

**INDUSTRIAL
DEPRESSIONS**

GEO. H. HULL

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INDUSTRIAL DEPRESSIONS

THEIR CAUSES ANALYSED AND CLASSIFIED WITH A
PRACTICAL REMEDY FOR SUCH AS RESULT
FROM INDUSTRIAL DERANGEMENTS

OR

IRON THE BAROMETER
OF TRADE


BY

GEO. H. HULL

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FOREWORD

EACH new occupation of mankind that has brought large increase to his rate of wealth-producing has, in time, developed some malady which has retarded its effectiveness, until he has discovered the nature of the disorder and acquired skill in overcoming or abating its ravages.

In the great economic revolution which in a half-century has enabled the iron-producing nations to increase the products of their manufacturing and mechanical industries tenfold, a new malady, known as Industrial Depression, has developed and grown to serious proportions.

As the malady of depression has progressed and increased in its direful effects, a great flood of untenable reasons have been assigned as its cause. These have so obscured and buried the real cause from sight that the people have not yet realized its nature. They looked for something external and mysterious, whereas the real cause was internal, and so simple and commonplace as not to be suspected. They looked for the cause among great and much talked of events or occurrences, the operation of which was in opposition to their own ideas, whereas the real cause was the voluntary action of a silent motive that existed within the breasts of each one of them, and that each unsuspectingly contributed his share in making effective. They endeavored to solve the mystery by a synthetic method of reasoning, which was useless, instead of

by an analytical method which alone is effective in problems of this nature.

In this book we have given an account of the analysis of all these alleged causes; we have separated the tenable ones from the untenable ones, have identified and classified the real causes of each one of the serious industrial depressions which have occurred in modern times, whether they resulted from external or internal derangements, and have suggested a practical remedy for those which result from internal derangements.

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DEFINITIONS OF WORDS AND TERMS AS USED IN THIS VOLUME

At the outset it is important that the precise meanings of certain words and terms (as they are used in this book) should be clearly and definitely understood.

The word *Agriculture* must be understood in its broad sense, that is, as including not only the cultivation of the soil, such as farming, gardening, floriculture, etc., but all the other occupations practised by a cultivator of the soil in connection with such cultivation, as, for instance, dairying, the breeding and rearing of stock, poultry, etc.

The word *Commerce* must be understood in its broad sense, that is, as including the exchange of goods, products, or property of any kind; the trading or dealings in these, as well as the transportation of them from place to place or from seller to buyer. Also the transportation of persons from place to place.

The word *Finance* must be understood as including everything connected with the function or operations of money or the various mediums of exchange used by the civilized peoples of the world, such as coin, bank-notes, checks, drafts, bills of exchange, etc., and the use and management of these by individuals, banks, governments, corporations, etc., in payments, collections, expenditures, revenues, etc.

The word *Industries* must be understood to include all the manufacturing and mechanical industries; but as this word has, by common usage in recent years, taken on a more specific meaning than formerly, some further explanation is required to make clear just what is included by *industries*, and what is excluded. Agriculture, for instance, has always been spoken of as an industry, but modern usage excludes what pertains to agriculture from a place under the term *industrials*. Under the head of the industrial nations of the world are included only the nations within whose borders the value of the products of the manufacturing and mechanical industries exceeds the value of the products of agriculture. The agricultural nations are those within whose borders the value of the products of agriculture exceeds the value of the products of the manufacturing and mechanical industries. Modern usage, therefore, accepts the word *industries* as something entirely apart and distinct from agriculture, as it does something apart and distinct from the terms *commerce* or *finance*. Hence the word *industries* must be understood as including all the manufacturing industries, but those only, and as excluding everything which comes under the heads of agriculture, commerce, and finance.

Manufacturing is defined as "forming of products by any process, whether by hand or by machinery," "working on or combining materials," "to form by labor into useful or desirable forms," "to make into something."

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The term *Mechanical Industries* is defined as, "the industries by which products are formed or manufactured by tools or by machinery into useful or desirable forms and conditions" and "effects produced by mechanical contrivances."

The Products of the Industries must therefore be understood as including everything made or formed by any person, whether by hand or by machinery or by tools, as, for example, buildings, furniture, utensils, ornaments, goods, machinery, highways, public works, railroads, pipe-lines, telegraph-lines, ships and all the other various vehicles, with their equipments and furnishings.

Depression, in a business sense, is defined as, "a state of dulness or inactivity," "a protracted season when business falls below the normal."

Industrial Depression must therefore be understood to mean a state of dulness or inactivity in the manufacturing and mechanical industries of the country; a protracted season during which the production of houses, furniture, stores, goods, factories, machinery, railroads, ships, telegraph-lines, roadways, gas-works, water-works, pipe-lines, etc., has fallen below the normal.

It is the custom in iron-producing countries to speak of "stocks of iron" or "stocks of pig iron," meaning, in both cases, stocks of pig iron. When "production of iron" or "production of pig iron" is spoken of, however, it includes the production of both iron and steel, the latter being regarded as a secondary form of iron. These words and terms are used in this book in the above manner.

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INDUSTRIAL DEPRESSIONS**

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APPENDIX A (FIRST PART)

AVERAGE PRICES PER GROSS TON OF CHARCOAL PIG IRON AT PHILADELPHIA FROM 1799 TO 1849

FROM REPORTS OF AMERICAN IRON AND STEEL ASSOCIATION

The following table has been compiled from the Statistical Chart of Mr. William G. Nielson, and embraces the prices of charcoal pig iron from the beginning of the century to the time when anthracite pig iron became the standard for comparison. Until May, 1827, the following prices are for best pig iron; from May, 1827, to June, 1833, they are for an average of all grades; from June, 1833, to January, 1840, they are for gray iron; and from January, 1840, to the close of the table they are for No. 1 Foundry. After 1849 the standard of quotations was No. 1 anthracite foundry pig iron, hereafter given.

Years	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1799	36½	36½	36½	36½	36½	36½	36½	36½	36½	36½	36½	36½
1800	36½	36½	36½	36½	36½	36½	36½	36½	36½	36½	36	34½
1801	33½	33½	33½	33½	33½	33½	31	32½	32½	32½	32½	32½
1802	32½	32½	32½	32½	32	31½	30½	29½	29	29	29	28½
1803	28½	28½	28½	28½	29	29	29½	29½	29	30	30	30
1804	30	30	30	30	30	30	30	30	30	29½	29	29
1805	29	29	29	29	29	29½	31	32	32	32½	33	33½
1806	35	35½	35½	35½	35½	35½	35½	35½	35½	36	36½	37
1807	37	37	37	37½	38	40	40	40	40	40	40	40
1808	40	40	40	40	40	40	40	40	40	40	40	40
1809	40	40	40	40	40	40	40	40	40	40	40	40
1810	38	38	38	38	38	38	38	38	38	38	38	39
1811	38	38½	41½	43½	45	45	45	45	45	46	47½	47½
1812	47½	47½	47½	47½	47½	47½	47½	47½	47½	47½	47½	47½
1813	47½	47½	47½	47½	47½	47½	47½	47½	47½	47½	47½	46
1814	45	45	45	45	45	45	45	45	45	46	48½	52½
1815	55	55	55	55	55	55	54	52½	52½	52½	52½	52½
1816	52	50½	50	50	50	50	50	50	50	50	50	50
1817	50	50	50	50	50	49	47	45	44½	43	42½	42½
1818	42½	42½	42½	42½	42½	42½	42½	42½	42½	42½	42	41
1819	39½	38	38½	37½	35½	35	35	35	35	35	35	35
1820	35	35	35	35	35	35	35	35	35	35	35	35
1821	35	35	35	35	35	35	35	35	35	35	35	35
1822	35	35	35	35	35	35	35	35	35	35	35	35
1823	35	35	35	35	35	35	35	35	35	35	35	36½
1824	37½	37½	37½	39	40	40	40	40	40	41½	42½	42½
1825	43	42½	43½	44	47½	50	50	50	50	49	47	45
1826	45	45	45	45½	46½	47½	47½	47½	47½	47½	47½	47½
1827	47½	47½	47½	46½	36½	35½	35	35	35	35	35	35
1828	35	35	35	35	35	35	35	35	35	35	35	35
1829	35	35	35	35	35	35	35	35	35	35	35	35
1830	35	35	35	35	35	35	35	35	35	35	35	35
1831	35	35	35	35	35	35	35	35	35	35	35	35
1832	35	35	35	35	35	35	35	35	35	35	35	35
1833	35	35	35	35	35	40	40	40	40	40½	41½	40
1834	35	31	30	30	30	30	30	30	30	30	29½	28½
1835	29½	29½	29½	30½	30½	30	30	30	30	30	30	31½
1836	32	32½	35	39½	41	41½	41½	42	45	47	49	50½
1837	51½	52½	52½	51	49	47	42	39	35½	34½	35½	36
1838	35	35½	35½	34	31	31½	32	32	31½	31½	31½	31½
1839	31½	32	33	34	34	34	33½	33½	33½	32½	32	32
1840	32	32	31½	30½	30	30	30	29½	29	29	29	29
1841	29	29	29	29	29	28½	28	28	28	28	28	28
1842	29	29	29	28	28	28	28	27½	27½	27½	27½	26
1843	28½	29	29	28	28	26	25	25	25	25½	25½	26
1844	27	27	26½	26½	28	29½	29½	29½	29½	30	29½	30
1845	30	29	32	35	36½	35	33	32	30	30	31	32½
1846	33	33	32½	32½	32½	31½	31½	30	29	30	29½	30
1847	30	30	30	30	30	29½	29½	30	33	33½	34	34
1848	34½	32	30½	29½	29½	29	28	27	26	26	25½	25½
1849	25½	25½	25½	25½	25	24½	23½	23½	23½	24	24	24

