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CO-OPERATION (1889)1

GENTLEMEN,—Your two last annual Congresses were opened by two veteran co-operators—Mr Holyoake and Mr Neale. They have spent long lives in the centre of your movement; they have cared for it, and worked for it; they have earned your affection and your gratitude; and they could speak to you words of wise counsel, based on thorough knowledge. But I cannot do that. I can do nothing more than lay before you a sample of the way in which your movement presents itself to an academic economist, and trust to your kind indulgence to pardon my lack of special knowledge of the subject of which I have to treat.

Co-operation is many sided, and can be looked at from many points of view. There are, in consequence, many definitions of it, all having much in common, but each bringing into special prominence some aspect of it which appeals with special strength to some one or other of the many different classes of minds who are attracted by it. It is of course necessary to agree provisionally on some formal definition of a co-operative society for administrative purposes. But a movement, which, though so great, is yet so young, is in danger of being cramped by the too rigid insistence on any hard and fast formula; and I would wish, instead of defining it, to describe the general notion which I have formed of it. I regard it as the typical and most representative product of the age: because it combines high aspirations with calm and strenuous action, and because it sets itself to develop the spontaneous energies of the individual while training him to collective action by the aid of collective resources, and for the attainment of collective ends. It has points of affinity with many other movements; but it is like no other. Other schemes for developing the world's material resources are equally practical and equally business-like, but they have not the same direct aim to improve the quality of man himself. Other schemes for social reform have equally high aspirations, but they have not the same broad basis of patient action and practical wisdom.

¹ Presidential Address, delivered on the occasion of the Twenty-first Annual Cooperative Congress, held at Ipswich, Whitsuntide, 1889.

What distinguishes co-operation from all other movements in that it is at once a strong and calm and wise business, and a strong and fervent and proselytizing faith.

The cardinal doctrines of its faith are, as I have said, not peculiar to it: they are shared more or less by other movements. They are, I take it:-First, the production of fine human beings, and not the production of rich goods, is the ultimate aim of all worthy endeavour. Secondly, he who lives and works only for himself, or even only for himself and his family, leads an incomplete life; to complete it he needs to work with others for some broad and high aim. Thirdly, such an aim is to be found in the co-operative endeavour to diminish those evils which result to the mass of the people from the want of capital of their own; evils which take the two-fold form of insufficiency of material income, and want of opportunity for developing many of their best faculties. Lastly, the working classes, though weak in many ways, are strong in their numbers. They have a great power in their knowledge of one another, and their trust in one another; and they can much increase this force, for by joint action they can make their little capital go a long way towards getting a free scope for their activities, and towards emancipating them from a position of helpless dependence on the support, and the guidance, and the governance of the more fortunate classes. And, though the beginning of such a movement may be small, it has in it the seeds of growth, because it will educate the working classes in business capacity, and in the moral strength of united and public action for public purposes.

Now this co-operative faith, as I understand it, differs from the faiths of many social reformers in two respects. On the one hand it is more prosaic, and more ready to take facts as they are; it does not substitute for them brilliant products of a poetic imagination. And on the other hand, the virtues to which it appeals are the virtues of those who hold the faith. It is not a claim that the virtues of others should induce them to divide equally all round the advantages which they have already acquired.

I do not mean that the co-operator is very likely to consider the existing arrangements with regard to property as the best possible. He may probably think, as I myself certainly think,

that the rich ought to be taxed much more heavily than they are, in order to provide for their poorer brethren the material means for a healthy physical and mental development; and he may think, as I certainly do, that the rich are in private duty bound to contribute freely to public purposes far more than the taxgatherer ought by force to take from them, and to confine within narrow bounds their expenditure on their own personal enjoyment, and that of their families. But the point I want to insist on is that any beliefs which the co-operator may hold on questions of this sort do not enter into the co-operative faith, because that relates to the duties of co-operators themselves, and not to the duties of others towards co-operators. The co-operative faith is a belief in the beauty and the nobility, the strength and the efficiency, of collective action by the working classes, employing their own means, not indeed suddenly to revolutionize, but gradually to raise, their own material and moral condition.

But now let us turn to the other side of co-operation, and regard it as a business. As a business it has succeeded, by economizing the efforts required to obtain certain desirable ends, and by utilizing a great waste product. For in the world's history there has been one waste product, so much more important than all others, that it has a right to be called The Waste Product. It is the higher abilities of many of the working classes; the latent, the undeveloped, the choked-up and wasted faculties for higher work, that for lack of opportunity have come to nothing. Many a fortune has been made by utilizing the waste products of gas works and of soda works; it has been very good business. But a much greater waste product than these is at the foundation of the fortunes of co-operation. Let us then take stock of the resources of co-operation in this country.

The habit of association is specially characteristic of the Teutonic race; and our historians are proud to show how those who settled on these shores were, in this respect at all events, among the most Teutonic of the Teutons. But the exclusiveness of our claims has been somewhat lessened by recent studies of association in the form of village communities, etc., among other races, and especially among the Slavs, and our own near cousins and fellow-subjects in India. And quite recently we have

been told that those associations for co-operative production, in which, if liberty is a little wanting, yet law and order are most perfectly developed, are to be found among those extremely distant relations of ours, the Chinese in California¹.

The fact is that the co-operative productive society in its rudimentary form is a product of all ages, and all races, and all places; and the independent productive societies, which we find now scattered sporadically over the whole of Great Britain, are representatives of a very ancient race. In a few cases, as, for instance, in some local institutions connected with quarrying and with fishing, they have an unbroken descent from remote antiquity till now.

But much that is most interesting in the recent history of productive co-operation comes from France, America, and other countries. Those features of it which are most characteristically British are found in its relation to the other sides of the co-operative movement. No other country has anything to compare with our great distributive retail and wholesale societies, or with that great Central Co-operative Union, the Congress of which I have the honour to address to-day. And I will, therefore, begin at that end.

You know well, and the whole world has heard, the figures that tell the growth of the trading business done by co-operation. But I may notice in passing that your figures are a little too modest. They record the number of sovereigns or counters that you have used in your sales; but they take no account of the fact that a thousand of these counters represent a great deal more business than they did a few years ago. The real growth of your trade is the increase in the volume of groceries and draperies, and other things that you have sold. Suppose now that the gold mines had given a richer yield, and the use of bank notes and silver and other substitutes for gold had increased faster than they have, in that case more counters would have been used in your trade: and, if there had been just so many more used that £1000 would have bought throughout the whole period the same amount of goods in general-taking one thing with anotherthen the figures which you publish would have shown the real

¹ See the History of Co-operation in the United States, published for the Johns Hopkins University, pp. 478-481.

growth of your business, and not, as they do now, much less than the real growth.

Using Mr Sauerbeck's figures, which are fairly applicable to this case, we find that if £1000 counted for only as much now as it did in the average of the years 1867 to 1877, the sales made by the English Wholesale Society last year would amount, not to six-and-a-quarter millions, but to nearly nine millions, while the sales of all the co-operative societies in the United Kingdom for 1887 (the last year for which I have the figures) would amount to fifty millions, and not merely to thirty-four, as your figures show. But the strongest case is got by comparing 1873, when prices were highest, with 1887. In those fourteen years the sovereigns or counters which represent the total sales of your societies had only a little more than doubled; but the amount of commodities sold had been multiplied by three-and-a-half. and, in the same time, the sales of the English Wholesale had been multiplied nominally by three-and-a-half, but really by five-and-a-half.

Well, what is the explanation of this huge trade? It lies chiefly in the fact that more effort was wasted in doing things that it was not worth while to have done at all in the oldfashioned retail trade than in any other business to which working men had access. It is possible that, if a co-operative society of working men had been able to penetrate the mysteries of the trade of law in its application to real property, and had been able to cut away all those complications that are more trouble to everyone, and more cost to everyone but the lawyers, than they are worth, there might have been an even more striking curtailment of wasted effort. But, however that may be, retail trade was the one accessible business in which there were great economies to be effected. Retailers, as a body, kept far more shops than was necessary, spent far too much trouble and money on attracting a few customers, and then in taking care that those few customers paid them in the long run—the very long run-for those goods which they had bought on credit, or, in other words, had borrowed; and for all this they had to charge. The smallest shopkeepers were those that spent most of their time in looking after their customers, and least in handing goods over the counter. It was those who were nearest the

condition of the working men, who performed the most unnecessary services for them, and charged them the most for so doing. In some cases a retailer would sell at long credit what he himself bought at long credit from a wholesale dealer, who himself perhaps bought at credit from the ultimate producer. The manufacturer had to charge high for the risks and trouble, as well as the locking-up of the capital; the wholesale dealer, starting from this raised platform of high prices, piled up a good percentage more for a similar cause; the intermediate dealer did the same, and perhaps, finding the retailer in his power, added a little adulteration extra; the retailer, having the workman in his power, added on, perhaps, a little more adulteration, and, anyhow, a great increase of price.

Now the co-operative store bought for cash, and as nearly as possible at the fountain head; it required no advertisements; in its earlier stages it paid next to nothing for shop front; and in its later stages, when it had a somewhat expensive shop front, it put a great many businesses behind it, or in successive stories over it. Its customers, regarding it as their own, would not mind mounting many steps, or waiting a little for the assistants on a Saturday night, or at any other time, when there happened to be too few to get through the business quickly. The customers were the proprietors, and had no inducement to adulterate their own goods; and the time which they spent on attending meetings of the society and managing their own business was in a great measure saved from the time that used to be spent in considering whether it would not be better to change their shopkeeper, or perhaps in lamenting that they were in his power and could not do so.

Now, my object in dwelling on this oft-told tale is to show that the success of distributive stores does not prove that there is any magic in co-operation, which will enable the working classes to undertake difficult businesses without the aid of picked men of a high order of business ability. Those whom the stores have thrust to the wall are chiefly men who did not get very high earnings, although they charged high prices. The system of co-operative retailing has such great inherent economies that it is likely to succeed if carried out with good faith and honesty and average good sense: the more business genius it has the

better it will succeed, but it can flourish fairly well without business genius.

And now let us pass to the Wholesale Societies. The Scottish Wholesale is larger relatively to the population of its district than the English; and it has special claims of its own on our admiration, especially in the matter of bonus to labour. But Ipswich is a long way from Scotland; and it will be simpler that I should speak of the Wholesale in the singular number, and refer always to that with which most of those present are directly connected—the Wholesale which has its head-quarters at Manchester.

Well, the Wholesale has inherent economies almost as powerful as those possessed by the retail stores. For, though, by buying for cash, they may get a little nearer to the original producer than can the small shopkeeper who buys for credit, the Wholesale can get much nearer. Its purchases are on so vast a scale as to command every concession and every attention from producers and importers. And, while thus buying cheaply, it probably has less expenses in selling, in proportion to the work done, than any other trader in a similar position. For, while every other trader has to convince his customers that it is worth their while to deal with him, the Wholesale Society is owned by its customers. They have the power of deciding how much shall be added to the original cost of the goods before they are sold to themselves, and, if the goods are priced too high, there is only so much more profit to be divided among themselves at the end of the quarter, in proportion to their own purchases. And, therefore, the retail societies would run no great risk if they shut their eyes and bought what the Wholesale offered at the Wholesale's prices without demur. It is true that there are exceptional cases in which the retail societies' buyer can consult the caprices of local taste better by buying elsewhere, and others in which accidents of time and place and opportunity may enable him to buy a particular lot of goods as cheaply as the Wholesale's buyer could have done, or even a little cheaper. And it is true that that self-confidence which is inherent in human nature, and which is a factor in many of our bad deeds and nearly all our good ones, may sometimes lead him to buy elsewhere when he should not. All this may be admitted; but it still holds good that there is

no large trader whose way is made as smooth for him in finding a customer for his goods as the Wholesale Societies.

But the advantages of the Wholesale are still further increased, when it produces in one of its own departments the goods which it sells itself to the distributive stores. Such departments as the boot works at Leicester, or the biscuit works at Crumpsail, can avail themselves of the splendid resources of the Wholesale for buying much of their material. The department has a supply of capital which is at once unlimited and never too large; for the great bank in which the Wholesale keeps its own reserves, and those of many distributive societies, will always allow to it as much capital as it wants, and never force it to pay for more. It can offer practical constancy of employment to its workers, for when trade is slack the Wholesale will, of course, give the preference to the goods of its own department, and leave the other producing firms with which it deals to bear their fretting under the ragged edge of inconstant work as best they may. Again, the department need have no very great anxiety about those fluctuations of prices which make the career of most of its rivals so full of strain and stress. If one year it makes a fortunate purchase of raw material, and the Wholesale can credit it with a sale price for its finished commodities, pitched on a much higher basis, the gains all go into the common purse of the Wholesale; and if, at another time, the markets go against its buyers, so that when wages and all other expenses have been paid, and a fixed 5 per cent. allowed for capital, the balance sheet shows a loss, there is no disturbance of the ordinary routine. Departments which, if they had been independent businesses, would have been sunk by accumulated losses in their early years, have been carried through the waters by the strong hand of the Wholesale; and, having emerged safely, with their lessons of failure behind them, are in fair years making high net profits: these profits go to strengthen still more the already strong hand, and enable it to undertake new tasks, and to help other struggling departments through their temporary troubles.

With these advantages the Wholesale has risen to a position unique amongst all the achievements that have been wrought by the working classes in the history of the world. The mere size of the business which they have to control gives a largeness to their ideas. It compels them to extend the range of their thought over the whole country, almost over the whole world. It is an education in itself to any member of a local society to have to consider whether his representative on the Wholesale is to advocate a forward policy—whether, for instance, he is to support a proposal for starting one more new line of ships of their own, or for opening a new foreign depôt in addition to those at Calais and at Rouen, at Copenhagen, and Hamburg, and New York. He feels a healthy pride as he turns over the pages of his Annual, and sees prints of one splendid building after another of which he is part owner; as he reckons up the acres of flooring in his warehouses at Manchester, or asks whether there are many buildings in the city that are finer than his London branch, with its high clock tower.

And, when he looks forward, his ambition may reach out a long way unchecked. He may reason that, if the belief should extend that all goods sold in the stores, whether high class or low class, are honestly what they pretend to be, that they are sold at least as cheaply as the tradesman can sell them, and that there is a dividend of, say, 2s. in the pound thrown in at the end of the quarter, the sales of the retail stores may perhaps grow to three or four hundred millions a year. Every increase in their sales would increase their power of consulting the tastes of a great variety of customers, and so retaining those who are now drawn off to shops that follow special lines of their own; and it would increase the variety of the orders which they could give to the Wholesale. And, if the growing loyalty to co-operative principles, which induced individuals to buy more largely of the stores, induced the retail stores to buy more largely of the Wholesale, they would by their very increased custom enable the Wholesale to extend its operations, to sell to them more cheaply, to provide them with a larger choice of goods, and thus to increase their inducements to buy almost everything from it.

The powers of the Wholesale as a dealer would therefore be increased much; but its powers as a producer would be increased out of all proportion. For now, though it can vie with any in buying direct from the packing houses of Chicago and the flour mills of Minneapolis, it cannot enter upon any manufacture for

which there is not a very large working class demand; since many purchasers when buying manufactured goods prefer the variety offered by a long street of shops to the charms of the dividend at the stores. Not being able to sell largely, the retail stores do not buy largely; and, being themselves compelled to seek for variety, they will, as a rule, buy only very small quantities of any one particular pattern, whether it is a cooperative product or not. Co-operative manufacture on a large and varied scale is thus like a cocoanut: it has a very hard shell; but, when the shell is broken, there is plenty of good food to be got within. There is a charmed circle to be entered if individual co-operators would buy manufactures so largely from their stores, and their stores would buy so largely of co-operative manufacturers, that co-operative manufactures become so various, and the stocks of them held by the distributive stores become so large, that there would be scarcely any temptation to seek variety in the outside shops.

It is a most fascinating picture. The retail societies, if properly supported by the private individual, and the Wholesale, if properly supported by them, have within them greater economies than have ever been claimed by the plausible promoters of those Trusts of which we have heard so much lately. But, while the purpose of those Trusts was to increase the fortunes of the rich. by means which perhaps might be fair, and perhaps might incidentally benefit the consumers, this further development of the great co-operative federation would be a means by which the working classes would help themselves. Its strength would be a moral strength; would rest on a broad basis of democracy and of equity; its gains would be divided out among all consumers, those consumers being in great part the producers themselves, consuming in proportion to their earnings, and earning in proportion to their efficiency. Raising its high head far beyond all other business undertakings, it would stand forth to challenge the admiration of all ages, the glorious product of working men's hands and working men's heads, of working men's providence and working men's enthusiasm for a great and good cause. It would, in a greater or less degree, act up to all the cardinal principles of the co-operative faith, as I understand it. And yet, magnificent as this scheme is, there are many ardent

co-operators who feel that it falls short of their fondest hopes. It would be strong and vast, and would conform to the principles of the co-operative faith more or less; but their most cherished hopes, their warmest affections, go out towards productive societies, which are less completely under the management of a central control, and which are, therefore, in some respects less strong, and which can offer less resistance to the blows of an adverse fortune; but which yet seem to point more directly towards the true aims of the co-operative faith, because they help the ordinary working man to get nearer to responsible work, because they tend more directly to utilise the great waste product—the higher abilities that are latent among the working classes. It is bold and hardly indeed for an outsider, such as I am, to express an opinion on a question on which those are not agreed who have borne the burden and the heat of the long day of co-operative work; but I shall ask your kind forbearance while I lay before you the reasons which have led me to think that extreme centralisation, though it might quicken and strengthen the growth of your great movement for the present, would not really conduce to its highest and most permanent interests; and that in the long run your movement will prosper best if care is taken that its more independent parts are not crushed out, but are enabled to survive and to supplement—not to conflict with—the central kernel of the Wholesale.

I'erhaps I may explain my position more clearly if you will allow me to digress a little. It is common to hear it said that England is divided into two nations—the rich and the poor. I am not sure that it would not be in some respects better for the poor if that statement were strictly true. I will admit that if everyone born of rich parents were able and virtuous, and everyone born of poor parents were stupid and vicious, the poor would lose much and gain nothing from being isolated from the rich. But, unfortunately for the poor, they have to make room among their ranks for a large accession every year of the most stupid and profligate of the descendants of the rich; and in return they every year give over to the ranks of the rich a great number of the strongest and ablest, the most enterprising and far-seeing, the bravest and the best of those who were born among themselves. Now, it is true that a system of caste so

rigid that every one has to stay always just where he is born is a desolating system. Hope and ambition, and some scope for the play of free competition, are conditions--necessary conditions so far as we can tell-of human progress. But the great evil of our present system, which it is one chief aim of cooperation—as I take it—to remove, lies in the fact that the hope and ambition by which men's exertions are stimulated have in them too much that is selfish and too little that is unselfish. After a man's income has put him beyond the fear of pressing want, any further increase adds to his happiness less than he thought it would before he got it. The direct increase of happiness that results from increasing wealth becomes less and less as the wealth increases; and a person who has already a few hundreds a year may, so far as material wealth has anything to do with it, be nearly as happy as he chooses to be. The pleasure derived from any further increase is chiefly the pleasure of acquisition, of victory over rivals, of a consciousness of the proof of one's own strength, of being admired and envied by those whom one has left behind, and of being wondered at and tolerated by those into whose society one has risen.

And, if the rise is very rapid, it is apt to be very bad for a man, and even worse for his children, as our experience at the Universities shows. A working man, who, by brilliant genius and strong energy, has heaped up a large fortune, is likely to send his sons there; and one might have expected that coming from such splendid stock they would have had noble ambitions, and helped to raise the tone of the University. And sometimes they do that; but in too many cases their influence is in the opposite direction: too often their parents have been too busy in struggling with their new social difficulties to instruct them as to the importance of anything higher than mere money; and, when I see such cases, I am filled with regret that most excellent material has been wasted.

It might have been better for himself, for his children, and for the world, that the father should not have moved so far away from his early associations; that he should have found scope for his strength and a goal for his ambition in working, at the head indeed of his comrades, but among them; and should not have suddenly passed over to dwell among strangers, the

large capitalist employers of his old friends. His rank in the social scale would have been nominally lower, but really it would have been much higher. Occupied less with adapting himself—and his wife—hurriedly, and therefore awkwardly, to new conditions, he would have been more truly refined. The able working man who is in no great hurry to terminate his connection with his own class is more often than not a perfect gentleman; and that is what a man cannot be, whatever his nominal rank in life, if he is over-much hasted to get riches. A leader of a great trades union, who has earned the esteem, and confidence, and affection of those around him, has got more of those things for which wealth is really to be desired than if he had accumulated a large fortune; and every sensible man would rather have him for a companion and a friend just as he is, than if he had become a great iron master or cotton lord.

However, those working men who rise to be rich generally do some important service. If they do nothing else, they increase the volume of production; and, when their rise is due to their power of originating new ideas and new methods, their own fortunes represent but a small part, often not a thousandth part, of the increase of material well-being that results from their efforts. And, though some of them may have developed their intellects at the expense of their other faculties, the harm done is not to be compared with the waste of latent abilities on the part of that very much larger number of the working classes, who with fitting opportunities might have been educated to do work as difficult and important as that of the average member of the middle classes, but who have no special genius and no faculty for pushing themselves.

Now, these men want three things—education to fit them for doing higher work; opportunity to do it; and the spur of ambition to rouse them to use the opportunity. This ambition need not be chiefly one for material gain. Theoretically, it might be a mere ambition to be good; but, with human nature as it is, those cases in which men are capable of good actions, but require some other stimulus than the mere desire to be good, are too numerous to be neglected by the practical politician. For practical working there should be added a position recognised as one of trust and of honour; and with every increase in the

importance of the work there should be some increase of pay, though it need not always be a very great increase.

Now, there have been at various times a good many schemes proposed for supplying these three wants of education, opportunity, and ambition. Some of these schemes have more poetry than common sense, and some are more violent than just. They are all both entertaining and instructive reading; most of them tend to edify and to elevate the reader. But there is, to my mind, some fatal practical objection to all of them, bar one; and that one is co-operation. As I said just now, other movements have a high social aim, and other movements have a broad and strong business basis. Co-operation alone has both. For it has a broader scope than trades unions or provident societies, or those building societies, which, as your excellent Tenant Co-operators know, are so nearly akin to your own movement. All of these can do something towards bringing out the higher and more unselfish ambition of working men, towards educating and utilising their latent faculties, but it is co-operation alone which has a sufficiently broad business basis to be able to do this great work on a great scale.

It can, however, discharge this high function only by bringing the administrative work close to the people who are to do it. If it organises itself into a vast centralised institution, on the model of a great bureaucratic government, it may have a great force, as such governments often have, but it will miss its highest aims. Looking at the question in this way, we find small profit in the fact that each of the 600,000 co-operators who belong to societies that are members of the Wholesale has an equal vote in determining its policy and that of its productive departments. For, in his capacity of citizen, each has already his voice in controlling the policy of the State. If the co-operator owns a six hundred thousandth part of your warehouses at Manchester, and of the co-operative ship that goes to Hamburg, he also owns a share of all our public buildings and institutions, and of a great navy. The vote which he gives for electing a representative either on the Wholesale or in Parliament has undoubtedly an educating effect; the broader the issues on which his vote depends, the higher is the educative value to him of his vote, provided he knows well what the issues are. But, if the issues are so remote that he does not attempt properly to grapple with them, the volume of his education is but slight. It is a better training in seamanship to sail a fishing-boat, than to watch a three-masted ship, the tops of whose masts alone appear above the horizon.

I do not overlook the fact that, even under a centralised cooperative system, there would be a great deal of local government.
Of course, every distributive store would retain its autonomy;
and, though the Wholesale would aim at saving it all trouble in
deciding as to the ultimate source from which its various supplies
should come, its management would offer a good deal of work
for a good many active minds; it would continue to give
education and opportunities, and a scope for a worthy ambition
to the ordinary co-operator. That is true—may the retail store
thrive, and continue this good work; there is nothing to be said
against it except that it does not give scope for all kinds of
business ability, and that there is not enough of it.

But you may say that the local store would still be able to start productive departments of its own, such, for instance, as the little farm which our Ipswich friends have here close by. That brings administrative work to the doors of the private cooperator-work which concerns him nearly, and in which he takes a keen interest; he watches it carefully, and learns a great deal from it, even though he may have no direct part in its management. And further, if little movements of this sort are multiplied, they may become fairly numerous relatively to the whole body of co-operators, and so a considerable part of those who have faculties above the average may find the education and the opportunity and the spur to a worthy ambition of which they are in need. That is true; and local stores can enable splendid results of this kind to be attained in spite of a certain amount of centralisation: all I wish to point out is that they vary in inverse proportion to the extent to which centralisation is pushed.

And, when we come to look at the centralised part of a centralised system of co-operation, we find that the opportunities which it offers to people for doing what I am doing now—making speeches—are out of all proportion to those which it offers for any other work except manual work. I am not one of those who think that the tone of politics is lower than it was; but I do

think there is one growing evil in the fact that statesmen have to spend so much time in convincing others of the correctness of their views, and the excellence of their administration, that they have not enough time for administrative work, and for studying carefully the matters committed to their trust. And I gather that your general committee, on whom everything would depend, has a great deal of talking to do. Its present members, including its most able president, were educated under a less centralised system. But I cannot help asking myself whether there is adequate security that in the competition for a post on the committee a man of great administrative force, but not a fluent speaker, would always be sure to get the better of a less able man who had a great faculty of persuasiveness, and had perhaps learnt a thing or two about the great machine which American politicians are perfecting.

But, suppose that danger to be avoided, and your central committee to remain as able, as energetic, and as upright as they are now. It would still be true that, when once elected, their powers and their procedure would necessarily resemble more or less those of the directors of a large joint-stock company; and, if those methods should prevail, which I understand to be most in favour with the advocates of centralisation, the resemblance would be very close. There would be heads of departments, as in any ordinary business, responsible to them and to no one else; and with high authority in matters of detail. There would be, as I have said, a strong executive. Moreover, many of these leading officers probably would have been educated in the cooperative movement. Their abilities, which might otherwise have remained latent and been wasted, would have been turned to good account. So far good. But there is one flaw, a grave flaw from my point of view. It is that the total number of men of that kind—the total number of men to whom the system so organised could point proudly as the high products of cooperation—would be very small in proportion to the capital employed.

There are, then, three reasons for my venturing to hope that co-operators will besitate before they accept the argument, that the right way of deciding whether the centralised system of production under the auspices of the Wholesale or the inde-

pendent system is the better, is to let the two have a fair field and no favour, and to cry at the end, "The devil take the hindmost!" First, I feel sure that the centralised system is stronger than the independent system, with its present organisation, or lack of organisation; and that, with a fair field and no favour, the former would win. Secondly, the more loyal the retail societies are to the Wholesale, the more difficult will it be to arrange a field which is quite fair, and in which the independent societies are not at some disadvantage. And, lastly, if success in the struggle for survival in a fair field is the sole test of excellence. what is the use of co-operation at all? Surely the direct effect of the struggle for survival in the animal kingdom is to cause those animals to flourish which are fittest to derive benefits from the environment, and so strengthen themselves; not those which are fittest to confer benefits on the environment. It is true that, in the higher world of man's action, those plans which benefit the environment most are likely to have a moral strength which will enable them to prevail in the long run. But is it not the special function of co-operation to give them a helping hand, and enable them to prevail early, or at all events to secure that their career is not cut so short that they have no "long run" in which to prevail?

Let us then turn to the independent productive societies. There is no doubt that they labour under great difficulties. The management by working men of the businesses in which they are themselves employed is neither as efficient nor as free from friction as it would be if we social reformers had been able to arrange the world just to our own liking. It has often been said that an army led by a capable general can give odds of twenty per cent. and a beating to one managed by a committee of able men, if they commit the one folly of discussing at length all details. The worst of several possible manœuvres, if adopted promptly, will often turn out better than the best of them if it is delayed till its pros and cons have been well talked out. And the fact that the employees on the committee of such a cooperative business are able to hold their own against their managers in matters of the minutest detail, may often go a good long way towards wrecking the concern. Moreover, there is a good deal of human nature in most men, working men not

excepted: and most men's eyes can see pretty keenly when they are looking in the direction of their own merits. The manager and a committeeman may occasionally differ a little about the merits of the committeeman, even though they don't say so; and then it is not always well for the manager. And, if the manager and the committeeman happen to be agreed on the point, but some of the committeeman's fellow-workers take a different view of his merits relatively to their own, then they are likely to remark that a committee is a very good thing, at all events, for those who are on it: and the remark, even though it may be true, does not help the concern to work smoothly.

Then, again, managing a business is a very difficult matter. There are some people who think it easy, and are constantly telling us that there is nothing much that the employers as a class do for industry that the working people properly organised could not equally well do for themselves. Such people remind me of Charles Lamb's friend, who complained that too much fuss was made about Shakespeare; "he could have written that sort of thing himself if he had had the mind." "Ah!" said Charles Lamb, "I suppose it was only the mind that was wanting." To carry on a great business nothing much is wanted except to organise it properly; but then that is just the difficulty. It is as easy as beating the big drum in an orchestral concert. Nothing more is needed than that you should do the right thing at the right time, but there are not many people who can do it.

I have already laid stress on the fact that the success of the distributive societies is no proof of the efficiency of working men as undertakers of business enterprises. Their inherent advantages are so great that they may sometimes prosper fairly even though their management is but second-rate; and there is no question that some of them have done so. Their success gives no ground for anticipating that a productive society would succeed when it had to run the gauntlet of competition with private firms managed by business men quick of thought and quick of action, full of resource and of inventive power, specially picked for their work and carefully trained. And of men thus picked a great number fail; it is said that in some businesses more than half of those who start fail within the first five years. Some of them come to the surface again, but many sink altogether; the waters

close over them; everyone takes it as a matter of course; they are heard of no more; but no fuss is made about them. When, however, a co-operative society undertakes a business harder than it can manage, the trumpets which sounded at its christening sound again a little louder at its funeral; and some faithful friend writes out a tender obituary notice, which the careful historian of co-operation epitomises for his necrological chapter—a perpetual warning as to the vanity of human hopes.

And then there is another difficulty. Nearly every kind of business requires every year a larger capital to carry it on; and the working man has seldom much capital. It has been commonly said that in competition capital employs labour and pays it a fixed wage; but that in co-operation labour employs capital, and pays it a fixed rate of interest. But that is more easily said than done. It is easy enough to borrow a thousand millions at four per cent., if the four per cent. is sure—quite sure. But it is not nearly so easy to borrow £1000 at ten per cent., if the ten per cent is only moderately sure. And most of us know the sorrows of that society of which all co-operators are so fond and proud, the fustian society at Hebden Bridge, which borrowed at 7½ per cent. when its security was not so good, and the current rate of interest was higher, but now finds itself much hampered by having to pay so high a rate.

But, in fact, it is not true that under competition labour is hired by capital; it is hired by business ability in command of capital: and it is not true that in co-operation capital is hired by labour; it may be hired by the business ability that lives in the heads that the working men have on their shoulders; but, if they have not much business ability, they will not get much capital, either of their own or of anyone else's; and, if they get it, they will not keep it long; and it all comes back to that.

Next, after the difficulty of making things is overcome, that of selling them begins; and often the latter is the greater of the two. To say nothing of advertising, private firms spend a great deal of their energy on getting hold of the right kind of travellers and agents for pushing their goods, and a great deal of money on paying them; and this is a thing that co-operative societies cannot do very well; and there is much of it to which, to their credit be it said, they do not take very kindly.

Lastly, a productive society often owes whatever success it has had almost entirely to a few men, perhaps to one man, of exceptional ability, fervent and strong in the co-operative faith. And then it is constantly at the mercy of cruel Death. He snaps the threads of a few lives, or perhaps only of one, and the society dwindles and decays, or is converted into a greedy joint-stock company; and so cherished hopes are once again disappointed, and the proud boasts of confident co-operators are brought to naught.

Well, then, productive co-operation is a very difficult thing, but it is worth doing. When I was an undergraduate, I once took to my mathematical tutor a long face and an unfinished problem. I told him I had worked at it the whole of the preceding day. and yet not done it, though the day before I had done twenty that did not look a bit harder. He was a wise man-Dr Parkinson was his name—and he looked at me cheerily and said, "Well, then, yesterday's work probably did you much more good than that of the day before. There is not much good in doing things you can do; but there is great good in trying to do those that you can't do, but that are worth doing." And it seems to me that the difficulties of non-centralised co-operative production are just those at which it is best worth while to take a long pull. and a strong pull, and a pull all together. I believe that some of them are not so tough as they look, and can be broken through; and that those which are very tough have a corner at no great distance, which you can turn, and so get round them.

In this matter you have a very great advantage from the elasticity of independent productive societies. There must be one spirit in them all, they must all rest on a common principle; but they may have the largest variety of detail. Sometimes, for instance, it may be best not to have employees on the committee at all; but even then the employees may attend the general meetings of the society, and may be represented on the committee by others who are and have been employed in the same or in allied trades. My friend Mr Jones intends, I believe, to call your attention to the co-operative element in the Oldham spinning mills; and I may well leave that subject in his most able hands. But I should like to point out that those mills owe a great deal to the facts that Oldham is the chief centre for

manufacturing cotton spinning machinery, and that many of those interested in the mills are or have been mechanics engaged in making that machinery. And there are many cases in which the advice of a workman engaged in an allied trade is of great use to a co-operative society, while the opportunity for giving it is a gain for him.

It is a subject on which I must speak with very great diffidence. But, after hearing a good deal of what can be said on both sides, I incline to think that the real advantages of having employees on the committee are greater, and the disadvantages less, than they are likely to appear at first both to the shareholders and the manager. I think that in this matter the co-operative spirit has a high, though difficult duty, the brave performance of which would ultimately bring its own reward. One reason for thinking that the difficulties arising from having employees on the committee are not so great as they look, is that, though they have had much to do with wrecking many enterprises, that has been because, in any new undertaking, people are apt to misunderstand one another at first. Partly it is that the wrong people are apt to be put on the committee at first; partly that there is no tradition or precedent to which to appeal in disputed cases, but every difference of opinion has to be fought out; partly that some of those who are most quick to start a new movement are least able to bear and forbear when the time of pressure comes. Experience, I believe, shows that difficulties of this kind, if once tided over, are likely to recur, if at all, in a somewhat milder form: they are rather like measles. Difficulties of this kind need not discourage us: they rather show that many of the failures of independent productive societies are due to causes which can be removed by co-operative aid and guidance. They are arguments against the complete isolation of such societies, but not in favour of their being consolidated under a rigid centralised government.

And it is much the same with regard to the other difficulties. No doubt many productive societies have failed through engaging in unsuitable businesses; but co-operative experience may guide them away from tasks in which it is necessary to run great risks, to act with great vigour and decision, to have a wide range of technical and commercial knowledge, to be well posted in the

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And it is much the same with regard to the other difficulties. No doubt many productive societies have failed through engaging in unsuitable businesses; but co-operative experience may guide them away from tasks in which it is necessary to run great risks, to act with great vigour and decision, to have a wide range of technical and commercial knowledge, to be well posted in the

latest news and to get it nearly at first hand, to be constantly devising new schemes and new methods of manufacture, and appealing to and creating new tastes. Co-operative production may occasionally come across a man who has the rare qualities required for such work. But, unless his co-operative virtue is very strong, the large gains which he can make in the outside world will draw him away. And for the present, at all events, productive societies need to be guided towards those industries that do not require rare talents; towards industries in which punctuality, and order, and neatness, and careful economy in matters of detail, and a steady resolute tread along a well-beaten path, are the things chiefly wanted. There are plenty of men latent among the working classes who have the capacity required for this work, and who would be content with a moderate income and a good position among those who know them.

Industries which satisfy these conditions seldom want a very large capital. Such as do must of course be avoided; and no doubt many productive societies have failed partly through under-estimating the capital required for what they have undertaken. Here co-operative counsel on the one side and co-operative capital on the other will be of good service. Productive societies that are in other respects on the right lines can generally get what capital they want at a reasonable rate of interest: though I do not say that distributive societies can make a good business by undertaking to pay five per cent. on an unlimited number of new shares, and lending out the money at a moderate rate to a more or less risky business. But I would venture to ask in passing whether there is not a pressing need for prompt action in the matter of accepting new capital at five per cent.? Is it not an anachronism?

Here, then, we see again an argument against the isolation of productive societies. And we find still another argument in the difficulties that they have in marketing their goods; and another in the need for continuity of management. For marketing is just the business in which co-operation is most effective; and the crisis through which a society passes when its best members are removed by death or in other ways may often be tided over by a little co-operative aid from outside.

Does not all this point to the conclusion that in order to give

co-operative production in this country a fair chance of doing its best, there is required some broad-based organisation for helping it? I say in this country, because the industrial qualities of this country are peculiar, and not like those of any other. Englishmen are not particularly quickwitted, or specially adapted for contriving sporadic productive associations, each fighting entirely for itself, each trying some new experiment, depending on its own resources, and heedless of what others have done or are doing.

And, on the other hand, Englishmen have no liking for things controlled and drilled by a central government. What suits their character best is to have a broad and solid association based on many smaller associations, not controlling and directing them, not interfering with their freedom without absolute necessity, but acting as a common centre for help and advice; serving as a channel by which any member that is in special need may receive the aid of others, and taking perhaps an active part in administering aid and the wholesome advice by which it may perhaps have to be accompanied. It seems to me that the three great features of English social life, trades unions, provident societies, and co-operation, owe their success to adopting this plan. Broad-based, highly-organised freedom of action is characteristically English: and the true future of English co-operation lies, I am convinced, in adhering to these lines.

If co-operation, which has made its great position by fostering freedom, should throw its strength into developing departments of the Wholesale governed by a central authority, is there any certainty that this new departure, so seemingly at variance with the traditions of the English people, would be supported by them permanently? I spoke just now of the great strength of a productive department of the Wholesale; but does not the permanence of the strength of the Wholesale; but does not the permanence of the strength of the Wholesale itself depend upon its adhering to English traditions of freedom and local autonomy? Even though centralised departments may be the strongest and fittest to thrive on their environment for the present, are they the fittest to benefit it, are they even the surest to flourish themselves in the long run? And would it not be, on the other hand, equally un-English to continue to allow the independent productive societies to fight their hard fight, to struggle, and

too often to die an early death, for the want of a guiding and a helping hand, for the want of those advantages, those economies, and those powers which come from broad-based association and co-operation? Do not many of your discussions point in this direction? Your schemes for propaganda, and the cordial reception given to Mr Gray's excellent papers on "Co-operative Production," seem all to do so. Your Co-operative Guild, your Co-operative Aid Association and your Labour Association are evidences that you recognise a want of this kind.

Is not, however, your Co-operative Union itself the right body for the work? But is it at present strong enough? Ought you not to develop it and to put more of your funds at its disposal? I speak here with the greatest hesitation. I do not mean to suggest that the funds for this purpose should be levied compulsorily on all societies, whether in favour of the movement or not; but I think that many societies would favour it. And it is just that part of the movement in which outsiders would be most willing to help, if they were sure that the funds contributed would be spent under the authority of the Union, and therefore wisely. I do not know whether anyone would raise an objection on the ground that the constitution of your Union permits joint-stock companies and other external associations to become members of it, though none have yet done so. In that case you might perhaps think it best to create a new body for the purpose; but it is to be hoped that this would not be necessary. Might you not give to your Union the means and the duty to help productive societies with guidance and with funds, leaving them the greatest liberty of detail, subject to the condition of their adhering closely to high co-operative principle, under which of course would be included securing a full share of the profits to the workers? Might not it further undertake to act as a common centre of information as to their special wants, and to warn them against pressing into a field that was already full; to take part in acquainting distributive societies with what they are doing; in acquainting them with the needs of distributive societies; in organising arrangements for depôts, exhibitions, commission agents, and travellers; and, lastly, might it not act as a kind of board of arbitration and conciliation for troubles that may arise either within a society, or between it and others?

It would, of course, nominate members on the committees of those associations which sought its pecuniary aid; but probably many other societies would ask it to do this, just as many schools and local colleges are glad to have members on their councils nominated by the Universities, partly because they can give good advice, partly because they bring an impartial judgment to the decision of any internal difficulty that may arise, and, not least, because their presence gives prestige and attracts the confidence of the outside world. And might it not be instructed to choose these representatives from as wide a circle as possible, and so to give to many men the opportunity of showing what they are worth as administrators; not, of course, putting untried men into responsible posts, but always finding for a man who had done one task well something more responsible to go on with? Is this a Utopian dream? Is not the tendency of your whole movement really in this direction; and has not the time now come, not, indeed, for prompt action, but for steadfast deliberation, that may prepare the way for resolute action? And the last question of all-can you forgive me, an ill-informed outsider, for my presumption in asking these bold and intrusive questions?

I have come to the end of my time, and yet have touched the fringe of only a small part of the great problems which you have set yourselves to solve. The days of romantic chivalry are past. Knights-errant no longer rescue imperilled maidens from the castles of terrible giants, or slaughter dragons that vomit volcanoes of flames; but there is as loud a call as ever for courage and a chivalric self-sacrifice for great and worthy ends. Those who are full of the co-operative faith have to endure the disappointment of seeing themselves out-voted by numbers who care for little that is co-operative except the dividend; and still they have to keep their courage, and to keep their temper, and to fight the good fight time after time till they win. I am told by those who know, what I should have otherwise expected, that there will be in this hall to-day many of the truest and bravest knights of that great order of modern chivalry-co-operation; and they must sometimes wish that the doors had not been held so widely open for those worshippers in their great temple whose devotions are exclusively paid at the shrine of dividend, who stay

eagerly watching to see whether the golden image that dwells there will hold up its fingers at the end of the quarter to signify 2s. 3d. or 2s. 4d.; and care for very little else. But to them I would repeat the noble motto of the English Wholesale: "Labour and Wait."

They and others who are not here to-day may wonder that I have not put more into the foreground the great issue as to whether the employees of a co-operative society should share in its profits. I have not done so, partly because my time was short, partly because there seems some danger of its overshadowing what I regard as a still more fundamental question. Profit-sharing is a great end, but it is also a means to an even greater end. It certainly tends to award to the worker a better and juster share of his work than he would otherwise get; but, taken by itself, it does not go very far towards that end. Unless it is used also as a means towards a better organisation of industry it is apt to become little more than a change of form, nearly as much being taken off wages at one end as is added on at the other under the name of profit-sharing. But even so it compares not unfavourably with the best result that can be reached without it, even if the spirit of the employers is liberal, and they try to pay not as low wages as they can, but as much as the business will bear; and if as their business extends they promote their old employees as rapidly as possible to higher posts at higher salaries. It is true that those employees who have been more than five years with one firm are, taking all England together, much better off than they would have been if the firms for which they had worked had barely kept their heads above water; and there is much more indirect profit-sharing, and solidarity of interest between employer and employed in the non-co-operative world than at first sight appears. And I must further confess that, when any abstract or "metaphysical" principle—the term is not mine—is applied to settle rigidly what share of the profits should go to labour and what to capital, and what to the consumer, I find myself unable to follow it; whether it is put forward in the interests of labour or of the consumer. Nevertheless, I regard the movement towards the direct participation by the employee in the profits of the business as one of the most important and hopeful events of modern times, and

as one of the best and most valuable fruits of the co-operative spirit.

It is the most convincing outward sign and symbol, and the most efficient means, of a true desire to associate the worker in the business, to keep warm his interest in it; to induce him to take a pleasure in advancing its prosperity by all means, whether they fall within the technical limits of his ordinary work or not; to offer him, as far as may be, education, and opportunity and scope for a worthy ambition to act not merely as a hand, but as a thinking and thoughtful human being. Profit-sharing is a good means towards this great end; and he has not lived in vain who has helped to overcome the obstacles which impede its general adoption.

The term profit-sharing is, however, sometimes applied to the case in which labour, or rather "the business ability that lives in the heads that working men have on their shoulders," endeavours to hire capital at a fixed rate of interest, and in favour of that I have nothing to say now, because I have been speaking for it all along. I must, however, confess to some partial agreement with the advocates of the present system of the Manchester Wholesale, when they argue that their employees in any productive department cannot be regarded as hiring capital on these terms. They argue that the Wholesale undertakes to market their goods for them, as well as to superintend their general management, and that an arbitrary element is introduced in the charge which has to be made for their services, and therefore that the profits to be divided among the employees, if that system were adopted, could not be determined by any abstract principle. I admit it; but I still wish that the Manchester Wholesale would follow the example of its Scottish sister; and, accepting the fact that there is an arbitrary element, calculate it as best it can, and share the net profits with the employees. As, however, I have already said, I should much prefer that the Union should perform for the independent co-operative societies many of the services which the Wholesales perform for their productive departments. Then the societies could approach as near as existing conditions will allow to the ideal of "labour employing capital."

This is, however, only one of many tasks that lie before the

true knights of co-operation. There are others in which the path of duty, if not more easy, seems yet more clearly marked in its general outline, though even in them there is a fringe of debatable ground.

You have, for instance, still to fight the old fight against giving credit. The wily trader is developing a fresh line of attack, by new modifications of the old plan of payment by instalments. He claims to give his dividend at the beginning instead of at the end; and I am told that there are a great many silly flies who walk into the pretty parlour of that shrewd spider.

Again, you have the old battle for honesty in dealing. You have been hampered a good deal by the reaction against undiscriminating attacks on adulteration. The term is often used so as to include open and undisguised changes in the character of goods to suit the wants and the tastes of consumers. But you seem to me to have a clear duty; it is to explain to consumers what things are cheap and what things only appear to be cheap; to give them for their money as high class goods as you can afford, and as much truthful information about them as you possess. Gradually they will care less and less to buy show instead of substance.

And you have—the most difficult task of all, because that in which you are most likely to be suspected of jealous motives-to keep the field clear of those who would use it for their own selfish purposes. Co-operators may be as generous as they please; but they must not be merciful either to wrong-doing or to incompetency. They should try to give to every man a better scope for his abilities, and therefore the opportunity for earning a better income than he would have got if his best faculties had not been turned to account; but they must not allow people to prey on the movement. If the manager of a store does his business so negligently or with so little skill that he could not keep his customers together were it not for the prestige which his store derives from co-operation, he must take a lower place. This is your hardest and most bitter task: there is none more repugnant to the spirit of the true co-operator; but there is, I believe, none which it is more imperatively his duty to perform, none which is more vital to the continued prosperity of the movement.

It is also a duty to pay to those who are doing their work with exceptional ability salaries high enough to prevent any excessive strain on their allegiance to co-operation arising when they receive tempting offers from outside. This is a pleasant, but not an easy task. It is said that successful business men owe much to their knowing when to pay very high salaries; and co-operators must keep their wits well about them in order to find out when to do it.

Thus, in every direction there is plenty of work for the heads as well as for the hearts of co-operators. They hold a most responsible position; it lies with them to control the future of that scheme for social reform which is the greatest because its business basis is the strongest; and of that business undertaking which is the greatest because its aims are the noblest and the most aspiring. Those co-operators who, caring little for themselves, labour hard and earnestly to turn to good account the knowledge that working people have of one another, their power of wise trust and sober confidence in one another, their sympathy and affection; those who work steadfastly towards the aim of giving education and opportunity and spur of a worthy ambition to that latent ability of the working classes which is the great waste product of the world; they will

In pulses stirred to generosity,
In deeds of daring rectitude, in scorn
For miserable aims that end in self,...
Enkindle generous ardour, feed pure love,
Be the sweet presence of a good diffused,
And in diffusion ever more intense,
So shall they join the choir invisible,
Whose music is the gladness of the world.

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You have, for instance, still to fight the old fight against giving credit. The wily trader is developing a fresh line of attack, by new modifications of the old plan of payment by instalments. He claims to give his dividend at the beginning instead of at the end; and I am told that there are a great many silly flies who walk into the pretty parlour of that shrewd spider.

Again, you have the old battle for honesty in dealing. You have been hampered a good deal by the reaction against undiscriminating attacks on adulteration. The term is often used so as to include open and undisguised changes in the character of goods to suit the wants and the tastes of consumers. But you seem to me to have a clear duty; it is to explain to consumers what things are cheap and what things only appear to be cheap; to give them for their money as high class goods as you can afford, and as much truthful information about them as you possess. Gradually they will care less and less to buy show instead of substance.

And you have—the most difficult task of all, because that in which you are most likely to be suspected of jealous motives-to keep the field clear of those who would use it for their own selfish purposes. Co-operators may be as generous as they please; but they must not be merciful either to wrong-doing or to incompetency. They should try to give to every man a better scope for his abilities, and therefore the opportunity for earning a better income than he would have got if his best faculties had not been turned to account; but they must not allow people to prey on the movement. If the manager of a store does his business so negligently or with so little skill that he could not keep his customers together were it not for the prestige which his store derives from co-operation, he must take a lower place. This is your hardest and most bitter task: there is none more repugnant to the spirit of the true co-operator; but there is, I believe, none which it is more imperatively his duty to perform, none which is more vital to the continued prosperity of the movement.

It is also a duty to pay to those who are doing their work with exceptional ability salaries high enough to prevent any excessive strain on their allegiance to co-operation arising when they receive tempting offers from outside. This is a pleasant, but not an easy task. It is said that successful business men owe much to their knowing when to pay very high salaries; and co-operators must keep their wits well about them in order to find out when to do it.

Thus, in every direction there is plenty of work for the heads as well as for the hearts of co-operators. They hold a most responsible position; it lies with them to control the future of that scheme for social reform which is the greatest because its business basis is the strongest; and of that business undertaking which is the greatest because its aims are the noblest and the most aspiring. Those co-operators who, caring little for themselves, labour hard and earnestly to turn to good account the knowledge that working people have of one another, their power of wise trust and sober confidence in one another, their sympathy and affection; those who work steadfastly towards the aim of giving education and opportunity and spur of a worthy ambition to that latent ability of the working classes which is the great waste product of the world; they will

Live
In pulses stirred to generosity,
In deeds of daring rectitude, in scorn
For miserable aims that end in self,...
Enkindle generous ardour, feed pure love,
Be the sweet presence of a good diffused,
And in diffusion ever more intense.
So shall they join the choir invisible,
Whose music is the gladness of the world.

SOME ASPECTS OF COMPETITION (1890)1

I. LIMITATION OF THE SCOPE OF THE PAPER TO A STUDY OF SOME FORMS OF COMPETITION IN COMMERCE, AND OF CHANGES IN THE MENTAL ATTITUDE OF ECONOMISTS WITH REGARD TO IT

I UNDERSTAND that the function of an Opening Address to a Section of the British Association is to give an account of the advances made in some part of the field of study with which that Section is specially concerned. The part of our field to which I would direct your attention to-day is the action of competition. We cannot, in the short space of time allotted to us, make an adequate study of the progress that has been made even in this part of our field; but we may be able to go some way towards ascertaining the character of the changes that are going on in our own time in the mode of action of competition, and in the attitude of economists towards it.

I do not propose to speak of changes in the moral sentiments of economists with regard to competition—though these, also, are significant in their way—but of changes in their mental attitude towards it, and in the way in which they analyse and reason about its methods of action. And partly for this reason, partly on account of the limitation of the time at my disposal, I propose to confine my remarks to some aspects of competition in commerce, and not to enter upon the subject of competition and combination in the buying and selling of labour. For in relation to that subject, the change in the moral attitude of economists is in some ways more marked and more important than that in their mental attitude; and it is therefore not so well fitted as that of competition and combination in commerce to illustrate the change in the methods of economic science to which I would invite your attention.

¹ Presidential Address to the Economic Science and Statistics Section of the British Association, at Leeds, 1890.

The abandonment of Dogma; the development of Analysis

The change may, perhaps, best be regarded as a passing onward from that early stage in the development of scientific method, in which the operations of Nature are represented as conventionally simplified for the purpose of enabling them to be described in short and easy sentences, to that higher stage in which they are studied more carefully, and represented more nearly as they are, even at the expense of some loss of simplicity and definiteness, and even apparent lucidity. To put the same thing in more familiar words, the English economists of fifty years ago were gratified, rather than otherwise, when some faithful henchman, or henchwoman, undertook to set forth their doctrines in the form of a catechism or creed; and the economists of to-day abhor creeds and catechisms. Such things are now left for the Socialists.

It has, indeed, been an unfortunate thing for the reputation of the older economists, that many of the conditions of England at the beginning of this century were exceptional, some being transitional, and others, even at the time, peculiar to England. Their knowledge of facts was, on the average, probably quite as thorough as that of the leading economists of England and Germany to-day, though their range was narrow. Their thoroughness was their own, the narrowness of their range belonged to their age; and, though each of them knew a great deal, their aggregate knowledge was not much greater than that of any one of them, because there were so few of them, and they were so very well agreed. In these matters we economists of to-day have the advantage over them.

Their agreement with one another made them confident; the want of a strong opposition made them dogmatic; the necessity of making themselves intelligible to the multitude made them suppress even such conditioning and qualifying clauses as they had in their own minds: and thus, although their doctrines contained more that was true, and new, and important than those promulgated by almost any other set of men that have ever lived—doctrines for which they will be gratefully remembered as long as the history of our century retains any interest—yet, still, these doctrines were so narrow and inelastic that, when

they were applied under conditions of time and place different from those in which they had their origin, their faults became obvious and created a reaction.

Perhaps the greatest danger of our age is that this reaction may be carried too far, and that the great truths which lie embedded in these too large utterances may be neglected because they are not new, and we are a little tired of them: and because they are associated with much that is not true, and which has become, not altogether unjustly, repugnant to our sentiments.

I propose to illustrate this danger chiefly by reference to that point at which it assumes its gravest form just at present, viz., the relations between competition and combination in domestic trade. But the relations between Protection and Free Trade in foreign commerce have a longer and more fully developed history; and I will begin by referring briefly to them because they throw a clear light both on recent changes in economic thought, and on the warnings which the experience of our forefathers, in dealing with the problems of their age, gives us with reference to those problems which are more specially ours.

II. FIRST ILLUSTRATION. THE POLICY OF PROTECTION

Englishmen used to underrate the differences between the influences of Foreign Trade on an Old and a New Country

It is a constant source of wonder to Englishmen that Protection survives and thrives, in spite of the complete refutations of Protectionist arguments with which English economists have been ready to supply the rest of the world for the last fifty years or more. I believe that these refutations failed chiefly because some of them implicitly assumed that whatever was true as regards England, was universally true; and, if they referred at all to any of the points of difference between England and other countries, it was only to put them impatiently aside, without a real answer to the arguments based on them. And further, because it was clearly to the interests of England that her manufactures should be admitted free by other countries, therefore, any Englishman, who attempted to point out that there was some force in some of the arguments which were adduced in favour of Protection in other countries, was de-

nounced as unpatriotic. Public opinion in England acted like the savage monarch who puts to death the messenger that comes running in haste to tell him how his foes are advancing on him; and, when John Stuart Mill ventured to tell the English people that some arguments for Protection in new countries were scientifically valid, his friends spoke of it in anger—but more in sorrow than in anger—as his one sad departure from the sound principles of economic rectitude. But killing the messengers did not kill the hostile troops of which the messengers brought record; and the arguments which the Englishmen refused to hear, and therefore never properly refuted, were for that very reason those on which Protectionists relied for raising a prejudice in the minds of intelligent and public-spirited Americans against the scientific soundness and even the moral honesty of English economics.

The first great difficulty which English economists had, in addressing themselves to the problems of cosmopolitan economics, arose from the fact that England was an old countryolder than America in every sense, and older than the other countries of Europe in this sense, that she had accepted the ideas of the new and coming industrial age more fully and earlier than they had. In speaking of England, therefore, they drifted into the habit of using, as convertible, the two phrases—"the commodities which a country can now produce most easily," and "the commodities which a country has the greatest natural advantages for producing," that is, will always be able to produce most easily. But these two phrases were not approximately convertible when applied to other countries; and, when List and Carey tried to call attention to this fact, Englishmen did little more than repeat old arguments, which implicitly assumed that New England's inability to produce cheap calico had the same foundation in natural laws as her inability to produce cheap oranges. They refused fairly to meet the objection that arguments, which prove that nothing but good can come from a constant interchange of goods between temperate and tropical regions, do not prove that it is for the interest of the world that the artisans who are fed on American grain and meat should continue always to work up American cotton for American use three thousand miles away. Finding that their case was not fairly met, the Protectionists naturally thought it stronger than it was, and honestly exaggerated it in every way. One of my most vivid recollections of a visit I made, in 1875, to study American Protection on the spot, is that of Mr Carey's splendid anger, as he exclaimed that foreign commerce had made even the railways of America run from east to west, rather than from north to south.

