would be more labor employed. Our power of consumption is determined by the consuming ability of seventy or eighty millions of people not engaged in the production of tin plate, and the rate of wages is determined by the relation between supply and demand. (575, 582.)

**G. Social effects of the tariff.**—Mr. LAMB says that any industrial system which, like the tariff system, is based upon privilege and taxes the whole country for the benefit of the few is unsound. Much of the discontent in the country to-day is the outgrowth of this injustice. The educating of people to look to the Government for legislation in their behalf has had results. (589.)

Mr. ATKINSON thinks that the development of commercial interests will tend to promote perpetual peace. (526.)

Mr. TAYLER says that our protective tariff system is based upon the idea that our American civilization is upon a higher plane than that of any other country, and that in order to maintain that high plane of living it is necessary that some kind of equalization be made wherever the labor cost in any article is greater in this country than it is in a competing country. This equalization is secured by the imposition of a tariff. The economic justification of the protective tariff is that the Government does a thing which the individual can not possibly do for himself. The individual can not compete with the civilization abroad. The tariff protects his opportunity.

Every duty levied upon an article not produced and not producible in this country, and therefore not levied for the sake of protection, is a tax. When the duty is insufficient in amount to stimulate American production it may also be a tax. (601, 602, 606.)

Mr. GUNTON says that protection properly applied and understood is not paternalism. Paternalism is giving something to the individual; protection is protecting the opportunities for the individual to do for himself. Protection in its strictly scientific aspect consists in preventing, by such nonpaternal methods as can, within governmental authority be devised, any element of a lower civilization from being the means of industrial success against the elements of a higher civilization. (612, 613.)

The Government should protect the superior element against the inferior. The inferior does not need protection and is not entitled to it. The test of civilization is the dearness of the man. A cheap man never created a high civilization or a strong nation. When, through social conditions, the average laborer and citizen becomes expensive, he is a factor in the economic life of the nation. Greater labor cost is an element of superiority which handicaps the manufacturer. It is the duty of the Government to protect that superiority against the inferiority of any other nation. Competition between nations should be on the basis of the higher civilization. If anyone wants the advantage of this country that person should have it only by rising to our plane of doing business. We should not be exposed to the disadvantage of being obliged to drop to his plane. (612, 613.)

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**J. Tariff and other taxation.**—Mr. LAMB says that at present a revenue tariff is necessary and will be necessary as long as we have an excise tax. Otherwise we should derive no revenue from our excise, because all spirits would be imported. He is opposed to incidental protection, as that seems to open the door to the most vicious form of corrupt influence. (599.)

Mr. Lamb believes that a tax on land values should be a part of our national income as well as of the State and city income. It would have to be laid in accordance with the provision of the Constitution which requires it to be laid according to the representation of the States. If Congress would lay a small tax that would not be a burden, it would ascertain where the ownership of the land values is. (600.)

**K. Proposed tariff changes.**—Mr. TAYLER says that because of our tariff legislation the country is getting along very well now, and it would be exceedingly unfortunate, from a business point of view, to introduce any element of unrest into the business conditions of the country by opening up the tariff question. (608.)

Our system of reciprocity ought, however, to be developed in accordance with the principles upon which our protective tariff system is based. Reciprocity should be applied to those things which we do not produce, and it should be a lever in our hands to develop that narrow line of American products which we can sell abroad. There are many millions of dollars' worth of things that we must buy from other people, and that kind of trade can be used to make those people buy from us what we produce. If there were a sliding tariff, a maximum and a minimum, within which the President had the right to move, and which could be applied so as to develop our export trade, it would be desirable. (604, 605.)

Mr. ATKINSON says that the protection of domestic industry now demands further additions to the free list, even to the extent of admitting free every article named as crude or partly manufactured. If that addition to the free list were made, the loss of revenue would be less than one-third the present surplus. In 1884 Mr. Atkinson made a compilation which showed that 60 per cent of all the articles named in the tariff could be transferred to the free list with a reduction of revenue of only 12 per cent.

If the tariff were removed from old scrap iron, steel, copper, and other metals, they would be brought in ballast without charge from many parts of the world, to the restoration of the smaller metal industries of New England and the seacoast, which have been destroyed by the duties on old metal. (527.)