APPENDIX A (SECOND PART)

AVERAGE PRICES PER GROSS TON OF NO. 1 ANTHRACITE
 FOUNDRY PIG IRON AT PHILADELPHIA SINCE 1842
 FROM REPORTS OF AMERICAN IRON AND STEEL ASSOCIATION

Years	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1842	—	—	—	—	27	27	26½	24½	25½	25	25	25
1844	24	24	24	24	24	26½	26½	26½	27½	28	27½	26½
1845	26½	26½	27½	33½	34½	33	31	28½	27	26½	28½	28
1846	28	28	28½	28	28½	28	29	26½	27½	27	28½	28½
1847	28½	28½	28½	28	29	29	28½	28	30½	33½	35½	33½
1848	31	28½	27½	26½	26½	26½	25½	25½	25½	25	25	24½
1849	25	24½	24½	24	23	23	22½	22½	21½	21	20	21
1850	21	21	20½	20½	20½	20½	20	20	21	21	21	21
1851	21	22	22	22	21	21	21	21	21	21	21	21
1852	21	21½	20½	20	20	20½	20½	21	23	26½	27	28
1853	32½	36½	35½	35½	35½	36	36	36	36½	37	37	36½
1854	37	36½	37	38	38	38	38	38	37	36	35	32½
1855	31½	29½	27½	26½	26	26½	26½	26½	28	28	28	27½
1856	27	27	27	28	28	28	27	27	27	26	26	26
1857	26½	26½	26½	27½	27½	27½	27½	26½	26½	25½	23½	23½
1858	23	22½	22½	22½	22½	22½	21½	21½	22	21	21	22
1859	23	23	24	23	23	23	23	23	22½	23	23	23
1860	22	23	23	22	22	22	22	22	22	22	22	22
1861	22	21	21	21	21	20	19	18	18	18	19	19
1862	20	20	20	21	21	22	24	24	24	25	30	31
1863	32	33	35	36	34	33	32	31	33	35	41	43
1864	43	48	50	54	57	57	69	73	72	63	61	59
1865	58	53	50	45	39	35	35	40	44	49	51	50
1866	50	49	46	41	41	43	46	47	48	49	49	49
1867	48	46	44	41	42	43	43	44	44	44	43	42
1868	38	36	37	36	37	37	38	39	40	41	42	43
1869	42	40	37	40	39	40	41	41	40	40	39	39
1870	36	34	34	33	33	32	32	33	33	32	31	31
1871	30	30	34	35	35	35	35	36	36	36	37	37
1872	37	40	47	40	49	53	51	52	53	53	51	47
1873	45	48	48	47	46	45	43	43	42	38	33	32
1874	32	32	32	32	31	31	31	31	29	29	26	24
1875	26	26	27	27	26	26	26	26	25	24	23	23
1876	23	23	23	22	22	22	22	22	21	21	21	21
1877	20	20	20	19	19	18	18	18	18	18	18	18
1878	18	18	18	18	18	17	17	17	17	17	16	17
1879	17	17	17	18	18	18	19	20	24	30	28	30
1880	40	41	37	31	25	23	23	25	23	23	24	25
1881	25	25	26	25	25	24	24	24	25	25	25	26
1882	26	26	25	25	25	25	25	25	26	26	26	25
1883	25	24	24	23	22	21	21	22	22	21	21	21
1884	20	20	20	20	20	20	20	19	19	19	18	18
1885	18	18	18	18	17	17	17	17	18	18	18	18
1886	18	18	18	18	18	18	18	18	18	19	19	20
1887	21	21	21	20	20	21	21	21	21	20	20	20
1888	21	20	20	19	18	18	18	18	18	18	18	18
1889	18	18	18	17	17	17	17	17	17	17	18	19
1890	19	19	19	18	18	18	18	18	18	18	18	18
1891	17	17	17	17	17	17	17	17	17	17	17	17
1892	17	16	16	16	16	15	15	15	15	15	15	15
1893	14	14	14	14	14	15	15	14	14	14	13	13
1894	13	13	13	12	12	12	12	12	12	12	12	12
1895	12	12	12	12	12	12	13	13	14	14	14	13
1896	13	13	13	13	12	12	12	12	12	12	12	12
1897	12	12	12	12	11	11	11	11	11	12	12	12
1898	12	11	11	11	11	11	11	11	11	11	11	12
1899	12	13	16	16	16	18	20	21	23	23	25	25
1900	25	24	23	23	22	20	17	17	17	17	16	16
1901	16	16	16	16	16	16	15	15	15	15	15	16
1902	17	18	19	20	21	22	24	24	24	24	24	24
1903	24	23	23	22	21	20	19	18	17	16	16	16
1904	15	15	15	15	15	15	14	15	15	15	16	15
1905	17	17	18	18	18	17	17	17	17	17	18	19
1906	19	19	19	19	19	19	19	19	22	24	25	26
1907	27	27	26	26	26	25	23	22	21	20	19	18
1908	18	18	18	18	17	17	17	17	17	17	17	17
1909	17	17	16	16	16	16	16	17	18	17	17	19
1910	19	19	18	18	17	17	16	16	16	16	16	16

APPENDIX A (THIRD PART)

LOWEST AND HIGHEST PRICES OF
SCOTCH PIG IRON IN THE NEW YORK MARKET

FROM THE AMERICAN ALMANAC, EDITED BY A. R. SPOFFORD, LIBRARIAN OF
CONGRESS, WASHINGTON, D.C.