Difficulties of American manufacturers fifty years ago

England had passed through the stage of having to import her teachers from other lands. But her genius for freedom had attracted to her shores the pick of the skilled artisans of the world; she had received the best lessons from the best instructors. and seldom paid them any fee, beyond a safe harbour from political and religious persecution. And modern Englishmen could not realise, as Americans and even Germans could fifty years ago, the difficulties of a manufacturer taking part in starting a new industry, when he came to England to beg or steal a knowledge of the trade, and to induce skilful artisans to come back with him. He seldom got the very best; for they were sure of a comfortable life at home, and were perhaps not without some ambition of rising to be masters themselves. He had to pay their travelling expenses, and to promise them very high wages; and when all was done, they often left him to become the owners of the 160 acres allotted to every free settler; or, the bitterest pill of all, they sold their skill to a neighbouring employer who had been looking on at the experiment, and, as soon as it showed signs of prosperity, stepped in, improved on the first experiments, and reaped a full harvest on a soil that had been made ready by others.

Again, the pioneer manufacturer had to bring over specialised machinery, and specialised skill to take care of it. If any part went wrong, or was superseded, the change cost him ten times as much as his English competitor. He had to be self-sufficing: he could get no help from the multitude of subsidiary industries, which in England would have lent him aid at every turn. He had a hundred pitfalls on every side: if he failed, his failure was full of lessons to those who came after; if he succeeded, the profits to himself would be trivial, as compared with those to

his country. When he told the tale of his struggles, every word went home to his hearers; and when the English economists, instead of setting themselves to discover the best method by which his country might help him in his experiment, said he was flying in the face of Nature, and called him a selfish schemer for wanting any help at all, they put themselves out of court.

The Action of the Laws of Diminishing and Increasing Return intensifies the evils of Protection in England, but lessens them in America

But the failure of English economists to allow for the special circumstances of new countries did not end here. They saw that Protective taxes in England had raised the price of wheat by their full amount (because the production of wheat obeys the Law of Diminishing Return; i.e. increased supplies can be raised in an old country, such as England, only at a more than proportionately increased cost of labour); that the high price of bread had kept a large part of the population on insufficient rations; that it had enriched the rich at the expense of a much greater loss to the rest of the nation; and that this loss had fallen upon those who were unable to lose material wealth without also losing physical, and even mental and moral strength; and that even those miseries of the overworked factory women and children, which some recent German writers have ascribed exclusively to recklessness of manufacturing competition in its ignorant youth, were really caused chiefly by the want of freedom for the entry of food. They were convinced, rightly, as I believe, that the benefits claimed for Protection in England were based, without exception, on false reasoning; and they fought against it with the honest, but also rather blind, energy of a religious zeal.

Thus they overlooked the fact that many of those indirect effects of Protection, which aggravated then, and would aggravate now, its direct evils in England, worked in the opposite direction in America. For, firstly, the more America exported her raw produce in return for manufactures, the less the benefit she got from the Law of Increasing Return (i.e. that manufacture on a large scale is more economical than on a small); and thus her case was contrasted with England, who could manufacture

more cheaply for her own use the more of her manufactures she sent abroad; and, for this and other reasons, a Protective tax did not nearly always raise the cost of goods to the American consumer by its full amount. And, secondly, Protection in America did not, as in England, tax the industrial classes for the benefit of the wealthy class of landlords. On the contrary, in so far as it fell upon the exporters American produce, it pressed on those who had received large free gifts of public land; and there was no primafacie injustice in awarding to the artisans, by special taxation, a small part of the fruits of that land, the direct ownership of which had not been divided between farmers and artisans, as it equitably might have been, but had been given exclusively to the former.

General conclusions as to Protection

I have touched on but a few out of many aspects of the problem. But perhaps I may stop here, and yet venture to express my own opinion on the controversy. It is, that fifty years ago it might possibly have been not beyond the powers of human ingenuity to devise schemes of Protection which would, on the whole, be beneficial to America, at all events, if one regarded only its economic and neglected its moral effects; but that the balance has turned strongly against Protection long ago. In 1875 I went to America to study the problem of Protection on the spot. I discussed the Protective policy with several of its leading advocates, I visited factories in almost every first-class city, and compared as well as I could the condition of the workers there with that of similar workers at home, and I walked up and down some of the streets of nearly all the chief American cities, and said to myself as I went: "The adoption of Free Trade, so soon as its first disturbances were over, would strengthen this firm and weaken that"; and I tried to strike a rough balance of the good and evil effects of such a change on the non-agricultural population. On the whole it seemed to me that the two were about equally balanced, and that the abandonment of Protection would injure the lower rather than the higher classes of manufacturing industries; that those metal and wood trades, for instance, which give the best scope for the special genius of the native American artisan would gain by the change. Taking account therefore of the political corruption which necessarily results from struggles about the tariff in a democratic country, and taking account also of the interests of the agricultural classes, I settled in my own mind the question as to which I had had some doubt till I went to America, and decided that, if an American, I should unhesitatingly vote for Free Trade. Since that time the advantages of Protection in America have steadily diminished, and those of Free Trade have increased; I can see no force in Professor Patten's new defence of Protection as a permanent policy. I have already implied that I believe that many of those arguments that tell in favour of Protection as regards a new country tell against it as regards an old one. Especially for England a Protective policy would, I believe, be an unmixed and grievous evil¹.

In Economic discussions absolute frankness is in the long run the best Policy

But this expression of my own opinion is a digression. My present purpose in discussing Protection is to argue that, if the earlier English economists had from the first studied the conditions of other countries more carefully, and abandoned those positions that were at all weak, they could have retained the controversy with their opponents within those regions where they had a solid advantage. They would thus have got a more careful hearing when they claimed that, even though labour migrated more freely between the west and the east of America than between England and America, yet it was unwise to spend so much trouble on protecting the nascent industries of the East against those of England, and none on protecting the nascent industries of the West against those of the East; or, again, when

¹ P.S.—I do not include under the head of a Protective policy any of the many ingenious schemes that have been propounded for "Retaliation" on those countries that impose high duties on imports from England, or for taxing imports from foreign countries, in order to be able to allow some differential advantage to the goods of our colonies, on condition that they grant corresponding advantages to English goods. It is true that many of these schemes have been advocated by arguments of a most unscientific character, such as find their proper place only in the crudest forms of Protectionism. But it is not necessary to base their claims on arguments of this kind. Arguments of some force can be given for the helief that some of these schemes, if they could practically be carried out under certain conditions, might on the whole do a lutle more good than harm to England. But there seems at present to be no probability that the proposed conditions will be realized in practice.

they urged that the younger an industry was, and the more deeply it needed help, the more exclusively would its claims have to stand on its own merits, while its older and sturdier brothers could supplement their arguments by a voting power which even the most honest politicians had to respect, and by a power of corruption which would tend to make politics dishonest.

Had the English economists been more careful and more many-sided, they would have gradually built up a prestige for honesty and frankness, as well as for scientific thoroughness, which would have inclined the popular ear to their favour, even when their arguments were difficult to follow. Intellectual thoroughness and sincerity is its own reward; but it is also a prudent policy when the people at large have to be convinced of the advisability of a course of action against which such plausible fallacies can be urged as that "Protection increases the employment of domestic industries," or that "it is needed to enable a country in which the rate of wages is generally high to carry on trade with another in which it is generally low." The arguments by which such fallacies can be opposed have an almost mathematical cogency, and will convince, even against his will, any one who is properly trained for such reasonings. But the real nature of foreign trade is so much disguised by the monetary transactions in which it is enveloped, that a clever sophist has a hundred opportunities of throwing dust in the eves of ordinary people, and especially the working classes, when urging the claims of Protection as affording a short cut to national prosperity; and, to crown all, he contrasts America's prosperity with English prophecies of the ruin that Protection would bring on her1.

¹ P.S.—Some of these prophecies have been repeated with reference to the recent McKinley Bill. But, even if all the rest of the world were submerged under the ocean, the United States, without any foreign trade at all, would remain a great and a prosperous nation; and, even though it be true—as I myself think it is—that the Act is a part of a policy which is on the whole mischievous to America, and is itself a mistake; and though the plans which it adopts for promoting the growth of American tin plate, lace, eve., industries do not seem to be the best pressible; and though their good effects for America will probably be overweighed by much greater evils, yet those good effects can scarcely fail to be very important. On the other hand an old fallacy has reappeared in a new form in an argument, which has attracted much attention both here and in America, that the Act must have benefited America, because it has led to the investment of a few hundred thousand pounds of English capital in starting tin plate and lace works, etc., in America. Protection always puts capital into some industries: that movement "is

It is true that Ricardo himself, and some of those who worked with him, were incapable of supposing that a doctrine can be made more patriotic by being made less true; and, so far as their limits went, they examined the good and evil of any proposed course, and weighed the good and evil against one another in that calm spirit of submissive interrogation with which the chemist weighs his materials in his laboratory. But they were very few in number, and their range of inquiry was somewhat narrow, while many of those Englishmen who were most eager to spread Free Trade doctrines abroad had not the pure scientific temper.

Now at length, however, there seems to be the dawn of a brighter day in the growth of large numbers of many-sided students in England and other countries, and notably in America itself, where the problems of Protection can be studied to most advantage—students who are not, indeed, without opinions as to what course it is most expedient to follow practically, but who are free from party bias, and have the true scientific delight in ascertaining a new fact or developing a new argument, simply because they believe it to be new and true, and who welcome it equally whether it tells for or against the practical conclusion which, on the whole, they are inclined to support.

III. SECOND ILLUSTRATION. TRUSTS AND OTHER FORMS OF COMBINATION

But I must leave the subject of competition from outside a nation and pass to that of competition within. Here the past counts for less, the present and the future have to work for themselves without very much direct aid from experience. For, rapid as are the changes which the last few years have seen in the conditions of foreign trade, those which are taking place in the relations of different groups of industry within a country are more rapid still and more fundamental. The whirliging of

seen"; but, before we can regard it as a net gain, we must make sure that there is not an equal or greater, though "unseen" leaking of capital out of other industries which the new tariff indirectly injures; and for every hundred thousand pounds that the Protection policy causes to be sent from England to be invested in American factories, it probably keeps away at least a million pounds that would otherwise have been sent there to be invested in railways and agriculture. And indeed the adoption of free trade by America would probably give a great stimulus to the immigration of English capital and labour to avail themselves of America's vast natural resources for almost every branch of industry.

Time brings its revenges. It was to England's sagacity and good fortune in seizing hold of those industries in which the Law of Increasing Return applies most strongly, that she owed in a great measure her leading position in commerce and industry. Time's revenge was that that very Law of Increasing Return furnished the chief motives to other countries, and especially America, to restrict their commerce with her by Protective duties to home industries. And Time's counter-revenge is found in this—that England's Free Trade has prevented the Law of Increasing Return from strengthening combinations of wealthy manufacturers against the general weal here to the same extent as it has in countries in which Protection has prevailed, and notably America.

American and English Business contrasted

The problem of the relations between competition and combination is one in which differences of national character and conditions show themselves strongly. The Americans are the only great people whose industrial temper is at all like that of the English, and yet even theirs is not very like. Partly because of this difference of temper, but more because of the differences in the distribution of wealth and in the physical character of the two countries, the individual counts for much more in American than in English economic movements. Here few of those who are very rich take a direct part in business, they generally seek safe investments for their capital; and, again, among those engaged in business the middle class predominates, and most of them are more careful to keep what they have than eager to increase it by risky courses. And, lastly, tradition and experience are of more service and authority in an old country than in one which, like America, has not yet even taken stock of a great part of her natural resources, and especially those mineral resources, the sudden development of some of which has been the chief cause of many recent dislocations of industry.

In England, therefore, the dominant force is that of the average opinion of business men, and the dominant form of association is that of the joint stock company. But in America the dominant force is the restless energy and the versatile enterprise of a comparatively few very rich and able men who

rejoice in that power of doing great things by great means that their wealth gives them, and who have but partial respect for those who always keep their violins under glass cases. The methods of a joint-stock company are not always much to their mind; they prefer combinations that are more mobile, more elastic, more adventurous, and often more aggressive. For some purposes they have to put up with a joint-stock company; but then they strive to dominate it, not be dominated by it. Again, since distances in America are large, many local monopolies are possible in America which are not possible in England; in fact the area of a local monopoly there is often greater than that of the whole of England. A local coal combination, for instance, means quite a different thing there from what it does in England, and is more powerful in every way.

Again, partly, but not solely, because they are so much in the hands of a few wealthy and daring men, railways, both collectively and individually, are a far greater power in America than in England. America is the home of the popular saying that, if the State does not keep a tight hand on the railways, the railways will keep a tight hand on the State; and many individual railways have, in spite of recent legislation, a power over the industries within their territories such as no English railway ever had, for the distances are great, and the all-liberating power of the free ocean befriends America but little.

The pressure of Combinations is becoming more Extensive, but less Intensive

It is this change of area that is characteristic of the modern movement. In Adam Smith's time England was full of trade combinations, chiefly of an informal kind, indeed, and confined to very narrow areas; but very powerful within those areas, and very cruel. Even at the present day, the cruelest of all combinations in England are, probably, in the trades that buy up small things, such as fish, and dairy and garden produce in detail, and sell them in retail; both producers and consumers being, from a business point of view, weak relatively to the intermediate dealers. But even in these trades there is a steady increase in the areas over which such combinations and partial monopolies extend themselves. New facilities of transport and

communication tell so far on the side of the consumer, that they diminish the *intensity* of the pressure which a combination can exert; but, at the same time, they increase the *extension* of that pressure, partly by compelling, and partly by assisting, the combination to spread itself out more widely. And in England, as in other Western countries, more is heard every year of new and ambitious combinations; and of course many of them remain always secret.

The success of American Trusts has been brilliant, but perhaps not very solid

But it is chiefly from America that a cry has been coming with constantly increasing force for the last fifteen years or more, that in manufactures free competition favours the growth of large firms with large capitals and expensive plants; that such firms, if driven into a corner, will bid for custom at any sacrifice; that, rather than not sell their goods at all, they will sell them at the Prime Cost—that is, the actual outlay required for them, which is sometimes very little; that, when there is not enough work for all, these manufacturers will turn their bidding recklessly against one another, and will lower prices so far that the weaker of them will be killed out, and all of them injured; so that when trade revives they will be able, even without any combination amongst themselves, to put up prices to a high level; that these intense fluctuations injure both the public and the producers; and the producers, being themselves comparatively few in number, are irresistibly drawn to some of those many kinds of combinations to which, nowadays, the name Trust is commonly, though not quite accurately, applied; and that, in short, competition burns so furiously as to smother itself in its own smoke. It is a Committee of the American Congress that reports that "combination grows out of, and is the natural development of, competition, and that in many cases it is the only means left to the competitors to escape absolute ruin."

The subject is one on which it would be rash to speak confidently. We of this generation, being hurried along in a whirl of change, cannot measure accurately the forces at work, and it is probable that the best guesses we can make will move the smiles of future generations; they will wonder how we could

have so much over-estimated the strength of some, and underestimated the strength of others. But my task is to try to explain what it is that economists of this generation are thinking about competition in relation to combination; and I must endeavour to reproduce their guesses, hazardous though this may be.

To begin with, I think that it is the better opinion that popular rumour, going now as ever to extremes, has exaggerated some features of the movement towards combination and monopoly, even in America. For instance, though it is said that there are a hundred commodities, the sale of which in America is partly controlled by some sort of combination, many of these combinations turn out to be of small proportions, and others to be weak and loose. Again, the typical instances which are insisted on by those who desire to magnify the importance of the movement are nearly always the same, and they have all had special advantages of more or less importance.

This is specially true of the only Trust which can show a long record of undisputed success on a large scale—the Standard Oil Trust. For, firstly, the petroleum in which it deals comes from a few of Nature's storehouses, mostly in the same neighbourhood: and it has long been recognized that those who can get control over some of the richest natural sources of a rare commodity are well on their way towards a partial monopoly. And, secondly, the Standard Oil Trust has many of those advantages which enable large railway companies to get the better of their smaller neighbours; for, directly or indirectly, it has in some measure controlled the pipe lines and the railways which have carried its oil to the large towns and to tidal water.

The strength of a moderate policy

On the other hand, we must remember that the future of a young and vigorous movement is to be measured, not so much by what it has achieved, as by what it has learnt; and that every unsuccessful attempt to hold together a Trust has been a lesson as to what to avoid, taught to men who are wonderfully quick to learn. In particular, it is now recognized that a very large portion of the failures in the past have been due to attempts to charge too high a price; that this high price has tempted those on the inside to break faith, and has tempted those on the outside

to start rival works, which may bleed the Trust very much unless it consents to buy them up on favourable terms; and, lastly, that this high price irritates the public; and that, especially in some States, public indignation on such matters leads to rapid legislation that strikes straight at the offenders, with little care as to whether it appears to involve principles of jurisprudence which could not be applied logically and consistently without danger. The leaders in the movement towards forming Trusts seem to be resolved to aim in the future at prices which will be not very tempting to any one who has not the economics which a large combination claims to derive, both in producing and in marketing, from its vast scale of business and its careful organization; and to be content with putting into their own pockets the equivalent of these economies in addition to low profits on their capital. There are many who believe that combinations of this kind, pursuing a moderate policy, will ultimately obtain so great a power as to be able to shape, in a great measure, the conditions of trade and industry.

Difficulty of combining central responsibility and individual energy: a pooling of gains often drifts into complete consolidation

It may be so, but these eulogists of Trusts seem to claim for them both that individual vigour, elasticity, and originating force which belong to a number of separate firms, each retaining a true autonomy, and that strength and economy which belong to a unified and centralized administration. Sanguine claims of this kind are not new; they have played a great part in nearly all the bold schemes for industrial reorganization which have fascinated the world in one generation after another. But in this, their latest form, they have some special features of interest to the economic analyst.

They have a certain air of plausibility, for the organizers of Trusts claim that they see their way to avoiding the weak points in ordinary forms of combination among traders, which consist in the fact that their agreement can generally be evaded without being broken. For instance, the most remarkable feature in the history of English railways during the present generation is, not their tendency to agree on the fares and freights to be charged over parallel lines—for that has long been a foregone conclusion

—it is the marvellously effective competition for traffic which such railways have maintained, both of a legitimate kind, by means of improved conveniences offered to the public as a whole, and of an illegitimate kind, by means of those special privileges to particular traders which we are now, at last, seriously setting ourselves to stop by law.

It is difficulties of this kind which the modern movement towards Trusts aims specially at overcoming. Trusts have very many forms and methods, but their chief motive in every case is to take away from the several firms in the combination all inducements to compete by indirect means with one another.

The chief instrument for this purpose is generally some plan for pooling their aggregate receipts, and making the gains of each depend on the gains of all, rather than on the amount of business it gets for itself. But here the dilemma shows itself. If each establishment is left to its own devices, but has very little to lose by bad management, it is not likely long to remain well managed, and anyhow the Trust does not gain much of the special economy resulting from production on a very large scale. For this a partial remedy can sometimes be found in throwing as much of its work as possible on to those establishments which are best situated, have the best and most recent appliances and the ablest management, and, perhaps, closing entirely some of the others. But, when once the pooling has begun, the combination is on an inclined plane, and every step hurries it on faster towards what is virtually complete amalgamation and consolidation. The recent history of Trusts shows a constant tendency to give a more and more absolute power to the central executive, and to reduce the heads of the separate establishments more and more nearly to the position of branch managers. In some cases the only substantial difference between such a Trust and a consolidated joint-stock company is, that it is nominally left open to the several parties contracting to claim their separate property after the lapse of a certain number of years, while some

¹ P.S.—Professor Brentano has called my attention to the plan of the German Iron Combination, which does not allow individual firms to sell direct to the consumer, but only through a central office. It fixes the amount of each firm's produce which may be sold, and the price of sale; and each firm gains by every reduction it can make in its own expenses of working. This plan has great elements of strength, and is probably specially suitable for Germany. But it is still on its trial.

are already preparing to dissolve and reconstitute themselves formally as joint-stock companies.

This tendency has been helped on by the action of the legislature and the law courts, and, since this action can be traced back in some measure to the imperfect analysis of competition in the older economic writings, it has a special interest for us here.

IV. A FALSE ANTITHESIS BETWEEN COMPETITION AND COMBINATION

It has led to the favouring of rigid, as against loose forms
of Combination

There seems to have been set up a false antithesis between competition and combination. For instance, if 100 workmen agreed to act together, as far as possible, in bargaining for the sale of their labour, they were denounced as combining to limit freedom, even when they did not interfere in any way with the liberty of other workmen, but merely deprived the employers of the freedom of making bargains with the 100 workmen, one by one. But the employer himself was allowed to unite in his own hands the power of hiring a hundred or twenty hundred men. and if he had not enough capital of his own he might take others into private, if not into public, partnership with him. Now, no trades union was likely to be as compact a combination, governed by as single a purpose, as a public or private firm, still less as an individual large employer; and, therefore, there was not only a class injustice, but also a logical confusion, in prohibiting combinations among workmen, on the ground that free competition was a good, and that combination, being opposed to free competition, was, for that reason, an evil.

It was an additional grievance to the workmen that employers had all manner of facilities for combination, of which they made full use; as is vigorously urged by Adam Smith, to whom the working classes owe more than they know. And it was this social injustice, rather than the logical inconsistency of economists and legislators, that led workmen to claim—and for the greater part successfully—that nothing should be illegal if done by workmen in combination which would not be illegal if done by any one of them separately—a principle which works well practically in

the particular case of workmen's combinations if applied with moderation; though it has no better claim to universal validity than the opposite doctrine.

But at present it is with the latter that we are concerned—the doctrine, namely, that a use of the rights of property which would be "combination in restraint of competition" if the ownership of the property were in many hands, is only a free use of the forms of competition when the property is all in a single hand. This doctrine has resulted in the prohibition of pooling between railways which were allowed to amalgamate, and in the prohibition of combination on the part of a group of traders to coerce others to act with them, or to drive others out of the trade, though all the while no attempt was made to hinder a single very wealthy firm from obtaining the despotic control of a market by similar means.

But to the economists of to-day the whole question appears both more complex and more important than it seemed to their predecessors, so they are inquiring in detail how far it is true that the looser forms of combination are specially dangerous in spite of their weakness, and even to some extent because of their weakness; how far the greater stability and publicity, and sense of responsibility and slowness of growth, of a single consolidated firm make it less likely to extend its operations over a very wide area, and less likely to make a flagrantly bad use of its power; and, lastly, how far it may be expedient to prohibit actions on the part of loose combinations, while similar actions on the part of individuals and private firms are allowed to pass in silence, because no prohibition against them could be effectual.

It is a sign of the times that the American Senate approved, on 8th April last, a Bill of Senator Sherman's, of which the second Section begins thus: "Every person who shall monopolise, or attempt to monopolise, or conspire with any other person or persons to monopolise, any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanour." This clause is interesting to the constitutional lawyer on account of the skill with which it avoids any interference by the central authority with the internal affairs of the separate States; and though, partly for this reason, it is perhaps intended to be the expression of a sentiment that

may help to guide public opinion, rather than an enactment which will bear much direct fruit; yet it is of great interest to the economist as showing a tendency to extend to the action of individuals a form of public criticism which has hitherto been almost confined to the action of combinations.

To return, then, to the tendency of Trusts towards consolidation. It is probable that the special legislative influences by which it has been promoted may be lessened, but that other causes will remain sufficiently strong to make a combination, which has once got so far as any sort of permanent pooling, tend almost irresistibly towards the more compact unity of a jointstock company. If this be so, the new movement will go more nearly on old lines than at one time seemed probable; and the question will still be the old one of the struggle for victory on the one hand between large firms and small firms, and on the other between departments of the Government, imperial or local, and private firms. I will then pass on to consider the modern aspects of this question, ever old and ever new, but never more new and never more urgent than to-day.

V. Modern analysis tends in many cases to justify State Control, but not State Management

To begin with, it is now universally recognized that there is a great increase in the number and importance of a class of industries which are often called monopolies, but which are perhaps better described as indivisible industries. Such are the industries that supply gas or water in any given area, for only one such company in any district can be given leave to pull up the streets. Almost on the same footing are railways, tramways, electricity supply companies, and many others. Now, though there are some little differences of opinion among the economists of to-day, as to the scale on which the owners of such undertakings when in private hands should be compensated for interference with what they had thought their vested rights, all are agreed that such right of interference must be absolute. Economists of all schools are eagerly inquiring what form it is most expedient for this interference to take. And here differences of opinion show themselves. The advantages of a bureaucratic government appeal strongly to some classes of minds, among

whom are to be included many German economists and a few of the younger American economists who have been much under German influence. But those in whom the Anglo-Saxon spirit is strongest would prefer that such undertakings, though always under public control, and sometimes even in public ownership, should whenever possible be worked and managed by private corporations. We (for I would here include myself) believe that bureaucratic management is less suitable for Anglo-Saxons than for other races who are more patient and more easily contented, more submissive and less full of initiative, who like to take things easily and to spread their work out rather thinly over long hours. An Englishman's or an American's life would involve too much strain to make them happy, while the Englishman would fret under the constraints and the small economies of their lives. Without therefore expressing any opinion as to the advantages of the public management of indivisible undertakings on the Continent, the greater part of the younger English and American economists are, I think, inclined to oppose it for England and America. We are not sure that we could exchange our own industrial virtues for those of the Continent if we wished to, and we are not sure that we do wish it. And, though we recognize that the management of a vast undertaking by a public company has many of the characteristics of bureaucratic management, yet we think the former is distinctly the better suited for developing those faculties by which the Anglo-Saxon race has won its position in the world. We believe that a private company which stands to gain something by vigorous and efficient management, by promptness in inventing, as well as in adopting and perfecting improvements in processes and organization, will do much more for progress than a public department.

Again, while a public company is inferior to a small private firm in its power and opportunities of finding out which among its employees have originating and constructive ability, a department of Government is far inferior in these respects to a joint-stock company, especially in England. And further, such a department is more liable to have the efficiency of its management interfered with for the purpose of enabling other persons to gain the votes of their constituents on questions in which it has no direct concern; and, as a corollary from this, it tends to

promote the growth of political immorality, and it suffers from that growth.

There is certainly a growing opinion among English and American economists, that the State must keep a very tight hand on all industries in which competition is not an effective regulator; but this is the expression of a very different tone of thought from that which is leading so many German economists towards what is called State Socialism. In fact, as far as I can judge, English economists at all events are even more averse to State management than they were a few years ago; the set of their minds is rather towards inquiring how the advantages claimed for State management, without its chief evils, can be obtained even in what I have called indivisible industries; they are considering how a resolute intervention on the part of the State may best check the growth of Imperia in Imperio, and prevent private persons from obtaining an inordinate share of the gains arising from the development, through natural causes, of what are really semi-public concerns, and at the same time leave them sufficient freedom of initiative and sufficient security of gain by using that freedom energetically to develop what is most valuable in the energy and inventiveness of the Anglo-Saxon temper¹.

But, though we dislike and fear the present tendency towards a widening of the area of public management of industries, we cannot ignore its actual strength. For more forethought and hard work are needed to arrange an effective public control over an undertaking than to put it bodily into the hands of a public department; and there is always a danger that in a time of hasty change the path of least resistance will be followed.

By way of illustration of the inquiries that have had their origin in this fear of public management, as contrasted with public control and public ownership, I would here mention a notion which has been suggested partly by the relations of some

Among the younger English economists who have written on the subject of Combinations, Trusts, and Government interference, I would specially refer to Mr Rise and Professor Foxwell. Most of the young American economists have written on it instructively from various points of view, and in Mr Baker's Monopolies and the Puople, to which I am myself much indebted, the English reaser will find condensed into a short compass an account of the general position of these questions in America, together with some bold and interesting suggestions for reform. Some useful documents relating to Trusts have recently been published in a Consular Report by our Foreign Office [5896-32].

municipalities to their tramways, gas and water works. At present it is in a very crude form, and not ready for immediate application; but it seems to have occurred independently to a good many people, and it may have an important future. It is that a public authority may be able to own the franchise and, in some cases, part of the fixed capital of a semi-public undertaking, and to lease them for a limited number of years to a Corporation who shall be bound to perform services, or deliver goods, at a certain price and subject to certain other regulations, some of which may perhaps concern their relations to their employees. In order that the plan may have a fair chance of success, it is essential that the capital to be supplied by the private Corporation should not be so large as to prevent there being a real and effective competition for the franchise. But, this being assumed, the special point of the proposal is that, where possible, the competition for the franchise shall turn on the price or the quality, or both, of the services or the goods, rather than on the annual sum paid for the lease. Competition as to quality is, from the consumer's point of view, often just as beneficial as competition as to price, and sometimes more so. And in industries which obey the Law of Increasing Return, as very many of these indivisible industries do, a reduction of price or an improvement of quality will confer on the consumer a benefit out of all proportion to the extra cost involved1.

VI. THE GENERAL INFLUENCE OF LARGE COMBINATIONS They economise in bargaining: but it is doubtful whether they render Industry more Stable

But I have lingered too long over those industries which I have called indivisible, and I must pass to those in which competition exerts a pretty full sway. The first point to be observed is that competition in bargaining and competition in production stand in very different relations to the public interest; and that one of the great advances in modern analysis consists in the emphasis which it lays on the distinction between the two. Competition in bargaining constitutes a great part of competition in marketing, but is not the whole of it. For under marketing is included the

¹ This belongs to a class of questions relating to monopolies, etc., the more general and abstract aspects of which can be best shown by the diagrammatic method.

whole of the effective organization of the trade side of a business; and most of this performs essential services for the public, and is. in fact, of the same order as production commonly so called. But a great part of marketing consists of bargaining, of manouvring to get others to buy at a high price and sell at a low price, to obtain special concessions or to force a trade by offering them. This is, from the social point of view, almost pure waste; it is that part of trade as to which Aristotle's dictum is most nearly true, that no one can gain except at the loss of another. It has a great attraction for some minds that are not merely mean; but nevertheless it is the only part of honest trade competition that is entirely devoid of any ennobling or elevating feature. A claim is made on behalf of large firms and large combinations that their growth tends to diminish the waste, and on the whole perhaps it does. The one solid advantage which the public gain from a combination powerful enough to possess a local monopoly is that it escapes much waste on advertising and petty bargaining and manœuvring. But its weakness in this regard lies in the fact that to keep its monopoly it must be always bargaining and manœuvring on a large scale. And, if its monopoly is invaded, it must bargain and manœuvre widely in matters of detail as well as in larger affairs.

Still less can we fully concede, without further proof, the claim which has been urged on behalf of such combinations, that they will render industry more stable and diminish the fluctuations of commercial activity. This claim, though put forward confidently and by many writers, does not appear to be supported by any arguments that will bear examination. On the one hand some industries which are already aggregated into large and powerful units, such as railway companies, give exceptionally steady employment; and others, such as the heavy iron and the chemical industries, exceptionally unsteady. And, when combinations succeed in steadying their own trades a very little, they often do it by means which diminish production and disturb other trades a very great deal. The teaching of history seems to throw but little light on the question, because the methods of regulation which are now suggested have not much in common with those of earlier times, while the causes which govern fluctuations in prices have changed their character completely.

Large Combinations can turn economically to account such knowledge as already exists

Let us then next turn to the economies of production on a large scale. They have long been well known, and our forefathers certainly did not underrate their importance. For, though the absence of any proper industrial census in England prevents us from getting exact information on the subject, yet there seems no doubt that the increase in the average size of factories has gone on, not faster, but slower than was thought probable a generation or two ago. In many industries, of which the Textile may be taken as a type, it has been found that a comparatively small capital will command all the economies that can be gained by production on a large scale; and it seems probable that in many industries in which the average size of businesses has been recently increasing fast, a similar position of maximum economy will shortly be attained without any much further increase in size.

Those reductions in the expenses of production of commodities, which have been claimed by the eulogists of Trusts and other large combinations, as tending to show that their gains are not at the expense of the public, turn out generally to have been at least equalled by the reductions in the expenses of production in similar industries in which there was no combination. And this count in their eulogy, though it may truly stand for something, seems to have been much exaggerated. But after all, what these very large public firms and combinations of firms have done has generally been only to turn to good account existing knowledge, and not to increase that knowledge. And this brings us to the main reason for regarding with some uneasiness any tendency there may be towards such consolidations of business.

But in a multitude of independent undertakers there is more inventive energy

It has always been recognized that large firms have a great advantage over their smaller rivals in their power of making expensive experiments; and in some of the modern "scientific" industries they use part of their resources in hiring specialists to make experiments for them in the technical applications of science. But on the whole observation seems to show, what might have been anticipated à priori, that these advantages count for little in the long run in comparison with the superior inventive force of a multitude of small undertakers. There are but few exceptions to the rule, that large private firms, though far superior to public departments, are yet, in proportion to their size, no less inferior to private businesses of a moderate size in that energy and resource, that restlessness and inventive power. which lead to the striking out of new paths. And the benefits which the world reaps from this originality are apt to be underrated. For they do not come all at once like those gains which a large business reaps by utilizing existing knowledge and well proven economies; but they are cumulative, and not easily reckoned up. He who strikes out a new path by which the work of eight men is rendered as efficient as that of ten used to be. in an industry that employs 100,000 men, confers on the world a benefit equal to the labour of 20,000 men. And this benefit may in many cases be taken as running for many years. For though his discovery might have been made later by someone else of equal inventive power, yet this someone else, starting with that discovery in hand, is likely to make another improvement on it.

I believe that the importance of considerations of this kind is habitually underrated in the world at large; and that the older economists, though fully conscious of them, did not explain with sufficient clearness and iteration the important place which they take in the claims of industrial competition on the gratitude of mankind.

The chemist in his laboratory can make experiments on his own responsibility: if he had to ask leave from others at each step he would go but slowly, and though the officials of a company may have some freedom to make experiments in detail, yet even as regards these they seldom have a strong incentive to exertion; and in great matters the freedom of experimenting lies only with those who undertake the responsibility of the business.

It may indeed be admitted that some kinds of industrial improvements are getting to depend on the general increase of scientific knowledge rather than on such experiments as can only be made by business men. This dependence, however, tells on the side of small firms which have a great managing ability in proportion to their capital, but cannot afford to make expensive experiments for themselves. For nearly all such scientific knowledge, as soon as it is achieved, becomes the public property of the nation, or rather of the world.

VII. Modern analysis of the motives of Business Competition

The love of money is only one among many

But the growing importance in business of that scientific knowledge that has its origin in academic studies, relatively to that technical knowledge which has its origin in business work, may serve as a convenient introduction to the next point that I want to make in the analysis of competition. It is that the motives which induce business men to compete for wealth are not altogether as sordid as the world in general, and I am forced to admit, economists in particular, have been wont to assume.

The chemist or the physicist may happen to make money by his inventions, but that is seldom the chief motive of his work. He wants to earn somehow the means of a cultured life for himself and his family; but, that being once provided, he spends himself in seeking knowledge partly for its own sake, partly for the good it may do to others, and last, and often not least, for the honour it may do himself. His discoveries become collective property as soon as they are made, and altogether he would not be a very bad citizen of Utopia just as he is. For it would be a great mistake to suppose that the constructors of Utopias from the time of Plato downwards have proposed to abolish competition. On the contrary, they have always taken for granted that a desire to do good for its own sake will need to be supplemented by emulation or competition for the approbation of others.

But business men are very much of the same nature as scientific men; they have the same "instincts of the chase," and many of them have the same power of being stimulated to great and even feverish exertions by emulations that are not sordid or ignoble. This part of their nature has however been confused with and thrown into the shade by their desire to make money.

The chief reason why the scientific man does not care much for money is that in scientific work the earning of much money is no proof of excellence, but sometimes rather the reverse. On the other hand, in business a man's money-earning power, though not an accurate test of the real value to the world of what he has done, is yet often the best available. It is that test which most of those, for whose opinion he cares, believe to be more trustworthy than the highly-coloured reports the world hears from time to time of the benefits which it is just going to derive from a new invention or plan of organizing that is just going to revolutionize a branch of industry. And so all the best business men want to get money, but many of them do not care about it much for its own sake; they want it chiefly as the most convincing proof to themselves and others that they have succeeded.

Economic progress requires as a condition free individual responsibility, but not the maintenance of those rights of property which lead to extreme inequalities of wealth

These are the very men for whom the older economists were most eager to claim freedom of competition as needful to induce them to do fully their high work for the world. But this seems to involve the error of running together, and treating as though they were one, two different positions—an error which seems to resemble in character the failure to distinguish adequately between the results of Protection in an old and a new country.

The first of these positions is that industrial progress depends on our getting the right men into the right places, and giving them a free hand and sufficient incitement to exert themselves to the utmost; and the second is that nothing less than the enormous fortunes which successful men now make and retain would suffice for that purpose. This last position seems to be untenable.

The present extreme inequalities of wealth tend in many ways to prevent human faculties from being turned to their best account. A good and varied education, freely prolonged to those children of the working classes who show the power and the will to use it well, an abundance of open-air recreation even in large towns, and other requisites of a wholesome life—such things as these might, most of us are inclined to think, be supplied by

taxes levied on the rich, without seriously checking the accumulation of material capital, and with the effect of increasing rather than diminishing the services which competition renders to society by tending to put the ablest men into the most important posts, the next ablest into the next most important, and so on, and by giving to those in each grade freedom sufficient for the full exercise of their faculties.

It is quite true that, where any class of workers have less than the necessaries for efficiency, an increase of income acts directly on their power of work. But when they already have those necessaries the gain to production from a further increase of their income depends chiefly on the addition that it makes, not to their power of working, but to their will to exert themselves. And all history shows that a man will exert himself nearly as much to secure a small rise in income as a large one, provided he knows beforehand what he stands to gain, and is in no fear of having the expected fruits of his exertions taken away from him by arbitrary spoliation. If there were any fear of that he would not do his best, but if the conditions of the country were such that a moderate income gave as good a social position as a large one does now; if to have earned a moderate income were a strong presumptive proof that a man had surpassed able rivals in the attempt to do a difficult thing well, then the hope of earning such an income would offer to all but the most sordid natures inducements almost as strong as they are now when there is an equal hope of earning a large one.

The socialists have underrated the difficulty of business work

On all this class of questions modern economists are inclined to go a little way with the socialists. But all socialist schemes, and especially those which are directly or indirectly of German origin, seem to be vitiated by want of attention to the analysis which the economists of the modern age have made of the functions of the undertaker of business enterprises. They seem to think too much of competition as the exploiting of labour by capital, of the poor by the wealthy, and too little of it as the constant experiment by the ablest men for their several tasks, each trying to discover a new way in which to attain some important end. They still retain the language of the older

economists, in which the employer, or undertaker, and the capitalist are spoken of as though they were, for all practical purposes, the same people. The organ of the German school of English socialists prints frequently in thick type the question. "Is there one single useful or necessary duty performed by the capitalist to-day which the people organized could not perform for themselves?" It would be just as reasonable to ask if there is a single victory to which Julius Cæsar or Napoleon conducted their troops which the troops, properly organized, could not have equally well won for themselves; or whether there is a single thing written by Shakespeare which could not have been equally well written by any one else if, as Charles Lamb said, he happened to "have the mind to do it." It is quite true that many business men earn large incomes by routine work. It is just in these cases that co-operation can dispense with middlemen and even employers. But the German socialists have been bitter foes of co-operation, though this antagonism is less than it was.

The world owes much to the socialists, as it does to every set of enthusiasts among whom there are noble men, and many a generous heart has been made more generous by reading their poetic aspirations; but, before their writings can be regarded as serious contributions to economic science, they must make more careful and exact analysis of the good and the evil of competition. They must suggest some reasonably efficient substitute for that freedom which our present system offers to constructive genius to work its way to the light, and to prove its existence by attempting difficult tasks on its own responsibility, and succeeding in them; for those who have done most for the world have seldom been those whom their neighbours would have picked out as likely for the work. They must not, as even Mr Bellamy and other American socialists do, in spite of their strong protestations to the contrary, assume implicitly a complete change of human nature, and propound schemes which would much diminish the aggregate production, but which they represent as enabling every family to attain an amount of material well-being which would be out of reach if the aggregate income of England or America were divided out equally among the population.

VIII. THE GROWING IMPORTANCE OF PUBLIC OPINION AS AN ECONOMIC FORCE

But though the socialists have ascribed to the virtues inherent in the human breast, and to the regulating force of public opinion, a much greater capacity for doing the energizing work of competition than they seem really to have, yet, unquestionably, the economists of to-day do go beyond those of earlier generations in believing that the desire of men for the approval of their own conscience and for the esteem of others is an economic force of the first order of importance, and that the strength of public opinion is steadily increasing with the increase and the diffusion of knowledge, and with the constant tendency of what had been regarded as private and personal issues to become public and national.

Public opinion acts partly through the Government. But, though the enforcement of the law in economic matters occupies the time of a rapidly increasing number of people, and its administration is improving in every way, it fails to keep pace with the demands resulting from the growing complexity of economic organization and the growing sense of responsibility of public opinion. A part of this failure is due to a cause which might easily be remedied; it is that the adjustment of punishment to offences is governed by traditions descending from a time when the economic structure of England was entirely different. This is most conspicuous with regard to the subtler, or, as they are sometimes called with unconscious irony, the more gentlemanly forms of commercial fraud on a large scale, for which the punishment awarded by the law courts is often trivial in comparison with the aggregate gains which the breakers of the law, whose offences can seldom be proved, make by their wrongdoing; and it is still more trivial in comparison with the aggregate injury which such wrongdoing inflicts on the public. Many of the worst evils in modern forms of competition could be diminished by merely bringing that part of the law which relates to economic problems of modern growth into harmony with that which relates to the old-fashioned and well-matured economic questions relating to common picking and stealing.

But at best the action of the law must be slow, cumbrous, and inelastic, and therefore ineffective. And there are many matters in which public opinion can exercise its influence more quickly and effectively by a direct route than by the indirect route of first altering the law. For of all the great changes which our own age has seen in the relative proportions of different economic forces, there is none so important as the increase in the area from which public opinion collects itself, and in the force with which it bears directly upon economic issues.

And in this connection I may perhaps transgress a little beyond the bounds I have set myself in this paper, and may glance rapidly at combinations of labour on the one side and o employers on the other. They are now able to arrange plans of campaign for whole trades, for whole counties, for the whole country, and sometimes even beyond; and partly on account of the magnitude of the interests concerned, partly because trade disputes are being reduced to system, affairs which would be only of local interest are discussed over the whole kingdom.

Many turbulent little quarrels which centered more often about questions of individual temper, than of broad policy, are now displaced by a few great strikes; as to which public opinion is on the alert; so that a display of temper is a tactical blunder. Each side strives to put itself right with the public; and requires of its leaders above all things that they should persuade the average man that their demands are reasonable, and that the quarrel is caused by the refusal of the other side to accept a reasonable compromise.

This change is increasing the wisdom and the strength of each side; but the employers have always had fairly good means of communication with one another; it is the employed that have gained most from cheap means of communication by press, by railway, and by telegraph, and from improvements in their education and in their incomes, which enable them to make more use of these new and cheaper facilities. And while the employers have always known how to present their case to the public well, and have always had a sympathetic public, the working classes are only now beginning to read newspapers enough to supply an effective national working class opinion; and they are only now learning how to present their case well, and to hope much

from, or care much for, the opinion of those who are neither employers nor of the working classes.

I myself believe that in all this the good largely predominates over the evil. But that is not the question with which I am specially concerned at present. My point is that, in the scientific problem of estimating the forces by which wages are adjusted, a larger place has to be allowed now than formerly to the power of combination, and to the power of public opinion in judging, and criticizing, and aiding that combination; and that all these changes tend to strengthen the side of the employees, and to help them to get a substantial, though not a great, increase of real wages; which they may, if they will, so use as to increase their efficiency, and therefore to increase still further the wages which they are capable of earning, whether acting in combination or not.

Public Opinion needs to be Educated for its new Responsibilities

And thus public opinion has a very responsible task. I have spoken of it as the opinion of the average man; that is, of an average member of one of those classes of society that is not directly and immediately concerned in the question at issue. But he is very busy, and has many things to think about. He makes great mistakes; but he learns by all of them. He has often astonished the learned by the amount of ignorance and false reasoning which he can crowd into the discussion of a difficult question; and still more by the way in which he is found at last to have been very much in the right on the main issue. He is getting increased power of forming a good and helpful opinion, and he is being educated in mind and in spirit by forming it, and by giving it effect. But in the task which he is undertaking there are great difficulties ahead.

In an industrial conflict each side cares for the opinion of the public at large, or as we have said of the average man. But they often care especially for the good opinion of those whose sympathy they are most likely to get: in the late South Wales strike, for instance, the railway companies were specially anxious about the good opinion of the shippers, and the engine drivers about that of the colliers. And there is some fear that, when party discipline becomes better organized, those on either side will

again get to care less for any public opinion save that of their own side. And, if so, there may be no great tendency towards agreement between the two sides as to what are reasonable demands.

It is true that there is always the action of outside competition tending to visit with penalties either side which makes excessive use of any tactical advantage it may have obtained. As we have just noticed, the shrewdest organisers of a Trust are averse to raising the price of its wares much above the normal or steady competition price. And the first point which courts of Conciliation and Arbitration have to consider is, what are the rates of wages on the one hand and of profits on the other, which are required to call forth normal supplies of labour and capital respectively; and, only when that has been done, can an inquiry be properly made as to the shares in which the two should divide between them the piece of good or ill fortune which has come to the trade. Thus the growth of combinations and partial monopolies has in many ways increased, and in no way diminished, the practical importance of the careful study of the influences which the normal forces of competition exert on normal value.

But it must be admitted that the direct force of outside competition in some classes of wages disputes is diminishing; and, though its indirect force is being increased by the increased power which modern knowledge gives us of substituting one means of attaining our ends for another, yet on the whole the difficulty of deciding what is a reasonable demand is becoming greater. The principles on which not only the average man but also an expert court of Conciliation or Arbitration should proceed in forming their judgments, are becoming, in spite of the great increase of knowledge, more and more vague and uncertain in several respects.

And there are signs of a new difficulty. Hitherto the general public has been enlightened and its interests protected by the fact that the employers and employed when in conflict have each desired to enlighten the public as to the real questions at issue; and the information given on one side has supplemented and corrected that on the other: they have seldom worked together systematically to sacrifice the interests of the public to their

own, by lessening the supply of their services or goods, and thus raising their price artificially. But there are signs of a desire to arrange firm compacts between combinations of employers on the one side and of employees on the other to restrict production. Such compacts may become a grievous danger to the public in those trades in which there is little effective competition from foreign producers: a danger so great that if these compacts cannot be bent by public opinion they may have to be broken up by public force.

It is, therefore, a matter of pressing urgency that public opinion should accustom itself to deal with such questions, and be prepared to throw its weight against such compacts as are injurious to the public weal, that is, against such compacts as are likely to inflict on the public a real loss much greater than the gain to that trade; or in other words, are of such a nature that if their principle were generally adopted in all trades and professions, then all trades and professions would lose as buyers more than they would gain as sellers.

IX. Conclusion

To sum up. It seems that one cause of the present strength of Protection in other countries is that the earlier English economists lessened the force of the valid arguments against it, by mixing them up with others, which, though valid as regards England, did not apply without great modifications to new countries; but economists of the younger generation, however fervent their devotion to free trade, seldom speak of Protection in new countries with the old unmeasured bitterness. The change of mental attitude towards competition in this aspect is in a great measure accomplished; and similar changes in the attitude of economists to monopolies and combinations are now in progress. It is clear that combinations and partial monopolies will play a great part in future economic history; that their effects contain much good as well as much evil, and that to denounce them without discrimination would be to repeat the error which our forefathers made with regard to Protection. If we do not take time by the forelock, and begin early to consider how their evil effects may be minimized and their possible good developed, we shall miss an opportunity that will never recur. For a later generation will find it more difficult to extricate the good from the evil than those who are contemporary with that great growth of the facilities of communication which are giving to the forces of combination and monopoly a new character, and in some directions a new strength.

So far nearly all the younger economists appear to be agreed; but, while some would not be sorry to see small firms displaced by large, large firms by Trusts, and Trusts by Government departments, others, in whom the Anglo-Saxon spirit is stronger, regard these tendencies with very mixed feelings, and are prepared to exert themselves to the utmost to keep Government management within narrow limits. They are most anxious to preserve the freedom of the individual to try new paths on his own responsibility. They regard this as the vital service which free competition renders to progress, and desire on scientific grounds to disentangle the case for it from the case for such institutions as tend to maintain extreme inequalities of wealth; to which some of them are strongly opposed. In order to preserve what is essential in the benefits of free competition, they are willing to have a great extension of public control over private and semi-public undertakings; but, above all, they look to the extension of the new force of public opinion as a means of eliminating much of the evil effects of competition, while retaining its good effects.

I have spoken of some aspects of competition, but those of which I have said nothing are more numerous and certainly not less important. I have put aside, as belonging to a different order of inquiry, the moral aspects of competition, and all study of its bearing on those who are least able to belp themselves. But I should have liked, if time had sufficed, to compare the tendency towards the formation of vast Trusts with that towards national or even international federation of Trade Unions; and again with the growth of the centralized force of the Co-operative Wholesale Society. I should have liked to examine the new forms of indirect competition between industrial groups, each of which is in direct competition with a third one, and so on.

I have however taxed your patience too long already, and must ask you to be lenient in your judgment of this imperfect and fragmentary study. I have endeavoured to give some illustrations of the changes which are coming over economic studies. I believe that the great body of modern economists think that the need of analysis and general reasoning in economics is not less than our predecessors supposed, but more. And this is because we think economic problems more difficult than they did. We are recognizing more clearly than they did that all economic studies must have reference to the conditions of a particular country and time. Economic movements tend to go faster than ever before, but, as Knies pointed out, they tend also to synchronize; and the economists of our own country have much more to learn now than fifty years ago from the contemporary history of other countries; but, in spite of the many great benefits which we are deriving from the increase of our historical knowledge, the present age can rely less than any other on the experience of its predecessors for aid in solving its own problems.

Every year economic problems become more complex; every year the necessity of studying them from many different points of view and in many different connections becomes more urgent. Every year it is more manifest that we need to have more knowledge and to get it soon in order to escape, on the one hand, from the cruelty and waste of irresponsible competition and the licentious use of wealth, and on the other from the tyranny and the spiritual death of an ironbound socialism.

XII

BENJAMIN JOWETT (1893)1

THE late Master of Balliol made no claim to be an economist in any special sense of the word. But he took great interest in political economy, especially on its social side; and through the younger men who came in contact with him was not without influence over the economic thought of the present generation. Bagehot, as he used to say himself, was the last English writer on economics who had learnt it from Ricardo direct, before the days of Mill's Political Econony. The Master was probably the last teacher of economics who had done so. Professor Henry Smith, who took his degree in 1848, and in after years was one of his closest friends, used often to speak of the days when Jowett had taught him political economy; and it would be interesting to know if the record can be carried back still earlier. He had various ways of teaching. Sometimes coming upon some young man of force and promise who had not quite the right training for his mind, or had not found in his other studies the right incentive to hard work, the Master would give him a book on political economy to read, and get him to come in from time to time to talk over his reading. Sometimes he would take one student alone, sometimes two or three together; and he did this up to the end, even in the last year of his life. While Tutor of Balliol he used to give short courses of set lectures on political economy, though he did not continue these after he became Master: and he more than once preached on the right use of wealth. His teaching on the subject was admirably adapted to guide and stimulate: it was full of shrewd common-sense, and pithy hints as to details; and, at the same time, brought home to his hearers the responsibility under which money is spent. and led them towards high ideals in its use.

He took part in most of the questions which agitate modern economists: but his own masters were Plato and Ricardo. Everything that they said, and all that rose directly out of what they said, had a special interest for him. Like them he

¹ From the Economic Journal, December, 1893.

sought the basis of reality in ideas: like them he was wise and farseeing, but fearless of paradox.

In pure economics his favourite subject was the currency, and he took a keen interest in the recent controversy on it. His views were generally conservative; and he was never converted to bimetallism. But he was ready to follow wherever Ricardo had pointed the way; and in a letter written not long ago he raised the question whether the world would not outgrow the use of gold as its standard of value, and adopt one of those artificial standards which vex the soul of Mr Giffen. And similarly in social matters he was conservative. He did not believe that the face of the world could be changed in a day; and he was not very patient of impatience. But to be earnest in anything, and especially in social reform, was a sure way to his heart. He was deeply interested in working men who were gentlemen in thought and feeling; and he used to say that only thus could they attain their full strength. The economic difficulties in the way of getting a first-rate education pressed heavily on his mind: his public efforts, both at Oxford and in connection with Bristol University College, to diminish them are well known; and a great part of his own income flowed by secret channels towards the same end. But he looked less to academic teaching than to the introduction of a noble spirit in business, as a means of bringing out the best faculties of those whose start in life had not been favoured by fortune. Plato's socialistic ideas possessed his mind; he made a careful study of contemporary socialistic thought when preparing to write the last edition of his introduction to Plato's Republic; and there is much that is instructive to the economist in his introductions to others of the Dialogues.

But after all, his influence on the economic life of England was quite as much through his faculty of making people want to know the right thing, and to do it, as by his own direct work. His sincerity was infectious. He knew how to get hold of what was best in men, and to make them good citizens. He cared not whether they were of high birth or of low estate, provided only he could see in them a possible power of good in the world after he should have left it. A very great number of those who are forming public opinion to-day, or discharging high duties for

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the State, have learnt from personal contact with him, that money, though a good servant, is a bad master; and that private advantage is but poor exchange for the sense of having worked faithfully for one's country. His own college responded bravely to the calls he made on it. There are few Foundations, either at Oxford or Cambridge, which have less material resources than Balliol: but he, continuing the good work of others, endowed it with that wealth of unselfish devotion and energy by which it has attained its unique position.

IIIX

THE OLD GENERATION OF ECONOMISTS AND THE NEW (1897)¹

On accepting the invitation with which the new Cambridge Economic Club has honoured me to address its first meeting, it seemed that, perhaps, my most appropriate subject would be the relation in which the work of the older generation of economists, which is drawing near the close of its activity, stands to the work which appears to lie before that coming generation, to which most of the members of the club belong. I propose therefore to lay before you some estimate of the preparation which has been made by the nineteenth century and the old generation of economists for the new generation of economists and the twentieth century. The estimate must be fragmentary and incomplete. The subject is large, and its treatment to-night must suffer from the shortness of the time at our disposal; but it will suffer yet more sorely from the limitations imposed by my own subjectivity. For it is never more difficult to free one's self from the shackles imposed by one's own bias than when endeavouring to take a survey of the present and to forecast the future.

Economic science as I first knew it, just thirty years ago, was more confident than now: partly because it was less active. Its general propositions and general principles were bold and peremptory: at all events so long as they kept on this side of the water. Some of them flourished elsewhere, especially in France. But most of them were bad sailors; and, if they were met with in other lands, they generally had a languishing air as though they had not recovered from sea-sickness. And even in England they were becoming less robust. Their decadence was no doubt hastened by academic criticisms, the ultimate source of which was to be sought in the new German school of history. But, probably, these criticisms had less influence than the rapid changes which were taking place throughout the whole Western World in the economic structure of society, and in the tone and

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temper of political thought: while, so far as England herself was concerned, the experiences of administrators and business men in Asia and Africa as well as in America had long been suggesting broader views of the action of economic and other social forces. It is consistent with the general history of English thought and action to believe that Englishmen were more influenced by their own experiences than by the scientific studies of foreigners.