Mr. LAMB would like to see the Babcock bill or something similar to it passed as an entering wedge. If the consideration of it should open up the whole tariff question, that would be a good thing. It is true that whenever the tariff undergoes general revision there is considerable suspension of trade, but there is no need of such delays as there have sometimes been. The removal of the tariff from certain products, while it is left on others, would simply be the substituting of one inequality for another. There are varying rates now upon different articles; therefore inequality already exists. (593.)

Mr. HOLT says that for every mill closed up by the removal of the tariff, 2 would open. We should lose some industries, but we should gain others for which we are better fitted. It is probably true that in some isolated cases mills to supply the United States market were established in foreign countries during the existence of the Wilson tariff law, but this was not the case generally. An officer connected with the leading textile industry of the country said that the manufacture of woolen goods and of some other kinds of textiles improved more during the low tariff of the Wilson law than it had before or since. A larger proportion of the textile mills are closed now than ever before. If the use of shoddy was greater during the existence of the Wilson bill than ever before, it was not so large as it has been since. The statistics of last year, as published in the papers, show that the people consume 1 pound of shoddy now to every pound of scoured wool. Three-quarters and perhaps nine-tenths of the shoddy and waste used in this country comes from our own shoddy mills. Mr. Holt would go to the limit in removing the tariff on woolen manufactures. (580, 581.)

Mr. CHAPMAN thinks it would be very unwise to repeal the duty on manufactured steel products because of the formation of the gigantic steel combination. It would be unwise to legislate in that direction, because such legislation would mean the destruction of American industries and the building up of the business in some other countries. The repeal of the tariff would injure independent operators more than it would injure the combinations. Tariff agitation is most disastrous to the business of the country. There is no need of legislation in that direction at present. (110, 111.)

Mr. HOLT presents a copy of a letter written by the president of the Wilmot & Hobbs Manufacturing Company, of Bridgeport, Conn., which was published in the

Iron Age in May, 1900. This letter states that there are various associations of manufacturers along the Atlantic seaboard and the Canadian border, and especially in New England, who desire to have such commodities as coal, coke, iron ore, pig iron, steel ingots, and steel billets on the free list. They believe that these materials are produced more cheaply in this country than in any other portion of the world, and that the protection given is the giving of Government assistance to monopolies and trusts. Mr. Holt says that this letter and other similar testimony does not intimate that the small manufacturers would be killed off by the abolition of tariff duties while the trusts would continue to do business. The little fellows realize that while the tariff lasts they are at the mercy of the big fellows. (563.)

Mr. GUNTON says that it would be a good thing if the tariff question could be referred to some permanent commission or department or official instead of being left to the regulation of Congress. There is nothing so important as to have the tariff reduced to an economic basis, governed by a general principle, and dealt with by an official department. If there is any constitutional or other difficulty in the way, it should so be dealt with as to make this course possible. (634.)

### XXXV.—SUNDRY QUESTIONS OF TRADE AND INDUSTRY.

**A. Foreign trade.** (See also *Effect of tariff on export trade*, p. CLIV.)—1. *Statistics.*—Mr. ATKINSON says that there is great variation between the figures as to the value of our exports to each European country which are given by our custom-houses and the figures of the amount of imports from the United States which are given by those countries. The larger figures credited to us by foreign countries are due to the fact that freights and other charges are included, and that there are duplications.

It is important to note the relatively large proportion of the total imports of European countries which the imports from this country constitute. All are dependent in a very considerable measure upon us. Mr. Atkinson submits tables showing the exports of the United States for the years 1895 and 1900 to the various European countries, the value of the imports into those countries credited to the United States by them, and our imports from each of those countries. (528, 549, 551.)

Mr. Atkinson thinks that a new classification of our exports is called for. They are now classified as products of agriculture or of manufactures. Under the head of products of agriculture some of the highest forms of our manufactured goods are included, such as wheat flour, canned meats, preserved fruits, dairy products, etc.; while under the head of manufactures are included some of the crudest of secondary forms of other products, such as copper matte, petroleum, etc. He suggests a classification into products of the field, the forest, the mines, the sea, and the factory, with each of these classes divided into goods crude, partly manufactured, and finished. Mr. Atkinson submits a table classifying our exports in the years 1895 and 1900 according to the method proposed. (528, 546.)