YEAR	LOWEST	HIGHEST	YEAR	LOWEST	HIGHEST
	TON	TON		TON	TON
1825	\$35.00	\$75.00	1858	\$22.00	\$27.00
1826	50.00	70.00	1859	22.00	31.50
1827	50.00	55.00	1860	20.50	27.00
1828	50.00	55.00	1861	20.00	24.50
1829	40.00	55.00	1862	21.00	33.00
1830	40.00	50.00	1863	32.50	45.00
1831	40.00	47.50	1864	43.00	80.00
1832	40.00	47.50	1865	40.00	55.00
1833	37.50	47.50	1866	42.00	55.00
1834	37.50	48.00	1867	38.00	49.00
1835	38.00	42.50	1868	35.00	45.75
1836	38.00	62.50	1869	34.50	45.00
1837	40.00	70.00	1870	31.00	37.00
1838	37.50	55.00	1871	30.00	39.00
1839	37.50	45.00	1872	33.50	61.00
1840	32.50	40.00	1873	37.00	52.00
1841	32.00	37.50	1874	33.00	45.00
1842	23.50	35.00	1875	29.00	41.00
1843	22.50	32.00	1876	27.50	34.00
1844	30.00	35.00	1877	25.00	28.00
1845	30.00	52.50	1878	21.50	26.50
1846	35.00	42.50	1879	19.00	30.50
1847	30.00	42.50	1880	21.00	35.00
1848	25.00	37.50	1881	22.00	26.00
1849	22.50	27.50	1882	23.00	26.50
1850	21.00	24.00	1883	20.00	25.50
1851	19.00	25.00	1884	18.00	23.00
1852	19.00	31.00	1885	17.00	21.00
1853	28.50	38.00	1886	18.00	21.50
1854	32.00	42.50	1887	19.25	23.50
1855	26.50	37.00	1888	18.50	22.00
1856	29.00	37.00	1889	—	—
1857	28.00	37.50	—	—	—

KEY TO APPENDICES B AND C

REASONS FOR THE ELIMINATIONS MADE, AND LETTERS USED TO IDENTIFY EACH

- A. Occurred in one nation only, or not common to all five nations. (See page 73.)
- B. Exist continuously, or in prosperous times, as well as in depressed times. (See page 74.)
- C. Too unimportant to be responsible for mysterious industrial depressions in five nations contemporaneously. (See page 74.)
- D. Things which make or increase business, hence cannot be cause of depressions, which are a decrease in business. (See page 73.)
- E. Things which affect individuals but do not affect nations, hence not responsible for a great national depression. (See page 74.)
- F. Connected with financial affairs, financial derangements *do* cause industrial depressions, but when they do, it is known. They are not the cause of the mysterious depressions. (See pages 71 and 72.)
- G. Subjects of special treatment. (See page 73.)
- H. Conditions of depressions. They are the sum and substance of depressions, hence not the cause. (See page 76.)

The figures 1 to 21 used in the second column of Appendices B and C, are referred to on pages 76 and 77.

APPENDIX B

ALLEGED CAUSES OF DEPRESSIONS AS ELICITED BY COMMITTEES OF CONGRESS

FROM FIRST ANNUAL REPORT OF THE COMMISSIONER OF LABOR

C. A.	ADMINISTRATION, change in the policies of
C. B.	AGITATORS, undue influence of
G. F.	BUSINESS ENTERPRISES, stoppage of, by panic
C. F. D. B. A.	CAPITAL, influx of foreign
F. D. B.	aggressive inroads of
G. F. E. D.	excessive conversion of circulating, into fixed
F. E. B.	centralization of
F. E. C. B.	interests of, not identical with those of labor
F. E. D. B.	small capitalists swallowed up by larger ones
F. E. B.	manipulations of the money power
F. E. D. B.	combinations of
F.	undue accumulation of
E. D. C. B.	CIGAR FACTORIES, tenement house
	* (13) CONFIDENCE, want of
H.	(5) CONSUMPTION, under
E. C. B. A.	CORPORATIONS, land grants to
E. B.	CORRUPTION, in municipal governments
F.	CREDITS, expansion of
G.	CRISIS, commercial
F. A.	CURRENCY, contraction of
F. D. A.	inflation of
F. A.	agitation of
F. A.	fluctuations of
F. A.	depreciation of
F. A.	deficient volume of the
F.	withdrawal of, from circulation for speculation
F. A.	inflation of the, followed by contraction
F. A.	destruction of the
F. A.	faulty legislation regarding
F. A.	conversion of the government, into interest-bearing bonds
F. E. A.	losses of creditors during the depreciation of, and of debtors during the appreciation of
F. E.	losses of workingmen by goods rising sooner than their wages during the depreciation of, and wages falling before goods during the appreciation of

* Figures used in this column are referred to on page 76. .

APPENDICES

F. B.	suspension of specie payments
F.	overissue of irredeemable paper money
F. A.	distrust of paper money
F. A.	disturbed value of gold and silver
F. A.	resumption of specie payment
F. A.	changing the measure of the value of money
F. A.	fraud of the finance system
F. A.	borrowing depreciated money by government and individuals
F. A.	demonetization of silver
F. A.	remonetization of silver
F. A.	issue of greenbacks
F. A.	refunding act
F. A.	passage of resumption act in 1875
F. C.	solution of the labor question turns entirely on the circulation of
F.	DEBTS, contraction of
E. A.	contraction of large foreign, prior to 1874
H.	(1) DEMAND, want of
F. A.	DEPRESSION, prolonged by want of fixed policy for return to specie payment
E. C. B.	DESTITUTION, caused by sickness
G. E. C. B. A.	EDUCATION, lack of
E. C. B.	common school, not practical
G. E. C. B.	too exclusively intellectual
E. C. B.	indifference to
E. C. B.	defects of system of
B.	want of technical training
B.	want of industrial schools
B.	economic ignorance
D. B.	ELECTRICITY, great utilization of the power of
H.	(7) EMPLOYMENT, want of
E. D. B.	EXTRAVAGANCE, induced by credit
E. D. B.	of dress
D. B.	in government expenses
G. E. D. B.	FASHIONS, in dress, devotion to
C. B.	FOOD, adulteration of
C. B. A.	FRANCHISES, government not receiving enough for
E. C. B.	GIRLS, want of training of, for future duties
G. D. B. A.	GOODS, importation of
G. D. C. B.	IMMIGRATION, immigration of Chinese
F. E. C. B. A.	INCOME TAX, repeal of the
F. B.	INDEBTEDNESS, national and other
E.	INDOLENCE, instinctive and widespread
E. B.	INDULGENCES, harmful
E. C. B.	INTEMPERANCE
F. E. C. B.	INTEREST, too high rates of
D. B.	INVENTION, the great development of
B.	KNOWLEDGE AND WEALTH, lack of material
C. B.	LABOR, inefficiency of
E. C. B.	thriftlessness of
C. B.	lack of interest of the laborer in his work
C. B.	lack of combining power of
D. A.	too small wages to
C. B.	unadjustment of
E. D. C. B.	competition of

D. C. B.	too many hours of
C. B.	handicapped by legislation
H. C. B.	surplus of, in cities
E. C. B.	unjust taxation of
G. E. C. B.	coolie
G. E. C. B.	convict
E. C. B.	female
E. C. B.	child
E. C. B.	cheap imported
E. C. B.	want of economy of
C. B.	interests of, not identical with those of capital
C. B.	improvident and misdirected efforts of labor- ing classes
E. C. B.	social differences between the laboring classes and capitalists
E. C. B.	neglect of laboring men by the aristocracy
E. C. B. A.	Laws, bankrupt
E. C. B. A.	conspiracy
E. C. B. A.	land
E. C. B. A.	navigation
E. C. B. A.	patent
E. C. B. A.	trustee
E. C. B. A.	relative to the guardianship of children
E. C. B. A.	want of homestead exemption
E. C. B.	LEGISLATION, class
B.	faulty
E. C. B.	privileged
C. B.	withholding franchise from women
B.	MACHINERY, improper use of
D. B.	labor-saving
B.	MISCALCULATION
F. B.	MISMANAGEMENT, financial
C. B. A.	MONOPOLY, land
E. C. B. A.	telegraph
E. C. B. A.	news
E. B. A.	railroad
F. E. C. B.	interest
D. C. B.	invention
F. C. A.	NATIONAL DEBT, paying the, before the develop- ment of the industries of the country
C. B.	NECESSARIES OF LIFE, speculation in the
H.	(8) NON-PRODUCERS, too many
G. F.	PANIC OF 1873
E. C. B.	PASSES, free
E. D. C. B.	PRODUCE EXCHANGE, fluctuations in
E. D. B.	PRODUCTION, planless
D.	over
E. D. C. B.	PRODUCTS, competition of, in market
E. C. B.	PROFITS, unequal division of
F. E. B.	RAILROADS, speculation in
B. A.	pools of
E. C. A.	war rates of
E. C. B.	excessive freight rates of
E. D.	excessive building of
C. B. A.	land grants to