These experiences bore fruit early in the writings of Richard Jones. It is noticeable that he was addressing Indian cadets when he said in 1833,

We must get comprehensive views of facts, that we may arrive at principles that are truly comprehensive. If we take a different method, if we snatch at general principles, and content ourselves with confined observations, two things will happen to us. First, what we shall call general principles, will be found to have no generality; we shall set out with declaring propositions to be universally true which, at every step of our further progress, we shall be obliged to confess are frequently false; and secondly we shall miss a mass of useful knowledge, which those who advance to principles by a comprehensive observation of facts necessarily meet with on their road.

Richard Jones had not fully grasped the modern distinction between generality of doctrines or dogmas, and generality of analytical conceptions and ideas; and his own position has its defects. But he said just what was wanted at the time: and his influence, though little heard of in the outer world, largely dominated the minds of those Englishmen who came to the serious study of economics after his works had been published by Dr Whewell in 1859.

Thus general economic principles had to justify their existence before a court which no longer had any bias in their favour, and perhaps had some little bias against them. Consequently they became less dictatorial, and more willing to admit their own limitations. Never again will a Mrs Trimmer, a Mrs Marcet, or a Miss Martineau earn a goodly reputation by throwing them into the form of a catechism or of simple tales, by aid of which any intelligent governess might make clear to the children nestling around her where lies economic truth, and might send them forth ready to instruct statesmen and merchants how to choose the right path in economic policy, and to avoid the wrong.

It is now patent, even to those who are in a hurry, that no practical problems can be settled offland by appeal to general doctrines; for the things of which account must be taken are so diverse, and our knowledge of many of them is so slight, that they yield no firm hold for formal proof. Much must be taken on conjecture; much must be decided by common sense rather than by reasoning on strictly logical lines.

Thus the growing perfection of scientific machinery in economics, so far from lessening the responsibilities of common sense, increases those responsibilities: for it widens and deepens the issues with which the economist has to deal, and for the ultimate decision of which he must, after all, rely mainly on his practical instincts. And on the other hand the retiring disposition of general principles and general propositions has been accompanied not by a diminution but by an increase of their real authority. They no longer wield the big battle-axe and sound the loud war cry like a Cœur de Lion; they keep in the background like a modern general: but they control larger forces than before. They exert a more far-reaching and more powerful influence on ideas: and ideas fashion the course of the world ever more and more.

For, indeed, the progress of knowledge in economics as elsewhere has shown that nature's facts are more diverse and more complex than used to be thought; and hence some have inferred that the more we know of the fundamental forces of economic and social life the more diverse will they appear. But to reason thus is to ignore the experiences of physical science, which has gone over the same ground a little ahead of social science. Physical science has learnt that an increasing knowledge of the variety and complexity of the phenomena of nature has often been accompanied by a diminution in the number of principles required to explain them. It has learnt that a few simple causes can produce an endless variety of results; and that a small change in the strength of any one of the forces, or in its method of combination with others, may alter the result beyond recognition. The discovery of intimate true affinities between things which appear wholly different to the hasty observer has long been recognized as one of the chief tasks of physical science.

Thus we cannot predict results from a mere knowledge of fundamental forces, without making a full investigation of the particular circumstances under which the forces act: a small change in those circumstances may alter the action of the fundamental forces almost beyond recognition. Hence it follows also that increased knowledge of these forces is more likely to stimulate than to check the study of particular facts. And this is what has actually occurred. Newton's law of gravitation stimulated the work of astronomical observatories. Darwin's development of the laws of struggle and survival gave perhaps a greater impetus to the careful and exact study of particular facts than any other event that has ever occurred. Nor is this all. For, when simple and elementary principles have already a fairly strong hold in any body of knowledge, every new fact has a greater opportunity of suggestiveness than before the knowledge was organized. Röntgen's rays are all the more stimulating to thought and to further observation, because of their tendency to modify general principles that have already won their spurs.

As the nineteenth century has worn on, there has been a growing readiness among economists, as among students of physical science, to recognize that the infinite variety and complexity of nature's forms is compatible with a marvellous latent simplicity of her governing principles. The pursuit of particulars has become ever more eager; but what little tendency there once was to dissociate it from the study of general principles has now almost died away. It is now recognized by everyone that an inference from one set of facts to another, whether it be performed by instinctive or by formal reasoning, involves not one process but two. It involves a passage upwards from particulars to general propositions and ideas; and a passage downwards from them to other particulars. We can seldom infer particulars from other particulars without passing in effect through generals, however simple be the subject-matter of our study; and we can never do so in the complex problems of social life.

Parallel with this advance is an increase in the skill with which the partial thoughts of economists of earlier times are interpreted. We have learnt that most of them were true seers, with careful habits of observation; and that what they meant to say was for the greater part true within its limits; though what they said does not always fully suggest to us what was in their own minds until we have supplied the latent premises which

they instinctively took for granted. We no longer look to them for quite the same sort of instruction as before; but that which we now seek, we are getting from them.

A further advance is the recognition that in economics we deal with the whole of man's nature, though we lay chief stress on certain special aspects of it. From this it follows that, in so far as we base ourselves upon the history of past times at all, it must be history as a whole. We need more than economic history, more than a history of economic institutions and customs, wages and prices, of trade and finance: we want a history of man himself, and economic history as contributing to that. To take one instance: the history of Socialism has great value, but not of the kind which is commonly ascribed to it. It is of little service as a record of particular events from which specific inferences can be drawn to modern problems. For the socialistic problems of to-day are very different from those of earlier times. The forces of reform and of resistance to change. the relations between different trades and classes in the same nation and the economic relations between nations are all different: the substance of the problem of social reform has changed, the machinery with which it has to be handled has wholly changed; and the success or failure of one particular social experiment long ago is not likely to throw a very strong special light on any experiment that may be tried now. But every such experiment in the past throws light upon human nature. And the history of such experiments throws light on the dynamics as well as on the statics of human nature: it tends to show not only what human nature was at any time, but also how it has developed. It offers us therefore great aid towards estimating the direction and the rate of growth of human nature in the future, and specially of that side of human nature which it is most important for us to understand, when considering daring modern schemes for social reform.

Social science or the reasoned history of man, for the two things are the same, is working its way towards a fundamental unity; just as is being done by physical science, or, which is the same thing, by the reasoned history of natural phenomena. Physical science is seeking her hidden unity in the forces that govern molecular movement: social science is seeking her unity in the forces of human character. To that all history tends; from that proceeds all prediction, all guidance for the future.

It is not for us to complain that the name of history has been sometimes usurped by what is but a fragment of history. Out of that tangled complex which constitutes the history of man, a few prominent threads have been selected and traced out: and much progress has been made towards the correlation of political institutions, and political events. The political branch of history has advanced far ahead of all other branches, because it is important on its own account; because it is definite, picturesque, of general interest, and richly supplied with records specially belonging to it. It throws also incidentally a bright light on the development of human nature; and in this way, as well as through the particular events which it records, it affords great help in tracing the thread of economic history. So great progress has political history already made that for this cause alone the economists of the future will have a much greater command over their work than had the "classical" economists. And they will owe a great debt also to ideas that have done good service for physical science, and are being adapted to some limited and partial aspects of social science.

It was perhaps not fully recognized by the older economists themselves, that in their predilection for a study of tendencies, they were really working to obtain just that mastery of knowledge which has laid the foundation of the successive triumphs of physical science. But, when studying particular facts with the purpose of inferring tendencies, they were conforming to the great canon already noticed that, in passing from particulars to particulars, we must go not directly but by way of generals; and also to a second great canon, that the main importance of the particular facts of nature lies in the light which they throw upon the processes of nature; or, in other words, that from what is we have to learn what is becoming; from das Sein we have to learn das Werden.

Economists have in recent years come more nearly into line with physical science by borrowing from it some of those terse and powerful phrases by which it has been long able to describe and explain nature's tendencies more easily and more precisely than is possible in ordinary language. They are facing the fact

that at the basis of nearly all modern knowledge there lies a study of tendencies, in the form more or less disguised of a study of the relations between the infinitesimal variations of different things. This study the shrewd ordinary man makes, though he may not know it: the man of science makes it, and knows that he does so: though before he addresses a popular audience he may fitly wrap up what he has done in language that is less terse and clear, but more familiar.

This work of the new methods is far from finished: much remains for your generation to do. But the start has been made; and it will be no hindrance to you, but rather some assistance, that many still look with suspicion on the movement. Their criticisms will help you to be careful not to outrun your positive knowledge and observation, and not to forget the differences in character between the facts and the forces of the physical world and those of the moral world.

To pass then to a rather less technical aspect of analysis:— Speaking generally, the nineteenth century has in great measure achieved qualitative analysis in economics; but it has not gone farther. It has felt the necessity for quantitative analysis, and has made some rough preliminary surveys of the way in which it is to be achieved: but the achievement itself stands over for you. "Qualitative" and "quantitative" analysis are terms borrowed from chemistry-a science which deals with things as they are, and not with their growth; and therefore the terms are not exactly what we want. But they must serve. Qualitative analysis tells the iron-master that there is some sulphur in his ore, but it does not enable him to decide whether it is worth while to smelt the ore at all, and, if it is, then by what process. For that purpose he needs quantitative analysis, which will tell him how much sulphur there is in the ore. And so it is also in economics. Every event has many effects; some work good, others evil. Some are permanent, others will quickly pass away. Some affect many, others only a few. Some grow cumulatively, others invite a reaction. Mere qualitative analysis, then, will not show the resultant drift of economic forces. It may show gain here and loss there; but it will not show whether the gain is sufficient to overbalance the loss; whether the gain should be

pursued in spite of the loss. And yet, for the purposes of practical action, this decision must be made. It is useless to say that various gains and losses are incommensurable, and cannot be weighed against one another. For they must be, and in fact they are, weighed against one another before any deliberate decision is or can be reached on any issue.

Of course the laws of duty impose boundaries that are not to be passed: just as at chess when a king is already at the right-hand end of the board he cannot move to the right. But the fact that the laws of chess rule some moves out altogether, does not prevent chess from consisting mainly of a balancing of the advantages of one programme of legitimate moves against another, and often weighing the value of a piece against that of an improved position. A piece and a position are logically quite heterogeneous; but he would be no chess-player at all who could not weigh the one against the other. And, though there are some things which no statesman may do, no economist may recommend, yet the action of the statesman and the advice of the economist must be based upon as exact an estimate as may be got of the relative importance of different sets of advantages, each made up of many things that are logically heterogeneous.

Here a distinction must be made between the relative weights which people do in fact assign to the various things which concern their physical, their mental and their moral well-being, and the relative weights which, as philosophers and moralists, we may think they ought to assign to those things. Ethical instincts and philosophy are the supreme authority in deciding what aims are fit to be pursued. But in studying the facts of the past and in devising schemes for the future our first concern is with the things that people have wished and do wish for; and at a later stage we may consider what things they probably can be induced to wish for in the future. No doubt their weighing is often foolish and shortsighted, sometimes ignoble and even wicked. Philosophers as we may strive to be, we surely afford no exception to this rule. We may wish that the ways of all were different; we may exhort ourselves and others to better ways: but we have to study mankind as they are. We must not picture to ourselves an unreal world as it might, or ought to be, and make schemes for it. That way lies social madness, leading to a failure of hot aspirations and thence to cold reaction. Our first duty as economists is to make a reasoned catalogue of the world as it is; and never to allow our estimates as to what forces will prove the strongest in any social contingency to be biased by our opinion as to what forces ought to prove the strongest. A chief part of the work which lies before the economists of the twentieth century is to make that estimate—not well, for that is impossible, but—somewhat less badly than it has been made hitherto.

The older economists were really driving at quantitative analysis when they took it as their special duty to make things stand out in true perspective, in true proportion. They set themselves to lay stress on "that which is not seen" because it is remote or obscure, in opposition to the popular tendency to care chiefly for "that which is seen," because a bright light happens to fall on it, because it is simple and near at hand: and they set themselves to defend the interests of the silent and patient many against the claims of the pushing and clamorous few. For indeed, as Fortrey said more than two centuries ago,

Private advantages are often impediments of public profit; for, in what a single person shall be a loser, there endeavours will be made to hinder the public gain; from whence proceeds the ill success that commonly attends the endeavours for public good: for commonly it is but coldly prosecuted, because the benefit may possibly be something remote from them that promote it, but the mischief known and certain to them that oppose it; and interest more than reason commonly sways most men's affections.

The pushing and clamorous few in an economic controversy are often a group of producers who can put their case well, and who show great energy and resource in making themselves heard. Hence has arisen the tradition that the economist is generally on the side of the consumer as against the producer: he aims at protecting the unvocal many who consume the products of a particular trade, against the vocal few who speak on behalf of the trade.

A good instance of the difficulty of getting your quantities right is found in the inverse claim, which is sometimes put forward nowadays, that the interests of consumers are really less important than those of producers; because the producers are many and the consumers few; the terms consumer and

producer being taken again in a forced sense; but in a different one from that of the old. Of course everyone is a consumer, and everyone is a producer (or the dependent of a producer); for income can only be derived from labour that takes part in production, or from the ownership of something that takes part in production. But, when the consumers are said to be few and the producers many, the consumers are taken to be those whose incomes enable them to consume largely; and the producers are generally taken to be those who work for a wage. The claim so interpreted is one which the economist must treat seriously and sympathetically. An instance is offered by the story, which seems to be not entirely without some basis in fact, of the vendor of Oriental tapestry, who excused the high price which he asked for it by the assertion that the stitch was so fine that ten people had lost their eyesight, and many more had been seriously injured. by working on that single piece. The whim or the artistic lust of the rich consumer had outweighed the welfare of the producers in this instance; and other instances nearer home might be obtained from some trades in which the hours of labour are excessive or its conditions unwholesome. Such instances of social discord are facts which the economist must admit: they are the result of natural laws which it is his business to help to counteract.

But they are exceptional instances; and I believe that the statement that the interests of working men are those of producers rather than those of consumers is very seldom true even in the limited and artificial sense in which the words are used. The question is one of relative quantities; and it is misconceived partly because people do not know the right directions in which to look for their quantities.

For instance, when working men think of themselves as consumers, they seldom look in the right directions. They know that they are consumers of food and clothing. But they do not think of themselves as consumers of such things as iron. They look upon the price of iron as the concern mainly of railway and ship companies, and other capitalists who purchase it. But, in fact, a low price of iron is at least as great a benefit to the working man as to anyone else. It is a chief cause of the increase of that purchasing power of his wages which results from the fall in the prices of his food and clothing, while the price of his

labour has been maintained. Everyone is apt to take as a matter of course the great benefits which economic progress brings him, and to regard any slight injury that results from it as an unendurable grievance; and thus to see things in a wrong proportion. But progress is not a matter of course: it is the result of effort. If there had been no improvement in steam engines and the manufacture of iron during the last fifty years, the purchasing power of Englishmen's wages would be much less than it is now: I do not know how much less, but I guess thirty or forty per cent. less. Some of the quantities in the problem must always remain more or less conjectural; but others could be taken out with tolerable certainty.

Such work as this belongs to the academic economist. For he has no class or personal interests to make him afraid of any conclusion which the figures, when carefully interpreted, may indicate; he accepts the premises of the working classes that the well-being of the many is more important than that of the few. He is specially trained to detect the falsity of the mirage which is caused by the fact that the comfort of a few rich men sometimes has a higher bidding power in the market than more urgent needs of many poor, and will outbid them in the market. Being thus fortified by the consciousness of his own rectitude, the economist, in the coming generation even more than in the past, must dare when occasion arises to oppose the multitude for their own good. He must for instance analyse the methods which people are tempted to take for securing a high minimum wage, falsely called a living wage, in a particular trade; and must show which of them will have indirect effects that will cause to working men as a whole a loss greater than the benefit.

Cries for a living wage have the shouts of the market-place on their side just now: they are raised by dockers and coal miners; by cotton spinners and glass blowers, and by capitalist booksellers. They appear to strengthen one another; because ordinary people do not see that the means most commonly advocated are such as, if generally pursued, would impoverish all. It is true that a great and important principle lies at the root of this movement for a living wage. Economists have fought for it in the past, and your successors may need to fight for it again. But, just as you are entering on your work the movement for

a living wage has become so popular, that there is less need to dwell on its merits, than to analyse its latent assumptions as to the relative quantities of losses and gains. "There is money in this branch of discovery," said the professor of pure science, "and we will leave it for those who seek money"; you may parody this and say—"there is popularity in the doctrine of a living wage; so we had better leave politicians to praise it and set ourselves to criticise it."

Again, while taking an attitude of reserve towards movements that are already popular, you will incline to be critical of prophecies that are fashionable. For instance, it is getting to be asserted commonly that collective bargaining is about to displace bargaining between individuals as the main arbiter of distribution and exchange. It may be so; but predictions of this kind have been made much more often than they have been fulfilled. You will need to examine how far the large and obtrusive surface, which collective bargaining presents, rests on a solid foundation; and how far it is hollow. You will not think lightly of the old social discords which it tends to lessen: but you will set against them those new discords which it may introduce. For clearly it tends to make a man work, or sell, not up to that margin at which there is a balance of gain and loss to him, but up to a margin which, if not arbitrary, yet fails of any close adaptation to his individual case. You will need to look at history and see how often collective bargaining, when most elaborately contrived and strong in outward appearance, was honeycombed and weak; you will need to watch the vast network of by-paths by which, when one person is willing to sell a thing at a price which another is willing to pay for it, the two manage to come together in spite of prohibitions of King or Parliament, or of the officials of a Trust or Trade-union. No doubt you may live to see collective bargaining a greater force than I expect, and working in ways which I do not guess. The experience of the past does not foretell the future; but it justifies some scepticism as to the solidity of those forms of collective bargaining which are most ostentatious.

These last remarks illustrate the difficulty of forecasting the nature of the problems which will chiefly occupy the coming

generation. But I will take another illustration of this difficulty, the chief interest of which lies in the guesses which past experience prompts us to hazard as to a mode of action of the healing force of nature. For, in social as in physical life, nature modifies old remedies to meet new developments of old evils. And I will venture on a surmise of one way in which your generation may perhaps see this healing force more active than heretofore.

Everyone is aware of the tendency to an increase in the size of individual businesses, with the consequent transference of authority and responsibility from the owners of each business to its salaried managers and officials. This would have been impossible had there not been a great improvement in the morality and uprightness of the average man: for even as late as the seventeenth and eighteenth centuries we find the great trading companies breaking down largely in consequence of the corruption and selfishness of their officials. But, men who are above such gross iniquity as was common then relatively to the few opportunities for it, are yet likely to succumb to subtler temptations, and especially to the temptation to consult their own case by jogging along quietly in accustomed routes, and avoiding the trouble and worry of new initiative.

And indeed this tendency to an increase in the size of businesses introduces an ever-growing discord into industry. The owner of a business, when contemplating any change, is led by his own interest to weigh the whole gain that it would probably bring to the business against the whole loss; but the private interest of the salaried manager or official draws him in quite another direction. For the trouble of a new experiment will come largely on him. If it fails, he will have to bear much of the blame; and, if it succeeds, only a very small part of the consequent gain will accrue to him. So the path of least resistance, of greatest comfort and least risk to himself is generally that of not striving for improvement himself, and of finding plausible excuses for not trying an improvement suggested by others, until its success is established beyond question.

If this were the whole of the case, then every new advantage that modern changes confer on large businesses in their contests with small would be a source of danger to social progress. For

the economies of the large business as against the small are mostly a matter of private concern and bear no further fruit: but the improvement of methods spreads from its first home all over the country, all over the world; and the private gain which results from it to the inventor is seldom a hundredth part, sometimes not a millionth part of the social gain. A strong tendency to ossification of the social organism might therefore be feared as the result of bureaucratic habits of shirking troublesome initiative, the main benefits of which would accrue to those who had not borne the burden. But this tendency is being counteracted, partially at least, by several forces. The increase in the size of industries goes with the substitution of scientific methods for empirical: and the basis of scientific technique is largely provided by laboratory work to which an ever-increasing number of elastic and enterprising minds are rising from among the people, being stimulated a little by the hope of gain, and much by intellectual ambition, and the sympathy of other students of science. And in addition to this general energizing force, a special force somewhat similar to it is coming into play to preserve from stagnation the more exclusively practical side of business management. For business experts are getting more and more into the habit of writing and reading specialist journals, of holding congresses, and in other ways coming under the judgment of one another. The old thankless task of attempting an improvement which may after all turn out badly, and to which a man's official superiors and the public at large may be indifferent, assumes a new shape when it is likely to be judged by a critical and appreciative audience who knows the technical difficulties of the problem. The most important improvements often remain for years just short of yielding financial profit: but such an audience applauds the clever and bold endeavour even though its financial fruit is not ripe; even though the interest of a manufacturer in charge of his own business would not impel him to use it. Thus the modern intercourse of expert officials with one another is bringing into the business world some part of that great progressive force which pure science has long derived from the approbation awarded to successful research by audiences fit though few. Such approbation is a reward; and like every other reward, present or deferred, appeals to elements

of our nature that are not the very highest of all: and partly for that reason it may be trusted to act steadfastly. But it is not only a reward: it is also a sympathy; and sympathy is the one solid and strong force acting steadfastly throughout the whole of human nature, which has in it nothing sordid. The coming generation of economists will have no more urgent, and perhaps no more pleasant task, than to inquire, with as close an estimate of quantities as may be, how far this class of forces may take the place of the cruder force of the pursuit of private material gain, which is being in some directions weakened by the growth of large businesses, and especially those under public control.

I have trespassed too long upon your patience and must conclude, though I have touched on only the outer fringe of the issue to which I have ventured to address myself. To sum up then:-During the generation that is now passing away it has been made clear beyond doubt by many workers in many lands that the true inductive study of economics is the search for and arrangement of facts with a view to discovering the ideas, some temporary and local, others universal and eternal, which underlie them: and that the true analytical study of economics is the search for ideas latent in the facts which have been thus brought together and arranged by the historian and the observer of contemporary life. Each study supplements the other: there is no rivalry or opposition between them; every genuine student of economics sometimes uses the inductive method and sometimes the analytical, and nearly always both of them together. There is a difference in proportion between different students; as one may eat more solid food and another may drink more fluid: but every one must both eat and drink under pain of starving or dying of thirst.

The generation of economists which is now passing away has worked through controversy as to method, to the extinction of that controversy. It has established the harmony between the study of facts and of ideas; it has shown the need of a catholic spirit in the interpretation of men as well as of facts. It has done much towards completing the main lines of qualitative analysis; but it has not grappled at close quarters with the

difficulties of quantitative analysis. The time has not yet come for taking stock of the value of its constructive work. But it has at all events cleared the field for the constructive work of the larger and stronger strain of economists that are to follow: and perhaps when people look back a century hence they may speak kindly of it, not so much for what it achieved itself, as for the far greater work which it prepared the way for you to achieve.

The problem of social aims takes on new forms in every age: but underlying all forms there is the one fundamental principle. that progress mainly depends on the extent to which the strongest, and not merely the highest, forces of human nature can be utilized for the increase of social good. There are some doubts as to what social good really is; but they do not reach far enough to impair the foundations of our fundamental principle. For there has always been a substratum of agreement that social good lies mainly in that healthful exercise and development of faculties which yields happiness without pall, because it sustains self-respect and is sustained by hope. No utilization of waste gases in the blast furnace can compare with the triumph of making work for the public good pleasurable in itself, and of stimulating men of all classes to great endeavours by other means than that evidence of power which manifests itself by lavish expenditure. We need to foster fine work and fresh initiative by the warming breath of the sympathy and appreciation of those who truly understand it; we need to turn consumption into paths that strengthen the consumer and call forth the best qualities of those who provide for consumption.

Other generations, in the heyday of art and literature in the ancient and mediæval world, have hit upon methods of doing this more or less successfully; but their aims have had a narrow horizon, limited to the welfare of a fortunate few. The generation of students of social science which is now passing away has striven to deal with the problem on a broader basis; and your generation is called on to continue that work with greater knowledge and with greater resources. You are called on to apply your knowledge of history, and especially of contemporary history, your powers of analysis and of quantitative measurement, your fancy and your intuition, your instincts and your

sympathies, towards the great task of utilizing the present waste products of human effort for the production of human lives that are joys in themselves and the sources of joy. For the future, as for the past, the chief lever of all is hope, hope for a man's self and hope for those dear to him. And your generation will stand out beyond that which has gone before, as that has stood out beyond its predecessors, as having an increasing power and opportunity of bringing the energizing influence of hope to the homes of what as late as the beginning of this century were called the lower orders of the people.

Your generation, beyond all that has gone before, is called on to inquire in a sanguine, but yet in a critical and analytical temper how far that force of association and sympathy, which we have just noticed as beginning to act powerfully among the expert officials in large businesses, may extend to people generally; how it may draw them on to high endeavours, as the good shepherd leads his sheep, without requiring the compulsive force of want to drive them forward with cruel blows: how far it may be possible to obliterate the old doctrine that the many must pine in order that the few may pioneer. Your generation will recognize that men are not equal by nature and cannot be made equal by art. It will recognize that some work must be done that is not ennobling. But it will seek to apply the growing knowledge and material resources of the world to reduce such work within narrow limits, and to extirpate all conditions of life which are in themselves debasing. It will expect no sudden improvement in man's conditions of life, because he forms them as much as they form him, and he himself cannot change fast. But it will press on steadfastly towards the distant goal where the opportunities of a noble life may be accessible to all.

XIV

MECHANICAL AND BIOLOGICAL ANALOGIES IN ECONOMICS (1898)¹

The terms Statics and Dynamics are imported into economics from physics; and some discussions about them among economists have seemed to imply that statics and dynamics are distinct branches of physics. But of course they are not. The modern mathematician is familiar with the notion that dynamics include statics. If he can solve a problem dynamically, he seldom cares to solve it statically also. To get the statical solution from the dynamical all that is needed is to make the relative velocities of the things under study equal to zero, and thus reduce them to relative rest. But the statical solution has claims of its own. It is simpler than the dynamical; it may afford useful preparation and training for the more difficult dynamical solution; and it may be the first step towards a provisional and partial solution in problems so complex that a complete dynamical solution is beyond our attainment.

The term "relative rest" calls for notice: for it plays an important rôle in the so-called stationary state of the economist. "Absolute rest" is an unmeaning term; statical problems deal with relative rest. This fact is perhaps more familiar than he knows to "the man in the train." The train may be running smoothly on straight rails; and then he may be tempted to treat the problem of packing his parcels on the rack as a statical one: for although all the things are moving they are relatively at rest. But experience has taught him that parcels, packed at the top of a railway carriage with reference to statical conditions only, are likely to fall if the movement of the train is checked: it has taught him to look out for the disruptive dynamical element that is latent in the apparently peaceful statical problem.

Many writers have carried over physical conceptions into social science. And it is interesting to note Mill's delight on

¹ From an article on "Distribution and Exchange" in the Economic Journal, March, 1898.

finding, as he thought, a key to economic method in the fact that "the principle of the Composition of Forces" is applicable to economics. "When the mind applies this principle it performs a simple act of addition. It adds the separate effect of one force to the separate effect of the other, and puts down the sum of these separate effects as the joint effect."

This is true: and in relation to statical problems properly so-called it is the whole truth. For, when considering the equilibrium of things which are strictly at rest relatively to one another, we have but to add by simple arithmetic the forces acting at a point in any direction; and make sure that the sum is zero.

But in dynamical problems, though true, it is not the whole truth. For, when a force moves the thing on which it acts, it thereby changes the force which that thing afterwards exercises. The attraction of the Earth alters the movement of Venus, and thus alters the force which Venus exerts on the Earth: which again alters the movement of the Earth, and therefore the attraction which the Earth exerts on Venus; and so on in endless but ever-diminishing reciprocal influences. Meanwhile both planets disturb slightly the Sun, whose attraction is their chief cortroller; and all the other planets have a part in the play. For such complications as these arithmetic is useless: they need the strength and delicacy of vast and subtle mathematical engines working out large volumes full of mathematical formulæ and figures. But these engines cannot be applied to economics. The most helpful applications of mathematics to economics are those which are short and simple, which employ few symbols; and which aim at throwing a bright light on some small part of the great economic movement rather than at representing its endless complexities.

Thus, then, dynamical solutions, in the physical sense, of economic problems are unattainable. And, if we are to adhere to physical analogies at all, we must say that statical solutions afford starting points for such rude and imperfect approaches to dynamical solutions as we may be able to attain to. This is in substance what I propose to argue now; but I prefer other words.

¹ Mill's Autobiography, pp. 159, 160. See also my Principles, third edition, Book I, chap. vi, p. 3.

It has been well said that analogies may help one into the saddle, but are encumbrances on a long journey. It is well to know when to introduce them, it is even better to know when to stop them off. Two things may resemble one another in their initial stages; and a comparison of the two may then be helpful: but after a while they diverge; and then the comparison begins to confuse and warp the judgment. There is a fairly close analogy between the earlier stages of economic reasoning and the devices of physical statics. But is there an equally serviceable analogy between the later stages of economic reasoning and the methods of physical dynamics? I think not. I think that in the later stages of economics better analogies are to be got from biology than from physics; and, consequently, that economic reasoning should start on methods analogous to those of physical statics, and should gradually become more biological in tone. Of course a new class of considerations as, e.g., of money, credit, international trade, may be introduced after some others have been carried a long way; and in the first handling of new matter there may be a temporary reversion to physical analogies. But that will soon pass; and, when the new matter is ready to be worked up with the old in an advanced stage, the method will become ever more remote from the physical and more akin to the biological.

Let us then look more closely at the method appropriate for the earlier stages of economic reasoning. Man's powers are limited: almost every one of nature's riddles is complex. He breaks it up, studies one bit at a time, and at last combines his partial solutions with a supreme effort of his whole small strength into some sort of an attempt at a solution of the whole riddle. In breaking it up, he uses some adaptation of a primitive but effective prison, or pound, for segregating those disturbing causes whose wanderings happen to be inconvenient for the time: the pound is called Cateris Paribus. The study of some group of tendencies is isolated by the assumption other things being equal: the existence of other tendencies is not denied, but their disturbing effect is neglected for a time. The more the issue is thus narrowed, the more exactly can it be handled; but also the less closely does it correspond to real life.

Each exact and firm handling of a narrow issue, however, helps towards treating broader issues, in which that narrow issue is contained, more exactly than would otherwise have been possible. With each step of advance more things can be let out of the pound; exact discussions can be made less abstract, realistic discussions can be made less inexact than was possible at an earlier stage.

The pound Cateris Paribus is never turned to better service in locking up disturbing causes, which we want to keep out of the way provisionally in the earlier stages of an enquiry, than when it is applied to the famous fiction of "the Stationary State." This state obtains its name from the fact that in it the general conditions of production and consumption, of distribution and exchange remain motionless; but yet it is full of movement; for it is a mode of life. The average age of the population may be stationary; but each individual is growing up from youth towards his prime, or downwards to old age. The average size of the business firms may be stationary; but at any moment almost every business is either rising or falling. The average value of grain may be stationary; but the current price fluctuates with successive harvest flows. The study of such fluctuations about a centre of rest is really a dynamical problem, though the simplest form of it is always included in the study of a "stationary state," and indeed affords the chief inducement to the fiction of such a state.

The fiction does not require that the numbers of the population should be stationary. Nearly all the distinctive portions of the stationary state may be exhibited in a place where population and wealth are both growing, provided they are growing at about the same rate, and there is no scarcity of land: and provided also the methods of production and the conditions of trade change but little; and above all, where the character of man himself is a constant quantity. For in such a state by far the most important conditions of production and consumption, of exchange and distribution, will remain of the same quality. and in the same general relations to one another, though they are all increasing in volume. Thus, to quote from a private letter of Mr Flux, "The term static is not exactly what we want: we want to express the conception of 'steady motion' as familiar in hydrodynamics; or, to take examples from solids, as illustrated by the case of a spinning top or a bicycle."

This stationary state, however, bears less resemblance to the real conditions of life now than it did in past generations. There has even been a perceptible change in this respect since Mill's time. For, though most of the factors at work now were at work then, their relative importance has changed so much as to alter the broad features of the problem.

When Mill was growing up, England was still oppressed by the difficulty of obtaining raw produce; and this was giving a bias to distribution in favour of those who own land, and against those whose income is derived from labour and who have many mouths to feed. The black shadow thus cast over the land reached its second climax in the potato famine. Since then it has dwindled: but Mill was always haunted by the fears which had oppressed Ricardo and Malthus, and they gave a sombre tinge to his study of the "influence of progress of industry and population on rents, profits and wages1." That discussion, it may be noted, is free from the fallacies of the wages fund. It examines the distribution of the net produce on national income, regarded as a flow; and from an analytical point of view it is perhaps the most advanced and modern part of his work. A century hence the substance of that chapter may seem more modern than it does to-day; for at the present rate of growth the whole world will be fully peopled ere many generations are passed. But just at present the acreage of fertile land, from which the nations of Western Europe can conveniently draw their supplies of raw produce, is increasing much faster than the population; and in this bright interval the outlines of the influence of progress on distribution and exchange are freed from that particular black shadow.

In our own age pressure of numbers on the means of subsistence does not cause a fundamental readjustment of the notion of equilibrium even for very long periods; we can allow for the growth of population by estimating demand and supply alike, not with regard to a total flow of so many units of produce per annum, but with regard to a flow of so many units per head per annum. The remedy is not perfect; some minor corrections will remain to be made: but so far as this change is concerned, the general outlines of our picture will be true to the facts of life; and

¹ Mill, Principles, Book IV, chap. iii.

in view of the complexity of the whole problem, we can scarcely hope for more than that.

The chief difficulties of economic science are now in another direction; they arise rather from the good than from the evil fortunes of mankind. The increasing command which progress is giving us over the forces of nature is altering the conditions of work and life rapidly and in many various ways. It is altering the character as well as the magnitude of economical and social forces. It is altering them perceptibly in each decade, and it may revolutionize them "in the long run."

Of course there is some analogy to this in mechanics. Our planetary system happens, indeed, to be in stable equilibrium; but a little change of circumstance might make it unstable; might, for instance, after a time cause one of the planets to shoot away from the sun in a very long ellipse, and another to fall into it. Again, though a pendulum will generally swing clean backwards and forwards along the same line; yet, if the clock is standing on an inclined ledge, the vibration of the pendulum may make it slide downwards towards a final catastrophe. Mechanical analogies ought, therefore, not to be abandoned hastily on the ground that economic events react upon the conditions by which they were produced; so that future events cannot happen under exactly the same conditions as they did.

But the catastrophes of mechanics are caused by changes in the quantity and not in the character of the forces at work: whereas in life their character changes also. "Progress" or "evolution," industrial and social, is not mere increase and decrease. It is organic growth, chastened and confined and occasionally reversed by the decay of innumerable factors, each of which influences and is influenced by those around it; and every such mutual influence varies with the stages which the respective factors have already reached in their growth.

In this vital respect all sciences of life are akin to one another, and are unlike physical sciences. And therefore in the later stages of economics, when we are approaching nearly to the conditions of life, biological analogies are to be preferred to mechanical, other things being equal. Other things may not be equal; the mechanical analogy is apt to be the more definite and vivid: the analogy, for instance, of a satellite which is moving

around a planet, which is itself moving around another centre, is helpful for special purposes, even in very advanced stages of many economic problems; and wherever helpful it should be used. But as the science reaches to its highest work such occasions become rarer and rarer, and the tone becomes more and more that of a biological science.

Consider, for instance, the balancing of demand and supply. The words "balance" and "equilibrium" belong originally to the older science, physics; whence they have been taken over by biology. In the earlier stages of economics, we think of demand and supply as crude forces pressing against one another, and tending towards a mechanical equilibrium; but in the later stages, the balance or equilibrium is conceived not as between crude mechanical forces, but as between the organic forces of life and decay. The healthy boy grows stronger every year; but with early manhood there is some loss of agility; the zenith of his power is reached perhaps at twenty-five for such a game as racquets. For other corporeal activities the zenith comes at thirty or later. For some kinds of mental work it comes rather late; for statesmanship, for instance, it comes very late. In each case the forces of life preponderate at first; then those of crystallization and decay attain to equal terms, and there is balance or equilibrium; afterwards decay predominates.

Again, with every spring the leaves of a tree grow, attain full strength, and after passing their zenith decay; while the tree itself is rising year by year to its zenith, after which it also will decay. And here we find a biological analogy to oscillations in the values of commodities or of services about centres which are progressing, or perhaps themselves oscillating in longer periods.

The balance, or equilibrium, of demand and supply obtains ever more of this biological tone in the more advanced stages of economics. The Mecca of the economist is economic biology rather than economic dynamics.

XV

HENRY SIDGWICK (1900)1

As a freshman I learnt that I should "cap" Dr Whewell and the Vice-Chancellor, but no one else outside my own College. A year or two later I learnt that there was in Trinity a younger man whose force resembled Whewell's. If Whewell was Headmaster, Sidgwick became Captain of the whole school. We looked to him for leadership against the obstruction of the elderly: and we thought people became elderly as soon as they were ten or fifteen years older than ourselves. So when we heard that the votes in Trinity of those senior to Sidgwick went one way, and those of Sidgwick and the juniors went the other way, we felt that Sidgwick was leading a band of champions of the new age, who were gradually gaining ground. We took him as our Captain, though he was not of our house, and borrowed our opinions on University reform largely from him. Gradually we were scattered. But to the end my first desire on every new question was to know how Sidgwick would vote and why. One voted confidently and cheerily when led by him; but doubtfully and anxiously when on the other side. For, even when one could not follow him, one knew that his opinions were the embodiment of a great idea. Surely the character of our hero, so gentle and so strong, so various, so honest and earnest in thought and deed, has been foreshadowed in "the noblest Roman of them all." For he lived

in a general honest thought
And common good to all.....
His life was gentle; and the elements
So mixed in him that Nature might stand up
And say to all the world:—This was a man/

¹ From the Cambridge University Reporter, December 7, 1900.

XVI

AN EXPORT DUTY ON COAL (1901)1

A UNIVERSAL tax on all a country's exports has similar results to those of a universal tax on her imports. Each of them acts in the same way as a special stamp duty on contracts made in connexion with her foreign trade; or, again, as an increase in the cost of carriage across her frontiers (the cost of carriage elsewhere not being affected). Each of them tends to make her goods a little more scarce than they otherwise would be in foreign markets; and so to enable an all-round merchant to bring back a trifle more imports in return for each bale of exports. The main burden of such taxes is borne by the country herself, but other countries are forced to contribute a small share.

To the extent of this small share duties on imports and exports show a balance of advantage, from the purely national point of view, as compared with other methods of levying revenue. And free trade would be a blunder if no one were hurt by taxes except those who ultimately pay them.

But nearly all taxes, and especially taxes on commodities, and most especially "differential" taxes levied on goods passing the frontiers, injure people who do not pay them as well as those who do. For they divert direct consumption from those routes by which human efforts can satisfy human wants most easily; and turn it to others which are naturally less advantageous, but which evade the tax. In so far as this is done, the people suffer and the tax-gatherer gets nothing. If, for instance, in consequence of the charges imposed when passing the frontier, imported wool were partially displaced by home-grown wool of inferior quality, or at a higher cost, then those who used this wool would be injured by the tax, though they did not help to pay it.

There is no absolute a priori proof that these evils must necessarily outweigh the advantages of shifting a part of the direct burden of a country's taxes on foreigners. And it is not

A letter to the Times, April 22, 1901.

by trained economists—not even by those who are the most ardent free-traders—that the defence of free trade is based on absolute *à priori* reasoning.

On the contrary, it is based on a study of details. For that shows that, as the world is constituted, an attempt to make other nations contribute to a country's revenue on any considerable scale is foredoomed to failure; and especially that England cannot now do it. Again, a study of detail shows that the waste and friction and indirect consumers' loss caused by differential duties on the frontier are always greater than they appear at first sight; and especially in the case of a densely-peopled country which has limited natural resources and must trust mainly to a highly efficient organization of her industry and trade.

One may indeed amuse one's self by imagining a small country, whose sole exports consist of rare minerals which other countries are ready to buy from her at almost any cost. She might restrict her output, or levy high duties either on her exports or on her imports. All three courses would come to much the same in the long run, and, in any case, she would enrich herself at the expense of her neighbours by refusing free trade.

But, as this world is made, no case of this kind on a large scale is possible. There is not, and there cannot be, any large country the greater part of whose exports are free from effective competition. And, therefore, a heavy general tax either on a country's imports or on her exports would merely make foreigners take out their purchases from her in those goods which were important for them, and they would supply themselves with other goods from elsewhere. That is, she would fail in the attempt to make scarce those goods for which foreigners have so urgent a need that they would buy them of her at a high cost rather than dispense with them.

There are thus three classes of frontier taxes which may be economically defensible. First come non-differential import duties on comforts and luxuries, such as those in England on tobacco and spirits; and, in case of need, on tea and sugar. Second come "protective" import duties on things for the production of which a country has great latent facilities that are just ripe for development; as was the case with tin-plates in

America a few years ago. (I am not advocating such taxes, for I believe their end can be attained at less cost in other ways.) The third are special export duties on commodities with which foreigners cannot easily dispense; such seems to be the case with our best steam coal, and, perhaps, our best gas coal.

If Glamorganshire were an independent country, she might possibly gain by an all-round tax either on imports or on exports. But, as it is, the easiest way in which we can charge to foreigners "all that the traffic will bear" as regards Welsh coal is by a special export duty.

But is it worth while to do this? On the one hand, our coal is a chief foundation of our industrial well-being; we are wasting our children's inheritance; and there is much to be said for taking toll from coal in order to lessen our National Debt. On the other hand, a tax on the export of coal appears to present many technical difficulties; and to be not worth the disturbance it must cause unless it is to be permanent. And, what is more important, it is, to a certain extent, a breach of international comity; while we are in a specially defenceless position against some export duties that certain other countries might conceivably levy. It is now five and twenty years since I first thought of writing to advocate an export duty on coal, but was restrained by this last consideration; and I have often taken up the question since. My doubts have never been resolved; but I admire the courage of the Chancellor.

XVII

SOCIAL POSSIBILITIES OF ECONOMIC CHIVALRY (1907)1

1. Different schools of economic thought have shown a marked tendency to convergence as to fundamentals both of method and doctrine during the last thirty years.

The Congress which has been opened to-day under the auspices of the Royal Economic Society is one of many recent indications that economic questions are to play a greater part in the life and thought of the present century than they did in that of the past. Parliaments all the world over now spend more than half their time on economic issues, and probably no other serious subject gives so much employment to the printing presses that work for periodicals and general literature. Universities are giving more attention to it, especially in the United States, Germany, and this country. There are said to be 325 professors of it in the United States, where it is richly endowed. But in this country the economic department of almost every University except Manchester, Birmingham, and London is seriously handicapped by a lack of funds.

Much progress has been made recently in economic science, especially on the analytical side. Disputes as to method have nearly ceased; all students accept Schmoller's dictum that analysis and the search for facts are, like the right and left foot in walking, each nearly useless alone; but that the two are strong in combination.

Again, what by chemical analogy may be called qualitative analysis has done the greater part of its work—that is to say, there is a general agreement as to the characters and directions of the changes which various economic forces tend to produce. Differences of opinion still exist, of course; and in controversy a small difference is apt to hide a large underlying agreement, and to be overrated by the public at large. But serious students on opposite sides of an economic controversy are now nearly always in fuller agreement with one another on fundamental

¹ This essay reproduces, with some slight alterations, an article in The Economic Journal, March, 1907.

matters than they are with those on their own side whose opinions have been formed without careful study.

Much less progress has indeed been made towards the quantitative determination of the relative strength of different economic forces. That higher and more difficult task must wait upon the slow growth of thorough realistic statistics. The new Census of Production may, in the course of time, supply one of the many sets of necessary facts; but it must fight its way gradually over great technical difficulties, increased by the present jealousy of the ordinary business man against the publication of any of his affairs.

2. There has been a similar but less complete convergence as to social ideals and the ultimate aims of economic effort.

But I will turn aside from these severe matters to one which is perhaps more suitable to a cheerful occasion, and which has very urgent claims on the consideration of economists at the present time. The ideals and the ultimate aims of all our economic work have been the subject of much eager discussion, but not of much careful, thorough, persistent study. I would like to ask you this evening to consider what it is that such study can do towards helping the world to turn its growing resources to the best account for social well-being.

It is a common saying that we have more reason to be proud of our ways of making wealth than of our ways of using it. Even the working classes buy many things that do them little good and some things that do them harm. And the well-to-do classes expend vast sums on things that add little to their happiness and very little to their higher well-being, but which they regard as necessary for their social position. Few people would assert that a man with fifty thousand a year is likely to have a very much happier life than if he had only a thousand; but to climb from the place in society which belongs to £1000 a year to that which belongs to fifty thousand, is a source of almost ceaseless delight to nearly every pattern of man, and to his wife. This satisfaction is, however, not net social gain: for something must be deducted for the chagrin of some of the many men and their wives who will be passed on the way. Of course, anyone who bears heavy responsibilities, and uses his brain much, needs larger house-room, more quiet, lighter and more

digestible food, and perhaps more change of scene and other comforts than will suffice for maintaining the efficiency of unskilled work, and even of artisan work; and, from the higher social point of view, it would be bad economy that such a man should cut his expenditure down below these "necessaries for efficiency" for his responsible work. In addition to this outlay, a good deal is spent upon things that yield solid, unostentatious pleasure of a wholesome kind: and only very austere people could condemn some expenditure of this kind, provided it does not absorb nearly the whole of a moderate income, or any considerable part of a very large income. Allowances must be made for these two classes of expenditure by the well-to-do; and also for the one or two hundred millions of their total income which are turned into capital annually, and thus enable us to make nature work for us as an obedient and efficient servant. But there still remains a vast expenditure which contributes very little towards social progress, and which does not confer any large and solid benefits on the spenders beyond the honour. the position, and the influence which it buys for them in society.

Now there is a general agreement among thoughtful people, and especially among economists, that if society could award this honour, position, and influence by methods less blind and less wasteful; and if it could at the same time maintain all that stimulus which the free enterprise of the strongest business men derives from present conditions, then the resources thus set free would open out to the mass of the people new possibilities of a higher life, and of larger and more varied intellectual and artistic activities.

Opinions are not likely to agree as to the amount of private expenditure which is to be regarded as socially wasteful from this point of view. Some may put it as high as four or even five hundred millions a year. But it is sufficient for the present that there is a margin of at least one or two hundred millions which might be diverted to social uses without causing any great distress to those from whom it was taken; provided their neighbours were in a like position, and not able to make disagreeable remarks on the absence of luxuries and of conventional "necessaries for social propriety" which are of little solid advantage.

3. The temporary suspension of the pressure of the Law of Diminishing Return from land on the population of this country gives special opportunities for social reform to the present generation, and throws corresponding responsibilities on them.

Cheap transport by land and sea, combined with the opening up of a large part of the surface of the world during the last thirty years, has caused the purchasing power of wages in terms of goods to rise throughout the Western world, and especially in Britain, at a rate which has no parallel in the past, and may probably have none in the future. The Law of Diminishing Return is almost inoperative in Britain just now, but after a generation or two it may again be a powerful influence here and nearly all over the world. Wages in Britain are now but very little affected by the rate of growth of population and the pressure on the means of subsistence. The restraining forces which prevents their rise from being even faster than it is, is the fact that countries whose large expanse offers very high returns on investments in railways, in building, in developing mines and new agricultural land can outbid British enterprise in the demand for capital. The progress of the arts of production and transport has increased British prosperity fast, in spite of this. But the world is really a very small place, and there is not room in it for the opening up of rich new resources during many decades at as rapid a rate as has prevailed during the last three or four. When new countries begin to need most of their own food and other raw produce, improvements in transport will count for little. From that time onward the pressure of the Law of Diminishing Return can be opposed only by further improvements in production; and improvements in production must themselves gradually show a diminishing return. Great, therefore, as has been the rate of social progress of Britain during the last generation, we may not be contented with it. There is an urgent duty on us to make even more rapid advance during this age of economic grace, for it may run out before the end of the century1.

¹ There are some who hold that, though nature may be niggardly in her return of raw produce, compensation may be found in the more liberal supply, by aid of electricity, of the power that aids man's efforts. But this belief appears to involve a technical misapprehension. Electricity facilitates and cheapens the distribution of power, both in bulk over large distances and in detail to individual machines; and it economises power

4. Progress is in the long run delayed by exaggeration of the evils inherent in present economic conditions.

Men of certain types of mind, which are not morbid, delight now, as in previous generations, in vehement indictments of existing social conditions. Their efforts may rouse a passing enthusiasm, which is invigorating while it lasts; but they nearly always divert energies from sober work for the public good, and are thus mischievous in the long run. Let us consider a few figures.

First, it may be noted that the use which is being made of increasing wealth is not, in the main, sordid or selfish. Recent changes in the distribution among different callings of those who are "occupied"—that is, working for profits, salary, or wages show no great increase in those who supply material comforts and luxuries; but they do show a great increase in those who are working on behalf of Government or on their own account to check disease and mitigate its sufferings, and to develop the intellectual and artistic faculties of the people: the increased output of each worker in occupations which can avail themselves of improved mechanical appliances accounts for a part, but not the whole, of this contrast. Again, if the present age were as selfish as it is often represented to be, we should find that the chief expenditure of public money for improving the conditions of life and work had accrued to the benefit of those who can enforce their will at the polling-booth. But, on the contrary, it has gone chiefly to the benefit of women and children; and meanwhile young people's wages have risen faster than those of women, and those of women have risen faster than those of men. And, again, our age has reversed the old rules that the poor paid a larger percentage of their income in rates and taxes than the well-to-do, and that the Treasury was more generous in

by lessening the amount of it that runs to waste in machines not fully employed. But electricity has done relatively little to economise the use of water power in rits. Partly on account of its inconstancy, it is, in general, far less economical than it appears at first sight for almost every purpose; the chief exceptions being in some chemical industries in which work can proceed throughout the twenty-four hours and be curtailed without great loss (since relatively little labour is employed), when the water supply runs low. There is not very much available water power in this country. Tidal power would not pay its expenses, save in a very few estuaries. It may be noted that the price of continuous power supply to large consumers is the same at Newcastle-on-Tyne as at Niagara. Electricity generated by water may enlarge the rescurces of Italy: but it cannot go far towards maintaining Britain's resources when her coal has become scarce.

providing sinecures for the well-to-do than in lessening the ignorance, the disease, and the sufferings of the poor.

Another exaggeration, arising out of a careless reading of Mr Charles Booth's statistics, states that a third of the people of this country are on the verge of hunger. He estimated that a million people in London are poor in the sense that they belong to families, the aggregate income of which does not exceed 21s. a week all the year round—that is, £54, 12s, annually. Now 21s, is the price of three-quarters of a bushel, or twenty-four pecks, of good wheat; while the average wage of English labour throughout recorded history from the beginning of the Middle Ages till quite recent times was less than six pecks of wheat a week, often mouldy; it never rose for any considerable 'ime beyond nine pecks. I may state that one of the few things which every German knows for certain about England is that there are a million people in London living in extreme poverty on the verge of hunger. But they open their eyes when they learn that under this misleading title are included all members of families with a less aggregate income than twenty-one marks all the year round. For twenty-one marks will buy much less food than 21s. will; and 70 per cent., if not more, of the German working-class families have a less annual income than 1100 marks.

Again, the reasonable dissatisfaction, with which every thoughtful person must regard the existing distribution of wealth, is in danger of being perverted towards ill-considered measures of reform by Utopian schemers; who imply, if they do not explicitly state, that, if wealth were equally divided, everyone would have access to means of comfort, refinement, and even luxury which are far out of the reach of any of the working classes at present. But the fact is that very many prosperous artisans' families, certainly many more than a hundred thousand, already enjoy a larger income than they would if the total of £1,700,000,000, at which the income of the United Kingdom is estimated, were divided out equally among its population of forty-three million—that is to say, they would lose by an equal distribution of income¹.

¹ The statistical position may be looked at in another way. The average annual earnings of the men, women, and children employed in the chief manufacturing industries was estimated by the Board of Trade, as the result of a partial wage census in 1838, to be £48. The returns took insufficient account of the high wages earned by many

These facts are consistent with the belief that a vast increase of happiness and elevation of life might be attained if those forms of expenditure which serve no high purpose could be curtailed, and the resources thus set free could be applied for the welfare of the less prosperous members of the working classes; the whole change being so made as not considerably to slacken the springs of productive energy. But they are not consistent with the common suggestion that by retrenching the lavish expenditure of the rich, and dividing income equally, the whole people would be raised to affluence previously unknown to working men. More's Utopia and Morris's News from Nowhere stimulate aspiration, and are so beautiful in themselves that they will remain a joy for ever. And they work unmixed good, because they do not profess to be practical. But in recent years we have suffered much from schemes that claim to be practical, and yet are based on no thorough study of economic realities; that lack the subtle beauty of a delicate imagination; and that even propose to tear up by the roots family life, the tree whose fruits and flowers contribute much more than half to the sum total of all that is known of beauty and happiness by the people in general, and especially by the working classes.

5. Chivalry in war and chivalry in business.

Our age is, then, not quite as wasteful and harsh as it is sometimes represented. Much more than a half, possibly even three-quarters, of the total income of the nation is devoted to uses which make for happiness and the elevation of life, nearly as efficiently as is possible with our present limited understanding of the arts of life. Even so, there is a large margin for improvement; and yet in one respect we seem to be going on wrong lines. For it is easier to make believe, even to oneself, that one looks down on wealth, than to work with energy in order to make wealth a thing of which the world may be proud. But in fact material resources enter of necessity so much into the thoughts and cares of nearly everybody that, if the world is not

piece-workers; and, though they have been criticized as possibly rather too high in some other respects, we may be sure that the average is now over £50. Therefore a family of average ability and average size, all the members of which are employed in manufacture, has now a considerably higher income than it would have under an equal division of income to all persons, including the very young and the very old.

proud of its wealth, it cannot respect itself. Surely, then, it is worth while to make a great effort to enlist wealth in the service of the true glory of the world. And history seems to suggest a route to this end.

War is more cruel even than competition to oust rivals from their work and living; but there grew up around it a chivalry which brought out the noble, emulative side of war, and even something of the finer sympathies. If in the Elysian fields a mediæval warrior be now discussing with late inhabitants of worlds many billions of miles away from our own the experiences of his old world, he may hold up his head as he speaks of the chivalry of war, the thing that occupied people's imagination most in that age.

In the present age our thoughts are occupied with industrial progress, with the marvellous services which we compel nature to render to us in manufacture and transport. But, if the talk should turn in the Elysian fields on the elevation of life which we have won by the new methods of business, we should not hold up our heads as bravely as would the mediæval knight. I want to suggest that there is much latent chivalry in business life, and that there would be a great deal more of it if we sought it out and honoured it as men honoured the mediæval chivalry of war. If we do this for a generation or two, then people bringing the latest news from this world may talk boldly of the chivalry of wealth: they may be proud of the elevation of life which has been achieved by training the finer elements of human nature to full account in the production of wealth and in its use.

Chivalry in business includes public spirit, as chivalry in war includes unselfish loyalty to the cause of prince, or of country, or of crusade. But it includes also a delight in doing noble and difficult things because they are noble and difficult: as knightly chivalry called on a man to begin by making his own armour, and to use his armour for choice in those contests in which his skill and resource, his courage and endurance, would be put to the severest tests. It includes a scorn for cheap victories, and a delight in succouring those who need a helping hand. It does not disdain the gains to be won on the way, but it has the fine pride of the warrior who esteems the spoils of a well-fought battle, or the prizes of a tournament, mainly for the sake of the

achievements to which they testify, and only in the second degree for the value at which they are appraised in the money of the market.