Mr. Atkinson submits a classified table of the imports into this country from 1894 to 1899, inclusive. (549.)

Mr. HOLT presents a table showing the amount of the exports of wire nails and wire during the years from 1893 to 1896. (561.)

2. *Export prices lower than domestic prices.* (See also *Effect of tariff on prices*, pp. cxlvii.)—Mr. HOLT, secretary of the tariff reform committee of the Reform Club of New York, says that practically all of our manufactured products are sold to foreigners at lower prices than to Americans. The minimum difference is about 10 per cent, the average difference is probably 20 per cent, and on protected products above 25 per cent. Often we have to pay 50 per cent, and sometimes we have to pay 100 per cent more for the products of our protected industries than is paid by foreigners. It is true that exporters in all countries charge lower prices on exported goods than on those sold in the home market, but not to anything like the extent that our exporters do. Manufacturers export at certain times when they have a surplus product which they can not sell at profitable prices, and the difference between export and domestic prices is very slight, probably from 5 to 10 per cent, while the American manufacturer sometimes makes a difference of 100 per cent.

During the two years ending December 31, 1900, we exported 136,000,000 pounds of wire nails. The average price of these nails in this country, as given in the Iron Age of January 3, 1901, was 2.68 cents per pound. The Government statistics tell us that the average price paid by foreigners was 2.44 cents per pound. Late in 1899 wire nails were being sold in this country at from \$3.10 to \$3.53 per keg, while large quantities were being exported at from \$2.24 to \$2.20 per keg. At the same time barbed wire was being sold to Americans at \$3.67 to \$4.13 per 100 pounds, while it

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was being sold to Canadians for \$3.25, and to more remote foreigners for \$2.20 per 100 pounds. In November, 1896, the price of wire nails to foreigners was \$1.30 per keg, while the price to Americans was \$2.70 per keg. There are different qualities of wire nails, but the difference in price is not more than 20 cents per keg. The facts concerning these export prices were obtained from the export books of a certain New York exporter. It is probably true that at the same time nails were sold through other exporters at quite different prices.

Tin plate is being extensively offered to manufacturers of cans and packages to be filled with products for export at about \$1 per box below the price to other manufacturers and consumers. Steel rails were sold some 3 months ago to foreigners at less than \$21 per ton, and there is no doubt that steel rails are sold for export at whatever the manufacturers can get, about \$20, and perhaps considerably less if the time for delivery is remote enough. The manufacturers' agreement under which rails are now sold for \$28 is not effective on rails sold to foreigners, or for export. (555, 556, 560, 561, 576.)

Mr. Holt says that the extent to which goods are sold at lower prices for export than in the home market is not known to most people, because the trusts take pains to conceal export prices, and practically pledge all parties concerned to keep all such knowledge from reaching the public. It is extremely difficult to obtain export prices. This concealment of export prices is probably responsible for much of the difference between the values of our exports and of our imports, and therefore for our apparently favorable balance of trade. Most of our export goods are placed at fictitious and higher prices than those at which they are actually sold. (555.)

Mr. FLINT states that at times when there is a surplus of production, manufacturers will seek a foreign market at a concession. That condition exists in all countries; it is not a prevailing condition in this country. There has been less disposition on the part of combinations to make lower prices abroad than there was on the part of individual manufacturers. The combinations, by their regulative power, avoid excessive production. Before the organization of industrial combinations, more goods were frequently produced than this country would take, and, under financial pressure, manufacturers had to make a sacrifice in order to realize cash. (86.)

Mr. WATERBURY, former president of the National Cordage Company, understands that it is the usual practice of manufacturers, both in the United States and in other countries, to sell goods abroad cheaper than at home. American rope makers, for instance, if they are selling to their regular trade at 10 cents, could not afford to cut the price to that trade to 9½ cents. It would knock the profit off the business. But they might send rope abroad at 9½, where their regular trade would not be interfered with. He thinks this is natural without any combination. (136.)

Mr. GUNTON says that it is always the practice of people who export to meet the foreign market. It often happens that it is actually beneficial for a large concern to sell a part of its product at cost if that part is necessary for the development of the business of the concern. (633.)