APPENDICES

F. A.	fictitious values in
C. B. A.	reformed system of
G.	REACTION
F. C. B.	REVENUE, faulty collection of
E. C. B.	SANITARY CONDITIONS, bad
F.	SPECULATIVE ERA, collapse from
F. E. D. C. B.	SPECULATION
D. B.	STEAM, great utilization of the power of
D. C. B.	STIMULATION, artificial
F. E.	STOCKS, watered
F. D. B. A.	SYSTEMS, monetary
E. D. C. B.	competitive
E. C. B. A.	educational
E. C. B.	contract
D. C. B.	government contract
E. D. C. B.	truck
F. B.	credit
F. D. B. A.	national banking
B. A.	political, perversion of
B.	wage
F. B. A.	financial, erroneous
E. C. B.	social, erroneous
G. C. B. A.	TARIFF, protective
C. B. A.	restrictive
G. C. B.	agitation of
E. C. B.	improperly adjusted
E. C. B.	unjust discrimination of
G. E. C.	changes of
G. E. C. B.	TAXATION, indirect
E. C. B.	needless
E. C. B.	unequal
E. C. B.	over, of land
E. C. B.	over, of labor
E. C. B.	under, of incomes
E. C. B.	under, of capital
E. C. B.	bonanza farms escaping
E. C. B.	capitalists escaping
E. C. B.	TELEGRAPH, high rates of
E. C. B.	TOBACCO
(15)	VALUES, expanded
G. F.	WAR, absorption of capital by
G. F.	destruction of property during
E. C. B.	WORK, piece

APPENDIX C

ALLEGED CAUSES OF DEPRESSIONS AS GATHERED BY AGENTS OF THE UNITED STATES BUREAU OF LABOR

FROM FIRST ANNUAL REPORT OF THE COMMISSIONER OF LABOR

F.	Acts that startle money-lenders, causing them to withdraw funds and refuse loans
C. B. A.	ADMINISTRATION, change of
G. D. C.	AGRICULTURAL PRODUCTS, low prices for
F. C. B.	APPRENTICE SYSTEM, abolition of the
F.	BANKS, failure of
F. A.	fear of adverse legislation relative to
F. E. D.	too liberal lending by
F. B. A.	BANKING SYSTEM, erroneous
E. B.	BUSINESS, lack of comprehension of details of
E. D. B.	CAPITAL, absorption of, by corporations
E. D. B.	aggressiveness of
E. C. B.	attitude of, versus labor
F. E. B.	concentration of, in banking and discounting centers, instead of geographical ones
F. E. D. B.	concentration of small interests in larger ones
F. E. B.	dead, invested in railroads
F. E. D. C. B.	farming on borrowed
G. F. E. D. B. A.	presence of foreign
F. E. C. B.	relation between, and labor lost
E. C. B.	syndicates and pools formed by capitalists and manufacturers to control labor
F.	timidity of
F. E. D. B.	too much, invested in manufactures
F. E. D. B.	too much, invested in railroads
E. C. B. A.	CASTE, absence of
E. D. C. B.	CHILDREN, employment of
E. D. B.	COMPETITION
	* (13) CONFIDENCE, want of
B. A.	CONGRESS, unfavorable and reckless legislation in
F. E. C.	CORNERS
E. D. C. B.	CORPORATIONS, creation of large
E. C. B.	monopoly of
E. C. B.	natural resources of the country in the hands of
F. E. D.	CREDITS, extended commercial
F. E. D. B.	CREDIT SYSTEM
G. E. C. A.	CROPS, small
F. A.	CURRENCY, agitation of the silver question
F. A.	coinage of the silver dollar
F. A.	contraction of the

*The figures placed in this column are referred to on page 76.

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H.	(4)	want of, for home products
E. D. C. B.		MANUFACTURES, efforts of manufacturers to supply the inordinate fancy and demand of the public for splendid articles
D.		increase of
E. C. B.		MONOPOLY, land
G. D.		OVERPRODUCTION
C.		PARTY POLICY, exaggerating the effects of
C.		PAUPERS, importation of
C.		POLITICAL CAMPAIGNS, reaction after
A.		POLITICAL DISTRUST
	(14)	PRICES, inflation of
	(18)	reduction of, to cost of production
	(19)	PRODUCTION, uneven
	(16)	variation in the
	(20)	want of adjustment between, and consumption
G.		PROSPERITY, reaction from
H.	(6)	RAILROADS, decreased building of
D.		overbuilding of
F. D.		too much capital invested in
F. F. E. C.		RENTS, higher
D. C. A.		REPUBLICAN PARTY, extravagance of
F. E. C. B.		SECURITIES, selling valueless
F. E. C. B.		SPECULATION, engaging in, rather than productive industries
D.		STEEL, introduction of Bessemer
G. C.		STRIKES
E. C. B. A.		TARIFF, abuse of system of, among importers
G. C. B.		discussions of the
G. C. B. A.		discussions on the, in Congress
C. B. A.		excessive
G. C. A.		fear of Congressional action relative to the
G. C. A.		high, protective
C. A.		legislation on the
G. C. A.		low rate of
C. A.		mode of collecting duties on imported machinery
C. A.		protective policy of the
G. C. A.		reduction of the
G. C. A.		revision of the
E. C. A.		unequal duties of the
C. A.		unjust
E. C. A.		want of proper construction of the
E. C. A.		want of proper protection
G. E. C. B. A.		TAXATION, enormous
E. C. B. A.		unequal
E. C. B.		TONNAGE DUTIES, manner of determining
E. D.		TRADING, the overdoing of
D. C. B.		TRAFFIC, liquor
H.	(15)	UNDERCONSUMPTION
G. D.	(17)	WAGES, reduction of
		variation in the rates of
E. C. B.		WAGE SYSTEM, failure of the
G.		WAR
E. D. B.		WEALTH, consolidation of

APPENDIX D

STATISTICS OF PIG IRON IN THE UNITED STATES FROM 1896 TO 1910 INCLUSIVE

DATE	Actual Production of Pig Iron for the Month	Total Stocks in Furnace and Warrant Yards on the first of each Month	Annual Rate of the Month's Production	Annual Rate of the Month's Consumption	
1896	January ...	903,189	662,754	10,663,462	9,341,722
	February ..	803,300	772,899	10,193,989	9,659,221
	March	857,681	817,463	10,125,493	9,530,365
	April	825,253	867,057	10,068,085	9,757,699
	May	817,869	892,960	9,656,126	9,336,220
	June	757,701	919,618	9,243,957	8,497,989
	July	729,142	981,782	8,608,580	7,543,208
	August	584,536	1,070,563	6,901,296	6,142,164
	September ..	499,350	1,133,824	6,092,070	5,461,470
	October	523,005	1,186,374	6,174,838	6,547,714
	November ..	563,284	1,155,301	6,872,211	7,408,611
	December ..	694,059	1,110,601	8,194,734	7,821,558
1897	January ...	749,952	1,141,699	8,830,080	7,508,292
	February ..	687,652	1,251,848	8,964,035	8,603,855
	March	784,685	1,281,863	9,239,037	8,913,237
	April	743,409	1,309,013	9,044,804	8,921,265
	May	738,571	1,319,308	8,696,073	9,132,056
	June	712,380	1,282,976	8,667,290	8,978,138
	July	711,299	1,257,072	8,374,977	8,625,261
	August	786,866	1,236,215	9,265,890	9,546,426
	September ..	823,449	1,212,837	10,018,624	11,379,904
	October	922,959	1,099,397	10,867,093	11,862,793
	November ..	962,586	1,016,422	11,711,703	12,018,435
	December ..	1,015,879	990,861	11,961,154	11,336,903
1898	January ...	1,004,568	1,042,882	11,827,981	11,311,766
	February ..	941,716	1,085,900	12,275,941	11,999,280
	March	1,041,950	1,108,955	12,268,120	12,397,768
	April	1,001,486	1,098,151	12,184,743	12,358,299
	May	998,766	1,083,688	11,762,020	11,957,476
	June	928,924	1,067,400	11,301,912	11,774,928
	July	930,868	1,027,982	10,960,220	11,129,792
	August	921,993	1,013,851	10,355,725	11,166,961
	September ..	908,297	946,248	11,050,948	12,254,824
	October	1,009,418	845,925	11,885,078	12,660,180
	November ..	1,009,719	781,334	12,284,910	13,196,454
	December ..	1,064,000	705,372	12,527,738	13,076,750