6. The chief motive to the highest constructive work in industry is a chivalrous desire to master difficulties and obtain recognized leadership.

The commonplace and even the sordid sides of business work obtrude themselves on our notice. Some men are known to have become rich by foul means. Many more have prospered by a steady adherence to affairs, largely of a routine character; with but little use of the higher imagination, and perhaps with scarcely any romance in their lives except in their family relations. These two classes of business men come into close contact with the ordinary observer; and, if he rejoices in the æsthetic expenditure of wealth which he has inherited probably from a business ancestor, he is likely to declaim in vigorous but undiscriminating language against those who greedily pursue wealth.

But there can be no doubt that at least one-half of the best ability in the Western world is engaged in business. Unless, therefore, we are convinced that human nature is irredeemably sordid, we must expect that there is much nobility to be found in business; and, if we look for it in the right place, we shall find it.

It has indeed been remarked with increasing frequency by careful observers during recent years that those business men, on whose work the progress of industry most depends, care for wealth more as an indication of successful achievement than for its own sake. Success in science, in literature, and in art can be judged directly; and a man engaged in these occupations seldom cares for money beyond a mere competence, unless he is rather sordid. He wants to be sure that he has worked well; and if he earns the laurel wreath of approval of the cultivated public, he is content. On the other hand, if business men were arranged in order according to the merits of their proposals as written down on paper and judged à priori, it would be a very bad order. And for that reason, more than for the money it brings them, the ablest and best business men value success. Assuming that a man's career is free from the suspicion of fraud,

malign destruction of rivals, and oppression of employees, success is good *prima facie* evidence of leadership. It is often the only trustworthy evidence that is available to the public, and can be appreciated by those near to him, whose joy in his success is one of his chief rewards.

Men of this class live in constantly shifting visions, fashioned in their own brains, of various routes to their desired end; of the difficulties which nature will oppose to them on each route, and of the contrivances by which they hope to get the better of her opposition. This imagination gains little credit with the people, because it is not allowed to run riot; its strength is disciplined by a stronger will; and its highest glory is to have attained great ends by means so simple that no one will know, and none but experts will even guess, how a dozen other expedients, each suggesting as much brilliancy to the hasty observer, were set aside in favour of it.

7. The need for enlarging the honour given to the highest constructive business faculty is increased by the growth of bureaucratic rule, which is hostile to it.

There are many kinds of laboratory experiments which a man can be hired to make at a few hundred pounds a year, but the epoch-making discoveries generally come from men who love their work with a chivalrous love. The true significance of such a man's life is often not recognized till he has passed away, but he is fairly sure that he will be honoured at last. Money is wanted to educate scientific men, to supply them with apparatus, and a moderate income earned without oppressive routine of teaching or other fatigue. But that is all that money can do. That being done, creative science can be evoked only by the force which evokes creative art and creative literature—the force of chivalrous emulation.

A chemist requires only a little space in a laboratory. But

¹ The imagination of such a man is employed, like that of the master chess-player, in forecasting the obstacles which may be opposed to the successful issue of his far-reaching projects, and constantly rejecting brilliant suggestions because he has pictured to himself the counter-strokes to them. His strong nervous force is at the opposite extreme of human nature from that nervous irresponsibility which conceives hasty Utopian schemes; and which is rather to be compared to the bold facility of a weak player, who will speedily solve the most difficult chess problem by taking on himself to move the black men as well as the white.

many of the most important experiments of a business man require the whole space, the whole material appliances, and the whole staff of a large business to be at his disposal, and often for many years consecutively. If he is working at his own risk, he can put forth his energies with perfect freedom. But, if he is a servant of a bureaucracy, he cannot be certain of freedom; he may be given a little freedom for a while, and then a change in administration, or impatience at his failure to strike the true path of progress at his first trial, may cause him to be pulled up sharp; and his chains clank, even when they do not press tightly.

Difficulties of this kind are met not only in the industrial undertakings of Governments, but also in very large joint-stock companies, and especially the so-called trusts. The chief owners of the trusts have given, and are giving, an extraordinary amount of thought to devising means whereby the heads of departments and others may be allowed a free hand, and emulation may be brought to bear as a stimulus to their energy and enterprise. Their devices are marvellously ingenious, and among the most instructive episodes in recent economic history, but they have attained only a modicum of success. Experience shows ever more and more that the technical economy to be attained by piling Pelion on Ossa in the agglomeration of vast businesses is nearly always less than was expected, and that the difficulty of the human element ever increases with increasing size. Much can be done by various schemes of reward and promotion as regards junior officials, and even the superior officials are stimulated by congresses and other opportunities for submitting their new ideas to the judgment of brother-experts. But no fairly good substitute has been found, or seems likely to be found, for the bracing fresh air which a strong man with a chivalrous yearning for leadership draws into his lungs when he sets out on a business experiment at his own risk.

8. Economists generally desire increased intensity of State activity for social ameliorations that are not fully within the range of private effort: but they are opposed to that vast extension of State activities which is desired by Collectivists.

These considerations point towards the watershed which divides the large majority of economists from "Collectivists"—

i.e., those who would transfer to the State the ownership and management of land, machinery, and all other agents of production. We are told sometimes that everyone who strenuously endeavours to promote the social amelioration of the people is a Socialist—at all events, if he believes that much of this work can be better performed by the State than by individual effort. In this sense nearly every economist of the present generation is a Socialist. In this sense I was a Socialist before I knew anything of economics; and, indeed, it was my desire to know what was practicable in social reform by State and other agencies which led me to read Adam Smith and Mill, Marx and Lassalle. forty years ago. I have since then been steadily growing a more convinced Socialist in this sense of the word; and I have watched with admiration the strenuous and unselfish devotion to social well-being that is shown by many of the able men who are leading the collectivist movement. I do not doubt that the paths, on which they would lead us, might probably be strewn with roses for some distance. But I am convinced that, so soon as collectivist control had spread so far as to narrow considerably the field left for free enterprise, the pressure of bureaucratic methods would impair not only the springs of material wealth, but also many of those higher qualities of human nature, the strengthening of which should be the chief aim of social endeavour.

To those who take this view of the dangers of collectivism, it is sometimes thought sufficient to reply that they still wallow in the mire of laissez faire. The phrase is ambiguous, and misleading rhetoric abounds with regard to it. Its original meaning was that gilds and métiers should not prohibit people from entering a trade for which they were competent; any one should be at liberty to choose his own work. It was not till much later that the phrase was twisted to mean:—Let Government keep up its police, but in other matters fold its hands and go to sleep.

In Adam Smith's time Government was corrupt, and, though he himself, like all his chief followers, was unselfishly devoted to the well-being of the people, experience had taught him to look with suspicion on those who invited the Government to new enterprises for the public weal: for their real motive was generally to increase their own gains, or to provide easy and well-paid posts for themselves or their relatives. Matters improved but slowly during the next fifty years. But honesty and true philanthropy grew apace during the earnest, if somewhat ungainly, beginning of the Victorian era. And J. S. Mill, one of the first to proclaim boldly that Shelley was greater than Byron, made a memorable attempt to combine many of the essential principles of Socialism with an unswerving devotion to individuality and a hatred to mechanical regulations of life¹.

Mill had seen a vast increase in the probity, the strength, the unselfishness, and the resources of Government during his life; and it seems that each succeeding decade had enlarged the scope of those interventions of Government for the promotion of general well-being which he thought likely to work well. One of the chief causes of this improvement was a change of sentiment which had, perhaps, its chief origin in the Wesleyan Revival, as Lecky has well shown. The movement was promoted by Parliamentary reform; by the spread of education, and by increasing zeal in the Established and Nonconforming Churches; by the cheapening and improvement of literature; by the rise of co-operation, itself largely due to Owen, that noble if weird prophet of Socialism; by the writings of Scott and Dickens, of Wordsworth and Tennyson, of Carlyle and Ruskin, of Newman and Maurice; and by the personal influence of Queen Victoria and of Gladstone, and other public men.

These and similar influences have co-operated with technical progress to enlarge the scope for the beneficial intervention of Government since Mill's death even more than during his long life. Government has now many new large and subtle resources for finding out where it can do more harm than good. Partly through the co-ordination and mutual aid of the forces of central and of local authorities, it has a much increased power of putting into effective operation any decision at which it has arrived. And the people are now able to rule their rulers, and to check class abuse of power and privilege, in a way which was impossible

¹ If anyone will read Mill's Autobiography, his essays "On Socialism," published in the Fortnightly Review for 1879, or even his discussions of progress and of the functions of Government in the last chapters of Books IV and V respectively of his Political Economy, and compare them with Carlyle's pamphlet on Shooting Niscoura, he will see that the popular opinion as to the generosity of Carlyle's temper and the hardness of Mill's is incorrect. He may even perhaps think that is should be inverted.

before the days of general education and a general surplus of energy over that required for earning a living. Thus we can now safely venture on many public undertakings which a little while ago would have been technically unworkable, or which would have probably been perverted to the selfish and corrupt purposes of those who had the ear of Government. But, on the other hand, this very enlargement opens out so many and so arduous new public duties that no Government, not even the German, can nearly catch up the work that is specially its own. Thus a new emphasis is given to the watchword, Laissez faire:—Let everyone work with all his might; and most of all let the Government arouse itself to do that work which is vital, and which none but Government can do efficiently.

For instance, public authorities are just beginning to awake to the urgency of their duties with regard to mapping out in advance the ground plans on which cities should expand—a task more vital to the health and happiness of coming generations than any other which can be accomplished by authority with so little trouble, while private effort is powerless for it. So I cry, "Laissez faire:—Let the State be up and doing"; let it not imitate those people who have time and energy enough to manage their neighbours' households, while their own is always in disorder.

Again, let the Legislature cease to pass any laws the true meaning of which is avowedly uncertain and must be declared by the courts of law; for such laws hamper constructive enterprise, and give an undue advantage to those who can afford the expense of one or more appeals. Let public authorities provide building laws and bye-laws which, while effective for social purposes, are so well thought out and so elastic that no one is compelled to put up walls much stronger than is necessary for his purposes, in order that the automatic working of general rules, unaided by the use of brains on the part of the authorities, may secure adequate strength for other buildings under different conditions. Such reforms do not require any considerable increase of public budgets. But they require that Government should obtain its fair share of the growing intelligence of the country; that this intelligence should be concentrated intensively on work which none but Government can do, and that it should not be

spread out thinly and carelessly on any social service that is needed. It is more necessary now than ever to bear in mind that the State alone can order an adequate inquiry where agents betray their trust, or where fraudulent producers or dealers can outwit the consumer; and that no activities of its own that are not absolutely necessary should be allowed to interfere with its imperative duty to inspect and to arbitrate: for that cannot be discharged by anyone else, except it be the ever-ready writers in newspapers. Further, in the interest of the purity of the public service, it should abstain from putting its officials to work where their probity can receive but little external support, except from a system of checks and counterchecks so elaborate and cumbrous that many clerks are needed where one would suffice in private service. The increase of mechanical office work is one of the chief evils of large businesses, even under the comparatively elastic régime of joint-stock companies: and it would be grievously increased if public servants were under ever-increasing temptations in relation to those very matters which evade the courts of justice, and in which public servants alone can act as efficient guardians of business rectitude.

9. Some illustrations of the anti-social influences likely to result from Governmental enterprise in matters where the private hand is competent for action, and the hand of authority is needed to preserve purity.

Let us look at some illustrations. The careless treatment of milk is an insidious cause of disease, which public authority has hitherto treated somewhat negligently. That is indeed one sin against the true constructive doctrine:—Laissez fuire; let the Government arouse itself to do energetically its proper work of educating British farmers up to the Danish standard, if not beyond; and of enforcing sanitary regulations in critical matters such as this. No doubt, under present conditions, it may be right to organize municipal depôts to provide specially pure and appropriate milk for those infants whose mothers cannot give them their natural food. But the function of such depôts is purely educational: they ought soon to make way for enlightened free co-operation under stringent public supervision. But high collectivist authority openly advocates them as the thin end of

the wedge for pushing all private producers out of the milk trade; and this seems to be anti-social. For it would close a suitable career to many men who were learning the elementary principles of enterprise in a simple business: and it would increase the glaring disproportion between the work that is required of municipal councils and the number of hours which they could give to it; even if they had nothing else to do:—even if none of their energies were demanded for private businesses of their own, or for conciliating the favour of their constituents against the next election.

The milk supply is a relatively simple affair. But Governmental intrusion into businesses which require ceaseless invention and fertility of resource is a danger to social progress the more to be feared because it is insidious. It is notorious that, though departments of central and municipal government employ many thousands of highly-paid servants in engineering and other progressive industries, very few inventions of any importance are made by them: and nearly all of those few are the work of men, like Sir W. H. Preece, who had been thoroughly trained in free enterprise before they entered Government service. Government creates scarcely anything. If Governmental control had supplanted that of private enterprise a hundred years ago, there is good reason to suppose that our methods of manufacture now would be about as effective as they were fifty years ago, instead of being perhaps four or even six times as efficient as they were then. And in that case, if the population of the country had grown to forty-three million, it is probable that the total real income of the country would be about half what it is now; and that, if divided out equally among all families, it would yield less than the average healthy bricklayer or carpenter now earns. It has been well said that if all the material wealth in the world were destroyed by an earthquake, leaving only the land, knowledge, and food enough to sustain life till the next harvest, mankind would in a generation or two be nearly as prosperous as before; but, if accumulated knowledge were destroyed, while the material wealth remained, several thousand years might be needed to recover lost ground.

And yet while Governments are being thus urged in the name of collectivism to an anti-social destruction of the springs of knowledge, a public engineering venture can often make a brave show. For it annexes the best products of that free enterprise which it is stifling. Its vast resources enable it to buy the most up-to-date plant, and to be for the time at least ahead in this respect of some of the very businesses whose brains it is picking. It calls attention to its accounts, and they show a profit. The ordinary observer neglects the fact that in equity every business of such a form as to be unlikely to make inventions of its own ought to pay a subsidy to those whose ideas it is turning to account. And he neglects the fact that, when a Government undertaking becomes obsolete, its accounts drop silently away. There is, indeed, grave doubt whether those of its undertakings which have no exclusive monopolistic advantage would show a fairly good return on the aggregate capital invested in them, if their accounts were made out on the same complete and rigorous system that is required of private business.

A Government could print a good edition of Shakespeare's works, but it could not get them written. When municipalities boast of their electric lighting and power works, they remind me of the man who boasted of "the genius of my Hamlet" when he had but printed a new edition of it. The carcase of municipal electric works belongs to the officials; the genius belongs to free enterprise.

I am not urging that municipalities should avoid all such undertakings without exception. For, indeed, when a large use of rights of way, especially in public streets, is necessary, it is doubtless generally best to retain the ownership, if not also the management, of the inevitable monopoly in public hands. I am only urging that every new extension of Governmental work in branches of production which need ceaseless creation and initiative is to be regarded as prima facie anti-social, because it retards the growth of that knowledge and those ideas which are incomparably the most important form of collective wealth.

10. Social disaster would probably result from the full development of the collectivist programme, unless the nature of man has first been saturated with economic chivalry.

I venture to think that the able and high-minded leaders of modern collectivism lay too much stress on the technical superiority of their schemes over those of the earlier Utopian socialists and communists. That superiority is indeed beyond question. The earlier ventures, and some even of the more recent experiments in America, disdained the use of modern machinery in the field and in the workshops. They held aloof from great world markets, and they applied almost primitive methods to satisfy little more than primitive needs. They recognized no private property even in house-room and furniture; they allowed no scope for individuality in taste or in the minor affairs of life; they arranged that everyone should share equally in the joint produce of the labour of all; or, if there was any discrimination. it was only that which, within the limits of a family subduing the prairie, allots the hardest work to the strongest and sturdiest members, and assigns to an ailing daughter or sister the choicest food, and the seat nearest to the window in summer and that nearest to the fire in winter. There was neither the opportunity nor the largeness of insight and foresight needed for a classification of workers according to their faculty, combined with special compensation in shortness of hours or otherwise for those who did specially difficult or specially disagreeable work, and so on.

Modern collectivists claim that their schemes are free from all these narrownesses. With earnest emphasis, though perhaps with insufficient appreciation of the difficulties of the problem, they foreshadow more or less distinctly a finely-woven texture, in which the warp of unified central authority and ideas is crossed by a west of departmental responsibility and free play in detail. They point to administrations such as that of the Prussian railways, where attempts have been made, on lines which have been worked out more thoroughly by giant businesses in America, to devise opportunity and incitement for free spontaneity on the part of each successive grade of officials down to the lowest. They avow themselves to have a loyal zeal for individuality; and some of them have even followed John Stuart Mill in his passionate cry that occasional solitude is so necessary for the health of man's spirit, that a world from which it was crowded out would be already half dead. In view of this technical contrast between the old and the new, it may seem at first sight that the failures of Socialistic enthusiasts in the past have no lesson of warning against the schemes which now hold

the field. But I venture to think that a closer view suggests the contrary.

For many of those Utopias were almost ideally perfect experiments for the purpose of investigating how much economic chivalry there is in the breast of the common man-that is, of the man who is not endowed with the qualities of leadership. And the results proved, I think, conclusively that in the common man jealousy is a more potent force than chivalry. The immediate cause of the failure of those Utopias seldom lay in their technical deficiences. It lay rather in the belief on the part of. some of the members that others were doing less than their share of hard and disagreeable work, or were getting insidiously more than their share of the comforts and amenities of life. Those who were dissatisfied could not easily move into a neighbouring business and find their level there; for that would have involved the abandonment of those hopes and ideals which had attracted them to the movement, and for which some of them had made sacrifices. Their discontent had not the wholesome outlet which a freedom of movement affords to most people in the modern world; so it remained under the surface, and festered, till at last the whole society was full of sores, and the end came. This was, in fact, the experience of almost every if not every such scheme, except a few in which an ardent devotion to some particular religious creed, positive or negative, completely dominated their lives and thoughts. In those exceptional societies material comforts counted for little, and personal jealousies could be stilled by the counsel and authority of the leaders whom the ordinary members reverenced as prophets, raised above the ambitions and the temptations of ordinary life.

In Germany the dominion of bureaucracy has combined with other causes to develop a bitter class hatred, and occasionally to make social order depend on the willingness of soldiers to fire on citizens; and the case is, of course, much worse in the even more bureaucratic Russia. But under collectivism there would be no appeal from the all-pervading bureaucratic discipline. A man would often think himself unfairly treated: he would believe that others were contributing less to the common fund than he was, and were, through favouritism or even corruption, drawing more from it; and such a man would, if possible, flee to a country

where free enterprise still flourished. But if there were no such haven, his disquiet would grow; obedience to authority would be given unwillingly; and, if the discontented were to be kept to their work by force, the resulting tyranny would need to surpass all previous records in minuteness of detail and in the destruction of everything that makes life worth living.

I submit, therefore, that, if collectivism is to work even fairly well, there must be ample provision for enabling anyone who thinks his lot unduly hard to find relief in some way that has not as yet been discovered. It is true that ingenious suggestions have been made for automatically regulating the work and pay in different occupations under a collectivist régime: but they are not likely to approve themselves to anyone who has followed closely the working of co-operative and competitive businesses.

Let us, however, suppose, for the sake of argument, that some workable scheme to this end could be devised. Even then we should need to face the difficulty already suggested that those improvements in method and in appliances, by which man's power over nature has been acquired in the past, are not likely to continue with even moderate vigour if free enterprise be stopped, before the human race has been brought up to a much higher general level of economic chivalry than has ever yet been attained. The world under free enterprise will fall far short of the finest ideals until economic chivalry is developed. But until it is developed, every great step in the direction of collectivism is a grave menace to the maintenance even of our present moderate rate of progress.

11. Social possibilities of economic chiralry on the part of individuals and the community as a whole under existing institutions.

To conclude:—There is much more economic chivalry in the world than appears at first sight. The most important and progressive business work is scarcely ever without a large chivalrous element, and is often mainly dominated by chivalrous motives. But there is also much getting of wealth that is not chivalrous, and much expenditure that has no touch of nobility. To distinguish that which is chivalrous and noble from that which is not, is a task that needs care and thought and labour;

and to perform that task is a first duty for economists sitting at the feet of business men, and learning from them. An endeavour should be made so to guide public opinion that it becomes an informal Court of Honour. Then wealth, however large, would be no passport to social success if got by chicanery, by manufactured news, by fraudulent dealing, or by malignant destruction of rivals: and that business enterprise which was noble in its aims and in its methods, even if it did not bring with it a large fortune, would receive its due of public admiration and gratitude; as the work of the progressive student of science, or literature, or art does now.

The discriminating favour of the multitude at Athens and at Florence gave the strongest stimulus to imaginative art. And if coming generations were to search out and honour that which is truly creative and chivalric in modern business work, the world would grow rapidly in material wealth and in wealth of character. Noble efforts would be evoked; and even dull men would gradually cease to pay homage to wealth per se without inquiring how it had been acquired. Wealth-getting by sordid means would not win its way in society, nor in popular favour; and no political committee, however devoid of high sentiment, would be shortsighted enough to follow a recent example in choosing a candidate who had been proved judicially to owe much of his wealth to base means. Sordid practices would then prevent wealth from yielding that social éclat for which sordid men chiefly prize it, and would go out of favour with men of ability and common sense, however devoid of high principle.

The chivalry which has made many administrators in India, Egypt, and elsewhere, devote themselves to the interests of the peoples under their rule is an instance of the way in which British unconventional, elastic methods of administration give scope for free, fine enterprise in the service of the State; and it atones for many shortcomings in forethought and organization. Again, because the dead hand of bureaucracy has stretched but a little way into her affairs, this country is able to call together voluntary committees of men trained in strenuous private enterprise, who freely give good general guidance in some large matters, such as London transport systems and army administration; and this, again, is a form of chivalry in work which

has great potentialities for good, and which it is the business of economists and others to study and to praise.

Gradually, it may be hoped, public opinion may be worked up to the point at which a rich man who lives idly will be despised. The increasing strenuousness of life which shows itself in sport may find an ever-increasing vent in solid work for the public weal. As President Eliot suggests, rich men might be led to give themselves specially to tasks which required high faculties and responsible characters, but for which it is not easy to allot large salaries: they might, for instance, take work where an impecunious person, finding large streams of money passing through his hands, might be subject to temptations from which they would be free; and they might set themselves to public tasks which would prepare the way for progress in the future, but would not yield sufficient immediate fruit to secure liberal endowment from a democracy.

Thus chivalry in work would run into chivalry in using wealth. Expenditure for the sake of display, however disguised by an æsthetic atmosphere, would be thought vulgar. He who devoted his energies to buying good pictures, especially by artists not yet known to fame, and gave them to the public at his death, if not before, would have reaped a good return from his wealth; and so would he who made his park beautiful, opened it to the public, and perhaps arranged for easy transport to it from neighbouring industrial districts.

Economic chivalry on the part of the individual would stimulate and be stimulated by a similar chivalry on the part of the community as a whole. The two together might soon provide the one or two hundred million a year that appear to be available, without great pressure on the well-to-do, towards bringing the chief benefits which can be derived from our new command over nature within the reach of all.

Equipped with such funds, the State could so care for the amenities of life outside of the house that fresh air and variety of colour and of scene might await the citizen and his children very soon after they start on a holiday walk. Everyone in health and

¹ Great Riches, 1906. Compare another recent memorable utterance from Harvard University—Professor Taussig's address to the American Economic Association, Dec. 1905, on "The Love of Wealth and the Public Service."

strength can order his house well; the State alone can bring the beauties of nature and art within the reach of the ordinary citizen. But the chivalrous rich man could aid municipalities in such vastly expensive schemes as that of Miss Octavia Hill for gradually opening out several broad bands of verdure at different distances in and about every large town, and for connecting them by transverse avenues along which working men and their wives might stroll, while the children played around them. to a recreation ground. Again, he might help towards removing the reproach that the exceptional natural advantages which London derives from her great river with its high banks cannot be seen by the eye, but only by the imagination. These and similar calls would attract much of his resources while he was alive, and most of his means would go to public uses at his death. For the growing opinion that it is an ignoble use of wealth to leave large fortunes mainly to relations is reinforcing the perception by the rich that the inheritance of great wealth is seldom an unmixed good. Strong men are getting more and more to recognize that a deep full character is the only true source of happiness, and that it is very seldom formed without the pains of some self-compulsion and some self-repression. Those who from childhood upwards have been able to gratify every whim are apt to be poor in spirit.

The rich man would further co-operate with the State, even more strenuously than he does now, in relieving the suffering of those who are weak and ailing through no fault of their own, and to whom a shilling may yield more real benefit than he could get from spending many additional pounds. He would contribute towards the costly organization needed for helping and compelling those who, through weakness or vice, have lost their self-respect, either to reform their own lives, or, at all events, to cease to drag their children down with them. He would, by increased voluntary service, aid the State to abandon the unworthy plea that even a rough discrimination between the just and unjust is so difficult and would require so large an outlay that the same measure must be meted out to all who, in old age or before it, are in urgent need of assistance. Under such conditions the people generally would be so well nurtured and so truly educated that the land would be pleasant to live in.

Wages in it would be high by the hour, but labour would not be dear. Capital would therefore not be very anxious to emigrate from it, even if rather heavy taxes were put on it for public ends: the wealthy would love to live in it: and thus true Socialism, based on chivalry, would rise above the fear that no country can move faster than others lest it should be bereft of capital. National Socialism of this sort might be full of individuality and elasticity. There would be no need for those iron bonds of mechanical symmetry which Marx postulated as necessary for his "International" projects.

If we can educate this chivalry, the country will flourish under private enterprise. Or, should collectivists succeed in showing that human nature had at last been so firmly based in chivalry that their great venture might be tried without running violent risks, some other civilization than that which we can now conceive may take the place of that which now exists. It may, of course, be higher. But those who believe that all the commerce of the world will ere long be carried through the air should make a few aeroplanes carry heavy cargoes against the wind before they invite us to blow up our railway bridges. For similar reasons it seems best that the difficulties of collectivism should be studied much more carefully, before the scope for creative enterprise is further narrowed by needlessly intruding collective administration into industries in which incessant free initiative is needed for progress.

Thus the end before us is a great one. It calls for steady, searching analysis, and for a laborious study of actual conditions. Economists cannot do it alone. Perhaps it may be found that their share in it will not be large, but I myself believe it will be very large. I submit, then, that a most pressing immediate call on us is to associate in our own minds and those of others economic studies and chivalrous effort.

XVIII

THE EQUITABLE DISTRIBUTION OF TAXATION (1917)1

Until recently "equity" was thought an adequate guide in the philosophy of taxation: and it was generally considered equitable that every one should contribute "on the joint-stock plan" to the expenses of the State in proportion to the income (or. as was sometimes said, the property) which he enjoyed under it. But further consideration showed that, while a joint-stock company has no responsibility for the number of shares which each individual holds in it, the duty of the State is of larger scope. For equity proceeds on the basis of existing rights, as generally recognized. A joint-stock company must accept them as final: but the State is under obligation to inquire which of them are based on convention or accident rather than fundamental moral principle; and to use its powers for promoting such economic and social adjustments as will make for the well-being of the people at large. A chief place among those powers is held by its control of the distribution of the burden of taxation. The notion that this distribution should be governed by mere equity was long dominant; but now it is seen that the problem is one of constructive ethics; though, of course, on its technical side, it calls for careful economic and political thought.

This new notion is indeed largely based on observations which were certainly made two thousand years ago, and probably much earlier, that the happiness of the rich does not exceed that of the poor nearly in proportion to the difference in their commands of material wealth. Sages have indeed frequently asserted that happiness is a product of healthy activity, family affection, and content; and that it is as often to be found in the cottage as in the mansion.

But yet a lack of the necessaries of life causes positive suffering, which transcends in a way the lack of happiness; and therefore taxes, which trench on the necessaries of life at the command of any stratum of sober, hard-working people, call for special justification.

¹ This essay formed part of an article contributed to After War Problems, 1917, edited by Mr W. H. Dawson.

Again, though the upper strata of society do not enjoy an excess of happiness over the lower strata at all proportionate to their superiority in incomes, yet almost every one derives considerable pleasure from an increase of his income, and suffers annoyance from its diminution. For the increase gratifies, and the diminution disappoints, the hope of some enjoyment or of some ambition which is near in sight. With an increase the man feels himself rising in that social stratum to which he is accustomed: the stratum which knows him, and which he knows; the stratum whose wants and thoughts and aspirations are kindred to his own. A clerk is made proud and happy when he can move from a working-class quarter to one in which untidy clothes are not seen; but he does not fret at being unable to move into a fashionable quarter: he is grieved if unable to take his family to the seaside for their wonted two or three weeks; but he does not greatly repine at being unable to travel round the world.

These considerations point to the conclusion that, while antisocial excess in the consumption of alcohol by any class is rightly
subject to heavy taxation, those who apply practically the whole
of a small family income to good uses should make little or no
net contribution to the Revenue. It will not be advisable, or
even possible, to exempt from taxation all the things consumed
by them: but the greater part of what they contribute directly
to the Exchequer should be returned to them indirectly by
generous expenditure from public funds, imperial and local, for
their benefit. The ever-growing outlay on popular education,
old age pensions, insurance, etc., is an expression of the public
conscience needed to palliate extreme inequalities of wealth:
while enabling even the poorest class of genuine workers to
remain full, free citizens, with a direct interest in public finance.

Even if it be true that as much personal hurt is caused by taking £1000 from an income of £10,000 as by taking £20 from an income of £200, yet the hurt caused by obtaining £1000 of additional Revenue by means of levies of £20 from each of fifty incomes of £200 is unquestionably far greater than that caused by taking it from a single income of £10,000. But invalid inferences are likely to be drawn from this fact, unless account is taken of the extent to which excessive taxes on capital react indirectly on the people at large. While special provision is made

for those whose incomes fall short of the necessaries of life and vigour, every one else must bear a considerable share of the national burdens. But the shares should be graduated steeply: and this can be effected only by a large use of taxes on income and property: no close approach towards it has been attained by taxes on particular commodities. For, indeed, many such taxes press with the heaviest weight on the poorest classes, and with no great weight on the rich; while those of them, which fall chiefly on the rich, have never been made to yield a very large amount of revenue.

In earlier times nearly the whole of most people's incomes was derived from operations known to their neighbours, and a large understatement of income was not likely to escape detection. But modern methods of investment and other causes had made it almost impossible to detect fraudulent understatements. until the plan, now familiar, was adopted of taxing at the source all British corporate incomes; while incomes from Stock exchange securities issued abroad are now in effect brought under the same discipline by aid of the agencies of the money market. This has enabled the Inland Revenue officials to give most of their attention to the intricacies of small private businesses, a task in which their methods have greatly improved. Thus the percentage of income demanded by the tax rose long ago much above that which it had originally been thought possible to charge with tolerable safety, unless during the emergency of a war; and yet the evasions are believed to have become relatively small. This plan, however, increases the difficulties of direct graduation of the burden of the tax: so recourse is now had to the indirect method of allowing certain abatements to be made from small incomes before they are assessed to the tax.

In order to carry the graduation above the limit at which no abatement was made a Super-tax was introduced in 1909, surcharging all very large incomes. The collection of that tax derives little aid from the practice of charging at the source; but, as the number of incomes which come under it is small, the officials can give a good deal of time to each of them. The great increases in the income-tax and Super-tax levied during the war, together with the Excess-profits-tax, while throwing no direct light on the probable course of taxation after the war,

suggest a hope that the various advances towards graduation made before it will be sustained and developed after it. In so far as the graduation is effected by abatements, people have a direct interest in submitting statements of their incomes in detail to the income-tax officials: and in this way graduation tends to promote the accuracy of income-tax returns and to diminish evasions.

The exceptional power of adjustment to special conditions possessed by the income-tax extends some way in the direction of taking account of the fact that two persons with equal incomes may have to bear very unequal burdens. Thus insurance premiums are deducted, subject to certain conditions, from income before taxation: and some further deductions, which might advantageously be enlarged, are made on account of young children. There is much to be said for the present plan of regarding the incomes of husband and wife as a single unit for taxation: but the charge levied on that unit should be less than if it had to support only one person.

This inequality between the burdens of taxation on two persons with equal incomes, but unequal responsibilities, extends below the income-tax paying class; but it is only in that class that a direct remedy is in sight. Among the working classes especially an unmarried man is likely to consume highly taxed alcohol and tobacco in greater quantities than a married man with an equal income; but in regard to most taxed commodities the married man's expenditure is likely to be the larger. It is true that the married operative is likely to derive more aid than the unmarried from public expenditures on health insurance and on schools: but, though the education given by the subsidized schools is as good as that afforded by some relatively expensive private schools, even the lower middle classes are induced by convention to hold aloof from them in this country.

If it were possible to exempt from the income-tax that part of income which is saved, to become the source of future capital, while leaving property to be taxed on inheritance and in some other ways, then an income-tax graduated with reference to its amount, and the number of people who depended for their support on each income, would become a graduated tax on all personal expenditure. Rich and poor alike would be left to

select those uses of their incomes which suited them best, without interference from the State; except in so far as any particular form of expenditure might be thought specially beneficial, or specially detrimental, to public interests. The income-tax would levy the same percentage on the rich man's expenditure on coarse tea and on fine tea, on bread and on expensive food; and a higher percentage on each than on the poor man's expenditure on anything, unless it be alcohol and tobacco¹. The way to this ideal perfection is difficult; but it is more clearly marked than in regard to most Utopian goals.

In pursuing this way, a watchful eye would need to be kept on the danger that excessive taxes on large incomes may check energy and enterprise. It is true that a man of high genius and originating faculty often values his gains less for their own sake, than for the evidence which they afford to himself and others of eminent power. His energy would not be much affected by a tax which lowered his share, provided it did not put him at a disadvantage relatively to others. The zeal of a yachtsman in a race is not lessened when an unfavourable tide retards the progress of all; and the business man of high faculty might not be made much less eager for success by taxation, which took from him and his compeers a considerable portion of their gains. But the average man desires wealth almost exclusively for its own sake; though some little introspection might suggest to him that what he really cares for is an increase in wealth relatively to his neighbours: and thus the problems of a steeply graduated income-tax run into those of graduated taxes on capital.

Heavy taxes on capital, of course, tend to check its growth, and to accelerate its emigration. It is to Britain's credit that she has been able to export a great deal of it before the war: but, if her factories had been equipped with as generous a supply of

¹ The "expenditure" which is contrasted with saving is, of course, expenditure for inumediate personal consumption on commodities and services of all kinds; for that part of an income which is "saved" is spent, if not by the person who saves, yet by those to whom he hands over its use in return for promised income. Thus all is spent: but that part, which is spent for personal consumption, disappears soon after it is taxed; and that part which is turned into income-yielding capital, is taxed again fully in the long run. Suppose a tax of, say, a shilling in the pound is levied permanently on every income, and £1000 saved yields, say, 4 per cent. permanently: then that £40 of annual income will yield permanently £2 as tax: and the present value of that permanent yield will be £50—the exact amount of a tax of a shilling in the pound levied on the £1000.

machinery as those of America, her industries would probably have been more productive than they were; and, if she is to hold her place in the van of industry after the war, she will need much new capital for her own use. Her natural resources, except in coal and a favourable coastline, are small; and a chief cause of the superiority of the wages of her workpeople over those in other countries of Europe has been the fact that her businesses could obtain the necessary supply of capital at lower charges than anywhere else. Therefore taxes on capital must be handled with caution. Ethical considerations and those of high policy alike make for the preservation of the capital that is needed to sustain the strength of a country in peace and when assailed by hostile aggression.

So far as the rights of property have a "natural" and "indefeasible" basis, the first place is to be attached to that property which any one has made or honestly acquired by his own labour. But the right thus earned does not automatically pass to his heirs: the tardy development of steeply graduated duties on inheritance (or "Death Duties") has approved itself increasingly to the ethical conscience and to the practical counsels of administration: and this in spite of the fact that such taxes are generally paid out of capital, for the heir seldom sets apart a sinking fund out of his income. There are considerable evasions, some technically valid, and others not; but they are said to be less than had been anticipated. The annoyance which a man feels on reflecting that his heirs will inherit somewhat less than he has owned does not seem to affect conduct much; and perhaps some part of the Revenue needed after the war, in excess of that before it, may be safely got by a moderate increase of these duties.

XIX

RETAIL PRICES

A RETAIL dealer when once he has established a good connection has always had a partial and limited local monopoly. If he has used it ill, he has lost it sooner or later. But, so long as he has retained it, he has not been under the necessity of adjusting his charge for each particular service to the cost of that service. His prices may be arbitrary to an extent that is impossible in the case of middlemen or ordinary producers who supply business customers. For a business customer will scrutinize the charge for each individual thing; and, if that charge is above its true cost, he will find some one prepared to supply it at its true cost: if he fails to do this, he is likely to fail in business altogether; since a small percentage on the things which he buys may affect his net profits by a large percentage. But the private consumer has often better things to do with his time than to give it to discovering the cheapest market for each class of purchases; and, not being a good judge of quality, his judgment is often mistaken when he does try. The retailer, knowing this, is apt to adapt his charges not to the cost of the services rendered, but to what the consumer will bear: he is apt to charge highly in those branches of his business in which his clientèle cannot form a good judgment for themselves or are unlikely to trouble themselves to buy in the cheapest market.

For instance the customer seldom knows when the wholesale price of a thing has fallen, and will probably expect to be supplied at his old price; so the retailer, unless for some special reason, is slow to follow a fall in wholesale prices. There may indeed be a special reason to the contrary. He may seize the opportunity of using that commodity as a decoy to attract customers: he may put down its price so low that it no longer pays its share of the general expenses of his establishment, and advertise the price prominently. Or some rival may have done just that and compelled him to follow suit. Sooner or later something of this kind is certain to happen. The longer retailers generally

P M

¹ From an unpublished undated MS.

have delayed to follow a fall in wholesale prices, the more striking is the effect which an ambitious firm can attain by prominent offers of large quantities of the commodity at a very low price: and for a long time to come the remaining retailers may find themselves partly crowded out. The fear then that a long delay to lower the price may be disastrous to them partly overcomes their unwillingness to move, even before the general public has learnt that they ought to move. But the unwillingness is strong; the gain to be got by selling at the old price to contented customers is clear; the danger may not seem pressing: the wholesale price may perhaps rise again and a hasty movement may need to be soon retraced. Again, every change is an evil in itself: it does not press only on old-fashioned tradesmen; but is sometimes specially troublesome to progressive retailers, who bring out expensive priced catalogues at intervals, and encourage customers to send orders in writing which can be filled up with great economy of labour in the warehouse without touching the open shop. When therefore the retailer thinks it no longer safe to ignore a fall in wholesale price, he often prefers giving a rather better quality at the old price, to formally lowering his price. He thus pleases his customers, does not bruit about the fact that wholesale prices have fallen, does not disturb his price list; and yet he puts as great a difficulty in the way of a rival, aiming a sensational stroke, as if he had lowered his price.

Lastly the retailer's working expenses are not affected by wholesale price. If that falls by say a quarter, he has made the full corresponding reduction in retail price when he has deducted a quarter of the old wholesale price, a quarter of the insurance against risk that the commodity would depreciate before sale, and rather less than a quarter of his own net profits. Hence the retail price cannot be expected to fall in the same ratio as the wholesale price, unless there has been meanwhile a reduction in the proportion which the retailer's working expenses bear to his turnover. And, though such a reduction may be in progress and in fact has been in constant progress for many years, it would not except by accident make a perceptible advance during a rapid fluctuation of wholesale prices. These seem to be the chief causes of the well-known fact that retail prices seldom fluctuate downwards as far and as fast as the corresponding wholesale prices.

Retail prices are rather quicker to follow upward than downward movements of wholesale prices for several reasons. When, as often happens, there is an understanding among retailers in the same trade as to prices, a rise in the wholesale market is more likely than a fall to stimulate prompt common action; and trade etiquette is apt to condemn as aggressive the action of a retailer who refuses to go with the others, on the ground that he has laid in a large stock before the rise in price. And even where there is no such understanding, the retailer stands to gain something in hand by promptly following a rise, just as he does by delaying to follow a fall.

But on the other hand the customer who is jolted out of his habit, finding the price raised against him, is apt to be set on the inquiry whether he cannot do better elsewhere. So the retailer prefers keeping the price nominally fixed, but supplying a rather inferior quality. And as in the case of falling prices a temporary change, which may need soon to be reversed, is inconvenient; and in any case the rise in retail price corresponding to a rise in wholesale price ought not to be in equal proportion, because working expenses are not affected by the change.

Thus then a fall in wholesale prices tends to raise, a rise in wholesale prices tends to lower, the qualities of the goods retailed under the same name. The real retail price, that is the price account being taken of quality, falls a good deal more slowly than the wholesale price; and it rises rather more slowly. Fluctuations of the nominal price are smaller and slower than those of real retail price, which again are smaller and slower than those of wholesale price. When, as before 1873, prices were generally rising, adulteration was rampant in almost all classes of goods. The following period of almost steadily falling prices saw a general dwindling of the area covered by adulteration. About 1873 "woollen" goods were largely made of cotton: twenty years later cotton was seldom found except in fabrics where it served some useful purpose; or again, in fancy dress materials, the fashion for which had extended downwards to strata which demanded cheap stuffs for occasional wear during the short life of the fashion. Of course there are numerous exceptions: the progress of chemical and mechanical science is always bringing cheaper substitutes, which are more taking or

will really answer the purchasers' purposes better than the earlier substitutes: and they will make their way in spite of a fall in the price of the genuine commodity. But this does not impair the truth of the broad proposition that a rise in price increases and a fall in price diminishes the inclination of retailers to offer inferior goods to their customers, rather than to tempt them with better goods than they have bought before.

It stands to reason that retail prices follow wholesale prices the less closely the larger the elements of partial monopoly and of expenses of working that enter into them; and therefore, other things being equal, the smaller the quantities in which they are retailed. The retail price of milk scarcely fluctuates at all: a fall of fifty per cent. in the price of tea is not likely to be reflected in the charge made for a cup of afternoon tea at a fashionable hotel. Railway companies, the largest of retail dealers, do not revise their list of passenger fares to meet a fluctuation in the price of coal; unless they had nearly decided on that course on other grounds, and the rise in the price of coal serves to precipitate their action, as a heavy shower of rain may bring down a rock that is already almost on the move.

Again in commodities such as beer and tobacco, which are sold by the quart or ounce for a few pence, a small variation in nominal price is not possible. So small alterations in wholesale price (or in cost, for the retailer is often an agent of the producer), including those due to taxation, work themselves out in changes of quality, unless it happens that a change in nominal price had already been impending. Things which are not sold by measure, but by name, are altered quickly in quantity; and, since selling by name is the rule in backward districts, retail prices in them are often astonishingly sensitive.

Further, there must always be a good many movements of retail price which stand in no relation to changes in the wholesale trade, or are even in opposite directions. They are like snow flakes which rise as they fly past a house in a strong wind, not because gravitation is in abeyance, but because it is overborne

¹ For instance, in 1878, when the taxes on sait were readjusted throughout India, being raised in the southern half and lowered in the northern, it was expected by many that the rule of custom and the smallness of retail purchases would prevent the raiyat from feeling the change for a long time to come. But the result was opposite. Sait was retailed by the pinch. And from the day when the new rule came into operation, the pinch was increased in size in the northern, and diminished in the southern half.

by the force of wind eddies. Thus, when fashion changes, average retail prices of dress stuffs may fall while wholesale prices are rising; because in the former goods that are going out preponderate and in the latter goods that are coming in. When a harvest of high quality is followed by one in which much of the grain was spoilt, old flour will be worth more than new; and retailers may be raising the prices of their remaining stocks, while wholesale prices show a decline. Again, an individual retailer may move the price of a certain commodity apparently at random, when he or a neighbouring rival begins or ceases to make it a catch article; or when the stock he has laid in turns out to be in bad condition and must be cleared out at a sacrifice; and so on. But all cases of this kind put together cover a very small part of the transactions of life; and, it would not have been worth while to call attention to them at all, were it not that they have furnished sensational material to writers who have argued that retail prices generally are arbitrary and scarcely at all subject to economic law.

XX

FRAGMENTS

I think a young man's autobiography has seldom much interest: but observations by old men on the response of their own phases to changes in the prevailing phases of political and social ideas and sentiments during half a century or more have interested me: and, if time and strength favour, I should like to leave behind me some general notes as to my mental and socio-ethical experiences. But I think time and strength will not serve for this. (1921.)

In the years of my apprenticeship to economic studies, between 1867 and 1875, I endeavoured to learn enough of the methods of operation of the greater part of the leading industries of the country, to be able to reconstruct mentally the vital parts of the chief machines used in each, neglecting, of course, all refinements and secondary complications. This endeavour was associated with an attempt to form a rough estimate of the faculties and training needed for working each, and the strain involved therein: and, my guide—if, as generally happened he was the employer or a foreman-would generally answer my inquiries as to the wages which each was receiving. After continuing on this course for some years, I began to ask my guide to allow me to guess the wages. My error did not very often exceed two shillings a week on one side or the other: but, when it did, I stopped and asked for an explanation. Sometimes my mistake was due to the fact that the work was easier or more difficult than it appeared to me: sometimes to the fact that the demand for the work was largely seasonal, or liable to variations due to fashion and other causes: sometimes that a high grade operative was being set to rather low grade work, because his proper work was not on hand just then, and was of course being paid the wages of his proper work: sometimes that the work was a blind alley, rather low grade and not leading up to higher work; and so on. These explanations were specially conclusive when I inquired why men were doing work which seemed within the range of women. In almost every such case, it was shown that the work was more difficult, or required more strength or more prompt resource and judgment, than appeared on the surface: or that it extended on occasion into hours that were forbidden to women by law; or—and this was no uncommon occurrence in those industries in which the large majority of the operatives were women—that a man was being paid more highly than a woman would be for the same work, because he seemed to develop the qualities required of a foreman, and the business required a larger number of such men than could find employment in it without some such special arrangements.

A little before 1891 St John's had organized a splendid ½d. post with three times the conveniences, from the 'Varsity man's point of view, of the 1d. Royal Post. It more than paid its way, though its stamps could only be bought by Johnians. I recollect that, when it was quashed, I was set on the inquiry as to Consumers' Surplus and that I made much use of its experiences. I also went into the dependence of a cheap local parcels delivery on the right to carry local letters: taking account of the fact that it costs as much to send a book from here to Selwyn Gardens or Christ's as to California or Japan. On such bases I guessed the percentage which Consumers' Surplus was of total receipts under a free system; while postal statistics gave me a basis for aggregates. But I have forgotten details and life is short.

Cournot's work is now easily accessible, mainly through the good efforts of Professor Fisher; and anyone who reads it can imagine the influence which it would exert on a young man, accustomed to think in Mathematics more readily than in English, and bewildered on his sudden entry into the strange land of economics, where many of the cardinal doctrines seemed to be mathematical propositions overlaid by the complex relations of real life; and at the same time distorted and stunted because the older economists had not recognized the mathematical conceptions that were latent in their own. I have long ago forgotten Cournot; and I may be wrong. But my impression is that I did not derive

so much of the substance of my opinions from him as from von Thünen. Cournot was a gymnastic master who directed the form of my thought. Von Thünen was a bond fide mathematician. but of less power: his blunder as to the natural wage is not of the same order as Cournot's little slips. But, to make up, he was a careful experimenter and student of facts and with a mind at least as fully developed on the inductive as on the deductive side. Above all he was an ardent philanthropist. And I had come into economics out of ethics, intending to stay there only a short while; and to go back, as soon as I was in a position to speak with my enemies in the gate, that is, with those men of affairs who dashed cold water on my youthful schemes for regenerating the world by saying "Ah! you would not talk in that way, if you knew anything about business, or even Political Economy." And I loved von Thünen above all my other masters. Professor Fisher has cared for Cournot. I would that someone would care for von Thünen. He should not, I think, be translated: but an abstract of his work should be given, with translations of a good deal of his second volume.

Prediction in economics must be hypothetical. Show an interrupted game at chess to an expert and he will be bold indeed if he prophesies its future stages. If either side make one move ever so little different from what he has expected, all the following moves will be altered; and after two or three moves more the whole face of the game will have become different. (1922.)

Defoe tells us that an Englishman found salt carried on the Volga in clumsy boats, and proposed an improved plan to the Grand Duke of Moscow. He listened carefully and then said: "'Tis well for you that you are not one of my subjects; do you come hither to set up projects to starve my people? Get you gone forthwith out of my dominions upon pain of death. You would perform that work with eighteen men, on which now one hundred and twenty are employed and get their bread by. What must the hundred and two men do that are to be turned out of their business? Must they perish and be starved for want of employment? Get you gone." In this venerable and malignant

fallacy there is a grain of truth: and, partly for that reason, it is quite alive now, though it has been slain a thousand times. What then follows? Only that such doctrines must be slain ten thousand times. For this it is necessary to go into the market place, to study the people, to enter into their ways of thought. It is necessary to watch every twist and turn of agile and seductive but generally honest writers, such as the authors of Merrie England and Coin's Financial School; and to meet them before the people, so that the people will see what is done; and to slay the old fallacies again and yet again before their eyes.

. Railways afford a striking instance of the common rule that the goods made for the few are often produced by cheap machinery and makeshift appliances fitted up for a short occasion and slight wear; but that there is no expense to which it is not worth while to go in preparing the most complex, delicate, durable and efficient machinery for producing things that will be consumed by the great mass of the people. The cheapest things are the cheapest largely because it has been worth while to produce them by the most expensive machinery. The cheapest railway fares and freights are on lines on which there is so incessant a rolling of wheels that the permanent way and all its appliances can profitably be constructed almost regardless of cost and with a sole view to strength and efficiency. And, on the other hand, the highest charges are those of railways made on the cheapest possible manner through sparsely peopled districts. Such railways generally pay very little for their land. and economize in every direction; but they carry so few units of traffic that the total cost per unit is often higher even than the high charge made for it.

Competition is a monster now grown of overwhelming strength. If we were perfectly virtuous, he would now feel himself out of place and slink away. As it is, if we resist him by violence, his convulsions will reduce society to anarchy. But, if he can be guided so as to work on our side, then even the removal of poverty will not be too great a task.

Combination as to production, and to a minor extent as to trading, is itself the source of economies which cannot be obtained without it. There are drawbacks, of course, as regards energy and freedom and elasticity, some of which affect the combines and some the public. But there is generally a kernel of solid gain (not necessarily net gain) which arises from natural causes and which could not be reached by any improvement in moral attitude.

Combinations as to employment, on the other hand, bring in no economies that could not be obtained by an improvement in moral attitude: and they necessarily involve waste.

At the same time the evils against which they are directed are some of them so vital that, so long as the moral improvement route is not practicable, the combination route may be worth, and indeed is worth, what it costs in many cases: and, in some cases, more.

There are a few narrow occupations in which blind people can earn in full self-respect a moderate living: if people whose eyesight gives them a larger choice moved into these occupations, the harm done to the blind would outweigh socially any slight gain that consumers might get from the cheapening of the products of those occupations; and any subsidizing of such a movement would be distinctly anti-social. Now it may be asserted that the lower grade industries generally, and especially what are called the "sweated industries," offer the only refuge for those who, being weak in body or character or both, desire to live an independent life: and that, when women belonging to well-to-do or artisan families do work at home or elsewhere for such industries, the injury which they do to the poor and weak producers outweighs the benefit which they render to consumers, as well as their own pecuniary gains. Such an argument needs to be carefully constructed. There is a danger that a few sensational cases of hardship may be multiplied by iterated reports, and loom much larger than they should: and therefore every item in the argument should be set out in quantity and not merely in quality. When that has been done, when the best figures to be had, whether based on actual enumeration or largely conjectural, have been analysed and criticized and rectified, it may conceivably be found that the intrusion of well-to-do people into low grade industries is on a sufficient scale to alter materially the relations of supply to the demand for labour of that grade, and to depress its wages. But the chance that this result will emerge appears at present very small, and it may be provisionally neglected.

If an industry is temporarily depressed, an accident that gives it some employment may do good, even though it is in itself an evil: e.g. if part of a sea-wall is washed down at a place where some huge failures (probably due to over-confident enterprise) have caused much idleness, the result may be a net social good. For those who are set on it will consume things that otherwise might have been consumed by the rate- or tax-payers: and that is in itself no harm. And they will help to put into gear the local trade and industry. But that merely shows that, when a machine is out of gear, the rules for its ordinary use are not necessarily the best. Such exceptional cases are therefore to be set aside.

The function of Government is to govern as little as possible; but not to do as little as possible. When it governs it so far fails, as an army fails when it fights. But an army to succeed must be active; and a Government to succeed, must be ceaseless in learning and diffusing knowledge, in stimulating and cooperating.

The Government, especially in a free country, is not an entity outside the nation, but a considerable part of the nation; and it can discharge its duties to the nation only by so arranging and developing its work as to make government itself a great education. This involves an extension of local responsibilities wherever possible. But devolution under rigid superior control is in danger of becoming mechanical and formal. The devolution that makes for organic evolution must not be limited to responsibility for carrying out details of schemes devised by the central authority: it must extend to the thinking out and the carrying out of appropriate constructive schemes in which the central ideas of the national scheme are adjusted to particular local conditions and requirements.

A country, which has no considerable supply of mineral oil, must always jealously guard her supplies of coal for use at sea. But it seems probable that the greater part of the uses to which coal is now applied in furnaces, fireplaces, etc. will ultimately be handed over to electricity, generated by coal consumed near the mines, with a careful preservation of by-products. Future developments of technique will decide how far gas will hold its own for special uses: but the direct consumption of coal, the most cumbrous of heavy products that travel over the whole country, will in the main be largely superseded by that of electricity, which carries itself at no expense, when adequate wires have once been set up. Such an arrangement would give scope for monopolies so powerful as to require thorough control by the State; and might seem at first sight to be suitable for a State monopoly. But the utilization of the by-products of coal is a most important matter; and it is in urgent need of the elastic energies of private enterprise in order to secure that each decade may see a great advance on that which went before it. Therefore it seems best that the State should cautiously but firmly control the charges made in each district for the standard "Board of Trade Unit"; and leave the process of obtaining it in private hands.

Gilds of various kinds exercised much zeal and some wisdom in regulating the affairs of many industries during the Middle Ages. Most of these regulations were designed to promote the interests of a particular group of artisans or traders, without any considerable injury to other people: but they became obstructive when the conditions, to which they had been fitted, passed away. Some of them became unworkable when the conditions of an industry changed greatly. For a considerable time they suffered much from the substitution of machines driven by water power for those which had relied on the force of the human hand or foot. Many industries moved from their old seats in town or country to the neighbourhood of streams rushing down the sides of hills: and by moving they became free from the pressure of obstructive rules made in times when the powers of horses and of human feet were the chief sources of the movement of mills, looms, and other machines.

These changes in the methods of industry and in its geographical distribution caused much hardship, and many unwilling movements from old homes to inhospitable banks of falling streams. Industry itself might seem to have had a pitiless joy in the discomfort of mere individual men and women. But the glory of the streams was soon to be dimmed. A monster force, derived from the sun long before mankind had appeared on the earth, soon laughed to scorn the power of such small streams as those of Britain: and industries began to settle near coal mines, and in other places to which coal could be conveniently conveyed.

Coal-engendered steam not only displaced water power from its first place as a prime-mover; it also displaced rivers and canals from their dominating influence over long-distance movements of ores, coal, grain and other weighty materials. But the great paths of the ocean gradually gained far more traffic than the rivers had lost: for coal became the chief source of man's power of massive movements over considerable distances, as well as of most of the mechanical work that had been effected not very long ago by wind and water and by the muscles of horses and of men, women and children.

These changes in technique are still increasing their influences on the characters of mankind. They are enabling children to spend for their own benefit much time and energy which used to be spent in hard bodily toil, that developed scarcely any valuable qualities save those of patience and endurance.