Mr. ELLIOTT, a paint manufacturer of Philadelphia, thinks that the present laws of the United States under which, if goods imported to the United States are billed at prices lower than the market prices in the countries of origin, the customs officers raise the valuation, make it impossible for the foreign manufacturer to sell goods here at lower prices than he charges in his own country. (217.)

3. *Advantages of export trade.*—Mr. FLINT says that while holding our home market we should extend our markets abroad. It is very important to have a widely distributed market. With such a market we are less subject to the effects of periods of contraction and expansion. (87.)

4. *Merchant marine.*—Mr. SCHWAB thinks that one of the chief difficulties of an extensive foreign business is lack of American shipping. It costs more to send a ton of billets or rails from Pittsburg to Europe than it costs to make a ton of steel from the pig iron. Steel products are most desirable ocean freights, and ought to be carried from New York to Liverpool for about one-half the present cost, in ships arranged for the purpose. Mr. Schwab thinks that foreign shipping is not likely to carry our products, competing with foreign products, without great profit. (465.)

**B. Traveling salesmen.**—1. *Number and earnings.*—Mr. LATASTE says that 200,000 to 250,000 would be a conservative estimate of the number of traveling salesmen in this country. The vast majority work for stated salaries, plus their legitimate expenses. Some of them get a salary and in addition to that a percentage on their sales over and above a certain amount. The minimum salary paid to men traveling over a very limited territory for local houses would be about \$900 per annum, plus expenses. The maximum would probably be between \$4,000 and \$5,000 a year. (30.)

2. *Organizations.*—Mr. LA TASTE, of Montgomery, Ala., president of the Traveling Men's Protective Association, says that that association is composed of traveling men, wholesale dealers, importers, manufacturers, commission merchants, and their buyers and sellers. Men whose sole business is insurance would not be admitted, though if a manufacturer were also an insurance man, that fact would not debar him. The national board of directors of the association would cancel the membership of a man if it were found that he traveled a day a year just to come into the association, or only traveled occasionally.

On the 1st day of February, 1900, the association had 14,645 members, of whom 75 or 80 per cent were traveling men. The organization is controlled almost exclusively by traveling men. The association was formed for the purpose of promoting the interest of traveling men and of others who might be members of it. It was incorporated under the laws of Missouri, in June, 1890. Its membership has grown from 1,139 on June 1, 1891, to 14,645. The membership fee is \$2, and the annual dues \$10. There is an indemnity fund out of which death benefits are paid in case of death by accident, and weekly allowances in case of total disability through accident. (20, 21, 24, 26, 31, 32.)

The association has succeeded in securing interchangeable mileage over something more than 78,000 miles of railroad from the Western, Central, and Southwestern Passenger Associations. The bill for the creation of a Department of Commerce originated with the Traveling Men's Protective Association. All the work of that character which has been done by the association has been done through its national committee. (26, 27.)

In addition to the Traveling Men's Protective Association there is an organization known as the Commercial Travelers' Mutual Benefit Association, which has a membership of about 2,000, and which is mostly an insurance organization. Its headquarters are at Utica. There is another organization of traveling salesmen in Iowa, with a membership of about 11,000. There is 1 in Kansas or Nebraska, and 1 or 2 in Illinois. There is also the Western Commercial Travelers' Association of Missouri, which is a life insurance organization, and there are a number of other smaller organizations. The Traveling Men's Protective Association is the only national organization of which Mr. LaTaste knows. It has State divisions organized in 30 States, and each State has 1 or more local posts. (25.)

**C. Railroads.**<sup>1</sup>—1. *Freight discriminations.*—Mr. FITLER, of the Edward H. Fidler Company, has not come directly in contact with freight discriminations and has no personal knowledge of any. (149.)

Mr. HOLMES, treasurer of the Plymouth Cordage Company, says that he would be better satisfied if he knew that everybody had to pay the same freight rates. "There is a feeling of unrest when we have to run around to see whether we can get any special advantages, and sometimes succeed." He does not care whether freights are high or low, provided they are the same to all. He only asks to be put on a basis of equality with his competitors. (142.)