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DATE	Actual Production of Pig Iron for the Month	Total Stocks in Furnace and Warrant Yards on the first of each Month	Annual Rate of the Month's Production	Annual Rate of the Month's Consumption
1899	January ... 1,068,180	659,621	12,576,962	13,190,870
	February .. 872,200	608,462	11,369,750	12,142,394
	March 1,076,936	544,075	12,680,047	14,259,811
	April 1,075,543	412,428	13,085,772	13,850,424
	May 1,104,158	348,707	13,000,570	13,615,462
	June 1,094,991	297,466	13,322,397	14,119,962
	July 1,115,801	231,003	13,137,510	13,561,206
	August 1,172,810	195,695	13,808,874	14,166,618
	September . 1,185,669	165,883	14,325,635	14,480,159
	October ... 1,283,909	153,006	15,116,997	15,284,733
	November . 1,300,487	139,028	15,822,594	15,888,942
	December .. 1,314,334	133,499	15,475,218	15,363,834
1900	January ... 1,295,149	142,781	15,249,335	14,880,431
	February .. 1,188,320	173,523	15,490,600	15,104,608
	March 1,307,044	205,689	15,389,391	14,982,807
	April 1,291,359	239,571	15,711,529	15,059,149
	May 1,313,071	293,936	15,460,357	14,360,333
	June 1,248,394	385,563	15,188,796	13,664,736
	July 1,109,778	512,568	13,066,739	11,640,875
	August 1,016,902	631,390	11,970,199	10,808,695
	September . 958,959	728,432	11,667,329	11,033,513
	October 959,933	781,250	11,302,434	11,789,286
	November . 969,038	740,679	11,789,969	12,795,077
	December .. 1,089,247	656,920	12,825,005	13,194,941
1901	January ... 1,196,724	626,092	14,090,460	13,827,096
	February .. 1,159,420	648,039	15,113,868	15,578,064
	March 1,291,748	609,356	15,209,289	16,374,681
	April 1,319,227	512,240	16,050,562	16,710,598
	May 1,375,293	457,237	16,192,964	16,553,768
	June 1,307,229	427,170	15,904,614	16,013,382
	July 1,314,666	418,106	15,479,129	15,614,165
	August 1,335,135	406,853	15,720,133	15,969,877
	September . 1,341,066	386,441	15,942,490	16,267,030
	October ... 1,462,150	359,396	17,215,642	17,992,882
	November . 1,390,800	294,626	16,921,400	17,576,204
	December .. 1,322,646	240,059	15,573,090	15,813,522
1902	January ... 1,459,325	220,023	17,182,375	17,888,455
	February .. 1,284,520	161,183	16,744,650	17,122,998
	March 1,487,159	129,654	17,510,093	17,807,609
	April 1,516,789	104,861	18,454,243	18,570,883
	May 1,574,410	95,141	18,537,413	18,654,535
	June 1,484,520	85,381	18,061,660	18,101,008
	July 1,476,707	82,102	17,387,036	17,456,348
	August 1,498,416	76,326	17,642,640	17,582,820

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DATE	Actual Production of Pig Iron for the Month	Total Stocks in Furnace and Warrant Yards on the first of each Month	Annual Rate of the Month's Production	Annual Rate of the Month's Consumption
September	1,442,944	81,311	17,555,822	17,626,634
October	1,510,577	75,410	17,785,824	17,732,040
November	1,469,447	79,892	17,878,274	17,635,070
December	1,561,681	100,159	18,387,605	18,270,233
1903 January	1,518,889	109,940	17,883,696	17,598,588
February	1,420,180	135,699	18,513,061	18,082,069
March	1,637,083	169,615	19,275,337	19,296,133
April	1,650,540	171,348	20,081,570	20,137,010
May	1,751,084	166,728	20,617,599	20,138,031
June	1,721,854	206,692	20,949,227	20,233,439
July	1,611,229	266,341	18,970,927	18,104,119
August	1,612,740	338,575	18,988,608	18,139,008
September	1,599,669	409,375	19,462,634	18,185,402
October	1,474,679	515,811	17,363,154	16,117,434
November	1,092,321	619,621	13,289,911	12,183,571
December	904,779	711,816	10,653,046	10,081,786
1904 January	971,097	759,421	11,465,212	11,465,668
February	1,230,387	759,383	15,528,334	15,821,566
March	1,485,892	734,947	17,543,112	18,202,380
April	1,599,018	680,008	19,508,010	19,513,230
May	1,570,057	679,573	18,536,802	17,444,574
June	1,316,657	770,592	16,063,218	14,918,526
July	1,145,716	865,983	13,526,838	12,921,162
August	1,178,558	916,456	13,914,538	14,181,996
September	1,369,684	894,172	16,710,148	17,617,636
October	1,474,290	818,548	17,406,124	18,013,384
November	1,510,303	767,943	18,425,694	19,221,162
December	1,648,309	701,654	19,460,690	20,633,738
1905 January	1,810,019	603,900	21,311,516	21,703,508
February	1,624,328	571,634	21,174,426	21,517,104
March	1,973,441	543,065	23,235,796	23,530,612
April	1,956,819	518,497	23,807,959	23,526,907
May	1,994,017	541,918	23,477,947	22,648,459
June	1,824,480	611,042	22,197,840	21,198,540
July	1,780,219	694,317	20,960,646	20,089,506
August	1,870,110	766,912	22,019,042	22,356,794
September	1,901,064	738,766	23,129,633	24,124,109
October	2,057,023	655,893	24,219,784	25,471,876
November	2,018,901	551,552	24,563,301	25,656,405
December	2,046,000	460,460	24,090,000	—
1906 January	2,068,893	No official reports made.	24,359,526	No official reports made.
February	1,904,032	(See Footnote page 179)	24,820,417	(See Footnote page 179)
March	2,165,632		25,498,587	

APPENDICES

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DATE	Actual Production of Pig Iron for the Month	Total Stocks in Furnace and Warrant Yards on the first of each Month	Annual Rate of the Month's Production	Annual Rate of the Month's Consumption
	April	2,073,222		25,221,354
	May	2,093,740		24,711,021
	June	1,970,733		23,997,267
	July	2,013,402		23,706,176
	August	1,926,736		22,685,741
	September ..	1,970,962		23,979,978
	October	2,196,818		25,865,725
	November	2,187,665		26,616,582
	December ..	2,235,306		26,318,899
1907	January ...	2,205,607		25,969,229
	February ..	2,045,068		26,658,922
	March	2,226,457		26,214,717
	April	2,216,558		27,000,771
	May	2,295,505		27,010,052
	June	2,234,575		27,337,301
	July	2,255,660		26,558,547
	August	2,250,410		26,496,758
	September ..	2,183,487		26,565,743
	October ...	2,336,972		27,505,942
	November ..	1,828,125		22,242,161
	December ..	1,234,279		14,532,631
1908	January ...	1,045,250		12,295,090
	February ...	1,077,740		12,849,222
	March	1,228,204		13,983,134
	April	1,149,602		13,849,962
	May	1,165,688		14,047,812
	June	1,092,131		13,556,850
	July	1,218,129		13,827,062
	August	1,359,831		14,879,992
	September ..	1,418,998		16,371,284
	October	1,567,198		17,668,650
	November ..	1,577,854		18,863,244
	December ..	1,740,912		19,926,190
1909	January ...	1,797,560		21,160,875
	February ...	1,707,340		22,256,240
	March	1,832,194		21,619,680
	April	1,738,877		21,156,130
	May	1,883,330		22,174,845
	June	1,930,866		23,599,440
	July	2,103,431		24,744,445
	August	2,248,930		26,479,290
	September ..	2,385,206		29,020,055
	October	2,599,541		30,524,585
	November ..	2,547,508		30,952,000
	December ..	2,635,580		31,033,030