I think that in the distant future there may be an international concert for the regulation of discount in order to diminish short period fluctuation of general prices: but I do not think that discount can control the rate of interest permanently: of course it might conceivably have a great effect under imaginary conditions; but not, I think, under real conditions. I don't like notes printed on gold: and, on the whole, I incline to think that no effective regulation of general prices, that is consistent with the maintenance of an international currency based on gold (to that limited extent to which it is carried now), is possible without international agreements as to taxes on gold

output, rising when gold is in too quick supply and falling in the converse case: the proceeds of the tax to be so distributed that the countries directly affected by it will not be losers. I think that might probably suffice: for the tendency to use gold merely as a reserve is on the increase I fear, and the notion of gold running short seems to go into the background. But, if it did, a few kilogrammes of silver might be brought to the aid of a gold kilo. (1916.)

Wealth exists only for the benefit of mankind. It cannot be measured adequately in yards or in tons, nor even as equivalent to so many ounces of gold; its true measure lies only in the contribution it makes to human well-being. Now, when bricks and sand and lime and wood are built up into a house, they constitute a greater aggregate of wealth than they did before; even though their aggregate volume is the same as before: and, if the house is overthrown by an earthquake, there is indeed no destruction of matter: but there is a real destruction of wealth. because the matter is distributed in a manner less conducive to human well-being. Similarly, when wealth is very unevenly distributed, some have more of it than they can turn to any very great account in promoting their own well-being; while many others lack the material conditions of a healthy, clean, vigorous and effective family life. That is to say the wealth is distributed in a manner less conducive to the well-being of mankind than it would be if the rich were somewhat less rich, and the poor were somewhat less poor: and real wealth would be greatly increased, even though there were no change in the aggregate of bricks and houses and clothes and other material things, if only it were possible to effect that change without danger to freedom and to social order; and without impairing the springs of initiative, enterprise and energy. There is unfortunately no good ground for thinking that human nature is yet far enough improved away from its primitive barbarity. selfishness, and sloth, to be ready for any movement in this direction so rapid and far reaching as to effect with safety any great increase in real wealth by a mere redistribution of material wealth.

It is probable that a future Social Order may greatly surpass the present in justice and generosity; in the subordination of material possessions to human well-being; and even in the promptness of its adjustments to changing technical and social conditions. But a grateful memory will always attach to the excellence of the work, which free exchange has done and is doing, in turning to account the combative and predatory energy of the present crude nature of man: it has supplied much of the driving force, by which crowded districts in the western world have been endowed with material comforts and intellectual training beyond those which were attained a few centuries ago even in places where nature's bounties were large relatively to the number of people whom they were called on to support.

The main cause of this success has been the simple and almost mechanical action of the forces by which the modern social order has built up an organization of effort so intricate that it could not be described adequately in a long study; while yet it works smoothly; and its wastes through friction and maladjustments are small in proportion to its achievements. It turns to account the faculties of forecast and contrivance and business courage. But yet a great part of its work is automatic in this sense, that its chief and sufficient motive is the reasoned expectation of net gains resulting from its pursuit with sound judgment and courage.

Work is not a punishment for fault: it is a necessity for the formation of character and, therefore, for progress. (1922.)

Effort is essential to us; therefore, unless we are to be transformed in nature (as well as faculty), there must be something in heaven that we can accomplish, is worthy of accomplishment, and requires effort. Therefore either heaven must be a different place from that which Oriental quietism has imagined; or our nature must be so fundamentally changed after death that there is something like a breach of continuity in it. In the latter case, there would be little apparent reason in holding the future representative of a man responsible, in good and evil, for that man's life. These considerations seem to point to the conclusion

that the old Saxon ideal of heaven (as a place where the "hunting grounds" are more noble in scope and character than those of this earth) is more true to the fundamentals of human nature than Asiatic, or even semi-Asiatic, conceptions of it. (1921.)

I have come to the conclusion that the Unknown probably has concerns in which this world plays a part almost as insignificant as that played by a single small insect in the history of this minute world.... Every year my reverence for the Unknown becomes deeper; my consciousness of the narrow limitations of all the knowledge in this world becomes more oppressive; and my desire to add to that quantity something that will count, though it is a microscopic fraction of that microscopic whole, becomes stronger. (1916.)

My wife has counselled and aided at every stage of my every outpouring: and given the best part of her life to aiding me by counsel in all matters large and small at every stage. She refuses to allow her name to appear on the title page: but that is its proper place. (From the draft of a preface to a proposed final volume, dated 19. 3. 23.)

PART III LETTERS

To Professor STANLEY JEVONS

1, Glen Oran Villas, Apsley Road, Clifton 30 June, 1879

Dear Professor Jevons,

I take up the pen with some shame to acknowledge your letter of May the 12th, and the safe arrival of "Rau." When your letter came I was in an unusual press of work which, as I was not very well, I could hardly get through; and when the pressure was over I forgot your letter till just now.

I am looking forward with the greatest interest to the new edition of your book. During the last two years I have been too much occupied with practical work to do any considerable amount of study or writing. I hope better days are in store. and I think soon I may begin on a book of curves of which the papers sent you by Mr Sidgwick will form the basis. The pure theory of international values I don't much care about. I don't think it can be made easy without curves, and I think I shall leave it very much as it stands; but in the rest of the book I propose to give only a subsidiary place to curves, and to develop the application of the theory somewhat. In this way I hope to contribute my mite towards that work of "real"-ising the results of abstract quantitative reasoning in Economics of which I recognize in you the chief author. The Economics of Industry, the 2s. 6d. book which my wife and I are writing, is nearly finished. You may be sure that one of the first copies that are bound will find its way to Hampstead.

Yours faithfully,

A. MARSHALL.

To A. H. D. ACLAND

17 Chesterton Road, Cambridge 26 Feb. 1886

My dear Acland,

I don't think my views on Labour Statistics are worth much: but as you ask for them, here they are.

American experience shows, I think, that a Labour Statistics Bureau may be of great service provided it does not attempt too much. I would have it aim at collecting only a few results at first, but subjecting those to a severe ordeal. It would be slow work at first: but nothing trustworthy can be got till certain disputed points of principle have been settled. When this has been done for a few representative trades, the work can easily be extended to others.

My own plan would be to issue to employers and employed at the chief centres of, say, the machine making trades, forms to be filled up, shewing not only the rates of wages in each branch, but the proportion of workers who get each rate, with separate columns for additions through overtime and piece work, and for deductions through short time. On this basis a draft Report for each such centre should be issued; local papers would no doubt gladly print it. Then notice should be given that a representative of the Bureau would hold a court at a certain time, say in the town hall; and hear arguments to shew that the figures in the draft Report were too high or too low: reporters being present. Then the Bureau should sum up and deliver judgment in its final report.

The process would at first be tedious; but I have so many hundred square yards of wage statistics which I don't much believe, that I would gladly exchange some of them for as many square inches of figures that had been tried in open court in this way.

I agree with you that lists of blue books ought to be more accessible.

Yours very truly,

A. MARSHALL

To Rov. J. LLEWELLYN DAVIES

Balliol Croft, Cambridge

Feb. 1886

....I have gradually become convinced that the main evil of our present system of aid of the poor is its failure to enlist the co-operation of the working classes themselves. It is because I believe that the working classes alone can rightly guide and discipline the weak and erring of their own number that I have broken silence now.....

But the feeling that the Residuum ought not to exist and that they will exist till the working classes themselves have cleared them away....has coloured my whole life and thought for the last ten years. I care about it more than about all other political questions put together.....

The peril is really very great. Soon the control of the working classes over Imperial and Local Government will cease to be nominal and become real. If they had learnt to look for guidance to the C.O.S. people, they could have been shown how to use out-relief rightly, and not to abuse it. As it is, I believe they will abuse it.

I remain,

Yours most respectfully and sincerely,

ALFRED MARSHALL

I do not think undeserving people often get out-relief: but I think that the House is in many ways less disagreeable to them than to those of clean minds.

To JAMES BONAR

Balliol Croft, Cambridge

4. ii. 1891

My dear Bonar,

....Do you think I should ignore those reviewers who complain that I overweight what I say with qualifying and explanatory clauses, and that it would be better if I put what I had to say broadly, and left the corrections to come in

gradually? I am like an ass between two bundles of hay—not stationary, but—wagging my head first towards the aim of (moderate) simplicity, and then, as a new critic like yourself comes down on me for inaccuracy, craning out again towards the aim of having every statement (taken with its immediate context) completely accurate as far as it goes. You are so careful and exact a writer on these subjects, and yet your style is so pleasant, that I should value your opinion on the point very much.

So far I have found some refuge in the unsatisfactory compromise of retaining and even increasing the repetition of qualifying clauses, but relegating them to footnotes....

Yours very sincerely,

ALFRED MARSHALL.

Balliol Croft, Cambridge 27. ix. 1898

My dear Bonar,

May I venture on the rashness of a definition? I do not myself hold a classical author to be one who more than others has said things which are true, as they stand. I don't feel myself bound to agree with him on many points, not even on any point. But he is not for me classical unless either by the form or the matter of his words or deeds he has stated or indicated architectonic ideas in thought or sentiment, which are in some degree his own, and which, once created, can never die but are an existing yeast ceaselessly working in the Cosmos. With that definition I can to my own satisfaction say pretty well whom I regard as classical economists. I think such a large proportion of them wrote in the half-century 1770–1820 that that is rightly called the classical epoch. I incline to regard Petty and Hermann and von Thünen and Jevons as classical, but not Mill....

Balliol Croft, Cambridge

6. iii. 1899

My dear Bonar,

Blandford's death is a loss to progress. I had not realized how much he was bound up with you....

I do not want people to study Indian currency! I want them to have studied the economics of industry and trade; fluctuations of commercial prosperity; good and evil of international indebtedness, of paternal policies in railway matters and so on. I am using currency reserves as my peg; because currency reserves happen to be under discussion. But I am never weary of preaching in the wilderness "the only very important thing to be said about currency is that it is not nearly as important as it looks."

Yours ever,

A. M.

Balliol Croft, Cambridge

18. vi. 1912

Dear Bonar,

Speaking generally I may say that the chief interest in Symmetallism departed with the collapse of Fixed-ratio-mintage: and that the changes in the arts of extracting gold from the earth, etc., in which it is embedded have been so great, and the discoveries of gold fields so extensive, that the facts of a quarter of a century ago—with which my evidence was largely concerned—are mostly obsolete. As to the analytical part of the evidence [Gold and Silver Commission] I have not consciously changed my position. It is set out in some directions more fully in my evidence before the Committee on Indian Currency of 1899....

Yours ever,

A. M.

Balliol Croft, Cambridge 8. viii. 1919

My dear Bonar,

I have just returned home, and found your letter of August 2nd. I agree that no very large indemnity can be got from Germany by any one of the routes you mention: but I think they might be used simultaneously. I am however opposed on principle to every sort of attempt to exact a sum approaching to ten thousand million pounds, even though the greater part

of it might in fact be paid in territory. If—as appears to be the case—Germany must be forced to cede much territory in Africa as well as in Europe, I think that such territory should be accepted at the very high money value which she would naturally set on it: and the remainder of our demands on her might be covered mainly by the transference of securities representing command over property in various parts of the world.

In any case, I think, no transfer should be enforced which cannot be put through quickly. For the military occupation of Germany, which would be required to enforce large payments spread over many years, would involve so much expenditure and so greatly retard that quenching of the military spirit, which is needed to restore British industry to its sober, earnest habits of work, that its net effect might probably be an economic loss. The hatred which it would cause, even among those numerous though not specially vocal Germans, who try to see our side of the conflict, would, I think, be an enduring calamity.

I have not read Giffen's article on the payment of the French 1873 indemnity in recent years, but I recollect that I thought it exaggerated the harm which the purely economic side of the inflation did to Germany. The main source of the mischief appeared to me to be the enormous increase of influence which the results of the war (geographical, political and economic) gave to the German jingoes. In 1869, they were, I believe, a relatively small minority of the population of Germany, except in the North East provinces; but the war set school teachers, among others, to wallow in jingoism; and the average German as he entered manhood was very much more jingoistic than he would have been if born a little earlier. And, though the milliards were an important contributory cause to this deterioration of quality, I think that a similar, if milder, madness would have spread over the people without it.

In fact the milliards did this good; that they made German business men so over-confident as to intensify the subsequent depression of trade. That depression was a wholesome medicine and mitigated much of the evil influences which the indemnity exerted on German business; though it did not check the domination of the military caste over society, over the universities, and—partly through them—over the schools.

I therefore oppose the demand for a huga indemnity in the interests of the British nation, even more than on ethical grounds: but I think that, if liberal allowance be made for Germany's property in land and its fixings in Africa and elsewhere, even £M10,000 might be got out of her.

I don't go into detail: but I do not regard a compulsory gift of German goods to us as necessarily a danger. Any violent disturbance of a particular British industry is of course an evil: but most of the goods which Germany could send us would be such as she might have exported to other countries in Europe or outside of it. It would probably not be well to export those goods: but we might export similar goods of our own to the markets to which they would have gone if Germany had been free in the matter. Again our agriculturists could do with any amount of German potash. German sugar is also in elastic demand; but of course no vast quantity could be handled in the next few years; and so on.

I have recently been much tempted to publish some of my opinions on current financial and social problems: and also on the strange compound of good and evil in the character of the German population—most people who write on the subject seem never to have associated, as comrades, with Germans, and to recognize only the evil. But my strength fails fast; and I have much half-ready material, belonging to my special province, which will need to be cremated on my funeral pyre. So I dare not write controversy on matters as to which I have no direct responsibility: and indeed I have to cut down even my reading of current events rather severely.

I live so much out of the world that I did not know you were in England: that good Mother must rejoice in your return even as does one of her humbler sons.

Yours very sincerely,

ALFRED MARSHALL

From THOMAS BURT, Miner and Privy Councillor

The Reform Club May 10th, 1892

My dear Professor Marshall,

I have not till this morning had time to carefully read your paper on State aided pensions &c. in the Economic Journal. I have read it carefully and with great satisfaction. It is to my mind one of the most thoughtful, and altogether one of the best, things I have read on the subject. I agree with it all. You spoke of having got into "hot water" over it, or some portion of it. I really cannot understand why. The tone of your article from beginning to end is judicial, and not a word of censure is applied to man or institution. Of course the "hot water" I only take to mean that rather strong exception has been taken to some of the opinions you express.

Our conversation the other day was conducted under rather unfavourable conditions, and probably I have not dealt specifically with the point you wished to bring before me. In that case I shall gladly forward a supplementary epistle should you so desire—though perhaps the entire agreement I have expressed will suffice.

With kind regards to Mrs Marshall and your dear self-

I am very truly yours,

THOS. BURT.

To L. L. PRICE

Balliol Croft, Cambridge 19. viii. 92

.... In the early seventies, when I was in my full fresh enthusiasm for the historical study of economics, I set myself to trace the genesis of Adam Smith's doctrines. I have long ago forgotten all details, but the general impressions are very fresh in my mind. On the business side I thought he was entirely British (Scoto-English): as regards philosophy and "tone," I thought he was not so Scotch as was commonly supposed nor did I think he

was French. In these respects he seemed to me to have been markedly under the influence of Locke. But as regards analysis. and the development of economic science proper, he seemed to me entirely French. (There were great lacunae in my reading. Foxwell says Mirabeau was very important: I know nothing of him even now and probably Foxwell is right. I knew next to nothing of Petty and nothing of Cantillon: but I know them now, and I do not agree with Foxwell about them.) I found so much in the Physiocrats which I had thought to belong to Adam Smith, that at first I got quite set against him. But afterwards I thought that many of these things were in substance older even than the Physiocrats; and that it was the form of his thought rather than the substance that he owed specially to them. And then I grew to think that the substance of economic thought cannot well be to any great extent the work of any one man: it is the product of the age. Perhaps an exception should be made for Ricardo: but everything of importance that was said in the five generations 1740-65, 1765-90, 1815-40, 1840-65, 1865-90, seems to me to have been thought out concurrently more or less by many people. And so I began to look for Adam Smith's originality more in the general conspectus which he presented than in particular doctrines. And as regards this, the more I knew of him, the more I worshipped him. It was his balance, his sense of proportion, his power of seeing the many in the one and the one in the many, his skill in using analysis to interpret history and history to correct analysis (especially as regards the causes that govern human nature, but also in other matters), that seemed to mark him out as unique; very much as similar qualities have more recently given a similar position to Darwin....His high prerogative comes from his having shown how inseparable induction and deduction are. In answer to those who say that he was inductive and his followers strayed from his example into the paths of deduction, I say that he was never purely inductive, but that there was an element of deduction in all his work: and that he never argued from a crude enumeration of particular historical instances. I think he was always inductive, but never merely inductive....

To Professor E. C. K. GONNER

Balliol Croft, Cambridge

9. v. 94

My dear Gonner,

You ask me to tell you something about my own work in connection with the post-graduate study of Economics in Cambridge. I understand that you will get direct from Foxwell and others an account of their work; and that the Cambridge Calendar and Reporter, supplemented by the detailed prospectus of lectures in Moral Science, for the typical year 1887-8, give you all the necessary information as to the general scheme of Cambridge teaching, examination, scholarships, &c.

I do not think it can be said that Cambridge offers very high inducements to graduates or undergraduates to study Economics. Those who do study it have generally a strong interest in it: from a pecuniary point of view they would generally find a better account in the study of something else. In particular the ablest students for our great Triposes—Mathematics, Classics and Natural Sciences—often think that they would rather diminish than increase their chance of a Fellowship by taking up a new line of study: and they are generally advised to try to do some original work in that with which they are already familiar.

Methods of teaching, of course, vary, but I will explain my own private hobbies. That of course does not come to much by itself. But it seems to be what you want in this particular letter.

I recognize the existence of students whose minds are merely receptive; and who require of their teachers to render plain their path in the systematic study of a text-book; or even to speak an elementary text-book at them if they cannot or will not find the time to read a text-book for themselves. But I always warn such students away from my lecture room.

Even my more elementary teaching makes no pretence at being systematic, but aims at treating certain dominant ideas and representative problems more fully than would be possible if every side of the subject had to be discussed equally. If I think the class are merely listening and not thinking for them-

selves, I try to shake them out of the rut. If they are thinking for themselves, I try to lead them on until they have got pretty well into the middle of a real difficulty and then help them to find their way out. I say very little about method; but I endeavour in every advanced course of lectures to work out rather fully a difficult example of almost every important method, having generally set, a week before, a question bearing on the example, so that they will know its difficulties before I begin.

My aim is thus to help them to acquire a delicate and powerful machinery for scientific investigation, without requiring them to attend long courses of lectures. For that is what graduates generally do not care to do. Some people say that books have superseded oral teaching, at all events for able students; I don't think they have. But I think able students are injuriously treated when a chapter of a book is spoken at them. It ough' to be printed, and given to them to read quietly. But the best way to learn to row is to row behind a man who is already trained; the learner's body moves by instinctive sympathy with his. And so the trained teacher should, I think, work his own mind before his pupils', and get theirs to work in swing with his. The graduate picks up the swing quickly. But he often wants a good deal of personal advice. I am "at home" for six hours in every week to any student who chooses to come to see me; and graduates generally come more frequently than others. The initiative in the conversation rests with the student; but if he is interested in any matter, I pursue it at length, sometimes giving an hour or more to a point which is of no great general interest, but on which his mind happens to be troubled; and I give much time to detailed advice about reading.

Of course the great hope in the background is that some of them will go on to do original work. But unfortunately more than half of those from whom I have expected most have been carried off by Headmasters to toil for the good of others; and though the spirit is often willing, the flesh is generally too weak to stand the strain of original work while teaching in a school. Such men of course help to form a sound public opinion in those parts of the country in which they settle; but they do not contribute much to that reward of the teacher's work which he loves best. It is those few who are able to persist that he cares

for most; and one has two things to fear—on the one hand that they will be weighted down by mere information, or, on the other hand, that they will pursue some special enquiry without adequate general training and knowledge.

I take therefore great pains about the choice of books for graduates to read. I never recommend the same list to any two. Nor will I give a man any advice at all till I know a good deal about his mind, and have formed some opinion as to those things in which he is likely to excel. My first aim is to stimulate his enthusiasm for knowing and perhaps for doing something in particular. But as time goes on, I begin to look out for his weak points and, where necessary, to put pressure on him to read a few sterling books that are good for his mental health-that will perhaps give him important knowledge that he does not particularly care for, or will exercise his mind in difficult analysis and reasoning for which he has no special aptitude. The severe examination in Mathematics at large, which most Cambridge graduates prepare for, is a useful tonic in this regard, and greatly as any English economist must envy the large quantity of original work which German students put out at about the time of their degrees, I think it is possible that even German universities have just a very little to learn from Cambridge practice in this matter. Our students seldom write when they should: theirs perhaps occasionally write when they should not. I will add that I think Cambridge is not without some disadvantages as compared both with Oxford and the provincial colleges. The habits of mind fostered by the Mathematical Tripos have indeed induced Cambridge students generally to be more certain whether they know what they mean than most others. But Cambridge suffers much from the narrowness of the studies of all except those choice students who are able to think and read both for their Tripos and outside of their Tripos; and she suffers much from the lack of men who can put important truths in easy language that is attractive to able men who are not specialists. In these respects Oxford has a great advantage over her. Oxford gains too from the fact that her students can afford to read a little Economics, without departing from the straight path which leads to success in Greats; whereas in Cambridge Economics does not enter in any way whatever into any Tripos

except the Moral Sciences and the Historical. And the provincial colleges have a great advantage over both Oxford and Cambridge, in the directness with which students at them are brought into contact with the problems of social and economic life.

Yours sincerely,

ALFRED MARSHALL

To Bishop WESTCOTT

Balliol Croft, Cambridge

23. ii. 97

My dear Bishop,

I have read with the greatest interest the Addresses you have so kindly sent me. Everything you say draws me towards forms of belief, which are not altogether my own, but the substance of which I am in some measure able to hold fast; strengthened by holy influences such as yours.

Yours most sincerely,

ALFRED MARSHALL.

Dosses Gasthaus, Grödner Tal, South Tirol

23. vii. 98

My dear Bishop,

The best things that I know of, the only tolerably good things, about Consumers' Leagues, are American. But I cannot send you references to them till I get home in September.....

My own views are that Consumers' Leagues are good things in their way: but dangerous. They are apt to get into the hands of those who want to do a great deal for humanity at small cost to themselves. Such people delegate the making of their white and black lists to trade-unionists and others; who have really two sets of motives. One is the same as that of the Consumers' League. The other is to keep up wages by making their labour scarce. The former motives they avow: the latter they keep in the background, perhaps being scarcely aware themselves how far they are governed by those considerations that touch their own pockets most closely. So the social enthusiasts

make themselves in effect agents for what is perhaps the most malignant of all social evils—the exclusion of the masses of the people from the best work which they are capable of performing. That is what the Gilds did as soon as ever they had got power and reputation and, above all things, the influence of the Church on their side. They put into their public declarations the most noble protestations of zeal for the public good and of zeal for true religion: and by that means they seem to have deceived the best men of their own time and many worthy historians of modern times, especially those who approach the subject from the Church point of view. But what did the Gilds really do? They checked improvements lest these should render their skill obsolete: they kept the masses of the people forcibly in occupations so low in grade and so overcrowded relatively, that the hunger and filth and the skin diseases born of the two lasted on in England for centuries after the people might have been fairly well-to-do if the free action of economic causes had not been checked by the Gilds, with their sanctimonious preambles.

.... "Masters" do not often profess philanthropic motives, when they combat the restrictive influences of Trades Unions. But in effect they often do fight the battle of the masses against class selfishness, from which no set of people were ever freenot even artizans. They prevent the few from entrenching their position by regulations that hinder the many from doing the best work of which they are capable, and from bringing up their sons to better work than their own. Consequently trade-unions -unlike the gilds in their later days-have exercised on the whole a liberating and elevating influence. Also Combinations of Masters-partly because they have been mere selfish movements-have lacked coherence; and have soldom been able for long together to exploit the public for their own interest. But Mr Smith argues, and not without reason, that combinations of masters and men playing into one another's hands will have coherence. If so they will bring to the front gradually the meanest characters among employers and employed, and ere long trade-unions will cease to be on the whole liberating and elevating influences.....

Yours very sincerely,

Balliol Croft

26, x. 99

My dear Bishop,

Patten's "Consumption" had maliciously hidden himself in the thickest of my hundred or more volumes of classified economic tracts. I am in no hurry for the volume; and it is possible that one or two articles in it may interest you. To be in any way of the smallest service to you is a high joy and pride to me.

I have been reading again recently your paper on the Organization of Industry. I think it is a masterly piece of work. I am just now working at the good and evil of Stock Exchange fluctuations. Like everything else which I touch in my second Volume. which will be more concrete than my first, I find it grows in difficulty in my hands. Thence I am to pass to speculation in goods, and that will bring me to think again about Mr E. J. Smith's schemes1. I am not inclined to regard them as less antisocial than when I first heard of them; but I incline to think that opposition to them from within the trades themselves can be trusted increasingly to limit their powers for evil. I cannot but think that the attempt to pledge the prestige of the Christian Social Union on behalf of the Standard Trade Union rate of wages, however it has been attained, is much to be regretted on many grounds. Two months ago [in Nürnberg] I was allowed to see one of the largest of those chromo-lithographic works in which English books and journals are "made in Germany." I was shown about by a partner, who was an Englishman, and he talked to me freely. The anti-social side of English Trade-Union regulations for the maintenance of a standard wage seems to be mainly responsible for the result that some tens of thousands of Englishmen are doing unskilled work at low wages in order that a small group of people, by cruel apprenticeship regulations, etc., may sustain their standard rate a few shillings higher than it otherwise would have been. Just those tradeunion rules which Mr Smith's movement tends to strengthen have the effect of checking the influx of workers into the higher

¹ [The reference is to the Birmingham Bedstead Association, much discussed in the Economic Beview of 1899, and commented on in Industry and Trade, p. 606 n. Eb.]

ranks of industry: and, should the movement spread, a rise in the customary wages in the majority of trades might and probably would be accompanied by a great injury to the wages and the general well-being of the working classes as a whole.

I read about the Co-operative meeting at Newcastle. I thought it was splendid. Only the report which I saw did not make Mr Livesey say that his objection to Trade-Unionism was limited to its aggressive forms and especially such as that of the old gas workers' union. He used to say this on the Labour Commission.

Yours very sincerely,

ALFRED MARSHALL.

Balliol Croft, Cambridge 24. i. 00

My dear Bishop,

.... I am not ashamed to confess that I know of no simple means by which a fair wage can be assured to all workers. I know of lots of simple means by which a fair wage and more than a fair wage can be assured to any particular group of workers that may be selected for the favour: but they all have unfortunately other effects. Some of them take from the rich and give to those who are less rich: I would promote all such by every means in my power that were legitimate; and I would not be specially scrupulous in interpreting that word. But the transfers of this kind that can be made by legislation, or by any sort of compulsion, seem to me to turn out to be small. The statistics of the incidence of taxation are most disappointing in this respect. One beats one's wings impotently against figures which show that modes of expenditure, which one would select for special burdens, can be disentangled only to a very small extent from others which it would be very unwise to burden. I have spent a very long time on analysing the figures which bear on this question.

Other such remedies take a little from the rich and a good deal from the working classes, and distribute nearly the whole among the working classes. But the inevitable waste of the double interference leads to the result that the rich would be a little worse off, and the working classes none the better. And

these again cover a comparatively small area, though larger than the first set.

The main "remedies," which act through regulation or custom or other restriction, prevent people from learning to do high-class work, in order that the few who can do it may be in great demand; and they make every occasion they can for throwing people out of employment as too old—at the age of 50 or lower in many cases—or because they have less than the average stamina. Thus they keep up the rate of wages per hour in each rank by means that diminish regularity of employment in that rank a little, and diminish very much the number in each of the higher ranks. And so they do a little surface good at the expense of many times as great an injury to those whom it is most important to raise.

There is only one effective remedy that I know of, and that is not short in its working. It needs patience for the ills of others as well as our own. It is to remove the sources of industrial weakness: to improve the education of home life, and the opportunities for fresh-air joyous play of the young; to keep them longer at school; and to look after them, when their parents are making default, much more paternally than we do.

Then the Residuum should be attacked in its strongholds. We ought to expend more money, and with it more force, moral and physical, in cutting off the supply of people unable to do good work, and therefore unable to earn good wages.

And as private individuals, I think we can do much more. We can find out people who, because they are old, or broken, or perhaps a little stupid, would be avoided by the moneymaking employer, even if he could get them a good deal below the "standard" wage: and we can pay them a good deal more than the market value of their labour; and help them up. After a while they will often find themselves worth good wages and steady employment; and will leave the rest where they have been sheltered, making room for others. This happens in fact.

These and other little ways seem to me wholly good. Why should I be ashamed to say that I know of no simple remedy? Is the Physician not allowed to say the same? He is asked—"Can you cure me?" "Certainly not at once." "Not by any means?" "Not by any right means. I can give you powerful

drugs, which will drive away the symptoms which you regard as your illness. But they will undermine your constitution. Patience is better for you."

Why should the economist be ashamed to admit that the more he studies "the mystery of evil" on its economic side, the more he is convinced that the key to the mystery is not in human hands; and that ill-considered remedies for evil—and as such I cannot help describing several of the specific proposals of the Oxford branch of the C.S.U.—are likely to do in the future, as in the past, much harm below the surface, with a little good above it.

As regards professional charges, such regulations as there are, are, I think, designed to protect the consumer against charlatans. For instance stock brokers, the most keenly competitive set of people, are prohibited by their regulations of the Exchange from advertising: and there are rules to govern their charges to private customers, in the absence of special agreement. But they are allowed to charge as much less as they like; and in many cases they charge only a small fraction of their nominal dues.

A "physician" may not take a less fee than £1. 1s.: but he may and often does give several consultations, to well-to-do patients as well as others, for a guinea. But a general practitioner may and often does charge 2s. 6d. or 3s. 6d. even to well-to-do people. And I knew a man in Bristol who made £800 a year by charging sixpence per consultation.

English lawyers are rather fettered by rules: and perhaps, partly in consequence, there is less justice in England, especially for the poor, than in any other country where the judges are upright. Further, these rules and custom seem to keep the average lawyer largely unemployed and poor. Americans say that English lawyers and medical men would be better off on the American plan of sheer freedom: and some English people, I believe, agree with them.

Yours very sincerely and gratefully,

ALFRED MARSHALL

P.S. I have not stated, because I think you know, my general

views about the "Standard wage" movement. But I will try to put their substance as shortly as I can. It is:—

- i. The movement has been of the highest value to the working classes and the nation: and was a chief cause of the rapid progress of England in the middle of the century.
- ii. It was then unpopular; and therefore, though it was occasionally violent, its range was too limited to enable it to act oppressively on a large scale; and its weakness brought Nemesis speedily when it showed anti-social tendencies.
- iii. Now, it is popular and surrounded by a halo. Most of the work for which it was specially fitted is done: and underground evil is growing relatively to the surface good done by it.
- · iv. But the good is on the whole greater than the evil even now.
- v. The standard wage is sometimes an equitable wage; but only by accident. The direct and natural effect of the machinery by which the standard wage is fixed in many trades is a tendency towards inequity.
- vi. For instance, though there is a little bricklayer's work that is highly skilled, a good deal of it is such as an intelligent bricklayer's labourer could learn to do in a few weeks, if he were allowed to. Therefore a standard wage of (say) 10d. an hour for bricklayers and 6d. for their labourers—and this is not an extreme case—seems to be not equitable. [I should prefer 1s. for really skilled bricklayers, 8d. for ordinary; 8d. and 6d. for labourers.]
- vii. Equity can be claimed with enthusiasm for "equal earnings for all"; or again "for earnings in proportion to needs and not in proportion to services rendered." And it can be claimed, though with perhaps little enthusiasm, for the unmitigated competitive system, which adjusts payments to services rendered more exactly than any artificial system conceived.
- viii. But, to claim it for a system of standard wages, in which the standard of each trade is fixed by its strategical skill and resources in excluding competition from below, seems to me an abuse of words, leading to a confusion and even inversion of moral ideas.
- ix. An elastic standard does more good and less harm than an inelastic one. E.g. an elastic system in the building trade would bring out the best capacities of operative builders; and

would raise the average real wages of working men; without taking account of the fact that, by cheapening building, it would cause them to be better housed, whether in their cottages or workshops.

- x. But many trade unionists, and especially those who are most likely to endeavour to use consumers' leagues &c. for their own purposes, are opposed to elasticity on strategic grounds.
- xi. Consumers' leagues are at less disadvantage in dealing with the conditions of work than in dealing with wages. And here, if they will give hard and sustained personal work to discovering whether the conditions of work are such as to raise or lower the physical and moral tone of those whom they affect, they can do vast good.
- xii. But if, to save themselves trouble, they adopt rigid rules, their interference will differ from that of Government for the worse in many respects, and for the better in none.
- xiii. And if, still further to save themselves trouble, they allow these regulations to be drawn up by such employees, or employers, or both together, as have an interest in keeping the trade select and privileged, then their interference will, I think, be an unmixed evil.
- xiv. Consumers' leagues are often managed by people who have a limited acquaintance with one or two businesses. From this experience they are apt to deduce general rules, and to regard themselves as being "practical." But here, as every where else, the most dangerous of all sweeping general rules are those which are deduced by aid of a priori intermediate axioms, (of which the so-called "practical mind" has always unconsciously a large stock), from limited experiences. Such leagues are likely to do more good than harm when they deal with individual cases one by one: but far more harm than good when they lay down general rules. And, when they publish such rules for the guidance of crude young men, they are taking on themselves a very grave responsibility.
- xv. My own belief is that in this imperfect world the nearest attainable approach to equity in remuneration must be based, not on any one set of considerations, but on at least 4: viz.
 - (a) the services rendered by the worker;
 - (b) the needs of the worker;

(c) the inducements which it gives to the worker to make the best of his faculties as a worker, as a comrade, and as a free responsible individual;

(d) the inducements and opportunities (or absence of hindrances), which it offers to persons in a lower grade, to rise into or to bring their sons up to the occupations in question.

Auckland Castle, Bishop Auckland

Feb. 3rd, 1900

My dear Professor Marshall,

How can I thank you for your most kind and suggestive letter? As soon as a little time of leisure comes I hope to study it carefully. I have often said that I should have spent my ten years on the revision of the N.T. gladly if the revised version of St Luke xxi. 19 could have gained popular currency, a promise of conquest in place of a command to endurance. It is often hard to be patient, and yet all life is our teacher. Perhaps I shall take courage to ask you further questions in due time. I must not waste your time now.

Ever yours gratefully,

B. F. DUNELM.

Balliol Croft, Cambridge

20, i. 01

My dear Bishop,

Thank you much for your excellent address on progress. It will certainly help to make the world better; it will direct people's thoughts towards the true aims of life; and it will help to reduce mere material wealth to its proper, and very small, proportions in their minds, and so far I am with you, or, I should say, following you, with whole heart.

But, as I know you are so good as to wish me to speak wholly without reserve, I will venture to add that what you say about competition seems to me to cover too large a ground, and to be liable to be used for purposes that are alien to your own, if not opposite to them. I entirely agree that much harm is done

by the prestige which the word "progress" gives to movements on behalf of which its name may be fairly invoked in one sense, but that not the highest sense. But I would submit that very much more harm is being done in the present age by uncertainties as to the meaning of "competition." It has base forms, and when you or Carlyle or other great preachers are denouncing it, these forms are chiefly in your minds. But what you say with reference to some kinds of competition which are unwholesome is apt, I think, to be exploited for selfish purposes with reference to other kinds of competition. When a man exerts himself to arrest or diminish competition, his motive may be the public good: but as a matter of fact it very seldom is. In at least nineteen cases out of twenty, his motive is to prevent his being at a disadvantage in spite of his being less energetic as a worker, less ready to throw away obsolete machinery &c. as a capitalist, than those whose competition he finds disagreeable. The Christian Socialists did, I believe, a great deal more good than harm: but they did harm. Their authority has been used with great effect by those mean, lazy and selfish men who since 1860 have done so much to undermine the vigour and honest work of English industry, and have removed her from the honourable leadership which she used to hold among the nations....

Fifty years ago nine-tenths of those changes, which have enabled the working classes to have healthy homes and food, originated in England. America had a few specialities, and so had France. But, speaking generally, anything which was not English was really dearer than the English, though bought at a lower price. We owed our leadership partly to accidental advantages, most of which have now passed away. But we owed it mainly to the fact that we worked much harder than any continental nation. Now, on the average, we work less long and not more vigorously than our fathers did: and, meanwhile, the average amount of thoughtful work done by the German has nearly doubled; and a similar though less marked improvement is to be seen in other countries. Americans and Germans jeer at the way in which many of our business men give their energies to pleasure, and play with their work; and they say, truly as I believe, "unless you completely shake off the habits

that have grown on you in the last thirty years, you will go to join Spain." And when they have said this, it has sometimes occurred to me that Spain did attain, two hundred years ago, to that ideal towards which many of those who claim to be followers of the Christian Socialists are drifting, and which I find in the "weedy" minds of some young members of the Christian Social Union. In consequence it is, I believe, a fact that there is scarcely any industry, which has changed its form during the last ten years, in which we are not behind several countries; and that every Teutonic country, whether behind us or in front of us, is on the average growing in vigour of body and mind faster than we; and that, because there is none of them that is not less self-complacent than we are, less afraid to meet frankly and generously a new idea that is "competing" for the field.

And now as to international trade competition. Of course the popular notion that a country can be undersold all round involves a contradiction in terms: it would mean that other countries were sending her presents in goods and not accepting payment for them. In fact our nominal imports exceed our nominal exports very much: but, as has been shown over and over again by statisticians and economists, that is to be explained partly by differences in the methods of reckoning the money value of the two; and partly by the fact that many of our real exports are services rendered to foreigners, especially in the form of continual loans, and which could not be reckoned among our exported goods, whatever system were adopted by custom house officials. Our real danger is that we shall be undersold in the product of high class industries, and have to turn more and more to low class industries. There is no fear of our going backwards absolutely, but only relatively. The danger is that our industries will become of a lower grade relatively to other countries: that those which are in front of us will run farther away from us, and those which are behind us will catch us up. This might be tolerable if peace were assured; but I fear it is not. Here I am very sad and anxious.....

So, recollecting that we are vulnerable in all parts of the world, and are not self-sufficing either in raw material or in food, I believe that London will ere long be held to ransom if we con-

tinue to allow the average efficiency of other nations per head to grow faster than our own. Our times of leadership were times when an hour of an Englishman's work was worth more than that of almost anyone else, and the Englishman worked as many hours as he could without overworking himself; we bore hard work and we forbore from that $\tilde{v}\beta\rho\iota\varsigma$ which is goading the Continent into dangerous enmity. Above all we were respected because it was known we respected the love of freedom even against our own material interests. We were then stronger than we seemed and might have afforded to sacrifice some strength for the graces of life. But now this seems no longer the case. German soldiers have always thought we overrated our strength: and now they tell me that their own estimates had been far too high. I think therefore that the first step towards a right use of wealth within the country is the taking an unaggressive position among nations. If we provoke war, we must be prepared to fit ourselves for war-in plain terms to spend £100,000,000 on our army and navy, before long, when at peace.

Now in "competition," as it is commonly understood, I find something crude, ugly, harsh; but with this evil, which can and ought to be diminished, I find very much good that has hitherto been attained by no other route. Till another route has been found, I think it is dangerous and even wrong to speak of competition as though it were an evil touched with good.

In my view Freedom is life: the virtues which the Christian Socialists so excellently fostered elevate life. And they took it for granted that it was easy to diminish the evil side of competition by attacks on competition generally, without-seeing that in this way they were working against freedom and therefore against life. No doubt they thought that competition was not essential to freedom: and in a sense that is so. In ideal freedom there is no competition, except perhaps emulation in doing good for its own sake. But in that ideal state there is no need for private property, nor policemen nor any of our social burrs. And my complaint against Kingsley and Maurice is that, though virile themselves, their teaching tended in some degree to emasculate character; because so much of it was negative. When they praised in positive terms the virtues of gentleness and unselfishness, when they urged that we were only trustees

for wealth, when they spoke on the lines of most of the address on "Progress," they could not be misunderstood. But they were misunderstood when they attacked competition: indeed they misunderstood themselves, because they had not thought out a way of checking competition egenerally without lessening freedom: they did not know how hard that is. They did not foresee how their teaching would be applied to strengthen the hands of those who want to keep out competition from below—that is to subordinate the interests of the many to the privileges of the few, and to suppress pushing men, who insisted on making things by such improved methods of machinery, organisation, &c., that old-fashioned firms had no choice save either to fail or to adopt modern improvements.

Economists are in a sense always studying the value and limits of competition. But they seldom talk of competition in general: because general propositions must be vague; and they work at definite parts. But occasionally they write of it broadly. Cooley's book which I send is a good specimen I think....

Yours in sincere devotion.

ALFRED MARSHALL.

I admit that the desire to "best" B and C is neither a noble force in any way, nor a very strong force generally. But the emulative desire to do better than—not B and C in particular, but—others in general, is, I think, one of the strongest and most persistent forces in history, working perhaps one-tenth for evil, but nine-tenths for good.

Auckland Castle, Bishop Auckland

Jan. 22nd, 1901

My dear Professor Marshall,

How can I thank you as I ought to do for this fresh proof of your kindness? What you say is very helpful and I think that I can fully agree with all that you say of the necessity of competition for us, being what we are, as a stimulus. What I fear is the growing tendency to make personal distinction and personal gain, measured by money, human ends. After all οὐ διακονηθῆναι ἀλλὰ διακονῆσαι is the only rule in which we can rest. The wilful restraining of power for selfish purposes, which must fail, by some trade unions is one of the saddest things I know; yet even this answers in part to a generous thought. I wish that you could say something at length on the Unions. The time has come, I think, for wise and sympathetic criticism.

The Essays which you have sent me will, I am sure, be suggestive, and I will study them carefully.

I ought perhaps to say that, shocked as I was by the Jameson raid and by the way in which it was received in London, I cannot regard the S. African war as other than inevitable. The declaration of war by Kruger seemed to me to reveal the whole policy of his party. Up to that point I thought peace possible. Indeed I had always reckoned Majuba amongst our triumphs till Lord Kimberley told us how the peace came about. You will forgive me if you condemn me.

I often wish that I could consult you about the Christian Social Union: probably some of our Cambridge friends do. There is much serious work among the members, and those whom I know desire the truth. All my love and hope for Cambridge was stirred by a very short visit to the Trinity Commemoration. I said a few words in Chapel which the Master asked me to print. You will feel what I failed to express.

With sincere gratitude,

Ever yours,

B. F. DUNELM'

Balliol Croft, Cambridge

23. i. 01

My dear Bishop,

Section IV of your address at Trinity seems to me one of the noblest and truest things ever said: I heartily subscribe to every word of it.....

My notion as to the proper work of the academic student with regard to Trade Unions is that he should treat them as a special case of association in which the good of individual unselfishness is ever surrounded and apt to be vitiated by the evil of class selfishness. I think that, when the academic student takes on himself the rôle of a preacher, he is generally less effective than when he treats the problems of life objectively; that is when he assumes no major premises based on his own views of duty, his own ideals of social life. So I am leading up to my discussion of Trade Unions by studies in which the Trade Unionist is invited to pass judgement on problems of combination in which he has no direct interest. Then I want to imply, when I come to his problems:—De te fabula narratur.

This is one reason for abstaining, now for many years, from saying anything publicly on labour questions.

I am not satisfied with the result. For the work is very long; and my life is ebbing away. But I think the notion was right in the main; and anyhow it would be a mistake to change my plans at this late stage.

Your devoted follower.

ALFRED MARSHALL.

Auckland Castle, Bishop Auckland St Paul's Day 1902

My dear Professor Marshall,

No doubt you can decide better than any one what ought to be the course of your work. Yet I long for some words from you on Labour combinations. The most suggestive remark which I have found in Dr Cooley's book is that parts of men, and not men, unite in combinations. And may one not say that we are all of us in danger of becoming parts of men in the pursuit of special aims. How rarely we see a whole man. Again and again Matthew Arnold's words ring in one's ears: "Thou art a living man no more, Empedocles, nothing but a devouring flame of thought." The Universities must train men.

As my thoughts go back to the past in this stillness, I cannot but recall very vividly my visit to you just before I came here. You showed me then sure lines of work and thought, and you have never failed me in my difficulties since.

May I not then call myself not only gratefully but affectionately yours,

B. F. DUNELM.

To EDWARD CAIRD, Master of Balliol College (re Engineers' strike)

Balliol Croft, Cambridge

22. x. 97

My dear Master,

I have followed this strike with an interest amounting to excitement. I am very much of an 8 hours man: I am wholly a trade-unionist of the old stamp. For the sake of trade unionism, and for that of labour as a whole, I hope that the employers will so far get the better of the leaders of the modern unionism, that the rank and file of the workers will get to see the futility as well as the selfishness of the policy which their new leaders are pressing. Everywhere the tried men, who had made modern unionism the greatest of England's glories, have been pushed aside—sometimes very cruelly. For a time the Engineers adhered to moderate and unselfish courses. But lately they have used their grand prestige, I hold, for England's ill.

In Belgium, Germany, Bohemia, Hungary and Japan, crowds of men are learning to manage machines which a few years ago required high skill, but which have been now so improved that they will do excellent work in the hands of a mere "ploughman." This tends of course to open out new kinds of mechanical work that require high skill: but England cannot keep much of that work, unless she is also able to grow with the age in the application of the more abundant lower skill to suitable work.....

There is no fear whatever, not the very least, that the A.S.E. will be broken up. No one wishes it: and it could not be done. But unless the A.S.E. bonâ fide concedes to the employers the right to put a single man to work an easy machine, or even two or more of them, the progress upwards of the English working classes, from the position of hewers of wood and drawers of water, to masters of nature's forces will, I believe, receive a lasting check. If the men should win, and I were an engineering employer, I would sell my works for anything I could get and emigrate to America. If I were a working man, I would wish for no better or more hopeful conditions of life than those which I understand to prevail at the Carnegie works now (there may

be evils there, of which I do not know, but I have watched for some account of them and have found none).

The 8 hours question is of course not the real issue at all. The real issue lies entirely in the question whether England is to be free to avail herself of the new resources of production. I think, however, that, while Americans and Germans work longer hours than we do, the most expensive machinery will not be freely used here except on the plan of double shifts. With double shifts, proper machinery, and the application of each man to "just that work which is the highest of which he is capable," I believe a 7 hours day would be long enough, and wages (real and not money wages) may be doubled in the coming generation as they have been in the past.

I have marked this as "confidential" because I have decided—not without hesitation—to take no public part in the controversy just now. If all employers were like Sir Benjamin Browne and Colonel Dyer I would speak out. But of course many of them are as great enemies of "the good" as some of the new-unionists are. And, as I am saying nothing publicly, I do not want to speak half-publicly.

Yours very truly,

ALFRED MARSHALL

Balliol Croft, Cambridge

5. xii. 97

My dear Master,

In brief, I think that:-

- i. This is the crisis of our industry. For the last twenty years we have indeed been still progressing; but we have been retrograding relatively to the Americans and to the nations of central Europe (not France, I think) and to Eastern lands.
- ii. The causes are partly natural, inevitable, and some are, from a cosmopolitan point of view, matters for satisfaction.
- iii. But one is unmixed evil for all, and a threat to national well-being. It is the dominance in some unions of the desire to "make work," and an increase in their power to do so.
- iv. And there is another like it. It is the apathy of many employers and their contentment with inferior methods, until

driven out of the field or threatened severely, at least, by more enterprising foreigners.

- v. The present distresses are an insignificant price to pay for remedying these evils, if so be that the remedy comes. If the men retort on the employers even more strongly than they have done—"part of our weakness lies at your doors anyhow," so much the better.
- vi. The employers' terms disappoint me: but less on second reading than on first. The tone is harsh: but this may mean nothing. The condition that the prices for piece work shall be fixed by individual agreement seems a great step backwards. But looking at the history of the recent past, I do not see what else is to be done. Agreement on generous lines, such as under the Mundella hosiery scheme, or the North of England Iron schemes, is an immense advance on individual bargaining. I have often said that T.U.'s are a greater glory to England than her wealth. But I thought then of T.U.'s in which the minority, who wanted to compel others to put as little work as possible into the hour, were overruled. Latterly they have, I fear, completely dominated the Engineers' Union. I want these people to be beaten at all costs: the complete destruction of Unionism would be as heavy a price as it is possible to conceive: but I think not too high a price.

If bricklayers' unions could have been completely destroyed twenty years ago, I believe bricklayers would be now as well off and more self-respecting than they are: and cottages would be 10 or 20 % larger all round. And, meanwhile, healthier bricklayers' T.U.'s would have grown up. Till recently the Engineers' Union was one which was contrasted with the bricklayers' union (or some of its worst-minded branches); now they seem to be as bad.

vii. In this I find no sign of deterioration of character. I think the Engineers have been under exceptional temptations, and have yielded to the seductions of those semi-socialists who have captured them.

viii. Mr Sinclair's letter in the *Times* of yesterday (Dec. 4) seems to me to go to the root of the matter. He illustrates one side—the American as distinguished from the Continental—of the causes that are at present making England move relatively

backwards. The balance against us, allowing for the superior weight of American locomotives, comes out at about 3:1, i.e. 3 Glasgow men needed to do the work of 1 American. I should put (say) a quarter of this to account of our employers, a half to account of new-unionism, and the remaining quarter to no account at all. I mean that, when a man works in a leisurely way and for relatively short hours, he does get some gain which may be set off against the loss in his efficiency.

- ix. Leisure is good, if it is well used. But the laborious laziness, which has come into many English Government workshops, and some private ones, engenders a character to which leisure is useless.
- *x. So long as our foreign policy aims at pushfulness, especially in those directions in which we imitate other nations with least benefit to ourselves—as in Egypt.—I think we are bound to increase our expenditure on Army and Navy at an ever-increasing rate. If then we go backwards relatively in mere production, we court disaster. Were it not for this, I should be fairly contented with our making progress absolutely, even though most other nations were growing faster.

Yours very truly,

ALFRED MARSHALL.

Addendum to vi.

I think it ought to be possible to devise a phrase which shall appear less hostile to the principle of Trade Unionism than that referred to under vi, and which shall yet prevent the use of collective bargaining as a means of hindering new men and new machines from coming into work for which they are needed. I hope some such phrase may be found. I have tried a little and failed.....

Balliol College Dec. 11th, 1897

My dear Professor Marshall,

I am much indebted to you for giving me so much of your time and so clear a statement of your view of the position.

I can go along with you in all you say of the particular causes of quarrel, and think the masters ought to win on these. But

I cannot think that any good would come of their breaking down the Union. I am afraid it would bring us back to the lawless methods of an earlier time. Of course, if the masters consented to modify their claims in the clauses in which they propose to deal with the individual workman, the difficulty would be got over. If not, I should feel obliged—so far as I see—to give what little support I can to the men. All the same I think it a great pity that men like Colonel Dyer should not be able to carry the rest of the masters with them in devising some less objectionable terms which would secure the particular points on which the masters lay weight, and set up some system like that he has consented to elsewhere.

With many thanks,

I am,

Yours very truly,

Edward Caird.

Balliol Croft, Cambridge 12. xii. 97

My dear Master,

Many thanks for your letter. You say: - "But I cannot think that any good would come of their (the masters) breaking down the Union." I am not sure whether you suppose me to think so. I emphatically think the opposite. In fact I have some notion— I have not clearly decided yet-of sending the Union a small subscription after the conflict is over. I do not regard the danger to the Union as lying mainly in the exhaustion of their funds. I think it lies in the time given to "masters" to train unskilled men for work which they say is easy, but which the Engineers want to label artificially as skilled and preserve as their own monopoly. If the men are right, then whoever gets the better of this struggle, the "masters" must in the long run take on the Engineers practically on their own terms. If, as I believe, "the Masters" are right, then whoever wins now, those of the Engineers who are not really skilled will not be able to find occupation save on the "Masters" terms. This is, I think, right. If the Engineers are not acting unsocially they will in the

long run substantially win. If, as I think, they have been acting unsocially, since they got under the influence of the Socialists, they will anyhow lose. If the "Masters" had published their explanations with their manifesto, much harm would have been averted.

I am not so much afraid as you are of the results of a temporary collapse of a Union. If that should lead to violence, then there should be violence now. For only a very small percentage of those who are most prone to violence are in Unions. The Dockers and the Gas Workers are individually of violent habits: but the collapse of the Dockers' Union, and the South London Gasworkers' branch, has resulted in a diminution, not an increase, of violence, I believe.

Yours very truly,

ALFRED MARSHALL.

To S. D. FULLER

Balliol Croft, Cambridge 21. xi. 97

21. M. 01

....To be overkind to the children of the pauper class, relatively to those of the self-respecting poor, would directly frustrate nature's rule that the better strains of population shall have a better chance of moving upwards and multiplying than the inferior strains have. This objection does not tell directly against boarding out the aged.

I am in favour generally of freedom of experiment: and should wish every method which has a primâ facie prospect of success to be tried. But it seems doubly important to go slowly in such matters: because I believe that in them the system is of the least importance: nearly all depends on individual character. If a hundred children or aged poor are boarded in well-selected homes, the good may predominate over the evil; and yet, if a hundred thousand homes had to be found, the evil might on the average largely predominate over the good.....

I want discrimination; and to offer to the best people a choice between (A) workhouses with more comforts and freedom than 404

the ordinary house; (B) out-relief, which might take the form of boarding out in some cases. I think this should be done at all costs. Every penny so spent would be fruitful of indirect good as well as direct. It would tend to keep distress from sinking into despair: it would conserve self-respect....

LETTERS

Yours very faithfully,

ALFRED MARSHALL.

To Professor E. CANNAN

Balliol Croft, Cambridge 7. i. 1893

My dear Cannan,

I have been looking again at the letter you were so very good as to write to me in December; and I have been re-reading part of Fisher's articles. Is this a correct survey of the situation?:

You and Fisher hold that wealth is a stock and a flow: but capital is only a stock.

I take wealth to be a stock only.

So far it would appear that the differences between us is only as to the use of the word "wealth." I can see no advantage in your use: but the matter does not strike me as important, so far.

But I think there is something of more importance behind. I take it we are all agreed that "capital," from the individual point of view, must be used in the common business way; more or less on the lines of what I have called trade-capital; and that it has no scientific justification: that therefore the discussion is all about "capital in general" or "capital from the social point of view."

Assuming that, I want to adhere to the line of division between "Land" or "Free goods," and "Capital." I can't be sure that you and Fisher do.

You see the position taken up in my Ed. III only comes to this, that I have openly adopted as my standard definition one which corresponds to what has been de facto my main use of the term ever since about 1869, when I used to think in Mathe-

matics more easily than in English. I then adopted the doctrine of the national dividend, its division into the shares of land, labour and capital, governed by the equivalence of differential coefficients of cost of production on the one hand (or disutility), and utility on the other [I did not use those words then]. There remained great lacunae in my theory till about 85; when, on my return to Cambridge, I resolved to try to find out what I really did think about Distribution: and I gradually developed (sufficiently to please my complacent self) the doctrines of substitution between prima facie non-competitive industrial groups, of quasi-rents, etc. But all this, though vital to my special views, did not affect my use of "capital." That was throughout the stock of things, other than land, which are instrumental in satisfying human wants. (In my first version of distribution in 1879, I did not speak of the National Dividend; because I wanted to get rent out of the way first: and Earningsand-interest Fund was National Dividend after deducting Rent.)

I did not openly define capital in that way; because I did not dare to set myself in opposition to English tradition. But in practice I nearly always used the term in that way, except when I was talking of trade-capital.

Now I have dotted my i's and crossed my t's; and my position is:

Capital [in general] is a stock.

Wealth is a stock.