Mr. KLINCK, a meat packer of Buffalo, asserts that the large packing concerns of the West have advantages in transportation. In particular, he is confident that their shipments in their private cars are underbilled. He states that he sold several cars of meat 5 or 6 years ago to one of them, who put it in his own cars. "He put 33,000 pounds of meat in a car, and the bills were made out in my office for 22,000." Mr. Klinck's own shipments are made at actual weight. The railroads employ men to take the actual weights of the packages. (274, 275.)

2. *Increase of freight rates.*—Mr. WHITE, president of the National Salt Company, says that according to his experience freight rates have advanced about 30 per cent on the average in the last 2 years. Not only this, but the minimum carload of salt has been increased from 30,000 pounds to 40,000. This is an economy to the railroads, but a burden to the shipper and the receiver. It is more expensive to load a car of 40,000 pounds than one of 30,000. (267.)

3. *Railroad receiverships.*—Mr. HOPKINS, who has had experience as a railroad manager and receiver, does not think that statutory regulation of receiverships is necessary so long as the judges are like those he has dealt with. They have steadily considered the upbuilding and improvement of the property. The roads under their control have been more thoroughly subject to the Interstate Commerce Commission than roads otherwise controlled, for the judges have not been willing that their receivers should be found manipulating rates, as independent managers have done. (515.)

**D. Government ownership of public utilities.**<sup>1</sup>—Mr. HILLYER thinks that the United States Government should control the railroads, the telegraph, and the long-distance telephone. There should be municipal ownership of waterworks,

<sup>1</sup> This subject is much more fully discussed in volumes IV and IX, Reports of Industrial Commission.

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and of electric-light and gas plants. In the case of natural monopolies, such as the supplying of water or light to a community, competition is of no avail as a remedy for evils. The city of Atlanta owns its waterworks, and absolutely wholesome water is supplied to the people at the rate of 10 cents per 1,000 gallons. The rates in Macon, Columbus, Montgomery, Memphis, Nashville, and Chattanooga are in every instance twice as high. In all of those cities, with the possible exception of Nashville, the water supply is controlled by private companies. In the course of 20 years' control of the water supply, the city of Atlanta has paid out of its profits all but \$630,000 of the \$2,300,000 invested in the plant, and the plant to-day is worth from \$3,000,000 to \$4,000,000. (17, 18, 19.)

Mr. TAYLER says that the trust points inevitably to socialism, and will reach Government socialism. When the interests owning or controlling any product or property, or production, or method of transportation are unified into one group, they operate that enterprise for their own benefit, and it is an easy step for the people to determine to acquire and operate those enterprises for the benefit of all. (603.)

Mr. MATHEWS, a refiner of petroleum in Buffalo, N. Y., declares that the remedy for railroad discriminations is public ownership of railroads. (651.)

### XXXVI.—CONDITIONS OF LABOR.<sup>1</sup>

**A. Wages and general condition of working people.**—Mr. KLINCK, a meat packer of Buffalo, says that the general condition of working people is vastly improved since he went into business 44 years ago. People used to work from 12 to 16 hours a day then, and they did not live nearly as well as they live now. (278.)

Mr. ELLIOTT, of John Lucas & Co., paint manufacturers, of Philadelphia, says that his house is paying the same wages that it paid in 1892, and has paid the same continuously. He does not think there has been any reduction of wages generally in the paint trade. He understands through newspapers and magazine articles that wages in the paint manufacture are about one-third higher in the United States than in Europe. (211, 212.)

Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, says that there are Scotchmen and Englishmen and some other foreigners in the mines of his company near Birmingham, Ala., as well as native miners, both colored and white. During the last 4 years there has been an advance of more than one-third in the price per ton for mining coal. This has been an advantage to the white miner, but Mr. Hopkins does not think the colored miner is much better off. "He needs only a small amount of money. He lives in the company's house, buys his provisions from the commissary, and is generally the company's man. When he dies, he is buried in the company's cemetery. He has a pretty good time, because he does not permit himself to be worried much, and if he can make 55 cents a ton cutting coal he does not care to work more than 4 days in the week." This is not true of all the colored people, but it is true of the majority. (508.)