No official reports made (See footnote page 179)

No official reports made (See footnote page 179)

APPENDICES

DATE		Actual Production of Pig Iron for the Month	Total Stocks in Furnace and Warrant Yards on the first of each Month	Annual Rates of the Month's Production	Annual Rates of the Month's Consumption
1910	January ...	2,608,605	No official reports made. (See page 179)	30,714,020	No official reports made. (See page 179)
	February ...	2,397,254		31,249,840	
	March	2,617,949		30,827,535	
	April	2,483,763		30,219,080	
	May	2,391,180		28,142,230	
	June	2,265,478		27,563,340	
	July	2,148,442		25,296,325	
	August	2,106,847		24,806,495	
	September .	2,056,275		25,917,830	
	October	2,093,121		24,644,800	
	November .	1,909,780		23,235,535	
	December ..	1,777,817		20,896,980	

APPENDIX E

AVERAGE PRICE OF PIG IRON IN THE UNITED STATES

From 1896 to 1910

1896	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No. 1 Foundry, Philadelphia	13.50	13.50	13.50	13.25	12.87	12.75	12.75	12.75	12.50	12.50	12.75	12.75
Bessemer, Pittsburg	12.50	12.75	12.00	13.25	12.75	12.50	11.25	11.50	11.25	11.75	12.25	11.25
No. 2 Foundry, Chicago	13.00	12.00	12.00	11.75	11.50	11.25	11.00	10.75	10.50	10.75	11.25	11.25
Gray Forge, Cincinnati	10.25	9.50	9.25	9.00	9.00	9.00	8.75	8.50	8.25	8.90	9.00	9.10
No. 2 Foundry, Birmingham	9.25	8.50	7.50	7.75	7.75	7.75	7.50	6.50	6.75	7.25	7.75	7.75
Totals	58.50	56.25	54.25	55.00	53.87	53.25	51.25	50.00	49.25	51.15	63.00	51.10
Percentage above Zero	30	25	21	22	20	18	14	11	9	14	18	14
Average Price	11.70	11.25	10.85	11.00	10.77	10.65	10.25	10.00	9.85	10.26	10.60	10.22
1897												
No. 1 Foundry, Philadelphia	12.75	12.75	12.62	12.12	11.87	11.75	11.75	11.75	11.87	12.00	12.00	12.00
Bessemer, Pittsburg	10.50	10.75	10.50	9.75	9.25	9.25	9.00	9.00	10.00	10.50	10.50	10.00
No. 2 Foundry, Chicago	11.00	11.00	11.00	10.75	10.50	10.00	10.00	10.25	11.50	10.50	10.25	10.75
Gray Forge, Cincinnati	9.00	8.75	8.50	8.25	7.75	8.00	8.00	8.35	8.50	8.75	9.00	8.50
No. 2 Foundry, Birmingham	7.75	7.00	7.00	7.00	6.50	6.50	6.25	7.00	7.25	7.25	7.46	7.50
Totals	51.10	50.25	49.62	47.87	45.87	45.50	45.00	46.35	49.12	49.00	49.00	48.75
Percentage above Zero	13	12	10	6	2	1	0	3	9	9	9	8
Average Price	10.20	10.05	9.92	9.57	9.17	9.10	9.00	9.27	9.82	9.80	9.80	9.75
1898												
No. 1 Foundry, Philadelphia	12.00	11.87	11.75	11.75	11.66	11.50	11.25	11.33	11.50	11.75	11.75	12.00
Bessemer, Pittsburg	9.90	10.15	10.40	10.40	10.40	10.40	11.35	10.40	10.40	10.30	10.20	10.65
No. 2 Foundry, Chicago	10.50	10.50	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Gray Forge, Cincinnati	8.75	8.75	8.75	8.75	8.75	8.60	8.50	8.50	8.75	8.75	8.75	8.90
No. 2 Foundry, Birmingham	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.75	7.75	7.50	8.00
Totals	48.40	48.52	49.15	49.25	49.06	48.75	49.35	48.48	49.40	49.55	49.20	50.55
Percentage above Zero	8	8	9	9	9	8	10	8	10	10	9	12
Average Price	9.68	9.70	9.83	9.85	9.81	9.75	9.87	9.69	9.88	9.91	9.84	10.11

APPENDICES

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AVERAGE PRICE OF PIG IRON IN THE UNITED STATES (Continued)

1899	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No. 1 Foundry, Philadelphia	12.12	13.25	16.00	16.50	16.62	18.62	20.37	21.75	23.50	23.75	25.00	25.00
Bessemer, Pittsburgh	11.00	11.75	14.00	15.15	16.25	19.00	20.75	22.00	23.50	24.00	24.50	25.00
No. 2 Foundry, Chicago	11.25	12.00	14.25	15.00	15.35	17.00	17.00	20.00	22.00	23.00	23.50	24.50
Gray Forge, Cincinnati	9.50	10.50	12.75	13.00	13.25	15.00	16.25	17.00	18.50	19.25	19.25	19.25
No. 2 Foundry, Birmingham	8.25	9.50	11.50	11.75	11.75	13.50	15.00	15.50	17.50	18.50	18.00	17.50
Totals	52.12	57.00	68.50	71.40	73.22	83.12	89.37	96.25	105.00	108.50	110.25	111.25
Percentage above Zero	16	27	52	59	63	85	99	114	133	141	145	147
Average Price	10.42	11.40	13.70	14.28	14.64	16.62	17.87	19.25	21.00	21.70	22.05	22.25
1900												
No. 1 Foundry, Philadelphia	25.00	24.50	23.62	23.25	22.50	20.00	17.75	17.25	17.00	16.00	16.50	16.50
Bessemer, Pittsburgh	24.90	24.90	24.90	24.90	24.90	19.75	18.00	16.05	14.00	13.25	13.65	13.55
No. 2 Foundry, Chicago	24.50	24.25	23.75	23.25	22.00	20.25	17.75	15.50	14.50	14.00	14.25	14.80
Gray Forge, Cincinnati	19.25	19.25	18.75	18.40	17.75	16.25	15.25	12.90	12.00	11.75	11.75	12.75
No. 2 Foundry, Birmingham	17.50	17.50	17.50	17.50	17.25	16.50	14.50	12.00	11.00	10.75	10.25	11.25
Totals	111.15	110.40	108.52	107.30	104.40	92.75	83.25	73.70	68.50	65.75	66.40	68.65
Percentage above Zero	147	145	141	139	132	106	85	75	52	46	48	53
Average Price	22.23	22.08	21.70	21.46	20.88	18.55	16.65	14.74	13.70	13.15	13.28	13.73
1901												
No. 1 Foundry, Philadelphia	16.00	16.00	16.00	16.00	16.00	16.00	15.87	15.50	15.50	15.50	15.75	16.25
Bessemer, Pittsburgh	13.25	13.60	15.56	16.69	16.65	15.94	16.00	15.90	15.71	15.90	16.10	16.35
No. 2 Foundry, Chicago	14.60	14.12	15.19	15.50	15.50	15.50	15.50	15.20	15.00	15.00	15.00	15.50
Gray Forge, Cincinnati	12.25	11.87	12.56	13.12	12.60	12.25	12.00	12.00	12.00	12.25	12.69	13.00
No. 2 Foundry, Birmingham	11.00	11.00	11.50	11.75	11.75	10.75	10.50	10.50	10.50	10.75	11.25	11.75
Totals	67.10	66.59	70.81	73.06	72.50	70.44	69.87	69.10	68.71	69.40	70.79	72.85
Percentage above Zero	49	48	57	62	61	57	55	54	53	54	57	62
Average Price	13.42	13.32	14.16	14.61	14.50	14.09	13.97	13.82	13.74	13.88	14.16	14.57
1902												
No. 1 Foundry, Philadelphia	17.50	18.37	19.50	20.37	21.00	22.87	24.25	24.50	24.50	24.50	24.87	24.25
Bessemer, Pittsburgh	16.70	16.93	17.56	18.37	20.95	21.25	22.00	21.75	21.75	21.95	22.25	22.12
No. 2 Foundry, Chicago	15.80	16.75	18.62	19.75	21.78	22.50	23.40	24.66	23.15	27.15	26.90	25.40
Gray Forge, Cincinnati	13.75	13.75	15.25	16.00	17.05	18.93	20.00	21.50	21.50	20.60	18.87	18.00
No. 2 Foundry, Birmingham	12.00	12.00	12.00	14.50	17.00	18.00	19.00	24.00	24.00	25.00	24.50	21.50
Totals	75.75	77.80	82.93	88.99	97.75	103.55	108.45	116.41	118.90	119.20	117.39	111.27
Percentage above Zero	68	73	84	95	117	130	141	159	164	165	161	147
Average Price	15.15	15.56	16.58	17.80	19.55	20.71	21.70	23.28	23.78	23.84	23.48	22.25