- But (i) Capital does not include "free goods": this is a matter of principle.
- (ii) Capital does not include those trifles, the income from which is neglected by ordinary people and income tax collectors. This is a mere matter of convenience; it corresponds to writing £M437 instead of £437,495,821:14:83.
- (iii) Though in England (not perhaps in France) wealth and capital consist for the greater part of the same goods, yet when we use the term "capital" we are always thinking of the "productiveness" and "prospectiveness," which mainly affect the demand for and the supply of wealth,....

Now as to inconsistencies between my Preface and Book II, ch. IV. Is not what I say about capital in the Preface contained in what I say on top of p. 143 and on pp. 152-3? [of course

I shall not reprint that Preface, so I propose to copy a part of it in at the end of p. 153 together with a paragraph to the same effect as p. 5 of this letter].

Fisher puts a strange interpretation on the first ¶ of p. 152. I don't want it: and I want space. So I shall omit it.

The first line of § 6 may be clearer as "some writers have thought it specially important," and I admit that the last line of first ¶ of Note 2 on p. 150 is now incorrect. I did not notice it. Of course I shall strike it out.

Is there any other change needed to make me consistent with myself? I cannot alter my definition of wealth to make it include income: for I see only evil in that change. But outside of that, is there anything I can do to free me from reproach in your eyes? You were good in December. Goodness brings its own punishment, in this abominable infliction on you.

Pardon! Yours humbly,

ALFRED MARSHALL.

To Professor A. W. FLUX

Balliol Croft, Cambridge 7. iii. 98

My dear Flux,

What do you mean by speaking of "my failure to afford you satisfaction." Human wants are insatiable. Who ever satisfied everybody, unless he was a fool and satisfied himself; or accurring and satisfied her? You are doing gloriously; if I may use my grey hairs as a screen behind which to talk somewhat after the manner of an Oracle, you are becoming more realistic, and I would that you did so even faster; and to that extent satiety-point is not reached. But—again the grey-hair-screen—your strength and vigour and elasticity, your productiveness and prospectiveness (i.e., work valid for future times as well as the present) are a good sight for sore eyes.... Macte Virtute.

You say that, à propos of Increasing Returns, you are inclining to lay stress on the incomplete utilisation of existing productive facilities. That is of course one of my chief hobbies. My confidence in Cournot as an economist was shaken when I found

that his mathematics re I.R. led inevitably to things which do not exist and have no near relation to reality. One of the chief purposes of my Wander-jahre among factories, etc., was to discover how Cournot's premises were wrong. The chief outcome of my work in this direction, which occupied me a good deal between 1870 and 1890, is in the "Representative firm" theory, Principles, pp. 348-390, the supplementary cost analysis, pp. 435-8 and 464-470; as well as the parts that directly relate to supply price for I.R.

The supplementary cost question can of course only be touched in Vol. 1. It will give a chief motive to a great part of Vol. Π , especially as to Fluctuations of credit and prices. I still think that my term "process" is the best I nave met with for covering in a short space all this group of difficulties.

But of course I don't suppose that I have said anything like the last word on the subject. Go ahead, and say a later and a better one.

Very many thanks indeed for your kind and good help.

Yours affectionately,

ALFRED MARSHALL.

Balliol Croft, Cambridge 19. iii, 04

My dear Flux,

I was just settling down to a belated letter of thanks to you for your generous and strong aid on pp. 281-3 of the current Quarterly Journal of Economics; and for your article in the Canadian Bankers' Magazine, when your letter of the 8th arrived.

I am very glad that you are coming to England and that you will be here at the British Association meeting. We have asked Dr and Mrs Pierson to stay with us for that. I hope you will get put up somewhere in our neighbourhood so that we may see you during the meeting, and that you will be able to look in on us in June. We have taken lodgings in Norfolk for July and the first half of August.

Thank you very much for your most kind offer to read the proof of my new book....The first half, which is only half written.

is on the causes and nature of Industrial Leadership treated historically as well as analytically. The second is on International Trade; while at the end is to come an application of the basis thus provided to current issues. The second part is to be as scientific as is compatible with an attempt to catch the general reader; but free use is to be made of appendices throughout. I am going to be a little venturesome in it: and shall be most grateful for your kindly help.

In the last part I am going to give a little freedom to my sentiment, as distinguished from my reason; and to speak as a citizen rather than specially as an economist. There also I shall be grateful for help. But sentiment is like a butterfly; no amount of friendly discipline will make him go by a rational bee-line.

Our best regards to Mrs Flux.

Yours very sincerely,

ALFRED MARSHALL.

Balliol Croft, Cambridge 26. v. 04

My dear Flux,

....I have been drawn in for an unusual amount of festivities much against my will. I have not attended a big dinner for ten years, and hoped I might never have to do so again. But I have to be responsible for Leroy Beaulieu, who arrives tomorrow; and so must go to three! straight on end.....Towards the end of June, I have to go to Oxford. Then from 17 to 23 August this house is to be a sort of Hotel with at least one Dependance, for British Association foreign guests—Pierson, Lotz and Dietzel, and probably some others. So I shall not have the repose of the blessed, which the would-be cautious writer so craves.

Consequently I don't know what is to happen to my book. I have got about 150 pp. in type; and I have made special arrangements for having it all set up before I read it. Now, however, it is certain that the book will not be out till the autumn and probably not till later. For the course of events has lessened the demand for short books—there are already

several good ones out; and the Tariii Issue will probably not get to a head within the next six or twelve months. Also I find that the further I go the slower I go. Just at present I am getting out of the industrial problems of Germany into those of U.S.A. That will bring my Part I to 200 pp. or more. Only after that shall I begin International Trade, and severe analysis.....

Yours very sincerely,

ALFRED MARSHALL.

To T. C. HORSFALL

Balliol Croft, Cambridge 8. iii. 1900

I am entirely in agreement with your claim that the community is bound to see to it that town dwellers have opportunities for knowing what a full healthy life is. Country folk are less dependent on training and on inspiration derived from their fellow-men. The fresh air and bright sunshine strengthen and stimulate, and at the same time soothe their nervous systems; and the beauty of everchanging nature offers an invitation to reverent and religious feeling, whether it be precipitated in theological forms or not. But town life, with its everincreasing density and extension, shrouds the individual away from himself, and from the Infinite. It keeps up an incessant strain on his nervous strength, and tends to make him forget the blessedness of repose. He is always on the move, and therefore he is seldom entirely himself: he is scarcely ever completely refreshed; and therefore he is apt to seek for excitement by the paths of least resistance, and the excitements to which they lead are seldom altogether pure and healthy.

I think therefore you are right in contending....that the growth of towns increases the urgency of the duty to broaden and deepen education. That duty would have grown anyhow with the increase of our resources and knowledge and with the expansion of our social ideals. But the growth of towns makes it doubly urgent to supply wholesome thoughts and suggestions, lest unwholesome should prevail; and to turn music and painting

and other fine arts to account in filling the void in man's life caused by the want of the free light and freshness and beauties of nature. The clatter and the bustle and the nervous strain of constantly jostling amongst a multitude of others must impoverish some sides of his nature; and it is therefore imperatively necessary, if the child is to grow up in any fulness of life, that he should see and hear and read of the brightest ideals that have come to mankind. Strong, vigorous but placid self-control is the bond of life; and the harder of attainment this is made by the physical conditions of town life, the easier should the access be to the restful influences and aspirations of those whose lots have been cast in larger moulds.

Yours very faithfully,

ALFRED MARSHALL.

From Dr N. G. PIERSON, Prime Minister of Holland

The Hague 3. iv. 1900

Dear Professor Marshall,

We are getting fairly on in our home politics. The bill for Compensation of accidents has been passed (and it is a grand measure) by the Lower House; so also, the bill introducing Compulsory education. The dwellings'-bill is under examination and I think it will pass.

But we are all much occupied in our minds by that horrid war in South Africa. I do not know what your feelings are in this matter, though I am not inclined to believe you strongly sympathize with Mr Chamberlain's politics. What is all this fighting for? Why could not these small republics be left alone? A curious light upon the so-called Outlander grievance is thrown by the fact that all the Outlanders, not belonging to the British nationality, heartily joined in the war and shed their blood on behalf of their "oppressors." Their wrongs, after all, cannot have been so very serious, though they may have existed to a small extent.

I see no speedy end to this war, for the Boers will never yield, until they are almost exterminated.

This is a sad close of our century. It makes one's heart bleed. How have you been getting on since we last heard from you? How is your health and Mrs Marshall's? And when shall we receive your second volume? It.will be a treat to read it.

Believe me, with kind regards, also from Mrs P.

Yours Sincerely,

PIERSON.

To Dr PIERSON

Balliol Croft, Cambridge 6, iv. 1900

....You ask me my views as to this miserable war. I should like to talk with you for an hour on the matter. I am not sure I understand the Boer case. I am certain that Continental newspapers do not understand the English case. There are of course ingoes here: and their views may tell when the time comes to arrange the terms of peace. But, whereas the Münchener Neueste Nachrichten proved in August (I was then in Süd Tirol) that England could not send 10,000 troops to Africa, we have sent nearly 200,000; and our barracks at home are fuller than they have ever been; the number of cubic feet of sleeping space allowed for each soldier has had to be temporarily reduced. And it is certain that, if necessary, we shall send another 200,000 a little later. This is not the work of the jingoes: they made the war inevitable; but the determination to put through the war is as strong among most anti-jingoes as among jingoes: and that would be an impossible state of things if the English case were what Continental newspapers generally suppose it to be.

I am myself an uncompromising anti-jingo: a peace-at-almost-any-price-man.... Since however I have got to know how enormous the military preparations of the Boers were, I have felt that, independently of the Uitlanders' grievances, England was bound to say—"You must give material security that those preparations will not be used against us the first time we are in difficulties. Taking account of the strategical advantages which your position, your revenue from the mines and other causes give you, we cannot guarantee the security of Durban and Cape

Town against your armaments without keeping 100,000 soldiers permanently in those colonies. Therefore you must disarm or have the fight out at once."

I do not deny that these Boer armaments had their main origin in the wicked and stupid Raid.... But self-preservation is the first law of nature. If I am walking on a Quay, and my dog bites a man: if he then tries to throw me into the water and one of us has to be drowned, I shall try to push him in first and stay on the Quay myself. So, though an Anti-jingo, I say the war must go on till Natal and the Cape have security from Boer armaments. Subject to that condition and the redress of the Uitlanders' grievances, many, perhaps most Englishmen, and certainly I, would make peace tomorrow on almost any terms that the Boers might wish.

Yours protesting but very sincerely,

ALFRED MARSHALL

To Professor J. B. CLARK, Columbia University

Wolkenstein in Gröden, South Tyrol

2. vii. 00

My dear Professor Clark,

I write in a pine forest in the "Dolomites" to thank you for your excellent Distribution of Wealth. I have not been able to take more than a cursory glance at it as yet: for I am engaged in quite a different field of economics. It seems to me that our differences are largely of emphasis; but that in the main we are allies. For which I am very thankful.

I note what you say of von Thünen, the great unrecognized, with special pleasure. I cannot recollect whether I formulated the doctrine "normal wages" = "terminal" (I got "marginal" from von Thünen's Grenze) productivity of labour before I read von Thünen or not. I think I did so partially at least; for my acquaintance with economics commenced with reading Mill, while I was still earning my living by teaching Mathematics at Cambridge; and translating his doctrines into differential equations as far as they would go; and, as a rule, rejecting those which would not go. On that ground I rejected the wage-doctrine in Book II.

which has a wage-fund flavour: and accepted that in his Book IV; in which he seemed to me to be true to the best traditions of Ricardo's method (I say nothing in defence of Ricardo's positive doctrine of wages) and then to have got very close to what I afterwards found to be von Thünen's position. That was chiefly in 1867-8. I fancy I read Cournot in 1868. I know I did not read von Thünen then, probably in 1869 or 70: for I did not know enough German. One side of my own theory of wages has been absolutely fixed ever since, to what by title of priority may be called the von Thünen doctrine. But I thought then, and think still, that it covers only a very small part of the real difficulties of the wages problem: I cannot yet be sure whether you agree with this or not. Perhaps I must wait for Vol. II.

Yours very truly

ALFRED MARSHALL.

Balliol Croft, Cambridge

11. xi. 02

Dear Prof. Clark,

... I have been looking a little at your Distribution of Wealth recently again. I am always struck by its power and freshness. But it does not lead me to yield an inch on the controverted distinction between interest and rent proper. Of course in your statical construction you are sole autocrat. But I do not follow your reasonings if they are intended to apply to the "dynamical" world in which we live; where a stationary state may result from the equilibrium of opposed forces. For in that world it seems to me that the stock of capital is not fixed as the stock of land is; that the sacrifice of waiting (marginal) is part of the cost of production of capital, and therefore of the cost of production of things made by it. And it seems to me that, as no similar proposition is true of rent proper in relation to land proper, I must continue while I live to assert that for long periods, THOUGH NOT FOR SHORT, interest and rent stand to value in wholly different relations.

So I am perplexed. Thus your first sentence on p. 371 seems to suggest that I deny that, if a rise of rent were caused by a diminution in the supply of land (as e.g. the subsidence under

the ocean of large areas of fertile land), there would result a rise in the cost of the produce and therefore in its value. Rise of rents and cost are results of same cause. You seem to me to suggest to the reader that I have stated, or implied, that a diminution in the supply of land available for a particular crop (which may arise from an increased demand for some rival crop) will affect the value of that produce in some way other than that in which a diminution in the area of all agricultural land would affect the value of all agricultural produce.

Now if I have committed myself to any such statement or implication, will you kindly tell me where?

I may say that my doctrine of quasi-rent, though only gradually developed, took on substance in 1868; when I was very much exercised by McLeod's criticisms—now unjustly forgotten—on the unqualified statement that cost governs value. He said: "your economist tells you that the wages and profits of people in the iron trade govern the price of iron; but they themselves know better; they know that the price of iron governs their wages and profits." I then started out on a theory of value in which I conceded to McLeod all that he asserted for short periods: and in effect, though not in name and not at all clearly, I regarded wages and profits as of the nature of rents for short periods. That went with my translations of all leading economic doctrines into differential equations: and, as far as I can tell, there is no broad difference on that side between my position before 1870 and now. But of course in other directions I have changed much. I then believed it was possible to have a coherent though abstract doctrine of economics in which competition was the only dominant force; and I then defined "normal" as that which the undisturbed play of competition would bring about: and now I regard that position as untenable from an abstract as well as from a practical point of view.

I have written thus fully, because I do not wish to be misunderstood by you. There are only two or three people in the world by whom I am as anxious to be understood aright. For your writings and our short talk have made me

Yours ever devotedly

Balliol Croft, Cambridge 15. xii. 02

Dear Professor Clark,

We agree so much on concrete matters that I feel sure we cannot differ much on generals....

What difference, if any, there is between us seems to me more probably to have its roots in our attitude towards the Dynamic state.

What I take to be a Static state is—to amplify a phrase which was all too short—a position of rest due to the equivalence of opposing forces which tend to produce motion. I cannot conceive of any Static state, which resembles the real world closely enough to form a subject of profitable study, and in which the notion of change is set aside even for an instant. In my view there may be no change in fact; but only because the forces tending to make change are (or for the purposes of a particular argument or illustration are supposed to be) equal and opposite.

....I could no more write one book about my Statical state, and another about my Dynamical state, than I could write one book about a yacht moving three miles an hour through the water which was running against it, and another about a yacht moving through the still water at 5 miles an hour. If there is any real difference between us, I think this must be at its root. And I trust that, when you get to your dynamical state, we shall attain the desire of the two good Scotch souls, who seemed unable to agree as to the password to heaven that related to predestination; but yet each hoped that the other would get in at some other door where predestination did not enter into the password: and so they might meet after all....

So I look eagerly for your Dynamics in the hope that that contrast between land and capital which I hold to be necessary for my Statics (which is indissolubly one with my Dynamics) will appear in your Dynamics. If so, then our difference will be apparent as mainly one of arrangement. And I shall be joyful.

Hoping soon to see you on this side of the herring pond,

I am.

Yours very sincerely,

ALPRED MARSHALL

Balliol Croft, Cambridge 24. iii. 08

My dear Clark,

I thank you very heartily for your most kind and friendly letter. I had thought you selected the Austrians for mention, partly in order to show that you bore them, and especially Böhm Bawerk, no ill-will on account of his rather rough method of thumping.

I have in earlier years eaten my heart out with doubt and anxiety as to what acknowledgments I should make to others. I fear I am an awful sinner: but I have grown callous. My rule has been to refer in a footnote to anyone whom I know to have said a thing before I have said it in print, even though I may have said it in lectures for many years before I knew that it had ever occurred to him: I just refer, but say nothing about obligations either way; being quite aware that people will suppose me to imply obligations. Instances are Francis Walker and Fleeming Jenkin.

But perhaps in return for your good-natured confidence I may state the reason which has prevented me from making general acknowledgments in any Preface except the first. It is that my main position as to the theory of value and distribution was practically completed in the years 1867 to 1870; when I translated Mill's version of Ricardo's or Smith's doctrines into mathematics; and that, when Jevons' book appeared, I knew at once how far I agreed with him and how far I did not. In the next four years I worked a good deal at the mathematical theory of monopolies, and at the diagrammatic treatment of Mill's problem of international values (parts of this were printed by Pantaleoni in a kindly way in his *Principii di Economia Pura*).

By this time I had practically completed the whole of the substance of my Mathematical Appendix, the only important exception being the treatment of elasticity (Note III) and Edgeworth's contract curve Note XII bis.

Substantially my theory of capital as it exists to-day is completely outlined in Notes V and XIII-XIV; and my general theory of distribution (except in so far as relates to the element of time) is in like manner contained in Note XXI; to which the preceding notes and especially XIV-XX lead up. I worked that out for the greater part while still teaching mathematics; and while still regarding myself as a mere pupil in the hands of great masters, especially Cournot, von Thünen and Ricardo; and while still extremely ignorant of economic realities. Between 1870 and 1874 I developed the details of my theoretical position; and I am not conscious of any perceptible change since the time when Böhm Bawerk and Wieser were still lads at school or College....

I think there is an immense deal to be done still in

- (1) elaborating the influence of time;
- (2) studying complex interactions with special reference to the quantities concerned;
 - (3) allowing for the decadence of some economic influences and the rise of others:
 - (4) taking account of non-economic influences, and especially such as evade quantitative measurement;
 - (5) applications to practical problems as to which I look for much help from "Essentials."

I see before me ten times as much work to do in these five directions as I can hope to do: and I am sure that after I am dead people will gradually discover ten times and more as much work as I see.

So I scarcely ever read controversies or criticisms. I have not read even a quarter of those which have been written about myself. The books, for instance, which I take to the Alps nearly every summer are almost exclusively concerned with matters of fact; though I try to read or skim any piece of analysis in which a man works to produce knowledge and not to controvert others. Thus I could not make acknowledgments to others properly: and I fall back on the plan already mentioned of referring in silence to any anticipation, of which I am aware, of a suggestion made by myself.

My whole life has been and will be given to presenting in realistic form as much as I can of my Note XXI. If I live to complete my scheme fairly well, people will, I think, realise that it has unity and individuality. And a man who has lost ten of the best years of his life—from 37 to 47—through illness, would, I

think, be doubly foolish if he troubled himself to weigh and measure any claims to originality that he has.

One thing alone in American criticism irritates me, though it be not unkindly meant. It is the suggestion that I try to "compromise between" or "reconcile" divergent schools of thought. Such work seems to me trumpery. Truth is the only thing worth having: not peace. I have never compromised on any doctrine of any kind. As to the use of terms, that is a matter of mere opportunism and everyone should, I think, not merely compromise but positively yield against his own judgment, if he thinks that by so doing he can facilitate mutual understandings. For that reason I have shifted my use of the word capital, but I have not changed my doctrines as to capital by a hair's breadth: Irving Fisher seems to have misread me in this matter. I hope you will forgive this scrawl.

Yours very sincerely,

ALPRED MARSHALL.

To Professor JAMES WARD

Balliol Croft, Cambridge 23. ix. 1900

....I would not have you think me indifferent to mental science. About as much of my time since I came to Cambridge in 1861 has been given to it as to mathematics. My zeal for economics would never have got me out of bed at five o'clock in the morning, to make my own coffee and work for three hours before breakfast and pupils in mathematics: but philosophy did that, till I became ill and my right foot swelled to double its normal size. That was in 1867. Soon after, I drifted away from metaphysics towards psychology. When Pearson asked me to lecture on Political Economy I consented; but I should have preferred philosophy, which was his subject. Shortly after the College made me a lecturer: and I added Logic and Ethics. But I always said till about 1871 that my home was in Mental Science. Gradually, however, the increasing urgency of economic studies

as a means towards human well-being grew upon me. About 1871-2, I told myself the time had come at which I must decide whether to give my life to psychology or economics. I spent a year in doubt: always preferring psychology for the pleasures of the chase; but economics grew and grew in practical urgency, not so much in relation to the growth of wealth as to the quality of life; and I settled down to it....

To Professor A. L. BOWLEY

Balliol Croft, Cambridge 21. ii. 1901

My dear Bowley,

I told you I thought there was too much mathematics in your excellent book for the ordinary economic student. Having looked again at it, I think it presents an implicit claim for the applicability of abstract reasoning in the deduction of practical precepts from economic statistics, which I hesitate to admit. So, in that hurried and imperfect way in which alone my overburdened strength will allow me to write, I venture to put my difficulty before you.

Perhaps the best way to begin is to confess that I regard the method of Least Squares as involving an assumption with regard to symmetry that vitiates all its applications to economic problems with which I am acquainted. In every case that I have considered at all carefully, I think harm has been done by treating the results as "economic." I regard them as mathematical toys. I think the economic, as distinguished from the mathematical, student is hurt by being invited to spend his time on them, before he has made a sufficiently realistic study of those statistics to know roughly, without calculation, on which side of the target the centre of the shots lies. He assumes there is no wind. I believe that a Boer marksman, who takes account of the wind, will by instinct get nearer the truth than he by mathematics. To study the wind and guess how it will deflect the bullets is, in my opinion, the work of the statistician. Do not you encourage men to neglect the wind? For instance, I of course accept the rule that, other things equal, it is more

important to multiply items for an index number than to adjust weights: indeed, I regard the rule as almost too obvious to need proof. But I hold that in economics other things are so often not equal that greater proportionate stress ought to be laid on the necessity of examining each case to see whether the weights are important or not, than you appear to me to do. Thus one would naturally say, prima facie, that it is not important to weight returns of wages from branches of a trade union in order to get the true average. But I had made very little progress in the study of wage-statistics before I became convinced that it is necessary to do so, at all events for several large classes of trades.....

Again, if I had been asked to give instances of the benefit that an economic student would get from a course in statistics. none would have been more likely to occur to me than that of being warned against the common newspaper error of regarding the statistics of unemployment among Ironfounders as a basis for broad generalizations.... Independently of its unique statistics, that trade fascinates me. I love to linger in the foundry, and I never liked mechanical invention less than when I learnt that it was bound to drive out the life-earned skill of the artizan from many of the higher, as well as the lower. branches of the trade. It was, I think, in 1885 that I was shown over the only Works in Keighley that were on full time. The Manager showed me a dozen navvies working like furies at the boxes, and each earning 10s. a day. It was coarse work: and I could hardly blame the founders' union for refusing it. But of course they lacked employment. He later on confirmed his statements: and told me that founders' employment statistics were utterly non-representative, even for other credit-cycle trades. On the Labour Commission I watched evidence as to Unemployment more eagerly than for any other point: and I am convinced that the common old-fashioned views as to its nature, extent and causes are very wide of the mark.

This is a fearfully long jaw. But it all leads up to one thing. You have made for yourself, in this short time and in spite of unusual difficulties, so splendid a position among students of the first rank, that you may well claim to be able to take care of yourself. But there is a tradition that an old teacher, not

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because he is wise but because he is affectionate, may venture something. Will you then be so very generous as to forgive me if I ask you to ask yourself whether, having now brought out this great and successful book, it is not time to make some further study of the broader relations between economic facts: to leave mathematics for a little on one side; and join more heartily in the quest for "the One in the Many, the Many in the One"?

Yours sincerely,

ALFRED MARSHALL.

Balliol Croft, Cambridge 3. iii. 01

My dear Bowley,

Thank you very heartily for your generous letter. Now that I am getting to feel the deadening hand of age press heavily on me, I am looking more and more towards a future when I shall be silent except in so far as some faint echoes of my voice may be mingled in among the sounds of progress in which some of my old pupils are leaders; and among the first of those I have for the last ten years thought of you. Others have given more time to economics than you: but no one has done as much relatively to his opportunities. So, though I grudge every hour that calls me away from my own work, I cannot bear to act on your kind hint, and leave the question as it stands.....

You say you have no memory. Memory is quite as often a curse as a blessing to the student of economics, because it tempts him to recollect particulars, and there never was a memory that could retain a hundredth part of the particulars needful for solving a very small problem. The use of the study of particulars may be controversial (and so far hateful). This use is that, when any one basing himself on particulars flatters a popular whim of the moment by instancing particulars favourable to it, the man with a memory can produce in debate particulars which are inconsistent with it, and so expose him.

But for the constructive student, who does not trouble himself to expose impostors, the only use of the study of particulars is to correct and enlarge his own instinct. He should, I think, read

and read and read pages of statistics, not troubling to remember any, but always stopping when he comes to a figure which is not what he expected, and not leaving it without a vigorous attempt to discover whether (i) his general expectations are framed on a wrong basis, or (ii) the deviation was due to some cause which he could not have expected to anticipate: so that, though it increases the need for caution, it does not demand a shifting of his general position. You know my old "Red" curve book in which any important economic or semi-economic fact (in figure form or other) which occurred in any year, say 1867 or 1889, will be pierced through by a pin put on the proper spot and run through the book. A very great part of my work has been the study of that book, or more recently of lecture diagrams. on a similar scheme. On each page or wall diagram there will be the history of from two to ten correlated movements. But I scarcely ever get any instruction worth having from a single page: I learn only by turning backwards and forwards, backwards and forwards from one correlated group to another. Thus my notion of the use of economic statistics differs widely from that which, on my second view of your book, I found implied in it; and which in your last letter you have expressed in the words: "the relation of the mathematics of the subject, which I regarded as its furthest scientific development, to actual facts."

In my view every economic fact, whether or not it is of such a nature as to be expressed in numbers, stands in relation as cause and effect to many other facts: and since it never happens that all of them can be expressed in numbers, the application of exact mathematical methods to those which can is nearly always waste of time, while in the large majority of cases it is positively misleading; and the world would have been further on its way forward if the work had never been done at all. It is chiefly when the mathematical method is used not for direct construction, but to train sound instinctive habits (like the practising of scales on the piano), that it seems to me generally helpful. I admit exceptions, and no doubt there are already more than I know of, and yet more will be discovered. For instance, if I were younger I would study the abstract mathematical doctrine of correlated curves, which I am ashamed to say I do not fully understand. I think it may occasionally be

helpful in determining a controversy as to whether two movements have a causal connection. But at present we are not ripe for that, I think. Look at the Bimetallic controversy. (You know I am a bimetallist, but opposed to the excrescences which the League has borrowed from the U.S. silver men.) Out of a hundred things which I think are causally connected, and which -by continually passing from one page of my "red book" to another-I have got to regard as but manifestations of one broad, many-sided movement, the writers of the League select two. Without proof they assert that A is the cause of B, when it seems to me that it would be less untrue to say that B is the cause of A, and they deluge the public with these correlated curves to prove it. No doubt they can be fought with their own weapons: their own methods can be made to bring out exactly the opposite results in every particular: but that is a dreary soul-sickening waste of time. Surely the thing to do is to build the basis of our economic structure soundly and not to put a varnish of mathematical accuracy to many places of decimals on results the premises of which are not established within 20 or 50 per cent.; many not even so far as to put beyond dispute the question whether A is the cause of B, or B the cause of A, or A and B are the results of a+b+c+d+... Surely the thing to do is to seek the Many in the One, the One in the Many.

And who is to do it? It is a far harder task than anything that was set to candidates for the Mathematical Tripos in 1865 (I know little of what has happened since).....It must for the greater part be done by Cambridge men, or left undone. And by which Cambridge men? There are not a score who are setting themselves to do it. There are not six who have equal faculties for doing it with the quiet and steadfast A. L. Bowley. If you do not do your best, the world will be much the poorer. If you do, you will have done something to turn the mighty forces of progress into paths that lead ever upwards, and away from alluring openings that lead to precipices, or at best are but blind alleys. To do that, even a little is worth a life: and you can do it much. Do not refuse.

Yours in trust and hope,

ALFRED MARSHALL

Balliol Croft, Cambridge 20. xii, 01

Dear Bowley,

It is not through negligence that I have left your letter unanswered. For I have thought about my answer once or twice every day since I received it. But it is most difficult to give advice to one who has already his own position more or less set, and yet more or less unknown to me: and it is important I should do my best.

So far as my views on books in general go, the enclosed paper, which I made out for my class, may interest you.

But as regards your own special work, I think the best thing I can say is that you should select a few questions which are of special interest to you, and in which the public is not without interest, and set yourself to solve them. There is scarcely any question in economics which might not be advanced by bringing to bear on it (i) a knowledge of what statistics have to say; combined with (ii) a knowledge of what statistics can't be made to tell, but which has to be reckoned for in a realistic solution.

(i) without (ii) seems to me so dangerous that on the whole it is almost more likely to do harm than good. And the best way of working (i) usefully is, I think, to work out a few specimen problems thoroughly, taking (ii) at least as seriously as (i).

You know I have always had this view. I have never lectured on statistics in the abstract. But in every advanced course I take one or two specimen problems (or problemettes—little problems or fragments of problems), and put the statistical aspects (in diagrammatic form, if possible) before the men, and then go for its solution as a whole. I believe that that is the right way to teach statistics to those who want to become not pure mathematicians but realistic economists.

Scarcely do I write a single chapter of my wearisome book without saying to myself—"Now, if I were a rich man, I would have an office with one or two trained economists to rule it, and several clerks, and I would ask them to bring out what statistics have to say on Question A or B, etc. And when I had got one answer as to A from English statistics, I would get

another division of the office to go over a similar problem to A with German or U.S. statistics; and look at the result. Then my chapter would be of quite a different order from what it is."

I ought perhaps to write down such questions as they arise: but I don't.

Now, would it be well that I should try to get a man of your age and position to "devil" at questions that I might have a disproportionate interest in?

But I will give you one instance, not a very important one in itself, but a good type—my purpose being mainly to try to make my meaning clear; not to urge any particular piece of work on you, but merely to indicate what is in my opinion the "real" use of statistics at the present stage of economics, i.e. the pursuit of the aim indicated by Fortry, quoted in my Old Generation of Economists and the New, p. 13.

The Sugar bounties.

- A. Assuming that they lower the price of sugar to the British consumer by d. a pound (or any other amount), what is the aggregate gain to us?
 - B. What would be the aggregate gain from stopping them to

 - (c) black labour

(a) capitalists and landlords
(b) white labour other countries?

- C. How far is it true that the present distress in those colonies is due to physical and moral degeneration as the results of
 - (a) climate;
 - (b) self-indulgent habits engendered by the abnormal ease of making money in the old time?

How far was that ease due to circumstances which no one had a right to expect to last?

What light can be thrown on these questions by

- (i) Statistics of trade and fortunes made by West Indians in the old time?
- (ii) Statistics of (α) sugar obtained,
 - (β) utilization of waste products,

from a ton of sugar cane in the West Indies in 1850 as compared with 1900: this ratio being compared with a similar ratio for a ton of beet in Germany?

- (iii) Statistics of work done by labourers whose ancestors have lived in these islands for several generations, as compared with that done by "fresh" workers? (British Guiana capitalists said they could make a good thing of the colony if sugar bounties were abolished, and they were allowed to import an indefinite number of Asiatic etc. workers: those whom they had used for several generations were useless! Apparently that was to be supported at Imperial expense!)
- (iv) Statistics of output per £1000 of capital and per x workers of (a) sugar in Queensland, (β) bananas and other miscellaneous fruit in Florida, etc.?
- D. Estimate of the probable loss incurred by bolstering up unenterprising capitalists in the employment of degenerating labour, with the prospect of having later on to support that labour.
- E. Pecuniary gain or loss resulting from leaving sugar bounties as they are, and giving a capital sum of £1000 as a present to each white man, woman and child in the West India Islands.

As I write this I am of course thinking a good deal about the anti-social practices which Trade Unionists sometimes sustain, though of course they did not invent them. In concocting sauce for the goose, one sometimes looks at the gander.

I am afraid the illustration has panned out rather wearisomely, however.

A similar one might be got from the question of "protection" to English agriculture: but of course the items would be much more numerous.

To take a very simple point. Only the other day I was showing a diagram in a lecture, made chiefly out of Arthur Young's Tables, which are reproduced by Tooke (*History*, vi. p. 391); and lamenting that I could not find time for the continuation by aid of your statistics.

But really they ought to be supplemented by some knowledge of the food other than wheat (or cereal) consumed by the workers at each date; with estimates of what such food would have cost at other dates; and not omitting (as many statisticians do inconsistently with their professed aims) those things which were not procurable at all at the earlier dates, but inserting them at

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rather high arbitrary figures based on those at which they first appeared; and adding that they could not be got even at those figures.

This would count to raise the purchasing power of modern wages in most things, but to lower city wages, if fresh air is counted, as it should of course be.

There: I have taken up much of your patience and I fear said very little after all. But it is difficult to say the right thing in such a case.

Yours ever,

A. M.

Balliol Croft, Cambridge

27. ii. 06

My dear Bowley,

I have not been able to lay my hands on any notes as to Mathematico-economics that would be of any use to you: and I have very indistinct memories of what I used to think on the subject. I never read mathematics now: in fact I have forgotten even how to integrate a good many things.

But I know I had a growing feeling in the later years of my work at the subject that a good mathematical theorem dealing with economic hypotheses was very unlikely to be good economics: and I went more and more on the rules—(1) Use mathematics as a shorthand language, rather than as an engine of inquiry. (2) Keep to them till you have done. (3) Translate into English. (4) Then illustrate by examples that are important in real life. (5) Burn the mathematics. (6) If you can't succeed in 4, burn 3. This last I did often.

I believe in Newton's Principia Methods, because they carry so much of the ordinary mind with them. Mathematics used in a Fellowship thesis by a man who is not a mathematician by nature—and I have come across a good deal of that—seems to me an unmixed evil. And I think you should do all you can to prevent people from using Mathematics in cases in which the English Language is as short as the Mathematical....

I find mathematicians almost invariably follow what I regard as Jevons' one great analytical mistake, his eulogy of the Geometric mean in general: and do not see that, according to his use, erroneous weighting may do far more mischief with the Geometric Mean than with the Arithmetic Mean. I always have to spend some time in convincing them of the danger.

Yours emptyhandedly,

ALFRED MARSHALL.

Another trouble is that mathematicians insist on assuming that, if p be the price which may vary to pr or to $\frac{p}{r}$, then the two variations are *prima facie* to be assumed to be equally probable. Whereas of course, if r is a considerable quantity, that is not true: Jevons has overlooked this also, I think, as a result of not thinking in English. But of course you know far more about these things than I do: and again I say I am an unprofitable Servant.

Balliol Croft, Cambridge

7. x. 06

My dear Bowley,

I ought to have thanked you before for your excellent and interesting Section F address. I rejoiced to know that the whole meeting of the Section was eminently successful, at all events from the scientific, if not from the newspaper, point of view.....

It is however true that the longer I live the more convinced am I that—except in purely abstract problems—the statistical side must never be separated even for an instant from the non-statistical: on the ground that, if economics is to be a guide in life—individual and more especially social—people must be warned off by every possible means from considering the action of any one cause—beyond the most simple generalities—without taking account of the others whose effects are commingled with it. And, since many of the chief of these causes have either no statistical side at all, or no statistical side that is accessible practically for common use, therefore the statistical element

must be kept subordinate to general considerations and included among them.....

And so you, who, in spite of your humility, are an economist by nature, should, I think, in the non-mathematical part of your work treat economic problems as a whole clearly and emphatically.

The vast services which you are rendering to economics would, I think, be doubled if you would do that: well that's too much, there's not room for it: say increased "in a considerable ratio."

Yours very sincerely,

ALFRED MARSHALL.

In the last two years I have given about a sixth of my lectures to almost purely statistical discussions of a general (non-mathematical) character. Each year I worked over rather carefully some hundred pages selected from the statistical parts of the two "Fiscal Blue Books." And now that Pigou is taking "Analytical Difficulties" I shall probably be able to do a little more in this direction. But my main aim is to help people to read through figures, and reach the real values, the true relative proportions represented by them.

Balliol Croft, Cambridge

15. x. 06

My dear Bowley,

....In what I am writing I am bound to say something on the matter [of the real wages of German and English workers]: but it can only be in one or two paragraphs; and it cannot be based on thorough study. For general purposes indeed I rely more on my "field work" in the workingmen's quarters of many German towns, and on my conversations with Germans in the Tyrol, than I do on Statistics. For the Statistics seem to me specially full of traps. "Arbeitslosigkeit" for instance means something very widely removed from "Unemployment," and it is hard to find out how widely.....

A novelist has been quoted in support of the statement that German children never wear untidy shoes: they would rather

go shoeless. I showed that to Dietzel and Lotz: they burst into a roar of laughter. She had obviously only observed in summer: and then most children of the working classes go barefoot; those who would have tidy shoes in winter start in the morning with clean legs: those who would wear untidy shoes start with legs covered eight inches high with indurated street muck!....

This is not Statistical. But if you could take the statistical side up, and do a little field work in Germany, you might render a great service.

Yours sincerely,

ALFRED MARSHALL.

To THEODORE LLEWELLYN DAVIES

Balliol Croft, Cambridge 39. x. 01

Dear Llewellyn Davies,

I have found a short loose end of time which I could give to the Local Taxation Report. I have dipped into the volume in several places; and have read nearly the whole of the Separate Reports on Site Values &c. I find it extremely interesting; if I were not so deeply sunk in other parts of economics, I should make a thorough study of it, and of some questions suggested by it.

The Separate Report seems to me admirably put. I agree with it on a very great number of points on which it differs from generally received opinion. And in fact I have only noticed two questions on which I do not go with it. My views on these two are indicated in my Memorandum. But they have so much interest for me that I think I will try to focus them again: partly because the answers of the signatories of that Report to the questions are implied by silence, rather than expressed.

The first is:—Given that (say) £200,000,000 have to be raised by taxation, Imperial and Local, is it possible to reduce the aggregate taxation on immoveable property without imposing other taxes which would on the whole be more burdensome and less just? I say No. And therefore, while I think that there is much to be said for maintaining large grants in aid of local rates

for the double purpose of removing the present inequalities of the pressure of those rates which are in effect spent on matters of national concern, and of enabling the Central Authority to exercise some control over the efficiency with which those services are performed, I think that the funds for those grants should be derived from taxes on immoveable property.

I do not question that the plan of grants in aid is the easiest at starting, and that the control exerted by the central government through these grants would be beneficial in many ways. But, though the easiest, I do not think it is the best route. Westminster has already a far greater burden than it can carry; and is notoriously wanting in initiative in many directions. My own ideal is therefore the development of "Provincial" governments with duties somewhat similar to those of the Swiss Cantons, and with funds derived chiefly from taxes on immoveable property. (The Inhabited House duty might be handed over to them.) They could try experiments; inter-provincial suggestion and emulation would make for progress.

The Second question, or rather group of questions, is:—Are not the duties, which the State and private individuals have hitherto recognized with regard to the use of land, inadequate to the needs of the modern age? Is it not true that, in spite of the electrical distribution of power, of asphalt roads and motor cars, an ever-increasing portion of English children will be town bred? Is it not true that, unless our laws as regards building and open spaces are organically changed, the result must be the degeneration of the race? Is not this the most important economic issue which the present generation of Englishmen have to face? Does it not call for a large expenditure of money? Will not that expenditure, if wisely set, redound to the real value of land? Is it not therefore equitable that land values should be charged much more heavily towards it? Does not this case differ in nature from ordinary questions of taxation; and resemble rather the taxation of riparian owners for main drainage schemes, which were not contemplated by the tenants, and from which they will not reap any great benefit?

If, as I claim, this group of questions should be answered in the affirmative, then Ch. XI "Why site values should be rated" does not go far enough to be an adequate basis for a thorough solution of the problem of the taxation of land; and I would rather that no great change were made now, than that gains, made at the expense of national life, should be diverted from the restoration to the people of the sources of life, and appropriated to the needs of the moment, with the ultimate result that they are mainly spent on ephemeral comforts and luxuries....

To Professor A. C. PIGOU

Balliol Croft, Cambridge 17. vi. 02

My dear Pigou,

I don't want to be an accomplice in any way in your letter. So all I will say is that I think it very good, though rather efflorescent in its earlier part.

One word of caution. Sir R. Giffen is a sturdy combatant, helpful when on our side. But he is reckless. And if we had to defend "free trade" (in its moderate modern sense), and yet were bound to admit all the contentions by which Giffen has given away his case in recent articles, I think our position would be strategically untenable.

As to my own motives for not writing, they are not quite what you take them to be: for I have just looked at the current Saturday Review. My own position is that I have no time or aptitude for writing on questions of the day, as such. If I condemned aloud all the words and deeds of, say, Mr Chamberlain or Mr Webb, which I do not approve, I should have my hands full.

When I write it is always because I think some general principle, which belongs to the sphere in which I work, is being misquoted, or misunderstood.

I am a good deal tempted just now to write about the Zollverein principle, for that reason. The Speaker's articles count as a perceptible, but not strong, argument against my doing it. But I do not regard it as my work to attempt to make an exposition of familiar arguments such as John Morley has done with such admirable clearness and force, and with which the Speaker is justly delighted.....

Yours etc.

ALFRED MARSHALL.

Balliol Croft, Cambridge 19. iii. 1903

My dear Pigou,

I have just been reading your article in E. J. [March 1903]....Well! Am I right in supposing that your main argument is this—

Though we may pass from the utility curve of an individual to the demand curve of a nation (or other group) as regards bread or milk or any other commodity which is valued only for its direct benefit to us, yet we cannot do that for commodities which we value partly because they impart social distinction. For a large change in the supply all round of such a commodity alters the conditions which we have assumed to be practically constant when making out the curve for an individual.

So far as I can see, I concur in this: and think something of the sort ought to have been said by me. But of course I have always insisted that the demand price of a group is not any approximate measure of satisfaction, save on the assumption that people of different incomes and also of different sensibilities are evenly distributed throughout the group. And next it may be said that the continued references to the effect of changes in fashion include in their purview such changes as alter the distinction-giving power of a thing....

Next, is your second chief point that, since some moving forces are not associated with great pleasure, possibly not even with great satisfaction, therefore the consumers' surplus shown by the curve may diverge far (even in a society where all are about equally well-off) from being a measure of aggregate pleasure or even aggregate satisfaction? If so I again quite agree. I must some time consider whether I have sufficiently emphasized the fact that the schedule deals with satisfaction only in so far as that arises out of the number and excellence of the things which a man has, and not out of the quality of the man himself....

ALFRED MARSHALL

12. iv. 1916

My dear Pigou,

I am charmed by the brilliancy and "go" of your book. But I am also a little frightened. I am certain that almost everything you say is true, with the qualifications that are latent in your mind: but some of them seem to me in danger of misleading people who do not know the ropes of economic complex interactions. For instance, what you say on p. 19 means something that is true: but I think it may be taken to be inconsistent with the vitally important fact that, if our soldiers and their families consume in various ways at Government expense much more than the German soldiers do, and the war last long, then Lloyd George's silver bullets in the last campaign may fail us.

Again, if A buys old lace from B, and B saves the money, the country is not weakened. But in fact B probably sells lace in order to spend—perhaps on maintaining a big establishment, dances, etc. Therefore I should be glad to hear that A had decided not to buy the lace, so long as I know nothing about B. The only thing which I have noted as apparently opposed to my own opinion is on p. 93, about railways. I have been working off and on at railways for several months; and I think I know nearly all of importance that has been said by the best authorities. I believe that they hold that it costs more to earn £100 on first class than on third class traffic; for first class insists on something like solitude, and the dead weight involved is portentous; but that, the excess of receipts over direct costs being high, they would lose net revenue by dropping first class carriages. I believe these opinions are certainly valid. My own estimate, based on no inside knowledge, is that, the direct cost to the country of A's railway journey for which £1 is paid is something like 6d.; though, especially if there is luggage, it may rise to a shilling. If the £10 is distributed over a dozen journeys, the cost would of course be higher. I make allowance for the time spent by ticket clerks, etc. on A's own needs: but none for the need which increasing traffic may make for increased services, and not merely tight packing of trains. (Of course that is fairly reasonable under war conditions.) If allowance is made for probable lengthening of trains, I would add half as much again: if additional trains are in view, a good deal more; and more again if A travels at times of the day at which the line is heavily worked. But I can't get beyond 4s. in any case. On the other hand I regard unnecessary motor car hiring as exceptionally unpatriotic....

ALTRED MARSHALL

To Professor F. Y. EDGEWORTH

Wolkenstein, South Tirol

28. viii. 02

-B. You know I never apply curves or mathematics to market values. For I don't think they help much. And market values are, I think, either absolutely abstract or terribly concrete and full of ever-varying (though individually vital) side-issues. Also Ox for market values measures a stock and not a "flow"; and I found that, if I once got people to use Demand and Supply curves which discussed stocks along the axis of x, they could not easily be kept from introducing the notion of stock when flow was essential. That is what I meant by my footnote on p. 47 of Ec. Journal, vol. VIII....
- 1). I think curves do naturally avoid the money difficulty: but I do not think they are essential for that line of argument. And I think they only get at the outer fringe of the outside of real problems of International Trade....
- F. re Sidgwick's theory of cost of transport, I have not decided whether to make any reference to it in my new volume. My view is that he has got quite off the rails and that it is hardly necessary to say so.
- G. Trusts. I am confirmed in my opinion that Cournot's method of treatment is wholly inapplicable to the real conditions of life. His discoveries were I think-in so far as they claimed to have a bearing on real problems-rediscoveries of things that had been known in the XVII and better in the XVIII century as the result of the working of the chartered companies. In all the vast talk which I have put into writing on them I have seldom been tempted to refer to the abstract theory of monopolies, except of course in the general introduction. No instance could, I think, be better of the mischievousness of an academic education in abstract economics not continued into real economics [i.e. not continued for at least three years (IIm!)] than the inferences which Cournot's method suggests as to the relative efficiencies and inefficiencies, public usefulnesses and mischiefs of different forms of combination and monopoly. I have in view, e.g., what he says about a monopoly of brass versus a monopoly of zinc

and a monopoly of copper (supposing zinc and copper useful only as constituents of brass). I have a notion that that is his illustration. The considerations of which he takes account seem to me to be of very slight importance relatively to those which he ignores: and the conclusion to which he points is, I believe, generally the opposite of the true one.

As to what I say in my Aspects about stability in relation to Trusts: that comes really under two heads. Firstly (on p. 23) I argue that they do not tend to make industry more stable (the same idea occurs in my Principles, p. 469 and is being developed in my vol. II): and secondly I have argued that "Trusts" in the original sense of the term, the only sense which was in vogue in 1890 (one analogous to Kartelle), were essentially unstable: that people gave far too much attention to them and ought rather to watch the real oncoming peril—that of consolidation. [Incidentally I may say that I am just a little swollen-headed (pride-inflated) at having predicted in 1890 what by 1960 had been effectuated, i.e. the disappearance from America (not from Germany yet) of Trusts in the 1890 sense of the word.]...

- J. I am not sure that we differ about "Rent not entering into Cost." The question whether a phrase, which was from the first an indisputably bad one, can be rescued by explanation from misinterpretation, is to be solved only by experience. If I could have foreseen how many people would, in spite of my protests, persist in taking my words as I would have them not do, I should have from the first said what I do now:—It is wisest not to say that "Rent does not enter into cost of production": for that will confuse many people. But it is wicked to say that "Rent does enter into cost of production," because that is sure to be applied in such a way as to lead to the denial of subtle truths, which, in spite of their being subtle, are of the very highest importance scientifically and also in relation to the practical well-being of the world.
- K. I don't recollect that I said that a tax on site values would not discourage home industry. For site value is a very complex entity, not a mere capitalisation of true economic rent; and the manufacturer is often his own landlord. But of course I hold that, if spent on fresh air, it would add so much to the industrial vigour of the population that it would go far towards

arresting England's industrial (relative) decline; and might even turn the tide....

N. I think the notion of "representative firm" is capable of extension to labour; and I have had some idea of introducing that into my discussion of standard rates of wages. But I don't feel sure I shall: and I almost think I can say what I want to more simply in another way.

I had forgotten I had written (and cut out), what you quote from my Edition I, about balancing of motives. But I did so no doubt because I found it was habitually misunderstood, especially by Ethicists: they would take such phrases as Utilitarian manifestos. So I set myself to cut out short sentences on a big subject. What I meant however is—for the greater part—contained in the last two lines of Vol. 1, p. 788. "The ground traversed in Books v and vI commands and gives access to that which lies yet before us." To that I adhere and I like it better than the old phrase "a kernel." But v and vi rest on III and IV; and VI is often concrete. In that old phrase you would perhaps take the kernel to be the essential part: I take it to be a small part; and, when taken alone, more likely to be misapplied than in the case of other sciences. In my view "Theory" is essential. No one gets any real grip of economic problems unless he will work at it. But I conceive no more calamitous notion than that abstract, or general, or "theoretical" economics was economics "proper." It seems to me an essential but a very small part of economics proper: and by itself sometimes evenwell, not a very good occupation of time.

The key-note of my *Plea* is that the work of the economist is "to disentangle the interwoven effects of complex causes"; and that for this, general reasoning is essential, but a wide and thorough study of facts is equally essential, and that a combination of the two sides of the work is alone economics proper. Economic theory is, in my opinion, as mischievous an impostor when it claims to be economics proper as is mere crude unanalysed history. Six of ye one, $\frac{1}{2}$ dozen of ye other!

That mere qualitative analysis, though essential, is not the chief work of the XXth century I have argued in "The Old Generation of Economists and the New," Harvard Journal, Jan. 1897 (pp. 11 and onwards of offprint). In all those pages

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there is no question raised for which Economic Theory by itself is of any use except in criticism. Nor is it of any use by itself for any one of those "Scientific inquiries" which I have suggested in Book 1. ch. VII, § 3 as the *proper* work of the economist; and of course not for the practical issues which I have suggested in the following § as giving a purpose to his scientific inquiries.

Balliol Croft, Cambridge

21. iv. 09

My dear Edgeworth,

I have just noticed your review of Rae in the Ec. J. [Vol. XIX. p. 102]. I don't want to argue. But the hint that a rather rash and random guess has been made by those who suggest that a (moderate) rise in the price of wheat might increase its consumption in England (not generally) provokes me to say that the matter has not been taken quite at random.

When wheat was dear and men were cheap, the estimate of consumption of wheat per head in England was one quarter: now it is, I believe, between 5 and 6 bushels. And thrifty Frenchmen with all their cabbages are said to consume more than a quarter now. Ever since I saw Giffen's hint on the subject, I have set myself to compare the amounts of bread (and cake, wheaten biscuits and puddings) eaten at first class dinners in private houses and expensive hotels, with the consumption in middle class houses and second-rate hotels; and again with the consumption in cheap inns, including a low grade London hotel: and I have watched the baker's supplies to cottagers. And I am convinced that the very rich eat less than half as much bread as the poorer classes; the middle class coming midway. This proves nothing conclusively: but it is a fair basis, I think, for a surmise as to a probability.

In America the waste of cereals is said to be prodigious: I think a rise in price would check that; also all cereals, including even wheat, are sometimes fed to stock. In Germany it is known that dear wheat and rye increase the always enormous consumption of potatoes. I have never seen evidence that dear wheat has a considerable effect in that direction here.

With bad world harvests for two or three years in succession, I suggest that part of English wheat consumption would come from American and Australian waste. If not, then bread might become so dear that our consumption of wheat would diminish. I don't say I am right: but I am not random.

Yours ever,

ALFRED MARSHALL

439

I forgot to speak of adulteration by bakers. When I was a boy that was done largely by potatoes. Now I think it is seldom done on a great scale: and that maize is used more than potatoes, when wheat is dear. I think a great rise in the price of wheat would greatly increase the amount of maize in bread: and this of course tells on your side.

Balliol Croft, Cambridge 22. iv. 09

My dear Edgeworth,

About ten years ago I nearly completed a draft Book (No. X. I think) of my second volume "On Markets." It had an introductory general chapter, followed by others in detail. After working some time, I found the task too long to be made complete. So I decided to select two or three typical instances, and work them out carefully. Wheat was-for many reasonsmy chief instance. My draft copy on it is about 40 pp. long. I read several thousand semi-technical pages, chiefly American, on the subject: and came to the conclusions which I condensed in 1903 into §\$ 23-27 and 29 of my Memorandum. The substance being that, after a special analysis, it appears to be not "extremely improbable," but a priori to be expected, that the elasticity of supply of wheat in those parts of America from which most wheat has been raised in the past would obey wholly different laws from those which did prevail there a generation ago, and which now prevail in the Dakotas and Manitoba etc.: and that the evidence which could be got tended to prove d posteriori that this was the case.

Having had means of knowing that the information put before

the British public from about 1902, as to the conditions of Northern Manitoba, Assimaboia, etc., was largely fraudulent, and prompted by unscrupulous "Americans," who had taken options (and in some cases bought outright) a great deal of Canadian land, I began to read again on the same subject, and worked through "several thousand?" pages more. Whenever I met a high class American I asked him in effect this question. "Is not the export of wheat from the North American Continent in years of normal harvest highly elastic for a fall and very inelastic for a rise?" and I understood everybody, who expressed an opinion at all, to agree. You may perhaps recollect that there was a dinner party here during the British Association meeting in 1904: and that after dinner, though there were. several people to whom I wanted particularly to talk, I spent the whole time—as it was my only chance—in getting from Mayor, who knew much more about it than anyone else in the world, a detailed (illustrated) account of the wheat resources of the Canadian Northwest.

Of course I looked at the matter from the analytical point of view also. And it seemed to me that the common opinion—which I understand you to endorse—is based on a fundamental misconception of the nature of wheat production in a new country. Under some circumstances it is a complete industry; and then it responds but slowly to changes in price. Under others it is a mere department of general agricultural industry; and then it responds almost instantaneously.

There is no paradox in this. Take an analogous case. If a certain pattern of cycle, not patented, were to come into favour, so that it could be sold for £1 more than others into which the same amount of work was put, then its production might jump up from five thousand to half a million instantly: because making a particular kind of cycle merely requires minor detailed readjustments of plant already in existence. That case resembles the case of wheat where highly capitalised mixed farming predominates. For the farmer can in 1910 say "I will have four times as much wheat a year as now," or "I will not have any wheat at all next year." As a matter of fact however—and on this all Americans with whom I talked seemed to agree—the Middle West mixed farming might diminish rapidly its

supply of wheat, but is not likely to increase it rapidly; because it is not highly capitalised, such an increase would require to be preceded by a large and rather slow increase of live stock (artificial manure being impracticable unless the price of wheat rose very much).

On the other hand, when cement works are fairly busy no increase of price will bring about any considerable increase of supply for a long while; it must wait for the erection of new cement works. This corresponds to the "sole-crop" supply of wheat in the Far West; where there is very little room for mixed farming as yet. Land already in cultivation is nearly sure to be used for wheat: and in order to break up more land for wheat it is necessary to build new farmers' cabins, attract workers, perhaps get new branch railways and so on. That is to say wheat production under these conditions is a complete industry, like cement production. It is not a department of agriculture, as cycle making is of mechanical engineering. In my view true science and observation completely endorse Rae's conclusions and mine.