Mr. Hopkins gives the average prices per ton paid by his company for cutting coal, as follows: 1897 and 1898, 39 cents; 1899, 49 cents; 1900, 54 cents. At the time of Mr. Hopkins's testimony, May, 1901, the company was paying 55 cents. Every 2½ cents advance to the miners gives an advance also to the drivers, men driving entries, coke men, and day laborers. All have been advanced about 33½ per cent. A good white miner who will work can take out about 6 tons of coal a day, and at present prices can get \$3.30 for it. (508.)

Mr. SPALDING thinks that the general advance in wages has not been in proportion to the advance in prices. (2.)

Mr. GUNTON says that the machinists to-day are perfectly justified in asking for a reduction in the hours of labor, and in asking that the reduction of hours be not accompanied by a reduction of pay. If ever there was a time when the laborers had a right to demand some concessions as a part of the prosperity and development of industry, that time is now. (615.)

The protective function of the Government should include the laborer and should give to him the same extent of protection which it gives to the capitalist. The laborer should have the opportunity to become intelligent. The Government should see to it that hours of labor are shortened, that the homes of laborers are surrounded by sanitary conditions, and that the labor of children is prohibited. (614.)

**B. Relations between employers and employees.**—Mr. HOPKINS says that he does not believe that there is any necessary antagonism between capital

<sup>1</sup> See also Relation of tariff to wages, p. CL; Social effects of the tariff, p. CLIII, and evidence summarized under the names of the several combinations.

and labor. It is impossible in this country for capital to tyrannize over labor. The laboring classes are too intelligent and too conscious of their own power; they understand too well the power of labor combinations, the force of public opinion, and the possibility of a resort to legislation. Labor has the same right to protect itself in any lawful way as capital; has the same right to organize and to fix the wage scale. It is doubtful if a strike is beneficial, on the whole, to labor, though the contrary may be true of the lower classes of labor, such as coal mining. Mr. Hopkins is not in favor of compulsory arbitration, nor of appeals to the courts for injunctions, except when that is the only way to prevent violence. (344, 345, 355, 356.)

Mr. FLINT states that there has never been a strike in any industry with which he has been connected. (85.)

Mr. SCHWAB states that the agreements between labor organizations and some of the constituent companies, which existed at the time of the consolidation, have, of course, been lived up to. Mr. Schwab does not seem, however, to have a high opinion of such agreements. When an agreement has been made for a given time, it may prevent strikes for that period; "but the periods recur pretty often, and it gives a good excuse for differences." (461.)

**C. Immigration.**—Mr. TAYLER says that the practically indiscriminate immigration which has come into this country for the last 30 years has had an adverse effect on industrial conditions, and in many cases has demoralized the rate of wages. A slight educational qualification for immigrants would accomplish all the restriction which is necessary. (606.)

**D. Prison labor.**—Mr. ATKINSON says that prison labor competition is not true competition, for the reason that the building and capital are furnished without charge. Prison competition may have interfered with a few small arts, but it has not been of great importance. (535.)

**E. Company stores.**—Mr. HOPKINS, president of the Sloss-Sheffield Iron and Steel Company, says that his company has stores connected with its works near Birmingham, A. S., and that the men are permitted to trade there as soon as they have money due them. The men are not compelled to trade there, but many of them need credit, and Mr. Hopkins thinks they would have to pay more in these isolated districts if the company did not have the stores. Wages are paid in cash once a month. (509.)

**F. Company tenements.**—Mr. HOLMES, treasurer of the Plymouth Cordage Company, says that his company owns 173 tenements, while it employs about 1,000 persons—men, women, boys, and girls. Its purpose in building tenements is to have its employees at hand and give them better houses to live in. It does not give them an opportunity to buy the tenements, though many of the employees have their own houses in the neighborhood. The tenements recently built have usually 6 to 8 rooms, and some of them have gardens of from 2,500 to 7,500 square feet each. They rent from \$1.90 to \$2.50; very few as high as \$2.50. They are provided with running water, the cost of which is included in the rent. There are bathrooms, but with only cold water in them and not hot. (140, 145.)

**G. Clothing and textile manufactures.**—Mr. ATKINSON says that the manufacture of clothing gives more employment to the masses of the people than the manufacture of textiles; that wages are a great deal higher and the conditions of life better. The poor foreign sweat-shop sewing women are poor because they are poor sewers. Wages are much higher in the making of shirts than in the making of shirtings, and the conditions of life are better, and the girls work under better conditions. (541.)



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