1903												
No. 1 Foundry, Philadelphia	24.00	23.75	23.50	22.75	21.87	20.62	19.00	18.00	17.50	16.75	16.00	15.87
Bessemer, Pittsburg	22.35	22.35	22.00	21.60	20.00	19.85	19.00	17.85	16.35	15.85	15.25	14.35
No. 2 Foundry, Chicago	25.00	24.00	24.00	23.00	21.70	20.50	18.50	17.50	16.85	15.90	14.50	14.30
Gray Forge, Cincinnati	20.50	20.75	19.35	19.20	17.70	16.50	14.60	13.50	13.25	12.30	10.95	10.75
No. 2 Foundry, Birmingham	20.00	19.50	18.50	16.75	16.50	14.00	12.25	12.00	12.00	11.25	10.25	9.50
Totals	111.85	110.35	107.35	103.30	97.27	91.47	83.35	78.85	75.95	72.05	66.95	64.77
Percentage above Zero	148	145	139	130	116	103	85	75	69	60	49	44
Average Price	22.37	22.07	21.47	20.66	19.45	18.29	16.67	15.77	15.19	14.40	13.89	12.95
1904												
No. 1 Foundry, Philadelphia	15.50	15.50	15.80	15.75	15.40	15.19	14.94	15.00	15.00	15.12	16.40	17.62
Bessemer, Pittsburg	13.60	13.35	13.85	14.10	13.60	12.60	12.50	12.65	12.75	13.35	15.25	16.60
No. 2 Foundry, Chicago	14.10	13.75	13.55	14.00	13.80	13.40	13.30	13.35	13.40	13.70	15.80	16.60
Gray Forge, Cincinnati	11.00	11.00	11.25	11.75	11.25	10.75	10.75	11.00	11.00	11.75	14.25	15.00
No. 2 Foundry, Birmingham	9.50	9.50	9.25	9.25	9.75	9.75	10.00	10.00	9.50	9.75	13.00	14.25
Totals	63.70	63.10	63.70	64.85	63.80	61.69	61.49	62.00	61.65	63.67	74.50	80.07
Percentage above Zero	42	40	42	44	42	37	37	38	37	42	66	78
Average Price	12.74	12.62	12.74	12.97	12.76	12.34	12.30	12.40	12.33	12.73	14.90	16.01
1905												
No. 1 Foundry, Philadelphia	17.75	17.75	18.00	18.25	18.06	17.60	17.19	17.25	17.25	17.87	18.65	19.00
Bessemer, Pittsburg	16.85	16.45	16.35	16.30	16.20	15.65	15.00	15.40	15.90	16.50	17.70	18.10
No. 2 Foundry, Chicago	17.50	17.50	17.50	17.50	17.25	16.60	16.15	16.35	16.50	17.55	18.90	19.50
Gray Forge, Cincinnati	15.25	15.20	15.00	15.20	14.81	13.35	12.28	13.00	13.00	13.88	15.35	15.75
No. 2 Foundry, Birmingham	14.25	13.50	13.50	13.75	13.25	12.50	11.75	11.75	12.00	13.00	14.50	14.50
Totals	81.60	80.40	80.35	81.00	79.57	75.70	72.37	73.75	74.65	78.80	85.10	86.85
Percentage above Zero	81	79	79	80	77	68	61	64	66	75	89	93
Average Price	16.32	16.08	16.07	16.20	15.91	15.14	14.47	14.71	14.93	15.76	17.02	17.37
1906												
No. 1 Foundry, Philadelphia	19.00	19.00	19.00	19.12	19.25	19.25	19.25	19.80	22.62	24.00	25.00	26.50
Bessemer, Pittsburg	17.32	17.29	17.26	17.25	17.24	17.38	17.57	17.96	18.44	20.06	21.96	22.75
No. 2 Foundry, Chicago	19.25	19.25	19.00	18.75	18.50	18.10	18.30	18.90	19.75	21.50	26.50	27.00
Gray Forge, Cincinnati	15.75	15.05	14.85	14.75	14.75	14.65	14.55	15.40	16.50	17.50	21.70	22.00
No. 2 Foundry, Birmingham	14.50	14.25	14.25	14.25	14.00	14.00	13.50	14.50	15.50	16.75	19.50	24.00
Totals	85.82	84.84	84.36	84.12	83.74	83.38	83.17	86.56	92.81	99.81	114.66	122.25
Percentage above Zero	91	88	87	87	86	85	85	92	106	122	155	172
Average Price	17.16	16.97	16.87	16.82	16.75	16.67	16.63	17.31	18.56	19.96	22.93	24.45

AVERAGE PRICE OF PIG IRON IN THE UNITED STATES (Continued)