I am even more perplexed by what you say about elasticity of demand..... I object to the phrase negative elasticity, because I think it tempts people to carry analytical mathematics beyond their proper scope. In this case, for instance, it suggests a paradox. And I submit that there is no paradox at all. Take a parallel case. I believe that people in Holland travel by canal boat instead of railway sometimes on account of its cheapness. Suppose a man was in a hurry to make a journey of 150 kilos. He had two florins for it, and no more. The fare by boat was one cent a kilo, by third class train two cents. So he decided to go 100 kilos by boat, and fifty by train: total cost two florins. On arriving at the boat he found the charge had been raised to 11 cents per kilo. "Oh: then I will travel 1331 kilos (or as near as may be) by boat, I can't afford more than 16# kilos by train." Why not? Where is the paradox? What but needless perplexity can result from calling this negative elasticity, on the abstract ground that that name is in harmony with mathematical symbols, which are being pushed beyond their proper scope?... I have written this prodigious scrawl because I cannot bear to think that you suppose me to have spoken of elasticity as high

for a fall and yet low for a rise, without careful thought; without having in a responsible way convinced myself that the sources of supply from which a great increase would come were not quickly responsive to stimulus, and that the sources of supply which would chiefly shrink against a fall of price would respond in that direction quickly.

Yours affectionately,

ALFRED MARSHALL.

Balliol Croft, Cambridge

27. iv. 09

My dear Edgeworth,

Many thanks for your all too kind letter. If I made any reply to your gentle criticisms I should be on the inclined plane which leads down to controversy: so my silence under rude blows might be more awkward than it is, if I once broke through my rule to leave controversy to the strong. I am trying to write out my thoughts, including of course those relating to wheat supply, without raising dust. I can't see my way through the huge difficulties of the great issue, even when there is no dust: I work ever slowly. But yet I have a notion that I really have something to say; partly on subtle points, for which my mind is now of little use, only I have a good many notes made before I became a dotard; but more on the One in the Many and the Many in the One, i.e. the relations of details to fundamentals, a matter on which the experience of age is some atonement for its stupidity.....

But I wish that some one who has the strength would hit such fallacies.....It wants steady persistent hammering; and it can't well be done except by a trained thinker. Even the generally excellent Westminster Gazette gave itself away by saying that the true reason why a German sending goods to the English market need not be charged with the equivalent of English domestic taxes was that the German paid heavy domestic German taxes—an answer fit to make Ricardo's bones rattle in their grave.....

Yours most ever;

ALFRED MARSHALL.

To Mrs BOSANQUET

Balliol Croft, Cambridge

28. ix. 02

Dear Mrs Bosanquet,

Thank you much for The Strength of the People. What I have already been able to read of it makes me sure that I shall find it very suggestive when I can find time to read more.

But I am moved to a mild remonstrance as to a criticism on p. 70. Had it not come from an economist I should have taken it as a matter of course. As it is I am rather puzzled. I admit that it is not only the rich who consume wastefully. Most people earn enough to be able to lead a fairly high life if they spend wisely. Wisdom also might diminish the wastes of war. But as human nature is, the high consumption of the rich seems to me excessive and to necessitate in effect a meagre life on the part of others.

To that argument you raise what I confess seems to me to be an invalid objection that those particular people who are in the worst conditions do not work directly for the rich.

No doubt it is true that labour which is scarce and performs important services is highly paid as a rule. But the issue here (I mean in the passage quoted from me) is a different one; viz.:—Is the share of the total price of products which goes to manual labour as large as is compatible with a wholesome and "free" state of society? Could we by taking thought get the work of our great captains of industry and financiers done with rather less of their present huge gains?

Again, costly professional services are generally paid for by the rich, and not by the poor. But surely to speak of this as covering a great part of the field is inaccurate—independently of the question whether it is relevant to the main argument. Surely it is the characteristic of those developments of manufacture which are specially American that the highest wages, salaries and profits are got by making things, and engines for making things, which appeal to the demand of the working and lower middle classes.

But these are minutiae. I think I agree with you in the main. I have always held that poverty and pain, disease and death

are evils of much less importance than they appear, except in so far as they lead to weakness of life and character; and that true philanthropy aims at increasing strength more than at diminishing poverty.

And now that democratic economics are so much more popular than they were a generation ago; now that the benefits of socialistic and semi-socialistic action are so much more widely advertised, and its dangers so much underrated by the masses of the people, I think it is more important to dwell on the truths in Mill's Liberty than on those in his Essays on Socialism.

A powerful plea for *Strength*, written, as this is, with insight and sympathy, cannot fail to contribute largely to true progress. Thank you again for it.

· Yours very sincerely,

ALFRED MARSHALL.

Balliol Croft

2. x. 02

Dear Mrs Bosanquet,

Of course I accept your premises. I have insisted on them in season and out of season. But I cannot get from them your conclusions.

The matter is too long for argument, especially in writing. But one opinion of mine may be submitted as illustrative of what seems to me, alas! the gap between us. I hope it is not really big!

I start by assuming that it is possible to levy taxes and rates, which would not fall mainly on the well-to-do, in such ways as not to impair individual effort and responsibility. I think everyone should pay rates and know that he pays them. But I regard rates as elastic.

I assume also that the well-to-do spend largely on things that do not make life really more worth living; and the loss of which would involve no serious detriment to the progress of art and knowledge, or to general refinement. [I believe there are no statistics available as a basis for estimating the amount of this. But I am sure it is over *one* hundred million in England; and I think it is very much larger.]

I admit that Municipal Socialism has many dangers, economic and moral. I think municipalities should not speculate or employ "direct" labour nearly as much as they already do.

I think also that public authority cannot meddle with the inside of a man's house very much without risking injury to self-reliance and wholesome independence. Municipal housing seems to me scarcely ever right and generally very wrong. Municipal free baths seem to me nearly always right.

But the outside of a man's house is not his affair: it is the affair of the State or Municipality. The darkness and the polluted air of his surroundings narrow the life and undermine the springs of strength and independence of character for him and his wife and above all for his children, who lack play.

I should like an expenditure comparable with that required for the South African war to be devoted to the removal of this source of degradation for a good many years to come. When the evil of the past had been undone, the future might be prevented from engendering evil without much expenditure of money, but not without much expenditure of thought. I should like this: though as a practical politician I should not dare to ask for many millions a year....I hold that such action is righteous, that it makes for strength, and that the economist has no higher duty than to examine the principles and the limits appropriate to it....

I know you will be so kind as to forgive my frankness.

Yours very sincerely,

ALFRED MARSHALL

Balliol Croft

28. x. 03

Dear Mrs Bosanquet,

...I contend that it would be possible to provide opportunities of healthy play for all children, and to bring fresh air and light more generously into all urban homes, and in other ways to lessen the *real* evils of the poorer classes, without touching on that expenditure of the rich which is necessary for

their true well-being. I think this is possible. But I think also that the attempt to do it in a hurry would be dangerous; for, carelessly done, it might sap the springs of freedom and energy. And in that danger I see the most urgent of all the calls on the efforts of students such as you and me.

Yours very sincerely,

ALFRED MARSHALL

To PERCY ALDEN

Balliol Croft, Cambridge

28. i. 03

Dear Mr Alden,

....I think that unemployment is a symptom of several distinct social maladies, which require different treatment.

For instance, the occasional unemployment of capable energetic workers of all grades is, I think, a wholly different disease from systematic unemployment. It seems due to the inability of beings of finite intelligence to forecast coming economic needs and opportunities with perfect precision: I believe that this form of unemployment is not increasing, but rather diminishing: and that it can be further diminished by a better understanding of the causes of trade fluctuations and changes; and by the widening of world markets: while something may be gained through the diffusion of the notion, that to spend the whole of one's income in prosperous times and to be without resource when the tide turns, is inconsistent with the respect that every one owes to himself.

On the other hand, systematic unemployment is, I believe, caused by the existence of large numbers of people, who will not or can not work steadily or strongly enough to make it possible that they should be employed regularly. They are hunters for odd jobs, which are generally "soft" jobs. A large part of the present unemployment seems to me to be this kind: that is, it is a symptom of disease rather than a cause. And remedies addressed to the symptoms of it are likely, I fear, to increase the disease.

No doubt we ourselves, society at large, are responsible for the existence of this disease, more than the victims of it are. And we ought not to be afraid of very large expenditure of public and private funds in removing or lessening the causes of the disease; on methods of which you and our common friend Lawrence are high authorities. I refer especially to methods for de-urbanizing life, in the sense in which urbanized life is enfeebled life. This should, I think, be supplemented by kindly but severe discipline of those who are bringing up children under physical and moral conditions which will make them recruits to the great army of the habitually unemployed.....

Yours very truly,

ALFRED MARSHALL.

To Sir H. H. CUNYNGHAME

Balliol Croft, Cambridge

14. vi. 03

FOOD SUPPLY IN TIME OF WAR

My dear Cunynghame,

I am no authority on either agricultural or military questions; and I am very far from wishing to offer myself as a witness before the Commission on Food Supply in Time of War: indeed I could not do it. But the matter has been much in my mind during many years; and I think I should like to be sure that certain questions which have occurred to me have been considered, if only to be put aside as unpractical. Will you kindly look through the following?

A. The question of storing

- 1. Is it not worth while to induce the growers of wheat which is ultimately to be consumed here to store it here rather than at a distance, if that can be done cheaply?
- 2. Can it not be done cheaply by enacting that (say) 1s. per ton shall be paid to everyone who on (say) the first Monday night in every month posts a sworn statement that he has on that night a certain number of tons of wheat in store at a certain

- place? (His statement need not be checked save by occasional surprise visits, with penalties for fraudulent declarations. I reckon that this amount would not only make it amply worth while to store grain here rather than abroad, but might even make it worth while to carry over grain from one year to another.)
- 3. Would not the English farmer obtain by this route some reward for the service which he renders in keeping a stock of wheat on hand? Is not such a reward just?
- 4. Might the plan possibly be extended at a lower scale to other grains, which on emergency could be used as bread-stuffs?

B. Military questions

- 5. Could we not in time of war with continental nations obtain grain from U.S. more easily than from Canada? Even if grain for us were made contraband of war, would it not suffice to convoy ships containing U.S. grain from the nearest friendly or neutral European port, to which they could run safely; while Canadian grain would be prize of war in all its course across the Atlantic?
- 6. If we were at war with U.S., would Canadian wheat reach us? If they kept their own grain at home, would they not certainly cross the border and seize or destroy Canadian grain which they thought was coming to us?
- 7. If U.S. government forbad the exportation of grain to any part of Europe, would not it speedily cause such ruin among their own farmers as to cause the evasion or abrogation of the rule? And if they allowed its exportation to, say, France or Germany, should we not be able to buy most of what we wanted from markets to which that wheat came, directly or indirectly?

Balliol Croft, Cambridge

7. iv. 04

My dear Cunynghame,

I am glad indeed that you are writing a book on curves..... I do not know on what lines you are writing, nor whether the history of those MSS. would be in any way relevant. But I would like you to have its outline in your hand, in case you should wish to use any part thereof.

In 1874-7 I nearly completed the MSS, of a book on Foreign Trade. What I then regarded—though I do not do so now—as a fairly realistic treatment of the problem, adapted for the use of business men and other non-academics, was the text. Then followed appendices, consisting of the foreign trade curves; and also the other class of curves in order to get at consumers' surplus (a) in open market, (b) in monopoly sales: where I wanted to get in some hyperbolas drawn by a certain machine you know of. I wanted these, because I found all methods of representing the "total benefit" of foreign trade by their special curves very troublesome. Also I wanted to get out in print those 'hyperbolas, etc. And lastly, in the appendices, I developed or tried to develop the abstract notion of international trade between employers' associations and trade unions.

Consequently the Appendix had no realism about it: all that seemed in any way real was put into the first part, which was to be in bigger print.

The first chapter was "philosophical," on the abstract idea of an economic nation. Then came the chapters on foreign trade which Sidgwick printed (you know I was very ill and consented to his printing some chapters for private circulation, but left the selection to him); then came a chapter applying those curves to the incidence of import and export duties and bounties. He did not print that: I wish he had. It was quite finished. Some of the others were not.

But my case II, that of increasing returns, never seemed to me of much practical use; and in later years I warned people off it, on the ground that, if time was allowed for the development of economies of production on a large scale, time ought also to be allowed for the general increase of demand.

And now, in recent years, I have gradually gone away from the fundamental hypothesis on which the curves are based. They lead to the result that a great part of an import duty will probably fall on the export nation: and I have become convinced that, though the reasons which the old free-traders gave for the opinion that import duties are paid almost entirely by the consumer are wrong, yet their result is pretty well true. And on inquiry I found I had fallen into a trap. I had followed Mill in taking a yard of cloth as representative of England's exports

and Germany's imports: which I still think is right. But then I had glided, as he had done, unconsciously into regarding the demand for imports in general as having a similar character to that for a single commodity. And I now think that is illegitimate, and vitiates a great part of my curves. My old chapter on the incidence of import duties is at least as slashing as Edgeworth's articles. But I do not believe his conclusions, nor those of Seligman, whom the Birmingham League and Ashley quote with such reverence. I have never said anything about the subject of this page in print as yet. But I hope soon to explain whatare, in my opinion, the conditions which govern the incidence of import duties. My Volume II could not be got ready in tolerable time. So I have decided to bring out an intermediate book.

This is long. But I do not apologise. For it takes us back to those queer rooms with the little windows close to the floor, from which I used to look out on noble elms, and in which I used to see some faces that I still love very much: and to one of these this is sent by a worn-out old pedagogue

ALFRED MARSHALL.

Balliol Croft, Cambridge 28. vi. 04

My dear Cunynghame,

Your kind and generous letter makes me all the more regret that I have not been able as yet to read your article in the September number of the *Econ. Journal*. Just now I am inquiring how much of the progress of U.S. industries, which is popularly attributed to the Law of Increasing Returns, is really due to it. I can't answer the question: but I am sure there is a large error in the common estimate.....

I believe that we differ a little as to the function of curves. I like to keep them as simple as possible, and to fill in qualifications and limitations in the text. I recollect that this was the reason of my not following you in the use of successive cost curves. Human nature varies: and I know some people find your method simpler than mine. (I may be wrong, but I think the

majority do not.) And it is a very great gain that things should be treated from two points of view.

If there could be imagined an improvement in your discussion, it would perhaps be that you should indicate that such qualifications as you put into your diagrams are only samples of a great many others which might be introduced. If they were all introduced, the diagrams would be a mass of curves; and I prefer to keep all that I can out of the diagrams. I have hinted this in my note on them in my *Principles*, p. 524....

As to International Trade curves:—Mine were set to a definite tune, that called by Mill. It is improbable that I shall ever publish them; but I am not certain. I am rather tired of them. . I find that it takes a long time to get men to understand the theory: though, when they do, they are proud of it, and are rather contemptuous of any one who undertakes to teach them without understanding it. There is no subject on which I lecture so many times to the same men from different points of view. One of these is that which I understand you are following. I set a question as to the immediate and ultimate effects of an import duty on some thing (named in the question); and, in answering it myself. I often follow what I call "the practical man's route." I talk of prices throughout, and work up to generalities; and thus get a good part of the science of International Trade as a side issue to a special problem. I say "a part": for much that is most interesting from my point of view cannot, I think, be conveniently reached by this route.

But I always find that the best men are relieved when I go over the ground again, starting with aggregates and subordinating details. My experiences on this matter are so numerous that I think it is impossible I can ever be convinced that your method is the method.

But I am sure it is a method: and I am most heartily glad that a man of your very high constructive force is tackling it: it will be a great boon to all students, here and elsewhere. For indeed there is no subject, I think, on which English thought has led the way so consistently as this.

I have promised Macmillan to keep the text of the book I am writing (not the appendices) in a form as attractive as I can to the practical man: and I shall probably go much more nearly

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on the price-of-particular-commodities line than in lecturing to an advanced class: but I do not yet know how much more.

Of course I shall not touch a curve of any kind in the text..... I doubt whether I should be able to add usefully to the long letter I have now inflicted on you, if I saw your MSS. For I do want my time. But I will try if you wish it.

Yours affectionately,

ALFRED MARSHALL.

To Professor F. W. MAITLAND

(This letter is concerned with the place to be assigned to law in the proposed Cambridge Economics Tripos.)

Balliol Croft, Cambridge

8. xi. 04

My dear Maitland,

Probably "Company Law" is technically more serious than I know. But I thought I had avoided the term. I want phrases to be as broad as possible. The Law relating to Joint Stock Cos., which I am most interested in just now, is proposed by J. B. Clark of Columbia. Its main purpose is to defeat practices such as those from which the Mogul Co. suffered, and one of its main means is to allow railway poolings, federations and similar "Northern Securities" practices. I am not sure that I agree with this. I rather think I do not. But I am sure that economists of the next generation will have to consider questions of this sort very carefully: and that, if they do not know more law than I do, though I have read a good many law books and a great many appeal cases, they will be in a weak position. That is why, as I have so often said, I want them, while still plastic, to be taught how to read law books; though I do not want them to become lawyers in any sense of the term.

I knew of course that the Mogul case had nothing to do with Company Law. But I think that the XXth century will need much Company legislation which pivots around the same fiduciary relations of directors of Joint Stock Cos. (and especially of such of them as would be called Trusts in America, on the ground that they exercise a predominating—not necessarily monopolistic—influence in certain branches of trade) towards the public. The economists' complaint against the law generally is that it cares too exclusively for the shareholders, customers and creditors of the Joint Stock Cos.; and neglects the quasi-fiduciary obligations of the company and its directors to other classes.

LETTERS

I don't want you to pay attention to any detail, right or wrong, in this suggestion; but simply to go for as broad phrases as you can. In particular it would be a good thing if monopolies could be included—partly because the question of national, and even more of international, patent rights is growing rapidly in urgency. But even now I should like, if it were possible, though I fear it may not be, to include the general question of the basis and limitations of the right of a private business to the privilege of secrecy, when its dimensions become so large as to give it a semi-public character. That is the kernel of most of the legal questions which interest myself—and I believe other economists—to-day. What will be the kernel twenty years hence, I have not the smallest notion.

Yours very sincerely,

ALFRED MARSHALL.

To F. W. PETHICK LAWRENCE

(Referring to a proposal to tax British investments in foreign countries)

12. i. 04

My dear Lawrence,

I thought your article extremely interesting: and in every way an improvement on Chamberlain's scheme. But I could not follow all your arguments completely.

New elements are introduced by the Colonial exemption. I think the result would be vast arbitrage operations by which nearly all British dependency securities in the hands of foreigners (especially French and Dutch) would be transferred to England in exchange for Argentine, U.S.A. and others. In so far as this was done we should not get much of the tax: the commercial interests of the empire would be knit together: but it might

weaken our position in time of political friction. For at such a time it is specially convenient to us to be able to bring capital home by selling international securities. Colonials do not serve well. And further the chauvinism of certain factions of foreign nations, especially the French, is sometimes mitigated by the commercial interests of other factions; who in consequence speak out when they might otherwise have kept silent. The effect of French holdings of Kafhrs was, I believe, very important in this respect. Of course if the Colonies would really bear their share of imperial military burdens, that would not matter. But in fact they only make believe.

The difference between the yield on good U.S.A. and U.K. securities is nearly £1 per £100: I do not feel sure that changing the £1 into 19s. 6d. would have a very great effect on the course of investment. I think that is governed mainly by (a) rate of average yield, and (b) confidence that the investor knows what he is about. The average Englishman is much more sure of his ground when comparing two English railways than two U.S.A. or two Canadian railways. I do not deny that sentiment influences a large number of small investors: but I do not think it influences much the great bulk of large investments.

For these reasons I should put items 3, 5 and 6 at the end of your article lower than you do. [I quite go with 4.]

Coming to your letter. I do not object to taxing foreigners if we do it by a simple plan, i.e. one that is really simple, not one that merely looks so, like Charles Booth's. But who are foreigners? In this whole controversy, nothing has angered me more than the action of Chamberlainites, and especially his Canadian bodyguard, in reviling the U.S.A. as "foreigners." The last page of the inclosed typed speech of mine indicates my views on that. I am not sure that the tax would immediately increase employment at home, except in so far as the price of English securities is kept high by sentiment. Nothing seems to cause a sharper temporary bout of unemployment than the buying back by foreigners of their own securities held in England. It causes dumping, or at least semi-forced sales of foreign goods; and so temporarily disturbs the English employment market.

And I do not see how the investor in foreign securities evades English taxes: other than those which have been imposed since the goods were made, by the exportation of which he—or his predecessors in title—obtained control of the means of purchasing foreign securities. Also I fear that a firm, which sold largely in U.S.A. and was thinking of starting a branch there, might be decided by the tax to send one of the partners over there to start an independent factory. What I mean is that, if Smith and Brown decide that this foreign branch shall stand wholly in Brown's name, he obtaining a foreign domicile, the plan is defeated.

I have said all I can against your scheme: for I think you put its merits too high. And I am not prepared, as at present advised, to look with favour on any scheme which differentiates against our greatest colony.

I admit however that U.S.A. are no longer in great need of external capital: and that your scheme would be much less offensive and friction-making from their point of view than Chamberlain's.

Yours very sincerely,

ALFRED MARSHALL.

To Sir SYDNEY CHAPMAN

Balliol Croft, Cambridge

29. x. 04

My dear Chapman,

I am proud of your two books. So far as I can see, your Cotton Industry is the best monograph of the kind that has ever been published. It is both a realistic-impressionist study of human life, and an economic treatise.

Work and Wages I have not yet seen much of. But I shall use it a great deal during the next few months. It fits in with my own work. I think the combination of Lord Brassey's knowledge of the inside of big affairs—a knowledge the lack of which at first hand has hampered me always and hampers me still—and his strong solid judgment combined with the faculties and mental elasticity which you have developed make a splendid team.

I have bought duplicates of them and taken them to the book-

case in L.L.R. 5: and at the same time Cunynghame's Genmetrical Political Economy.

I am awfully proud of the three Cambridge products.

I bragged indeed and said I thought that there were few Universities which could show as good a series as our Adam Smith Prize lot. First Bowley's which got him the Silver Medal of the Statistical Society at (I believe) an unprecedently early age, next Lawrence's Local Variations of Wages, next yours; and there is one good one still to come, that of Pigou on Arbitration and Conciliation, nearly ready for the Press.

So I am proud of the "Cambridge Stables"; and I think the quantity and quality of the work you have got through is wonderful. Our best regards to you and Mrs Chapman.

Yours affectionately,

ALFRED MARSHALL

You may be amused by this photograph of our Louse party (Edgeworth had gone), Sarah working the bulb.

To MANOHAR LAL

Balliol Croft, Cambridge 28, i. 09

.... Thanks for the cutting you sent me. But the writer has not caught my drift. It is true that I think that the reasons, which make Protection specially unsuitable to Britain now, do not apply to India. But neither do I think that simple Protection to Indian industries would work well: and the particular proposals made by the Tariff Reform League, in regard to India, seem to me fraught with the maximum of evil and the minimum of benefit to both India and Britain. I was disgusted at the neglect of India's interests by the Colonials at the recent Conference and I do not like the way in which the Tariff Reformers are arguing now that their scheme is necessary for India's safety. I hold, on the contrary, that any serious Preferential Scheme for the Empire would be likely to call into being a formal or

informal Middle-Europe-Customs-Union directed against the Empire. Tariff Reformers say that the Continent "must" have Indian products. That seems to me true only as to jute. A Tariff war would. I think, exclude Indian tea, silk, cotton, hides, etc. in a great measure from the Continent. (I expect the United States would not join in the war unless specially attacked: but would remain neutral.) The Tariff Reformers say that roundabout trade is always bad, and that India would do better to sell direct to Britain than to sell to the Continent and pay Britain with the proceeds. But I hold that roundabout trade never exists without good cause. The Continent spins chiefly low count yarns, and therefore is glad to buy short stapled · Indian cotton. Who would gain by forcing us to buy short staple yarns at relatively lower prices than the Germans can pay, and causing rather more of the American cotton to go to Germany?

I do not see my way clear as to India's policy. I have never advocated the excise duty on Indian cotton manufactures. But yet I do not like to preach a crusade against it without knowing more of the facts than I do. I hold that, before any such action is taken, the plan should be considered of devoting the excise duties on cotton to subsidizing pioneer works in industries which are still in an infant stage; an industry that employs a quarter of a million people cannot be described as "an infant."

But I do not believe that any device will make India a prosperous nation, until educated Indians are willing to take part in handling things, as educated people in the West do. The notion that it is more dignified to hold a pen and keep accounts than to work in a high grade engineering shop seems to me the root of India's difficulties....A high authority in an Indian Railway is now in my house. He says—"a native who has discretion is above working in our engine shops." That is my point. Until the judgment necessary for high grade industry can be developed in native workers, no expenditure on the importation of white foremen will make India a progressive country....

Balliol Croft, Cambridge 22. ii. 11

Dear Manohar Làl,

I am very glad to receive your kind and interesting letter. But I must adhere to my resolve not to publish anything about India, till I can incorporate my opinion about Protection to her industries in a more general discussion. I think I have already indicated my reasons: they are too long to be written out; but I think they are strong, and for me at least they are decisive. I never speak of a "Free Trade Principle." But I go rather near to one when I say that in my judgment no tax. should be levied in such a way as to raise the price of things which are consumed by the people, but yet do not contribute to the revenue, unless it is what the Germans call an "educative" tax: and I think that a Protective tax on cottons would not now be educative. I think Government should incur economic loss for the sake of industrial education: but I am not in a position to say confidently in what ways; I can only speak tentatively.

I do not think that manufactures are more conducive to prosperity than agriculture is, unless they evoke initiative. A score of Tatas might do more for India than any Government, British or Indigenous, can accomplish. The dark spots of western Europe are not agricultural. They are the homes of those manufactures which are divorced from initiative. To try for manufactures as in themselves a remedy for India's ills seems to me a fatal error.

I have understood that the handloom, adapted to the use of the automatic shuttle, is breaking the factory weaving sheds in India. That seems to me a strong reason against laying exptional stress on the cotton industry.

I am very glad to know of the excellent work you are doing.

Yours very sincerely,

ALFRED MARSHALL

To LOUIS DUMUR

Stern im Abtei, Süd Tirol

2. vii. 09

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Dear Sir,

The questions, which the Alliance for promoting the increase of population in France is discussing, are of deep interest. I do not know France well enough to answer them; but I will venture to make a few remarks bearing on them.

From the military point of view a check to the growth of numbers may of course be a source of danger, mitigated by the automatic tendency, which the predominance of any great military nation has, to stimulate alliances or understandings for cooperative self-defence among its neighbours. But such matters do not lie within my scope.

I do not regard a moderate retardation of the growth of population as a great social and industrial evil in itself. And, though I think it often does go together with national decadence, I doubt its being the cause of that decadence. But I think it may often be a consequence of the same causes which bring about that decadence. These are, I think, often associated with the growth of wealth and the cessation of the need for incessant energy and self-devotion in the overcoming of difficulties. In so far as the retardation of the growth of population may be caused by a consequent weakening of individual, and therefore of national character, the remedy seems to me to lie chiefly in combating its evil causes. In so far as it has no such evil origin, I should regard it without grave anxiety.

The rather violent checks to population, which have recently appeared in some strata of some Anglo-Saxon peoples, seem to be partly caused by a selfish devotion to "sports" and other amusements on the part of men: and partly to a selfish desire among women to resemble men; with the effect that, without rendering any high service to the State in masculine work, they destroy that balance and mutual supplementary adaptation of masculine and feminine character, which enabled a man to secure rest and repose by marriage; though he might probably have been worried beyond endurance by the lifelong incessant com-

panionship of another man. This cause does not seem to diminish the number of marriages much; but it tends to make men delay marriage till their best strength has gone. I believe that these two evil tendencies exist in France, though less than elsewhere.

The evils of town life are being combated by the drift of population from the central districts to suburbs where most families can have separate houses, many can have gardens, and nearly all children can play freely in the open air. The movement of France in this direction has perhaps been rather slow. More energy seems urgently needed to check the drift towards living in small apartments in crowded cities, where children are not easily accommodated; and where placid recreations, which build up strength of body and character, are supplanted by nervous excitements, which consume strength, and consume also a large part of the family income unprofitably. It is of course true that but a small part of the population of France suffers much from this evil.

But there remains one from which I fear that France may suffer much. It is very likely that I am mistaken; and I speak with the utmost diffidence. But is it not true that a preference for a secure income, free from anxiety, and unlikely to be forfeited without grievous fault is specially strong in France? Is not this preference associated, partly as cause and partly as effect, with the law of equal inheritance, and with the large part which dowries play in marriages? Does not a small income derived from land, or from Government employment where promotion goes mainly by seniority, tend to concentrate attention on small cares, and petty savings? No doubt this has its good side; and the masterly, unrivalled economy of many French households is admired and envied throughout the world. But does it not also disincline people for bold creative enterprises? Does it not make the expense of rearing and providing a dowry for an additional child too serious a burden? Does it not make the dowry too important; and thus diminish the chance of marriage for those who come from fertile stocks, and give a fatal premium to infertile stocks?

No doubt it is well to insure people against calamities which are beyond their own control. But is it not a condition of

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vigorous individual and national life that men should seek, rather than avoid, those risks which are inherent in bold action, and which can be overcome by their own courage and energy? Does not this matter need the careful attention of France, and other old countries? Would not some gain be derived from a little infusion of American audacity, to supplement the splendid industrial qualities of the French people? I am perhaps rash in making this suggestion: but I am encouraged to it by noticing that some of the suggestions under the consideration of the Alliance point in the same direction.

LETTERS

Taxes on childless people, combined with special privileges to parents of many children, would, I think, have but little direct influence in England: I cannot speak as to France. But in such matters legislation is an expression of the public conscience; and a national protest against the restriction of births from selfish motives might perhaps exert a good deal of influence indirectly.

Yours very faithfully,

ALFRED MARSHALL.

To LORD REAY

Balliol Croft, Cambridge

12. xi. 09

Dear Lord Reay,

I wish it were in my power to give an adequate answer to the questions you have put to me. But my only confident dogma in economics is that every short statement on a broad issue is inherently false. It was in 1903 that the Chancellor of the Exchequer set me two questions. I have done nothing else that I could help except write out my answers to those questions, with their kith and kin. It is now 1909: and the answers are not yet nearly ready. Partly for that reason I have paid very little attention to Budget controversies; and I have remained silent even when my published opinions were misquoted or misinterpreted.

You will therefore kindly understand that the few remarks which I make in answer to your questions do not claim to be

true: the most I can hope for is that they are on the whole on the side of truth.

I do not know what "socialistic" means. The *Times* has just said that it means taking away property from individuals and giving it to the State. But the Budget proposes to take money: and if, say, £M150 have to be levied by taxation, the Budget, whatever its form, must be accordingly Socialistic to the extent of £M150, neither more nor less.

My own notion of Socialism is that it is a movement for taking the responsibility for a man's life and work, as far as possible, off his shoulders and putting it on to the State. In my opinion Germany is beneficially "socialistic" in its regimentation of those who are incapable of caring for themselves: and we ought to copy Germany's methods in regard to our Residuum.

But in relation to other classes, I regard the Socialistic movement as not merely a danger, but by far the greatest present danger to human well-being. It seems to me to have two sides, the administrative and the financial. Its chief sting seems to lie on the administrative side.

I do not deny that semi-socialistic or Governmental methods are almost inevitable in ordinary railways etc.: though a vigorous despot in America breaks through them occasionally. But the sting of socialism seems to lie in its desire to extend these rather than to check their expansion. I believe that they weaken character by limiting initiative and dulling aspiration; and that they lower character by diverting energy from creation to wirepulling. I therefore regard Protection as socialistic, in that, especially in a democratic country, it gives a first place to those business men who are "expert" in hoodwinking officials, the legislature and the public as to the ability of their branch of industry to take care of itself.

On the financial side, Socialism may be rapacious, predatory, blind to the importance of security in business and contemptuous of public good faith. But these tendencies lie on the surface: they provoke powerful opposition and reaction; and personally I fear them less than those which are more insidious. In moderation they are even beneficial in my opinion. For poverty crushes character: and though the earning of great wealth generally strengthens character, the spending of it by those

who have not earned it, whether men or women, is not nearly an unmixed good. A cautious movement towards enriching the poor at the expense of the rich seems to me not to cease to be beneficial, merely because Socialists say it is a step in their direction.

But it may be urged that, though much of the expenditure of the very rich tends to lower rather than to raise human character, yet their capital is needed for the expensive methods of modern industry. Britain's capital however grows fast relatively to her area, and a small check to its growth would but postpone a little the day when most of her new accumulations are exported. I admit however that the interest on her foreign investments is a mighty bulwark against the blows of foreign tariffs.

For about fifteen years I taught somewhat eagerly that "Death Duties" were a grievous evil because they checked the growth of capital. For the next few years I hesitated. Now I think they are on the whole a good method of raising a rather large part of the national revenue; because they do not check accumulation as much as had been expected, and a small check does not seem to me now as great an evil as it did then.

As regards the influence of taxation on employment, I hold it to be indirect only. All income is spent on the purchase of services including that of postponing consumption, or "saving": excepting in so far as it goes to the owner of land and other forms of wealth that have not been created by individual effort. I have repeatedly stated my opinion that the owners of such land have not truly paid income tax. It is true that they have not "evaded" it. But the law has hitherto been a sustained social injustice in this respect: what they have been required to return as income is only a part of it. This injustice I regard as "predatory"; its redress I regard as anti-socialistic.

The case of stock exchange securities which have appreciated is similar in some respects. But (1) to require individuals to make return of all increments got in 1907, and of the decrements in 1908, would be impracticable. (2) Few forms of intellectual effort are more important socially than forecasting the future and contriving so that the future may turn out well. The shareholder who directly or indirectly takes part in the manage-

ment of a company is generally doing good service; and his rewards, like those of the able and courageous fisherman, come largely in the form of big hauls or "windfalls." I do not see how to tax the passive stockholder, without taxing the active one. And I do not want to tax "increments" except in cases in which either it is possible to compensate for "decrements," or the decrements are relatively rare and small.

Lastly. The term landowner does not exist in English law: and English public opinion has never admitted that the landholder has the same rights of usance, without reference to the public interest, in regard to his land, as he has in regard to his carriage or his yacht. Morally everyone is a trustee to the public—to the All—for his use of all that he has: but the trusteeship under which he "holds" land is of a specially binding nature.

At the same time I have always scouted the notion that there is a monopoly of land: or that the State can quietly resume the full ownership of land: I am as great a heretic in the eyes of Mr Wedgwood or Mr Fillebrown, as in the eyes of Mr Chaplin.

To return to the relation of taxation to employment. The State by taxes takes part of the national income and spends it almost exclusively on services; just as the individual would have done, if it had been left to him. The small share that goes to those who have rendered no services, in the form of pure rent, may be neglected in either case. Hence I conclude that, if taxes are so levied as to impair enterprise, they pro tanto lessen employment at good wages: but if they are so spent as to increase vitality, they increase employment at good wages; because they increase earning power. I am certain that Tariff Reform would, and that the present Budget would not, lessen employment at good wages.

The notion that the investment of funds in the education of the workers, in sanitation, in providing open air play for all children etc. tends to diminish "capital" is abhorrent to me. Dead capital exists for man: and live capital that adds to his efficiency is every way as good as dead capital. It is not more important to have cheap maize than cheap wheat, merely because maize is the raw material of pigs, and wheat of men.

Foolish ostentatious expenditure by the State, like the similar

expenditure of private persons, is, no doubt, an enemy to good employment: because the funds used up in it do not create, as they pass away, fresh sources of future production, and therefore future income; as they would if they were spent on building up improved iron works or human beings.

I think it would be difficult to frame a budget which got so much revenue, with so little burden to the working classes, as the present one does: though I do not entirely approve of all the details of it that I know, and I do not know all.

But if the budget is not to be used as a means of diminishing the existing inequalities of income, then I think it is quite possible to get a total of £M200 a year by the addition of taxes on articles of general consumption, independently of their source; and therefore without taking, as Tariff Reform taxes would do, much more from the people, directly or indirectly, than would be received by the State.

This is I fear a very poor answer, very slovenly and meagre. But my power of work is waning: and it has taken all that I can do in a morning.

Yours sincerely,

ALFRED MARSHALL.

Carolside, Earlston, Berwickshire, N.B.

14. xi. 1909

Dear Professor Marshall.

I am indeed greatly obliged for your illuminating letter and the trouble you have taken to answer all my questions.

On the whole I was very glad to see that your opinion of the budget is favorable as regards increment and death duties.

Do I understand that you hold that the interest of capital invested abroad pays for imports to England and pro tanto neutralises the evil effects of high tariffs in penalising our exports which otherwise would have to pay for the imports?

I suppose that you regret the excessive outlay in armaments as representing unproductive expenditure, but that you do not object to old age pensions, which may be considered as deferred or supplementary wages.

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I suppose that you regret the excessive outlay in armaments as representing unproductive expenditure, but that you do not object to old age pensions, which may be considered as deferred or supplementary wages.

I take it that your opinion that the landholder has not paid his proper share of income tax only applies to building land, not to agricultural land, and that you approve the concession made to the latter with regard to deductions for repairs and management. I also suppose that you admit that the effect of reducing the spending power of individuals and increasing the spending power of the State is to create a disturbance in the labor market.

I hope I am right in thinking that you do not advocate an addition of taxes on articles of general consumption independently of their source except as an alternative of tariff reform.

Again apologising for my inquisitiveness and with very sincere thanks.

Your obliged,

REAY.

Balliol Croft, Cambridge 15. xi. 1909

Dear Lord Reay,

You have interpreted my short answers as I meant them. But perhaps I should add a few words on two points.

My view is that foreign import duties on British imports must be paid almost entirely by the consumer (setting aside a few small exceptional cases), unless British exports are thereby reduced to so low an aggregate that Britain is compelled to give up some imports which she urgently needs. If she were, her need would force her to export even at the cost of paying a part or the whole of the duties herself. Such conditions would be unlikely in the present state of world commerce anyhow: and they are rendered impossible in my opinion by the fact that the very few cases in which a foreign country has any approach to a monopoly of an import which we need very urgently are more than covered by our power of drawing about £100,000,000 worth of those things which we most need even if all our exports were barricaded out. This is a complex, but I think important fact; and I am giving a considerable space to it in the book on National Industries and International Trade at which I am slowly toiling.

Next as to armaments. I am not a good judge of the question how far we might safely reduce our armaments or even abstain from increasing them now. But I think that, if half a dozen of the noisiest speakers and writers who exulted over the insult inflicted on Germany, when one of her mail ships was taken into a South African harbour, though her captain had given his word of honour that he had no contraband of war, could have been suppressed, and similar conditions stopped, we should have had no call to build ships very fast.

Yours sincerely,

ALFRED MARSHALL

To Sir HORACE PLUNKETT

Balliol Croft, Cambridge

17. v. 10

Dear Sir Horace,

I have read through your instructive and impressive plea for a Country Life Institute twice. I have learnt much from it and profited much by it. But I am not in a position to form an opinion on nearly the whole of its subject matter: and I ought not to sign it. I am very unwilling to say "no" to an invitation urged in such kind and pleasant words by you, and this morning in a letter by Mr Butcher. But I must not stray so far from my last.

Of course there are some topics raised in your plea which I have considered. But on those I have formed rather definite opinions, which do not march entirely with yours.....

There would be no use in my urging my views on you, for you could not be expected to adopt them. And, indeed, many of them are not in accordance with common opinion, and could hardly be expressed in a paper of this kind, without lengthy explanation.

Some of these relate to the history of the relations between classes—landlords, farmers, agricultural labourers, and industrialists in the first half of last century: some to the increase in the purchasing power of the produce of land during the greater

part of the second half of the century: some to the opposition between the movements of rural and agricultural population: some to the influence for good of agencies in England and Scotland that are not to be found to any large extent in Ireland and so on.

Perhaps I should add a little on the last two of these groups. I know a good deal of the habits of life of the rural population within an old man's cycle ride of Cambridge, say an area of about 600 square miles. I doubt if there is any rural population on the Continent of Europe, unless it be in Scandinavia, which is so prosperous, so happy, or so much given to thoughts and emotions larger and higher than those of merely local life. I attribute this chiefly to the influence of non-conformist chapels, with whose theological views I have nothing in common: but which I believe give an individuality and a holy sanction to the inner life of even the 14s. a week labourer that is very rare elsewhere. No doubt the farmer's education is generally very bad in the neighbourhood; and a great many Scots are brought in for that reason. But we take in, for the benefit of our servant. a weekly paper-The Cambridge Independent Press. It almost ignores the existence of the University, and pays little attention to Cambridge town affairs: and I think it is ignored by gentlefolk generally in the town and elsewhere. But I often look at it, as a zoologist might look at a kangaroo; and I am astonished at the width of range, the clearness, and—so far as I can judge the scientific thoroughness of its long weekly articles on things which the agriculturist ought to know, and did not know a little while ago. (These articles are I presume supplied to it by a Press Agency of some sort.) The continued growth of factories in villages; of the free use of cycles by unskilled labourers; of motor omnibuses running out ten miles into the country; of warehouses where there used to be slums and of cottages with gardens where there used to be solitude etc. make me cheerful. An optimistic tone, in nearly all matters except the relations of family life under the influence of aggressive womanhood, fills my voice more and more as I grow old. And though I feel it is a good thing that the weak spots in our social system should be pourtrayed so as to strike into the attention of the negligent, I don't feel that I ought to sign a paper which implies that the

conditions of rural life in England are going backwards. I expect what you say as to Ireland is true: there is perhaps no one who knows as well as you do what Ireland needs and how to help her. And no doubt what you say of America is based on knowledge much better than mine: but I could not speak on America from this point of view, without probing some doubts and dreads in my mind as to the dangers of American industrial life (rather than rural) which arise from the aversion of the new strains of immigrants for agriculture.

I have two or three times in my life signed documents with many propositions drafted by others: and every time I have deeply regretted it. My notion is that a document should be the work of an individual, or at most of two or three people working intimately together. If pruned down to please many it really satisfies none, and generally loses all vitality. Then others may express a general approval of its aims, without committing themselves to its details or to the arguments by which it is supported.

I agree with you that even in England and Scotland, a strong Institute might do good work by coordinating all the large movements for the amelioration of rural life, and the dissemination of agricultural knowledge now at work. And I am always glad when anyone takes a hopeful view of any new departure.

I was even enthusiastic when the Institute of Social Service was founded: it seemed to have a definite work to do, and the will to do it. But it has lacked a strong hand at the helm; and its recent history has rather saddened me.

It may prepare the way indeed for a larger semi-official Institute or Bureau. And when one considers the vast number of specialists and business men and others who are working for the increase and dissemination of knowledge in regard to agricultural economy in the country—when one thinks of the literary Department of the Board of Agriculture, the numerous Agricultural Societies, the Agricultural Departments at many of our Universities and so on, may not one incline to urge the Government to summon a meeting of representatives from them to consider how a central Institute might best focus their work? The matter lies beyond my knowledge I can get no further than asking a question.

The work of the Country Life Institute which you suggest for Ireland seems to me a large undertaking; but if your strong hand were in it, I feel sure it would do a glorious work. Little as I am justified in speaking specially of Irish affairs, I would gladly express this confidence in such work in such hands, if you should wish it.

I grieve much not to be able to say more. But I am not in a position to do it.

Yours sincerely,

ALFRED MARSHALL.

To Professor FINDLAY SHIRRAS

(In answer to questions arising out of a Government of India enquiry into the causes of the rising prices.)

Weybourne, Norfolk 6. vii. 10

-I will say briefly one or two things which may possibly be of interest to you.
- (1) I made, in preparation for a conversation with Mr Morison and Mr Abrahams, some little study of prices in India in recent years, and compared them with other histories of prices, especially American. I laid stress on America because the lowering of the direct and indirect costs of transport, which has been a chief cause of recent changes in prices, has of course tended to bring up prices of agricultural produce in Indian and American ports relatively to the prices of the same things in western Europe; and to bring up their prices in Upland districts of India and America relatively to their prices at the ports of the same countries. And I concluded that there was a strong prima facie case in favour of the opinion that similar causes had produced similar results in the two countries. Cheaper transport and more abundant gold had lowered the value of gold relatively to agricultural produce in about the same degree in the two.
- (2) I do not doubt that the facilities for getting currency, in all its forms, back from inland districts where it has done special work in moving harvests or relieving famine, are sadly deficient

in India: but it is better that I should not attempt to write about conceivable remedies. I have on the other hand some conviction that adaerations are setting in nearly all over India in various directions and in different degrees: and that consequently a great deal of currency stops up-country, not because it cannot easily get down, but because it is needed where it is. I trust that the important set of local inquiries, which you are organising, will throw light on this subject. American literature, official and unofficial, affords the best means that I know of for studying (1) the influences of cheap transport on prices of imports versus exports; and on upland prices versus prices at the ports; and (2) the varying powers of absorbing a large amount of currency per head under the influences of varying degrees of (a) self-contained life of individual "farmers" and groups of farmers, (b) payment of wages and in some cases rent in kind, rather than in money, and (c) the use of farm carts etc. rather than railways, carriers' carts, etc., all of which I include under the general term adacrations....There is a rather old report, published I think as a "bookseller" book, on The Purchasing Power of Gold...which shows how the price of wheat was rising in some American uplands at the very time when the rapidity of its fall in Liverpool was greatest

To B. MUKHERJEE, Lucknow University

Balliol Croft, Cambridge

22. x. 10

Dear Sir,

My excuse for not answering your question as to my opinions about India is suggested by yourself. If I were to answer all the questions which are sent me, my book would never appear. As it is I shall not live to serve up to table one half of the dishes which I have partly cooked.

I had an hour's talk a little while ago with an Indian on such questions as you ask. By question and answer we got on quickly, each guiding the other. To reach similar results in writing would be a long week's work.

I will however indicate the general trend of my opinion.

I have no objections on principle to the "Protection" of Nascent Indian Industries. But a customs tariff is an expensive method to this end: and under existing circumstances it would—as you partly hint—enrich European capitalists rather than Indian.

Therefore I think it should not be applied until other methods have been tried, nor until those industries which already receive a very high protection from cost of carriage (in some cases double cost of carriage) have succeeded in evoking Indian enterprise: strong cases in point I understand to be the leather, paper and oil seed industries.

If India had a score or two of men like Mr Tata, and some thousands of men with Japanese interest in realities, with virile contempt of mere speech-making in politics and law courts; and with no scorn for work on things while the mind was full of thought, India would soon be a great nation. Nothing could stop her: no tariff system could hinder her: she would enter into her heritage.

But so long as an Indian who has received a high education generally spends his time in cultured ease; or seeks money in Indian law suits—which are as barren of good to the country as is the sand of the sea shore—nothing can do her much good. So long as, with the exception of Bombay cotton—which after all is of Parsee origin—and a few works, of which Mr Tata's are at the head, all enterprise seems to be in European hands: in spite of the fact that the unhealthiness of India for the young children of Europeans is in effect a Protective duty of perhaps 50–100 per cent. in favour of Indian enterprise in India as against European.

For twenty years I have been urging on Indians in Cambridge to say to others: "How few of us, when we go to the West, think of any other aim, save that of our individual culture? is not the Japanese nearly always ask himself in what way can strengthen himself to do good service to his country on his irn? Does he not seek real studies? Does not he watch sources of Western power? Is not that the chief reason for oan's quick progress? Can not we imitate her? Do we need other change than, like the Japanese, to think of our ntry in the first place and ourselves a long-way behind?"

You will complain that I have not indicated what I would do if I were responsible for India. My silence is due to two causes. I have not been able to learn enough about India to speak confidently: and I do not venture, in writing to a stranger, to indicate the vague, crude, tentative suggestions which I shall perhaps ultimately publish. I have occasionally discussed them in confidence with Indian friends.

I have said nothing about Preference. The more closely schemes for Preference are examined, whether in relation to India or to Self-Governing Colonies, the more futile and dangerous do they seem to me. Their advocates do not win my confidence.

Yours very truly,

ALFRED MARSHALL

P.S. Perhaps you have already seen the "White Paper" which I am sending you. I thought a good deal about India when writing it, but my only reference to her is in its last lines.

You will of course understand that I know that some of the Indians who come to the West do really care to make themselves strong in action: I am very fortunate in counting several such men among my friends. But many more are needed.

Balliol Croft, Cambridge

Dear Sir,

I am very much obliged for the papers you have sent me: they are most interesting.

I cannot say "yes" or "no" to the question whether I am in favour of Protection to Indian industries. Either answer would be as misleading as it would be if given to the celebrated question "Have you stopped beating your wife?" I have not authorised anyone to say anything on my behalf: but I have suggested to several persons, Indian and English, that the Excise duties should be earmarked for purposes such as were indicated by Sir Sassoon David at the end of his speech.

I do not think the Indian cotton industry has a right to Protection on the exceptional ground that it is "nascent." And I am not hopeful that Government can do much for India so long as the best Indian minds seek self-culture, or the barren work of pleading in the Courts, rather than those creative enterprises which might make their country strong. But I hold it bound to do its utmost, in spite of difficulties, to aid new enterprises which are educative, and especially when they are being worked by brave Indians, who care little for either comfort or dignity, provided only they can help India to be great. Would that there were more such men! I am not prepared to say that a Protective duty on imports can never be justified when a nascent industry needs help, and no other help is possible. But I think it is a clumsy, wasteful, demoralizing method; and that India can help her young industries much better by other means. I think, for instance, that the Sugar industry needs help; and that a Protective duty would be poison to it. It wants to be waked: and a Protective duty would be a mere sleeping draught.

Yours very truly,

ALFRED MARSHALL.

To Professor IRVING FISHER

Balliol Croft, Cambridge

16. ix. 11

Dear Professor Fisher,

I desire to associate myself heartily with your appeal for national, and if possible international, inquiries into changes in the purchasing power of money, with special reference to the costs of living of various sections of the community in various countries. I go with the spirit of your aspirations heartily: but I am inclined to doubt whether a thorough scientific treatment of the whole problem can be achieved quickly; and to suggest that for the present attention should be concentrated on those parts of it which can be treated broadly and quickly.

In particular I doubt whether a study of wages and budgets should be pressed very far at this stage. I do not think we have

yet reached satisfactory methods for dealing with those problems. The work that has been done at them is worthy of all honour: but those who have made the chief advances are those who are the least satisfied with what has already been achieved.

Standardisation is as yet in so early a stage that we can get no trustworthy price lists, which range over a fairly long period, and which are applicable to many things which are not either raw or in the first stage of manufacture. No doubt technical progress has been conspicuous in the arts of transport: and in this one direction the commodities that are entered in the artisan's budget do represent fairly well the forces of economic progress. They bring out the fact that his food is still earned at a low cost of effort, although the soil around him may yield small supplies of it. But they seldom represent the economies of modern manufacture which are embodied even in simple clothing: for such things are not yet reduced to any common standard. And scarcely any lists take account of the vast amounts of light, water, reading matter, personal transport and other amenities of life which he does buy cheaply but which would have cost much more than all his wages not long ago. I submit that our main purpose—that of mitigating the evils caused by broad changes in the real cost of production of goldought not to wait for further calculations by methods as crude as the best which are within our reach to-day.

Thus for the present I would limit international inquiries to a selection of the best representative commodities for the whole consumption of the world. It must be rather a short list; and each commodity must have a large consumption and a fairly standardised marketing. It cannot therefore be other than crude: it must probably be cruder than our best national index numbers. But it will be simple and definite: and its purpose will be intelligible to the working classes in advanced countries and to the ruling classes in others.

I think the time is not ripe for an official international inquiry into the causes of these variations. The excellent work that has been done recently, for instance, in estimates of the rapidity of circulation of money would perplex the ordinary man, even if it were really complete: and in my opinion it has not yet made a very great advance towards that end.

Only on such a simple definite basis does it seem to me that it could be hoped—if the hope can be entertained at all—to reach an international convention for the establishment of an artificial inconvertible paper currency in which each nation should have its due share; and of which it could truly be said that, though very far from ideal perfection, it was only about half as bad as a gold currency. But I am myself not very hopeful: partly because I do not see how it would work out in a war as intense as that in which Pitt was charged with issuing forged French paper money.

You inquire as to my early scheme for remedying the chief evils that arise out of the ever-changing relations of the supply of gold to the work to be done by it. My proposed "Remedies for fluctuations of general prices" are set out in the Contemporary Review for March 1887. They were on familiar lines already suggested by Lowe, Scrope, Jevons, Walras and others: but they had some little peculiarities. I thought then that any plan for regulating the supply of currency, so that its value shall be stable, must be national and not international. But I thought that each nation might possibly have a paper currency the value of which was in effect tied to that of certain fixed quantities of gold, silver and other commodities which "have great value in small bulk, and are in universal demand, and which are thus suitable for paying the balances of foreign trade." I no longer think that such a currency is on the whole at all likely to answer.

But a quarter of a century has made me ever more desirous that every country should have an official "unit" of general purchasing power, made up from tables of price percentages like those of Sauerbeck and others: and that it should authorise long period obligations for the payment of rent and interest on loans of all kinds to be made at the option of the contracting parties, in terms either of this general unit, or of a selection of price percentages appropriate to the special purpose in hand. Public authority should make out such lists as appeared suitable to particular classes of transactions: but the parties concerned should have perfect freedom to make special selections. Any wages contract, such as a sliding scale in the iron trade, might "take account not only of the price of the finished iron, but also on the one hand, of the prices of iron ore, coal, and other

expenses of the employer; and on the other, of the prices of the things chiefly consumed by the workmen."

I think that could be done at once. If it succeeded, the world would I think be prepared in say twenty years for an international "fixed standard" paper currency: provided it can be helped on the way by a vigorous movement such as that in which you are active.

Yours very truly,

ALFRED MARSHALL.

Balliol Croft, Cambridge

14. x. 12

Dear Professor Fisher,

.... The scheme for a national stable-value currency which you send me has very great attractions. But as you know I now, though not in 1887, think that international trade would be too much troubled by a set of national currencies; and that a national value-unit (or groups of such units) should be kept for long period domestic contracts and customary rates (wages etc.) only. I admit heartily that, if national currencies on your plan were generally set up, the limits of fluctuation of the Foreign Exchanges would be less than on any other plan for artificial national currencies which I know. But I can get no further than that.

And I would ask you to consider whether your regulations would supply a sufficiently powerful force to keep the volume of the U.S. currency at the level required for your purpose, unless the other chief countries had nearly the same regulations. When \$100 purchased more than a hundred dollar units of general commodities, gold might indeed be brought to the mint in spite of the seignorage which was still being charged (though charged at a lower rate of course than when prices were higher). But even in this case the adjustment might not be very rapid: the speculative strain involved in deciding whether the seignorage was likely to go lower or not would be considerable: and the new dollars might for a long while be insufficient for their work; might they not?

And on the other hand if, when the gold dollar, i.e. the unit of value, was much above its gold value, a development of banking or other cause reduced the total purchasing power needed to be held in coin, might not there be a great rise in prices in U.S. while prices elsewhere were at rest? Would not the gold dollars need to stay until their value had been caught up by that of gold bullion?

These are only hasty half-thoughts. But even so they throw me out of my feeble stride. I must adhere to my rule of not going into any complex matter that does not arise out of the particular writing which I have in hand at the time. May I therefore ask you to be so very good as to let these few weak words be my last on the subject?

I am yours very sincerely,

ALFRED MARSHALL.

Balliol Croft, Cambridge

15. x. 12

Dear Professor Fisher,

On further consideration it occurred to me that I could not have advocated an artificial national currency in 1887. I have just looked up my article in the Contemporary Review, and I find that my goal was an artificial unit for long standing contracts and arrangements, and the restriction of currency to passing bargains. When Giffen uttered his vehement trumpet blast against "Fancy Monetary Standards" (No. XIX of his collected Inquiries and Studies), I chaffed him about his energy; and I recollect that he said that his argument was not opposed to my scheme. Recollecting that just now, I further remembered that my doubt about the practicability of my original scheme was connected with International Stock Exchange securities bearing a fixed rate of interest (among other things).

Yours very sincerely,

ALFRED MARSHALL.

To J. M. KEYNES

Balliol Croft, Cambridge 9. iii. 1914

Dear Keynes,

The Indian Currency Report came in at lunch time. I am behindhand with copy for the Press; so I thought I could not do more than get to know its general drift just at present.

But I dipped in here and there, and then read the conclusions: and finally turned negligently to the Annexe. But that held me. I had had no idea you had written it. Much of it, as of the Report itself, deals with matters beyond my knowledge and judgment. But there is quite enough of it within my understanding for me to have been entranced by it as a prodigy of constructive work. Verily we old men will have to hang ourselves, if young people can cut their way so straight and with such apparent ease through such great difficulties.

I thought of several objections as I read: but on going further, I found all of them met except one. Probably there is an answer to that also; but I did not see it. The objection is that in being generous to the shareholders in the Presidency Banks, you may possibly have been a little less than just to other credit institutions (I purposely use a broad vague term), English and Native; and also perhaps to the Indian State. I have always felt a little jealous of those Presidency Banks: they seem to me to have none of the obligations of a State Bank, and yet some of its sources of profit; and the new Bank would be able to override competitors who might have held their own against the Presidency Banks.

Again I have always thought the Bank of England Parlour, as it was described by Bagehot, contained elements which a State Bank should consider; and try to get something of them if possible. I admit that the fortunate accidents, which made it so strong say 40 years ago, are not as prominent now as then: and that State Banks are for many reasons in a stronger position than then. But yet, I think, I should like to enquire—if I ever went into the matter, which of course I shall not do—whether some Assessors might not be nominated (subject perhaps to conditions, including a veto in exceptional cases) by other

financial authorities. Also some of them might perhaps have the right to subscribe for a few shares of the Bank at par.

I found in talking to the Indian experts in 1898 that the work of the native financiers (Banyans I fancy they were called) was not fully understood: and I doubted even whether Englishmen in India understand it. Several natives of India have talked to me confidentially about the relations of Indians and English: and they were unanimous in their opinion that Anglo-Indians, even the best-informed, have no conception how much there is to be known about India which is beyond the knowledge of Englishmen. The extent of native hoarding was one of the subjects to which these conversations referred.

But I have made a sufficient display of matters on which I certainly know much less than you: so I will end.

Yours enthusiastically,

ALFRED MARSHALL.

Balliol Croft, Cambridge 8. x. 1914

Dear Keynes,

I have just read with great admiration and profit your splendid article on war finance. I think I agree with you on all points on which I can form an independent opinion. But there is a good deal of ground beyond my ken. I have never seen my way to form an opinion on the controverted questions as to the relative advantages of the English and Continental methods of dealing with (1) specialized bills, or (2) the financing of businesses. My general notion is that system counts for less than men; and that the British system suited British conditions in Bagehot's time. But the consolidation of banks since his time opens out new problems, which I cannot grasp.

As to the ill conduct of particular banks in recent times, I know nothing: I am not inclined to suppose them all to be raised above sin. But, on the other hand, my little experience inclines me to think that those, whose stories of the wickedness of banks are the most incisive, are often those of whom the banks (if free to speak) could tell wicked stories.

Yours very sincerely,

ALFRED MARSHALL

481

Balliol Croft, Cambridge

12. x. 1914

Dear Keynes,

Many thanks for your letter, which interested and informed me greatly.

Your experience goes on similar lines to that which I had on the Labour Commission: the preponderance of heavy minds in the management of businesses that can be reduced to routine is a great evil. The minds of leading working men seemed often more elastic and strong.

• I had this danger partly in mind when I thought of the need of some financial agencies outside of the banks, whose chief concern is with routine: much of which could, theoretically at least, be discharged by automatic machinery.

I had mistaken the nature of the fault which you found with the bankers.

But I must stop.

Yours very sincerely,

ALERED MARSHALL.

Balliol Croft, Cambridge 14. xii. 1914

Dear Keynes,

• I have to thank you for what seems a most important article once more. I am too far away from all monetary questions, and too imbecile, to be able to read it through properly. But I seem to find myself agreeing with all I read. I think your concluding paragraph clears up your position well.

I don't think you have said anything about invasion in regard to the B. of E.'s stock of gold. I have always regarded the two as intimately connected. We have been warned that the Germans did intend, though perhaps they do not now, to risk the loss of many ships and lives in the endeavour to put 150,000 or 200,000 men at least on our shores: weather, new model submarines (capable of firing torpedoes without turning), etc. may conceivably favour them. If so, many people will go mad with terror; and demand gold to bury in their gardens, etc.

Until the danger of such mad, senseless terror is over past (perhaps it nearly is now) I do not want the Old Lady's stocking to be thinned out.

My reasons are partly political: partly a fear that such a panic would put a premium on gold, if the Old Lady did not oblige. And in this matter also I look at the sentimental side more than the material: but our national credit seems to have a larger sentimental element in it than that of any other country, and to have a very large gold value.

Yours very sincerely,

ALFRED MARSHALL.

Don't trouble to answer.

Balliol Croft, Cambridge

21. ii. 1915

Dear Keynes,

I know so little about either war or politics that I am afraid of speaking publicly, lest I do mischief. But some time you—with your full access to knowledge—will perhaps tell me whether I am right in fearing that our attitude to food supplies may cost us dearly in the future; though of course France and Russia can see no danger in the new precedent.

I shall not live to see our next war with Germany; but you will, I expect. For I am convinced that Germany is resolute in saying that her quarrels with Russia and France are capable of adjustment: but that she will not accept our superiority at sea, unless we allow her unhampered expansion—which of course includes unlimited fortified coaling stations. So I think of the next war almost as much as of the present; and the two together oppress me.

The more severely we use our power of starving Germany, the more eagerly do I think that she will set herself to prepare during a generation for a war with England, turning nominally on questions in which France and Russia have little concern: that she will at last spring it suddenly, and have several score of fast cruisers already out to sea.

The "Alabama," always evading battle, did immense mischief to North American trade: and though aerial telegraphs have helped our cruisers more than the "Emden," a great number of "Emdens" might stop most of our food supplies, except such as were convoyed by powerful fleets.

Further, submarines, some swift, but most broad and able to fire torpedoes in all directions, would be ready by the hundred; with light engines and large displacement, so as to be independent of fresh air for a day and of fresh supplies for a month.

Such a war would cost her but little; for we could not hurt her, while we should need to keep incessant guard during perhaps several years against invasion and hunger; unless Russia vetoed German ambitions.

So I say to myself anxiously, is the present gain to be got by bringing hunger to the people of Germany, against the judgment of many neutrals, worth what it may cost to England a generation hence? You must be busy, so don't answer till we meet.

Yours ever,

A. M.

Of course I do not think that peace ought to be concluded on terms which fail to make Germany regret that she engineered the War.

Don't bother about this if you are busy. It is merely an old man's nervousness,

Balliol Croft, Cambridge

22. ii. 15

My dear Keynes,

So far as I can judge, the Government declaration as to Germany's trade is required and wise. I am glad that no precedent is to be made for declaring food unconditional contraband.

Take care of yourself in this heavy strain.

Yours ever.

ALFRED MARSHALL

To the Right Hon. LOUIS FRY

Balliol Croft, Cambridge

7. xi. 14

Dear Mr Fry,

My favourite dictum is:—Every statement in regard to economic affairs which is short is a misleading fragment, a fallacy or a truism. I think this dictum of mine is an exception to the general rule: but I am not bold enough to say that it certainly is.

Also I am able to work only for a very short time without a break: and my long promised book goes very slowly. I am quite well: but feeble. So I generally avoid letters and conversation. But I do not like to leave your letter without some poor attempt at an answer.

My patron Saint is Abbe, who, in control of the "Zeiss" works, has done more than anyone else, I believe, to revolutionise the higher glass industry, and attain results which a little while ago were thought impossible. His maxim was-keep financial control, but allow yourself for personal expenditure only as much as will enable you to keep your (and your family's) physical and mental energies at their highest. That is, my attitude towards "luxuries," in the distinctive sense of the term, does not get beyond toleration. Nevertheless I was not altogether sorry when, at the outbreak of the war, some cold-blooded and perhaps not altogether disinterested people cried out:-"Don't alter your mode of expenditure more than you can help. By refusing to buy accustomed luxuries you throw out of employment highly specialised workers, who cannot turn to anything else. Presently they will be wanting charitable relief. Pay for work would have been better for them, and would have avoided disorganisation of labour, with its attendant financial nervousness: and that is a thing specially to be dreaded from the point of military efficiency at the present time."

But I also think that everyone ought to begin to turn his expenditure into channels, which tend to the general good. A panic movement, which caused a wholesale discharge of

elderly butlers would have been an evil: but a steadfast diminution in the demand for unnecessary domestic servants would turn people, who were not too old to change their vocation, into work that would make for the public good. Just at present of course the best of that work is at the front in the North of France and in Belgium.

Meanwhile chauffeurs, who are not able or willing to render direct public service, should, I think, be employed, as many of those belonging to my neighbours' establishments are, in taking convalescent soldiers for drives in the country. Other neighbours are retrenching in small ways, and either taking refugee Belgians into their own houses, or subscribing for their relief, otherwise: and so on.

So now I think the time has come for the general principle:—Make towards a more steadfast suppression of personal luxuries and a larger devotion of resources to public ends. When the war is over, let the new seriousness, which it has brought into life, endure. Let more of the resources of the nation go to keeping children longer at school, and at better schools; to clearing out all unwholesome dwellings; and to levelling up the incomes of the poorer classes by an extension of the general principle that all may use freely roads, bridges etc. which are made at public expense.

By this means the employments that are subservient to luxury will be depleted gradually, without shock, and with no considerable hurt to any one: and the nation as a whole will grow in physical, moral and mental strength and joyousness.

On the question whether, when such a thing as sugar threatens to become scarce, well-to-do people should stint their consumption of it, I should be inclined to advocate moderate stinting: but I do not think the matter is practically important. If grain supplies ran short, I think educated people should eat oats etc. to which those with less elastic minds cannot accommodate themselves easily. Horses might put up with other food. The conversion of barley etc. into beer and spirits should be almost stopped. And, if milk runs short, healthy adults should leave it for children and invalids as much as possible.

As to the expenditure by Public Bodies on undertakings, other than relief works. I hesitate: because I cannot forecast the needs

And on the other hand if, when the gold dollar, i.e. the unit of value, was much above its gold value, a development of banking or other cause reduced the total purchasing power needed to be held in coin, might not there be a great rise in prices in U.S. while prices elsewhere were at rest? Would not the gold dollars need to stay until their value had been caught up by that of gold bullion?

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Balliol Croft, Cambridge 12. x. 1914

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22. ii. 15

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ALFRED MARSHALL.

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LETTERS

To the Right Hon. LOUIS FRY

Balliol Croft, Cambridge

7. xi. 14

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So now I think the time has come for the general principle:—Make towards a more steadfast suppression of personal luxuries and a larger devotion of resources to public ends. When the war is over, let the new seriousness, which it has brought into life, endure. Let more of the resources of the nation go to keeping children longer at school, and at better schools; to clearing out all unwholesome dwellings; and to levelling up the incomes of the poorer classes by an extension of the general principle that all may use freely roads, bridges etc. which are made at public expense.

By this means the employments that are subservient to luxury will be depleted gradually, without shock, and with no considerable hurt to any one: and the nation as a whole will grow in physical, moral and mental strength and joyousness.

On the question whether, when such a thing as sugar threatens to become scarce, well-to-do people should stint their consumption of it, I should be inclined to advocate moderate stinting: but I do not think the matter is practically important. If grain supplies ran short, I think educated people should eat oats etc. to which those with less elastic minds cannot accommodate themselves easily. Horses might put up with other food. The conversion of barley etc. into beer and spirits should be almost stopped. And, if milk runs short, healthy adults should leave it for children and invalids as much as possible.

As to the expenditure by Public Bodies on undertakings, other than relief works. I hesitate: because I cannot forecast the needs

of the country after the war. Of course any unnecessary borrowing is a grave injury to the general business of this country. We ought to be financing our weaker allies, perhaps more than we are. It is said that we have lent fifteen millions to Australia. Our power in this direction is less than our will: and any one who still further lessens it without cause, is not acting rightly.

I have maintained from the first that, so long as the sea was open, there was no reason to expect much unemployment in the country during the war. Some persons would of course have to shift their occupations a little: but the whole trend of modern industry is towards the removal of impassable barriers to migration from one occupation to another of the same kind. The number of subdivisions is increasing: and when work becomes slack in any one, those in it say truly that they cannot get work in any other. But that only means that they cannot get it easily. If pressure lasts in their special work, they can, with a good-will, gradually get fairly good employment in other work. This was nearly certain à priori: and the experiences of the last three months have shown it to be true. See e.g. Board of Trade Labour Statistics for October; and Prof. Ashley's recent investigation into the conditions of work in Birmingham.

The building trades are, I admit, likely to become slack when the work arranged before the war is done: and though I think it would be most unwise and even wrong for any Public Body to commit themselves to large expenditure without most urgent need, there may be cause for getting plans ready for building and navvy work after the war is over. The unemployment, which is to be expected in many trades then, will be specially heavy in building trades: partly because they are so large, and those in them have no wide alternative openings; and partly also, I think, because ordinary people will then first realise how much the resources of the country have been depleted by the war and how much incomes generally must shrink; and will be on the look out for cheaper houses rather than larger. Of course, i we are invaded, the building trades will be busy after the wa in some places: and have no employment at all in those whic have not been devastated. But our present concern is not keep at home young strong men-such as affect the building trades—but to help them to the front.

Such alone are the poor and fragmentary remarks which I can offer you as an expression of my particular views on large questions.

Yours very sincerely,

ALFRED MARSHALL.

P.S. On reading this over, I see that it ought to be re-written: but I trust you will kindly pardon its slovenliness.

In forecasting, as best I may, conditions after the war, I have made no allowance for an indemnity from Germany. Though I think she should be forced to pay for the havoc she has wrought in Belgium and France, I think also that the world does partially endorse Germany's charge that we alone among her enemies are influenced by sordid commercial considerations; and partly for this reason I hope that all our demands will be concentrated on lasting security against her military pretensions.

To Professor Sir WILLIAM RAMSAY

Balliol Croft, Cambridge

9. xii. 14

Dear Sir William Ramsay,

In my chapter on Germany's contribution to "Industrial Leadership" I talk about Lorraine and Luxemburg ores and Gilchrist in few words: but I did not know that the Germans were held up for a time by patents. That is an important fact. I will put it on to the proofs.

§§ 78, 79 of the inclosed [Fiscal Policy of International Trade] indicate that I have no objection on principle to "combative" taxes on dumped goods. But though I have read carefully everything that throws light on the practical working of such taxes, I have found nothing to show that they can be worked efficiently.

What is said about ether leaves me cold. If the Excise people are pigheaded, the scientific world is able to bring pressure on them. Possibly however the Excise may have a stronger case than appears at first sight. During the last thirty years I have

come across scores of instances in which there is more to be said for the regulation than is admitted by those to whom it is objectionable.

But generally I agree that the Government in general and most especially the legal members of the House of Lords need to be bullied into common sense and some knowledge of business. Of course Moulton does not belong to the old gang.... But Halsbury went out of his way to preach an economic sermion in favour of unlimited freedom to grant rebates: and had no idea that American economists—who are the highest authority on this particular subject—are convinced that those rebates strengthen the destructive and antisocial effects of unscrupulous trade combinations more than almost anything else: and, as far as I know, English economists agree....

Yours very sincerely,

ALFRED MARSHALL.

Balliol Croft, Cambridge

1914

Dear Sir William Ramsay,

I was told by a youth, who had been taught chemistry for two years at a leading University, that his teacher dictated a sort of text-book of his own; and that the lesson was chiefly one in writing from dictation facts useful to be remembered. Allowing for some exaggeration I thought this a bad sign; and there were others of the same kind on a smaller scale elsewhere.

Impressed by the personality of Sir David Dale (whom I met at the Labour Commission) I invested some of my small means in the Dundesland Iron Ore Co. I was disgusted when I found that they had recourse to Edison for a method of dealing with the ore, and spent enormous sums on setting up plant on his method; when a small experimental station at home might have indicated that the plan was not suitable for the ore. I was terrified when the directors, with millions of money at their back, went (as it seemed to me on their knees) to Krupp; and asked him to let one of his chemists make some experiments

for them. Dale had died meanwhile. Krupp's chemist made them successfully: but I was chagrined by his success.

In consequence I have scarcely ventured to touch on industrial chemistry in revising my old proofs; though I have felt able to speak with confidence on a good many matters connected with industrial mechanics.

Your letter heartens me very much; but I am not yet in good spirits. Ought not you, and the few men who, like you, are raising the reputation of British chemistry throughout the world, to set yourselves to see whether the rank and file of British teachers of chemistry work up at all near to your own high ideals?—This is the question which occurs to me: it may probably show nothing but impertinent ignorance. And in any case do not trouble to answer. We ought both of us to be at our own hard work.

Yours very sincerely,

ALFRED MARSHALL.

I would rather have your testimonial as to a pupil than that of any body of examiners: but I would not give a halfpenny for one by the man who dictated a text-book.

To Professor C. R. FAY

Balliol Croft, Cambridge

23. ii. 15

BRAVO!

M. le Professeur

Capitaine Fay!

I am glad every way. I shall be delighted with analogies between economics and militarics. I don't guess what they are, except that the relations between long- and short-period policies and causations are—I suppose—rather similar in the two cases.

Life and Labour, 1800-1850 is a fascinating study. But a thousand years hence 1920-1970 will, I expect, be the time for historians

It drives me wild to think of it. I believe it will make my poor *Principles*, with a lot of poor comrades, into waste paper. The more I think of it, the less I can guess what the world will be like fifty years hence.

Yours affectionately,

ALFRED MARSHALL.

To Professor F. W. TAUSSIG

Balliol Croft, Cambridge 37. iii. 1915

Dear Professor Taussig,

sort. But the smallest excitement sets up blood-pressure and cripples me for the rest of the half day. And I may not even write quietly for much more than an hour on end; and, still less, talk. I tell you this because one of its chief hardships is that it prevents me from seeing visitors; among whom no place has been higher in my esteem than that of Americans, and especially American economists. And next to them come German economists. Alack the day! But I love them still.

I think with you that the outlook is evil. I think more about the next war, in some moods, than even about the present. For if Germany were to declare war on England alone, we could do nothing against her, except to push her Commerce into indirect channels, and harry her Colonies: and that would strengthen Germany's opinion that our attitude to her is one of mere commercial jealousy. That may be true of the Germanesque tendencies of the "Tariff Reformers": but it is not true in the least of the people at large. Our dread, which latterly has become envenomed, is that, in such a war, we should need to spend perhaps two hundred millions a year on defences by land and sea against invasions, which might reduce a part at least of the land to the condition of Belgium. They would then have ready beforehand perhaps two hundred submarines, some swift, others with immense power of life without return to a base; and we might be brought to misery during many years, even if we evaded perdition. That is why many of us, who would be glad to see private property at sea immune, if it might be, feel that the right of capture at sea is our only bulwark, other than our alliances, against the monster-army of Germany.

And yet, I love the Germans through it all. They are not what they were in the 60's; because they have all passed under the schooling of German officers; and these are, it seems to me, far more selfish, as well as arrogant, than Germans in general. That is I think shown by the particular form which they have given to Agrarian Protection. The broad lines, which Wagner advocates for it, may be wise or foolish: but they are not lines of class-selfishness in any narrow sense. But protection, nearly the whole of the pecuniary gains of which come to the class from which the officers are almost exclusively drawn, while many of the smaller cultivators gain nothing net by them, seems to me to indicate a narrower class-selfishness.

I fear that: and I fear the sayings of the Bismarckians that the use of German colonies is not to draw the population away from the Fatherland: i.e. it is not economic. It is to supply bases for naval stations, from which military operations may be worked.

If we thought that Germany would use her colonies merely for commercial purposes, many of us would most heartily welcome the extension of her colonies far and wide; even though we know that her present colonies afford immense opportunities, which she has no real inclination to develop with her full energy.

Yours in prolixity, but most heartily,

ALFRED MARSHALL

To JOHN HILTON

Balliol Croft, Cambridge

3. x. 1918

Dear Mr Hilton,

I am delighted to find that you are Secretary to the Committee on Trusts: it is a most important post; and, I think, admirably filled.....

I began the study about twenty years ago; and have given most of my time to it during recent years. I began with a bias against American developments, and in favour of German. But the American situation has greatly improved; and—except for the good mingled with the ill in the Stahlwerks-Verband—I do not think the German situation gets better. The Americans are absolutely frank, I think; and the pictures of German cartels which seem to have been supplied to some of the Board of Trade's Committees on particular trades after the war differ widely from those which I have formed as years went on. It is very unfortunate that they have not published the evidence on which they have based opinions, which are not, I think, in accordance with the evidence on the subject furnished by the Kartell-Enquête and the discussions at the Social Verein on the subject.

As to the relation of law to monopoly I have learnt very little from English sources: it seems never to have been thoroughly studied here. But American analysis and experience seem to show that in almost every difficult case there comes a stage at which the right of appeal to a "Supreme Court," or its equivalent, becomes necessary. But I do not think that a Court of Law is at all likely to find out what are the really significant points in such a problem, unless guided by highly trained specialists: and I think that some of the obiter dicta, even of many able judges, as to matters of economic policy might have very disastrous results if any authority came to be attached to them.

In short, I think the Federal Trade Act (somewhat modifying the duties of the old Bureau of Corporations and preserving in the main its personnel, though changing its name to Federal Trade Commission) is a master stroke of genius. It has been repeatedly argued, both here and in America, that the Common Law in regard to monopolies etc. has done admirable service, because its traditions are so vague as to be incapable of exact interpretation: it merely suggests a general tendency; and each generation has interpreted its vagueness with more or less success, in accordance with the needs and the administrative resources of the time. If that great heritage is to be swept away in the troubled waters of war time, I trust that nothing will be done of a far-reaching character without a careful study of the toilsome steps by which American expedients have been developed. I presume you have full access to the official literature

relating to the work of the Federal Trade Commission. I have learnt from it, and that of the Bureau of Corporations, more perhaps than from any other source relating to the functions of a democratic government in regard to complex economic issues. On the other hand I have learnt nothing from official German pronouncements on such matters, unless it be in the art of saying what one does not mean. I am still a great admirer of Germany, in some connections, but those sides of her character, which the war has made prominent, seem to have misguided the policy of her cartels, and of her Government in relation to them.

I concur in the suggestion made by the Engineering Committee [Cd. 9078], p. 26, that secrecy is at the root of many of the evils of cartel policy: but not in their proposal that the constitution of a cartel should be registered *privately* with the Board of Trade. Bureaucratic rule has been necessary during the war: but if it became permanent, grave evils might arise from it, I fear, in this country, which is rapidly becoming a true democracy.

At such a time as this I think everyone who has studied a matter that is becoming urgent should submit his conclusions without reserve to those who are responsible, and, though I do not suppose that mine will be found very helpful, I have ventured to burden you with a long letter.

Yours faithfully,

ALFRED MARSHALL.

LETTERS TO NEPHEWS

To HAROLD E. GUILLEBAUD, a schoolboy at Marthorough

Balliol Croft, Cambridge

3. x. 04

My dear Harold,

I am glad you are in the Sixth. Just for the present you must I suppose be content to live as a parasite of Greeks and Romans. But do not overdo it.

Do not overstrain your health; and do not shut your mind to broader and harder matters of thought than Classics suggest.

Recollect that two boys out of three, who show exceptional ability at public schools in England, are pushed into classical studies on narrower lines than prevail in Germany, or indeed anywhere save in England. And recollect that in after life the large majority of these boys are passed by numbers of others, who probably had less natural ability and certainly had less careful education. Recollect that, even in literature, the best strength is generally shown by people who at school did not narrow their thoughts mainly to classics.

I speak with deep feeling. From six to seventeen years of age I studied practically nothing but classics. I then obtained a place in the school which entitled me to a "close" probationary classical fellowship at Oxford. (These things are abolished now.) I spent the next five years mainly on mathematics and the next three mainly on philosophy. I have forgotten my mathematics and philosophy as well as my classics: but I am intensely grateful to them. And I am not very grateful to my classics.

For of course the Knowledge gained by them is of no great use to anybody. They are the most invigorating studies of which boys are capable up to the age of (say) fourteen: and there are some, though not many ideas and ideals, which older boys and men more easily assimilate, perhaps, if presented in Greek surroundings than if associated with modern problems. But, on the whole, the mental vigour of the chief adult men of the world has been trained chiefly in work that uses bigger muscles of the mind than those which are chiefly exercised by classics.

495

Do then your classics, but recollect that by a mere study of them your faculties—be they great or small—are much less likely to be made as strong, and as serviceable to your generation, as they would be if you passed on from them to work in which you would be standing on your own feet, and not merely carried by men who were great, because they studied the problems of their own age. The Alexandrines were classical scholars: the great Greek genius was educated in direct work at real difficulties.

Your very affectionate

ALFRED MARSHALL.

Give my love to Claude when you see him.

To Captain ARTHUR RAYMOND MARSHALL, R.G.A., who was wounded on Dec. 8, 1917, and died in hospital at Rouen on Feb. 2, 1918.

Balliol Croft, Cambridge

18. i. 18

My dear brave Arthur,

How good and strong you are under your grievous pains! The latest news of you is always the news of the day, rivalled only by the inch high headings-if there are any-over the war news in the "Times." Poor dear lad! It is sad that you are thus struck, and in parts of the body that are specially sensitive and self-willed. But all brave soldiers, when hit, have the consolation of being able to say, "it was for my country": and in this war there is even more to be said. The whole world—other than Germany—is in a sense "the country" of those who are fighting for a future of peace: you suffer on behalf of the world; and the world will be grateful to you in coming times. Even should the worst befall and the world seem to darken before you, you can say "Dulce et decorum est pro patria mori": and then you can say it over again, and put pro orbe instead of pro patria. But that is only for moods when you are cast down. In other moods you will be looking forward to a noble life in quiet hero garb. First you will be looking after recruits, and 496

LETTERS

then you will be settling down to engineering work, in whyour mind will be all the keener, and have all the qualities true leadership, because you have seen so much, and done much, and felt so much. And this is the mood that you shot foster. Among the happiest of men, are those who have go through great tribulation, and have worked through it all a noble life, ever nearer their Ideal, ever nearer to God.

Your loving, anxious, hopeful

ALFRED MARSHALL.



ALFRED MARSHALL, in his garden shelter at Cambridge, 1920

MARSHALL'S EIGHTIETH BIRTHDAY

On the occasion of Alfred Marshall's eightieth birthday (July 26, 1922), the following Address was presented to him by members of the Royal Economic Society:

On the occasion of your eightieth birthday we-many of us formerly your pupils, all of us admiring students of your writings -make bold to send you a brief message of congratulation. You have held up through a long life, with single aim and steady purpose, a high scientific ideal; to look through the sign to the thing signified, to shun the superficial and the plausible, and never to be content with the good when the better may still be attained. You have given inspiration to youth and counsel and enlightenment to age. The School of Economics at Cambridge is your child; on the Labour Commission and in your evidence before the Gold and Silver and other Commissions you have rendered important direct service to the State and have advanced Economic Science. But it is as a master of method and a pathbreaker in difficult regions that we, the signatories of this letter, desire especially to greet you. Through you, British economists may boast among their foreign colleagues that they have a leader in the great tradition of Adam Smith and Ricardo and Mill, and of like stature. In gratitude and affectionate esteem we wish you continuing power and happy days and the sense of work well done.

HALDANE OF CLOAN, President of the Royal Economic Society.

BALFOUR, Vice-President of the Royal Economic Society.

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T. N. CARVER, PH.D		Professor in Harvard University.						
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L. L. PRICE, HELÈNE REYNARD, D. H. ROBERTSON, CHARLES P. SANGER, G. F. SHOVE, J. C. STAMP, Sc.D., K.B.E MARY STOCKS, B.Sc. R. H. TAWNEY. BARBABA WOOTTON. G. UDNY YULE, C.B.E.

Dr Marshall replied to the Secretary of the Society as follows:

SEA VALE, EAST LULWORTH, DORSET,

July 27, 1922.

MY DEAR KEYNES,

The address, which you have sent to me on my eightieth birthday, fills me with gratitude and joy. It is all too kind: but I am so avaricious that I would not give up a jot of it.

It is true of almost every science that, the longer one studies it, the larger its scope seems to be: though in fact its scope may have remained almost unchanged. But the subject matter of economics grows apace; so that the coming generation will have a much larger field to study, as well as more exacting notions as to the way in which it needs to be studied, than fell to the lot of their predecessors. The Chinese worship their ancestors: an old student of economics may look with reverential awe on the work which he sees young students preparing themselves to do.

If I have helped in putting some young students on the way to grapple with the economic problems of the coming age, that is far more important than anything which I have been able to do myself: and, resting on the hope that I have done a little in this direction, I can depart in peace.

Yours happily,

ALFRED MARSHALL.

BIBLIOGRAPHICAL LIST OF THE WRITINGS OF ALFRED MARSHALL¹

by J. M. KEYNES

THE following is an attempt to record those of Alfred Marshall's occasional writings and lectures, as well as his published books, which are extant in print, and have some permanent interest. Those which are printed in this volume are marked with an asterisk.

- *(1) 1872. Review of Jevons's Theory of Political Economy. (Academy, April 1, 1872.)
- (2) 1873. Graphic representation by aid of a series of Hyperbolas of some Economic Problems having reference to Monopolies. (Proceedings of the Cambridge Philosophical Society, Oct. 1873.)
- *(3) 1874. The Future of the Working Classes: a Paper read at a conversazione of the Cambridge "Reform Club," Nov. 25, 1873. (Published in the *Eagle*, the St John's College, Cambridge, magazine, and afterwards printed separately for private circulation.)
- *(4) 1876. On Mr Mill's Theory of Value. (Fortnightly Review, April 1876.)

 A defence of Mill against criticisms in Cairnes' "Leading Principles."
- (5) 1878. The Economic Condition of America. A lecture delivered at Bristol. (Bristol Mercury and Daily Post, Dec. 1878.)
- *(6) 1879. Water as an Element of National Wealth. A Gilchrist lecture delivered at Bristol. (Bristol Mercury and Daily Post, March 6, 1879.)
- (7) 1879. The Economics of Industry. By Alfred Marshall and Mary Paley Marshall. (Macmillan and Co.).

1879: First Edition, pp. viii + 230.

1881: Second Revised Edition, pp. xvi + 230. Reprinted 10 times, making 15,000 copies in all.

(8) 1879. Pure Theory of Foreign Trade.

Pure Theory of Domestic Values.

These were non-consecutive chapters of the second Part of "The Theory of Foreign Trade" at which A. M. was working from 1869 to 1877. After they had been circulating in manuscript, Henry Sidgwick printed them for private circulation in 1879.

- (9) 1881. Review of Edgeworth's Mathematical Psychics. (Academy, April 1881.)
- (10) 1881. Address on leaving Bristol. (Western Daily Press, Sept. 30, 1881.)
- (11) 1881. Evidence before the Committee on Intermediate and Higher Education in Wales.
- (12) 1883. Progress and Poverty. Three lectures delivered at Bristol. (Western Daily Press, March 1881.)
 - 1 The dates given are those of publication in each case, not of composition.

1884. Reprinted separately by W. Metcalfe and Son, Cambridge, in 1887.)
(14) 1885. The Present Position of Economics. An Inaugural Lecture.

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- Pp. 57. (Macmillan and Co.)
 (15) 1885. The Present Position of Political Economy. (A letter to The
- Times, June 2, 1885.)

 Referring to a lengthy review of The Present Position of Economics, published in The Times of May 30, 1885.
- (16) 1885. Theories and Facts about Wages. (Co-operative Annual, 1885.) An account of former Wage Theories and the first published outline of the Theory of Distribution developed in The Principles.
- 117) 1885. How far do Remediable Causes influence prejudicially (A) the Continuity of Employment, (B) the Rates of Wages? (A Paper read at the Industrial Remuneration Conference, Jan. 1885.)

This address was printed in the Report of the Conference together with the four following appendices: (A) Overcrouding of Towns (on the same lines as the Contemporary Review article of 1884, above); (B) The Interdependence of Industries (a short quotation from Bayehot's "Lombard Street"); (C) A Standard of Purchasing Power (the first appearance of the proposal for an Optional Tabular Standard); (D) Theories and Facts about Wages (a reprint of the contribution to the Co-operative Annual, 1885, above). This publication (22 pp. altogether) is the most important indication of the progress of his ideas between 1879 and 1885. Extracts from it were reprinted in Money Credit and

*(18) 1885. On the Graphic Method of Statistics. (Jubilee volume of the Royal Statistical Society, pp. 251-260.)

This paper contains three important novelties:

- (1) The proposal for the construction of historical curves, i.e. the grouping together of allied historical curves so as to suggest possible correlations to the eye.
- (2) A device for making it easy to see the proportional rates of increase on historical curves.
- (3) The definition of elasticity of demand, which appears here for the first time.
- (19) 1885. The Pressure of Population on the Means of Subsistence. (A lecture delivered at Toynbee Hall, Sept. 10, 1885.)

No report of this lecture exists, but a brief summary is given in *The Malthusian*, Oct. 1885. The lecturer strongly supported Malthusian doctrines, but disappointed orthodox Malthusians by saying nothing in favour of limitation of births. "I understood him to say," the reporter records, "that it would be a calamity if we English, by limiting our numbers, allowed foreigners to have a larger share than ourselves in peopling the world; and there was no need to fear the effects of our prospective increase at home."

- (20) 1885. Preface to Bagehot's Postulates of English Political Economy, pp. v-vii. (Longmans.)
- (21) 1886. Answers to Questions on the Subject of Currency and Prices, circulated by the Royal Commission on the Depression of Trade and Industry. (Third Report, Appendix C, pp. 31-34.)

His proposal for an optional tabular standard is developed and that for Symmetallism is also put forward.

(22) 1886. Political Economy and Outdoor Relief. (A letter to The Times, Feb. 15, 1886.)

Against undue severity in the administration of outdoor relief and in favour of relief works to meet unemployment. "The pay should be enough to afford the necessaries of life, but so far below the ordinary wages of unskilled labour in ordinary trades that people will not be contented to take it for long, but will always be on the look-out for work elsewhere. I for one can see no economic objection to letting public money flow freely for relief works on this plan." The letter provoked a protest "on moral grounds" from the Rev. J. Llewellyn Davies, who stood up for the straitlaced school.

(23) 1887. The Royal Commission on Trade Depression. (A letter to The Times, Jan. 18, 1887.)

Expressing general agreement with the Report of the Commission and commenting on some details.

*(24) 1887. Remedies for Fluctuations of Ceneral Prices. (Contemporary Review, March 1887.)

This is, perhaps, the most important of A. M.'s occasional writings. It includes his proposals (1) for a Tabular Standard of Value, independent of gold and silver, called "The Unit," to be established officially for optional use in contracts; (2) for a "Symmetallic" system of currency, the unit being made of twenty parts silver and one part gold; (3) for the "chain" method in the compilation of Index Numbers of Purchasing Power. He points out (a) that the evils of a fluctuating standard for deferred payments are chiefly of modern origin, but that now they are of overwhelming importance; and (b) that bimetallism, even if successful, aims only at curing long-period fluctuations in the value of money, whereas the harm was done by the short-period fluctuations, corresponding to the Trade Cycle, which no metallic system could cure.

(25) 1887. A Tabular Standard of Value. (A letter to The Economist, March 12, 1887.)

The Economist of March 5, 1887, had been seriously shocked by the Contemporary Review article, and concluded: "The Standard which Professor Marshall proposes is, it seems to us, impossible and impracticable, and to say more of it would be superfluous." In this letter A. M. defends himself, particularly against the misrepresentation that he proposed "The Unit" for use as actual cash currency.

- *(26) 1887. Preface to *Industrial Peace*, by L. L. F. R. Price.

 Deals mainly with the rationale of Arbitration
 - Deals mainly with the rationale of Arbitration and Conciliation. Mr Price's book was "A Report of an Inquiry made for the Toynbee Trustees." A. M.'s Preface begins with a tribute to Toynbee.
 - (27) 1887. Evidence before the Gold and Silver Commission.

 A. M.'s written answers were submitted on Nov. 9, 1887, and

A. M.'s written answers were submitted on Nov. 9, 1837, and occupy six and a half columns. His oral cross-examination took place on Dec. 19, 1887, Jan. 16 and 23, 1888, and the reports occupy eighty-three folio columns; after which he put in a "Memorandum as to the effects which differences between the currencies of different nations have on international trade" (twelve columns). This Memorandum is a fuller version of "an abstract of my opinions on the complex question of the relation

between a fall of the exchange and our trade with countries which have not a gold currency," which he submitted to the Commissioners, in print, between his evidence of Dec. 1887 and that of Jan. 1888. The importance of this Memorandum lies in the fact that it contains a clear enunciation of the "purchasing-power parity" theory of the exchanges between countries having mutually inconvertible currencies.

(28) 1887. On the Theory of Value. (Quarterly Journal of Economics, Vol. r. p. 359.)

A short letter answering a criticism by Prof. Laughlin of a passuge in the Economics of Industry.

- (29) 1887. The Theory of Business Profits. (Quarterly Journal of Economics, Vol. 1. p. 477.)
 - A Memorandum answering a criticism by General Walker of a passage in the Economics of Industry.
- (30) 1888. Wages and Profits. (Quarterly Journal of Economics, Vol. II. p. 218.)

 A Memorandum answering a criticism by Mr Macvane of a passage in the Economics of Industry. See also a short letter published in the Q.J.E., Vol. III. p. 109, disclaiming the accuracy of a paraphrase of his views set forth in the same Journal by
- Mr Macvane.

 (31) 1889. Bimetallism. (Letters to *The Times*, Jan. 25 and 31, 1889.)

 The first letter repudiates a statement that A. M. was one of those who have "substantially approved the Bimetallic theory";
- the second enters into controversy with Mr Henry Chaplin.

 •(32) 1889. Presidential Address before the Co-operative Congress, Ipswich,
 June 10, 1889. (Reported in The Times, June 11, 1889; reprinted
 as a pamphlet by the Central Co-operative Board, Manchester,

The Address was a great popular success, but The Economist commented that "Professor Marshall's Address seems to us obscured, instead of brightened, by its sentimental tone...We are entirely

instead of brightened, by its sentimental tone....We are entirely friendly to co-operation as a most sensible plan for enabling the public, which buys, to share in the profits of those who sell, and to compel the latter to be honest, but we believe in it because it is based on intelligent self-interest, and not because it will extinguish that powerful motive force." The Address contains the following characteristic, and double-edged, passage: "It was common to hear it said that England was divided into two nations, the rich and the poor. He was not sure that it would not be better for the poor if that statement were strictly true....But, unfortunately for the poor, they had to make room among their ranks for a large accession every year of the most stupid and profligate of the descendants of the

rich (loud cheers), and in return they every year gave over to the ranks of the rich a great number of the strongest and ablest, the most enterprising and far-seeing, the bravest and best of

(33) 1890. Principles of Economics. Vol. 1. The successive editions of this book were as follows:

those who were born among themselves."

- 1890. 1st edition, pp. xxviii +754. 2000 copies, 12s. 6d. net.

 - 1898. 4th , pp. xxix.+820. 5000 , , ,
 - 1898. 4th ,, pp. xxix. +820. 5000 ,, ,,

in 1879."

- 1907. 5th edition, pp. xxxvi + 870. 5000 copies, 12s 6d. net. 1910. 6th 5000 pp. xxxii + 871. 1916. 7th 0000
 - 1920. 8th 5000 pp. xxxiv + 871. 18a.
 - (This edition (1920) has been stereotyped.) 1922. Reprint 5000

The most important changes were introduced into the third and fifth editions. The sixth edition is the first in which the Suffix Vol. I. is dropped.

- *(34) 1890. Some Aspects of Competition. (Presidential Address to the Economic Science and Statistics Section of the British Association, Leeds, 1890, pp. 35.)
 - (35) 1890. Proposal to form an English Economic Association. (A circular letter.)
- (36) 1890. Speech at the Meeting for the Foundation of the British Economic Association. (Economic Journal, Vol. I.)
- (37) 1891. The Post Office and Private Enterprise. (Letters to The Times. March 24 and April 6, 1891.) Criticising the legal monopoly of the Post Office.
- (38) 1892. Elements of Economics of Industry: being the first volume of Elements of Economics.
 - 1892. 1st edition, pp. xiii + 416. Reprinted 1893, 1894. 1896. 2nd "pp. xiv + 432. Reprinted 1898, 1899. 1899. 3rd "pp. xvi + 421. Reprinted 8 times. 1913. 4th "pp. xvi + 440. Reprinted 7 times.

 - The above editions and reprints represent \$1,000 copies in all.
 - "An attempt to adapt the first volume of my Principles of Economics to the needs of junior students... A chapter on tradeunions has been added.... A few sentences have been incorporated from the Economics of Industry, published by my wife and myself
- (39) 1892. The Poor Law in Relation to State-Aided Pensions. (Economic Journal, Vol. II. pp. 186-191.) A plea for a Commission of Inquiry into the problems of
- State Relief generally before committing ourselves to old-age pensions.
- (40) 1892. Poor Law Reform. (Economic Journal, Vol. II. pp. 371-379.) A rejoinder to criticisms of the preceding article by Mr. Bosanquet.
- (41) 1892. A Reply to "The Perversion of Economic History" by Dr Cunningham. (Economic Journal, Vol. II. pp. 507-519.) Dr Cunningham's article, which was printed immediately in front of the above, was an attack on the Economic History in The Principles.
- (42) 1892. Discussion on Mr Booth's "Enumeration and Classification of Paupers." (Statistical Journal, Vol. Lv. pp. 60-63.)
- (43) 1893. On Rent. (Economic Journal, Vol. III. pp. 74-90.) With special reference to the Duke of Argyll's "Unseen Foundations of Society."
- (44) 1893. Speech at the Meeting of the British Economic Association, June 19, 1893. (Economic Journal, Vol. III. pp. 387-390.) On economic motive and the independence of Economics from utilitarian ethics-following an address by Mr Goschen.

- *(45) 1893. Obituary: Professor Benjamin Jowett. (Economic Journal, Vol. III. pp. 745-746.)
- (46) 1893. Consumers' Surplus. (Annals of the American Academy, Vol. III. pp. 618-621.)
 - A reply to misconceptions about Consumers' Surplus in a paper by Prof. Patten. "In every case," A. M. here emphasises, "all other things are supposed to remain unchanged; and particular stress is laid on the fact that there is no change in the conditions of supply of any other commodity (say meat), which is a 'rival' to it (the bread), and can partially satisfy the same needs."
- (47) 1893. Discussion on Mr Higgs' "Workmen's Budgets." (Statistical Journal, Vol. LVI. pp. 286-288.)
- (48) 1893. The Aged Poor. (A Preliminary Statement prepared for the Royal Commission.)
- (49) 1895. Evidence before the Royal Commission on the Aged Poor. (Report of the Commission, Vol. III. pp. 529-550.) The examination was held on June 5, 1893, and occupies forty-three columns.
- (50) 1895. Discussion on Mr Bowley's "Changes in Average Wages (nominal and real), 1860-1891." (Statistical Journal, Vol. LVIII. p. 279.)
- (51) 1895. The Venezuela Question. (Letter to The Times, Dec. 22, 1895.) A plea for appreciation of the American point of view.
- (52) 1896. On Cambridge Degrees for Women, 8 pp. 4to. (A Fly-sheet issued to Members of the Senate of the University of Cambridge.)
- *(53) 1897. The Old Generation of Economists and the New. (Quarterly Journal of Economics, Vol. xl. pp. 23.)

An Address delivered at the first meeting of the Cambridge Economic Club, Oct. 29, 1896.

- "Speaking generally, the nineteenth century has in great measure achieved qualitative analysis in economics; but it has not gone farther. It has felt the necessity for quantitative analysis, and has made some rough preliminary surveys of the ways in which it is to be achieved; but the achievement itself stands over for you."
- *(54) 1898. Distribution and Exchange¹. (Economic Journal, Vol. VIII. pp. 37-59.)

A reply to Prof. Hadley's "Some Fallacies in the Theory of Distribution."

Mainly an essay in method. As regards Prof. Hadley: "I venture to adhere to the opinion that distribution and exchange are fundamentally the same problem, looked at from different points of view."

(55) 1898. The Slow Progress of our Exports. (Letters to The Times, Nov. 10 and Dec. 2, 1898.)

He suggests "that we already import from abroad nearly as much tropical and other produce, which we cannot raise ourselves, as we want; and that, as our real income increases, we prefer to spend its growing surplus largely on such personal services as conduce to domestic comfort, recreation, education, etc."

Part of this is here reprinted with the title "Mechanical and biological analogies in Economics."

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- (56) 1899. Evidence before the Indian Currency Committee. (Minutes of Evidence taken before the Committee, Part II. [c. 9222], pp. 167-185, and Appendix [c. 9376]. Diagrams 64-69.)

 The examination was held on Jan. 11 and Feb. 16, 1899, and occupies thirty-four columns.
- (57) 1899. Memoranda on Classification and Incidence of Imperial and Local Taxes. (Written replies to a Questionnaire circulated by the Royal Commission on Local Taxation. Report of the Commission, [c. 9528], pp. 112-126.)
- *(58) 1900. Speech at a Meeting held at the Lodge of Trinity College, Cambridge, Nov. 26, 1900, to consider what steps should be taken to perpetuate the memory of Professor Sidgwick. (Cambridge University Reporter, Dec. 7, 1900.)
- *(59) 1901. An Export Duty on Coal. (Letters to The Times, April 22 and May 9, 1901.)

 "The Chancellor of the Exchequer's proposal to put an export duty on coal...is not, as some have asserted, to be condemned on general economic principles....On the other hand, a tax on the export of coal appears to present many technical difficulties; and to be not worth the disturbance it must cause unless it is to be permanent. And, what is more important, it is, to a certain extent, a breach of international comity....My doubts have never been resolved; but I admire the courage of the Chancellor." These letters were reprinted in the Economic
- (60) 1902. A Plea for the Creation of a Curriculum in Economics and Associated Branches of Political Science. Pp. 18. (A pamphlet printed for circulation to the Cambridge Senate.)

Journal, Vol. xI. pp. 265-268.

adopted."

- (61) 1902. Economic Teaching at the Universities in relation to Public Well-being. (A Paper read at a Conference of Members of the Committee on Social Education, Oct. 24, 1902.)
- (62) 1903. The Proposed New Tripos. (A Fly-sheet to the Cambridge Senate.)
- (63) 1903. Discussion in the Cambridge Senate on the proposal to establish a Tripos in Economics and Associated Branches of Political Science. (Cambridge University Reporter, May 14, 1903, pp. 772-774.)
- (64) 1903. Fiscal Policy: a letter to the secretary of the Unionist Free Trade League. (The Times, Nov. 23, 1903.)
 - "About thirty years ago I became convinced that a protective system, if it could be worked honestly as well as wisely, might on the whole benefit countries in a certain stage of industrial development, and that set me on the inquiry whether a free-trade policy was wholly right for England. I have pursued that inquiry ever since, and have gradually settled down to the conclusion that the changes of the last two generations have much increased the harm which would be done to England by even a moderate protective policy, and that free trade is of more vital necessity to England now than when it was first
- (65) 1904. Discussion on Mr Schuster's "Foreign Trade and the Money Market." (Journal of the Institute of Bankers, Vol. xxv. pp. 94-98.)

 On the theme that the maintenance of Free Trade is essential to the position of Great Britain.

- (66) 1904. On a National Memorial to Herbert Spencer. (Daily Chronicle, Nov. 23, 1904.)
 - There is probably no one who gave as strong a stimulus to the thoughts of the younger Cambridge graduates thirty years or forty years ago as he. He opened out a new world of promise; he set men on high enterprise in many diverse directions; and though he may have regulated English intellectual work less than Mill did, I believe he did much more towards increasing its utility. He has, perhaps, been more largely read and exercised a greater influence on the Continent than any other recent
- (67) 1905. Education and the Classics. (A letter to *The Times*, March 3, 1905.)

English thinker except Darwin."

In favour of the reformers in the compulsory Greek controversy. Nevertheless he holds that "for several years the child's most educative study is that of words, for he is still too young to make a scientific study of things....Experience shows that he has more to gain from handling words than from any other exercise, perhaps more than from all others put together. The materials for his work come to him gratis and in abundance; and in building with them, he is called on to exert the highest spontaneity of which he is capable. Demands are made on his general intelligence, his judgment, his perceptive sensibility and his taste; and in a greater or less degree he can rise to these demands. He is architect, engineer, and skilled artisan all at once."

- (68) 1905. University Education for Business Men. (Letters to The Times, Dec. 18 and 29, 1905.)
- (69) 1906. Introduction to the Tripos in Economics and Associated Branches of Political Science. Pp. 16.
- •(70) 1907. The Social Possibilities of Economic Chivalry. (Economic Journal, Vol. xvii. pp. 7-29.)

An Address delivered before the Royal Economic Society on Jan. 9, 1907.

One of the best of A. M.'s occasional utterances on social questions: on the two themes, "We have more reason to be proud of our ways of making wealth than of our ways of using it," and "Social disaster would probably result from the full development of the collectivist programme, unless the nature

of man has first been saturated with economic chivalry."

(71) 1908. Memorandum on the Fiscal Policy of International Trade. Pp.
29. (House of Commons Paper, No. 321 of 1908.)

This Memorandum was written in August 1903, but was pigeon-holed in the Foreign Office unprinted (with the acquiescence of the author), in circumstances described in the Memoir, until 1908. See also A. M.'s letter to The Times, Nov. 23, 1908.

- (72) 1909. Rates and Taxes on Land Values. (Letter to The Times, Nov. 16, 1909.)

 Blessing, on the whole, the proposals of the "Social Welfare Budget" of that year.
- (73) 1910. Alcoholism and Efficiency. (Letters to The Times, July 7, Aug. 4, and Aug. 19, 1910.)

In controversy with Professor Karl Pearson.

- (74) 1914. A Fight to a Finish. (Letters to The Times, Aug. 20 and Aug. 25, 1914.)
 An appeal for the moderation of national hatred.
- (75) 1914. Civilians in Warfare. (A letter to The Times, Oct. 28, 1914.)

 A "plea for the dissemination of accurate information as to the conditions under which the civil population of a country may oppose the violence of an invading army."
- (76) 1915. Milk in Germany: the Oversea Supply of Fats. (Letters to The Times, Dec. 29 and Dec. 31, 1915.)
- (77) 1916. The Need for more Taxation. (A letter to The Economist, Dec. 30, 1916.)
 In support of Prof. Pigou's plea for increased taxation to defray the expenses of the war.
- (78) 1917. The Uses of Hatred. (Letter to *The Times*, Dec. 28, 1917.)

 A protest against Sir Conan Doyle's proposal for the systematic development of hatred against Germany as a political weapon. "To foster hatred as an end would strengthen the position of pacifists, whose noble sentiments seem to me to make for a premature peace which would inflict a disaster almost unparalleled in history on the coming generation."
- *(79) 1917. National Taxation after the War: I. The Appropriate Distribution of its Burden; II. Taxes on Imports—the New International Situation. (An Essay contributed (pp. 313-345) to After-War Problems, a volume "by the Earl of Cromer and others," under the editorship of Mr W. H. Dawson.)

 A re-endorsement of Free Trade in post-war conditions. "A broad system of Protective duties would deprive Britain of the strength which has enabled her to carry the chief financial burdens of the war, would confer some benefits on particular industries at the cost of much greater injury to the people at large; and would lessen the funds available for paying pensions to wounded men and to widows; and for lowering the present
 - mountain of debt, which may threaten to turn some peril of a later generation into disaster." He favours an income-tax which would exempt savings, would take account of the number of people dependent on each income, and would be steeply graduated.
- (80) 1919. Industry and Trade. Pp. xxiv +875. (Maemillan and Co.)
 lst edition, 1919. 18s. net, 2000 copies.
 2nd , 1919. 2000 copies.
 3rd , (stereotyped), 1920. 2000 copies.
 4th , 1921. 2000 copies.
 - 5th ,, 1921. 2000 copies.
- (81) 1920. Premium Bonds. (A letter to The Times, Nov. 17, 1919.) A protest against "a form of State Lottery."
- (82) 1923. Money Credit and Commerce. Pp. xv + 369. (Macmillan and Co.) 1st edition, 1923, 10s. net, 5000 copies.

¹ Part of this is here reprinted with the title "The Equitable Distribution of Taxation."

Abbe and the "Zeiss" works, 484 Acland, A. H. D., see LETTERS Adam Smith, 35, 36, 78, 100, 121; new "Board of Trade Unit" of electricity. Böhin Bawerk, Prof., 416, 417 point of view, 126, 157; relation to Physiocrats, 157n., 379; originality, Bonar, James, see LETTERS Boole, 20 379; on trade combinations, 267, Booth, Charles, London statistics, 328 272; Government in his time, 334-5; Bosanquet, Mrs, see LETTERS Prize, 59, 456 Bowley, Prof., 26 n., 456. See LETTER Aged Poor Commission, 52-3, 70 Brentano, Prof., on German Iron Com Airey, 3, 5 n. bination, 271 a Alden, Percy, see LETTERS Brick makers, 1866 Parliamentary American visit and its lessons, 14, Commission on, 107 27, 67, 262-3; wealth compared with U.K. 134; protection, 258-64; Bristol, 15-16; University College, 16, 293; lectures at, 16; farewell address carly difficulties of manufacturers, at, 16-17; medical charge at, 388 260-1; and English business compared, 266-7; railways, 267; Trusts, British Economic Association (now the Royal Economic Society), founda-268-72, 274, 492-3; combination tion of, 54 law, 273; doctors and lawyers, 388; Browne, Sir Benjamin, 399 new strains of immigrants, 469; Budget of 1909, 465 economists on rebates, 488; Federal Burke's dictum, 66 Trade Commission, 492-3 Burt, Thomas, 50; letter from, 378 Arbitration, 222-5; broad principle of, Business, analysis of motives in, 281-2, 224 331-2; Socialists underrate its difficulties, 283-4; increasing size of, Ashley, Prof., 486 "At Homes" with pupils, 48-9, 57-9, 308; chivalry in, 329-32 60 n., 87-8, 381 Avon, estimate of its value, 138 Cateris Paribus, economic method of, Caird, Edward, Master of Balliol, 398; Bagehot, and Ricardo, 292; and English banking system, 480 letters from, 401. See LETTERS Cairnes, Some Leading Principles of Buker's Monopolies and the People, Political Economy, 19; criticism of its attitude toward J. S. Mill, 119-33, 276 n. Balliol College, influence of Jowett on, 160 n. 294 Cambridge, and falling away of Chris-Balliol Croft, 48-50, 74-7 tian dogma, 7-9; first age of married Bank of England, in relation to a bisociety, 49; and economics, 171-4, metallic currency scheme, 204-7 n.; 380; compared with Oxford, 342-3; "Stables," 456; Independent Press, Parlour, 479; stock of gold in case of invasion, 481-2 468; Economics Tripos, 54, 55-7, Barbour, 194 171-2; rural population, 468 Bateson, Dr. Master of St John's, 4 n., Cannan, Prof., see LETTERS lla. Capital, from individual and social Benians, E. A., Reminiscences of lecpoint of view, 404-6; Death Duties tures, 78-80 and growth of, 463; dead and live, Bentham, 11, 22 n., 23, 71 Bimetallism, 18 n., 28 n., 39, 67-8; and 464 Carry and cost of reproduction, 128 n.; stability of prices, 193, 196-7; is Social Science, 167 n.; and protecstrictly speaking Fixed-Ratio-Minttion, 259 age, 188, 199-203; proposal for stable, 31-2, 204-6, 423 Cartels, 492, 493 Cassel, Prof., 30
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