1907	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No. 1 Foundry, Philadelphia	27.50	27.37	26.87	26.56	26.60	25.75	23.62	22.50	21.19	20.40	19.44	18.94
Bessemer, Pittsburg	22.82	22.78	22.85	22.16	24.10	24.10	23.30	22.70	22.90	22.80	20.65	19.90
No. 2 Foundry, Chicago	26.00	26.50	26.75	27.50	27.40	26.50	25.40	24.50	23.60	22.60	20.60	19.00
Gray Forge, Cincinnati	22.60	22.50	22.70	21.50	21.90	21.35	20.55	19.95	18.85	18.45	17.35	15.50
No. 2 Foundry, Birmingham	23.50	22.75	22.75	22.75	22.75	22.50	21.75	20.75	18.50	18.25	16.50	14.00
Totals	122.52	121.90	121.92	120.47	122.75	120.20	114.62	110.40	105.04	102.50	94.54	87.34
Percentage above Zero	172	171	171	168	173	167	155	145	133	128	110	94
Average Price	24.50	24.38	24.38	24.09	24.55	24.04	22.92	22.08	21.00	20.50	18.91	17.47
1908												
No. 1 Foundry, Philadelphia	18.70	18.75	18.60	18.15	17.45	17.00	17.00	17.00	17.15	17.25	17.50	17.75
Bessemer, Pittsburg	19.00	17.90	17.85	17.50	16.90	16.90	16.90	16.20	15.90	15.75	16.50	17.40
No. 2 Foundry, Chicago	18.10	17.80	17.50	17.40	17.30	17.60	17.25	17.00	16.75	16.50	16.75	17.00
Gray Forge, Cincinnati	14.90	14.50	14.25	13.95	13.75	14.00	14.00	14.25	14.50	14.50	14.75	15.00
No. 2 Foundry, Birmingham	13.50	13.50	13.00	12.25	11.50	12.25	12.00	12.50	13.00	13.00	13.00	13.50
Totals	84.20	82.45	81.20	79.25	76.90	77.75	77.15	76.95	77.30	77.00	78.60	80.65
Percentage above Zero	87	83	80	76	71	73	72	71	72	71	75	79
Average Price	16.84	16.49	16.24	15.85	15.38	15.55	15.43	15.37	15.46	15.40	15.72	16.13
1909												
No. 1 Foundry, Philadelphia	17.75	17.50	17.00	16.75	16.50	17.00	17.00	17.50	18.50	19.00	19.50	19.50
Bessemer, Pittsburg	17.40	16.90	16.40	15.90	15.65	15.90	16.40	16.90	18.40	19.40	19.90	19.90
No. 2 Foundry, Chicago	17.35	16.75	16.50	16.50	16.50	16.50	17.00	17.25	18.50	19.00	19.00	19.00
Gray Forge, Cincinnati	14.75	14.50	13.25	13.00	13.75	13.50	14.00	15.00	16.00	16.75	17.00	16.50
No. 2 Foundry, Birmingham	13.00	13.00	12.25	11.50	11.50	11.50	12.50	13.25	14.25	15.00	15.00	14.50
Totals	80.25	78.65	75.40	73.65	73.90	74.40	76.90	79.90	85.65	89.15	90.40	89.40
Percentage above Zero	78	76	68	64	64	65	71	78	90	98	101	110
Average Price	16.05	15.73	15.08	14.73	14.78	14.88	15.38	15.98	17.13	17.83	18.08	17.88
1910												
No. 1 Foundry, Philadelphia	19.50	19.25	18.50	18.25	17.50	17.25	16.75	16.50	16.00	15.00	16.00	16.00
Bessemer, Pittsburg	19.00	19.80	19.65	19.40	17.50	16.65	16.40	16.00	15.50	15.75	15.90	15.75
No. 2 Foundry, Chicago	19.00	19.00	18.25	17.50	17.00	16.75	16.50	16.00	16.00	16.00	15.75	15.50
Gray Forge, Cincinnati	16.25	16.00	15.50	14.50	14.25	14.00	14.00	13.50	13.50	13.50	13.75	13.50
No. 2 Foundry, Birmingham	14.25	14.00	13.50	12.50	12.00	11.75	11.50	11.50	11.00	11.00	11.00	11.00
Totals	88.90	88.05	85.40	81.17	78.25	76.40	75.15	74.00	72.00	71.25	72.20	71.75
Percentage above Zero	98	96	90	80	74	70	67	65	60	58	60	59
Average Price	17.78	17.61	17.08	16.23	15.65	15.28	15.03	14.80	14.40	14.25	14.44	14.35

APPENDIX G

TABLE SHOWING THAT EACH ABNORMAL ADVANCE IN THE PRICE OF PIG IRON HAS BEEN FOLLOWED BY AN INDUSTRIAL DEPRESSION

Lowest and highest prices of Scotch Pig Iron in New York from 1825 to
1882, taken from the American Almanac

Edited by AINSWORTH R. SPOFFORD, Librarian of Congress

Years of Depression up to 1886, taken from the First Annual Report of the
United States Commissioner of Labor, published in 1886, page 290

	Lowest	Highest	Year	
Low, High	\$35.00	\$75.00	1825	114% advance
Depression ..	50.00	70.00	1826	
	50.00	55.00	1827	
	50.00	55.00	1828	
	40.00	55.00	1829	
	40.00	50.00	1830	
	40.00	47.50	1831	
	40.00	47.50	1832	
	37.50	47.50	1833	
Low	37.50	48.00	1834		86% advance
High	38.00	42.50	1835	
Depression ..	38.00	62.50	1836	
	40.00	70.00	1837	
	37.50	55.00	1838	
	37.50	45.00	1839	
	32.50	40.00	1840	
	32.00	37.50	1841	
	23.50	35.00	1842	
Low	22.50	32.00	1843	133% advance
High	30.00	35.00	1844	
Depression ..	30.00	62.50	1845	
	35.00	42.50	1846	
	30.00	42.50	1847	
	25.00	37.50	1848	
	22.50	27.50	1849	
	21.00	24.00	1850	
	19.00	25.00	1851	
Low	19.00	31.00	1852		123% advance
High	28.50	38.00	1853	
	32.00	42.50	1854	
	26.50	37.00	1855	
	29.00	37.00	1856	
Depression ..	28.00	37.50	1857	
	22.00	27.00	1858	
	22.00	31.50	1859	
	20.50	27.00	1860	

APPENDICES

	Lowest	Highest	Year	
Low	\$20.00	\$24.50	1861	300% advance (Depreciated Currency)
	21.00	33.00	1862	
	32.50	45.00	1863	
High	43.00	80.00	1864	
	40.00	55.00	1865	
	42.00	55.00	1866	
Depression ..	38.00	49.00	1867	
	35.00	45.75	1868	
	34.50	45.00	1869	
	31.00	37.00	1870	
Low	30.00	39.00	1871	103% advance
High	33.50	61.00	1872	
Depression ..	37.00	52.00	1873	
	33.00	45.00	1874	
	29.00	41.00	1875	
	27.50	34.00	1876	
	25.00	28.00	1877	
	21.50	26.50	1878	
Low	19.00	30.50	1879	84% advance
High	21.00	35.00	1880	
	22.00	26.00	1881	
Depression ..	23.00	26.50	1882	
	21.00	25.00	1883	
	18.00	20.50	1884	
	17.75	18.25	1885	
	18.25	20.00	1886	
	20.50	21.50	1887	
	18.00	21.00	1888	
	17.00	19.25	1889	
	18.00	19.90	1890	
	17.50	17.75	1891	
	15.00	17.50	1892	
No Great Change in Prices and consequently no Depressions from Industrial Causes	13.75	15.00	1893	Short Depression caused by Silver Coinage panic. (June.)
	12.50	13.37	1894	Short Depression caused by depletion of Gold Reserve. (April.)
	12.00	14.50	1895	Short Depression caused by Venezuela Proclamation. (December.)
	12.50	13.50	1896	Short Depression caused by threatening of Gold Basis. (July.)
	11.75	12.75	1897	

APPENDICES

	Lowest	Highest	Year	
Low	\$11.25	\$12.00	1898	
High	12.12	25.00	1899	122% advance
Depression ..	16.00	25.00	1900	
Low	15.50	16.25	1901	
High	17.50	24.87	1902	60% advance
Depression ..	15.87	24.00	1903	
Low	15.00	17.62	1904	
	17.25	19.00	1905	
	19.00	26.50	1906	
High	18.87	27.50	1907	83% advance
				Depression caused by Financial Panic. (October 1907.)
Depression ..	17.00	18.75	1908	Beginning of Depres- sion caused by High Cost of Construc- tion.
	16.50	19.50	1909	
	16.00	19.50	1910	

APPENDIX H

RELATIVE RANK OF NATIONS IN ALL IMPORTANT AFFAIRS.

	1	2	3	4	5	6	7	8	9	10
WEALTH										
Rank	Order of Severity in Industrial Depressions 1886	Area Square Miles	Population in Millions	Wealth of Countries	Wealth per Inhabitant	Wealth in Farms	Wealth in Houses	Wealth in Railroads	Wealth in Merchandise	Wealth in Sundries
		Thousands	1880	Millions £ Sterling 1888	£ Sterling 1888	Millions £ Sterling 1888	Millions £ Sterling 1888	Millions £ Sterling 1888	Millions £ Sterling 1888	Millions £ Sterling 1888
1	Great Britain	6179	84	12,820	370	4142	4146	2260	1563	5447
	Siberia		Russia	U. S.	Australia	U. S.	U. S.	U. S.	U. S.	G. B.
2	United States	3925	62	10,800	300	3093	2492	985	805	3939
	China		U. S.	Gt. Britain	Gt. Britain	France	Gt. Britain	G. B.	G. B.	U. S.
3	Germany	3640	45	8900	240	2710	2159	663	677	3174
	U. S.		Germany	France	France	Russia	France	France	Germany	France
4	France	3372	37	7500	240	2508	1755	555	601	2557
	Canada		Austria	Germany	Holland	Germany	Germany	Germany	France	Germany
5	Belgium.....	3288	37	5800	230	2077	1019	371	515	1832
	Brazil		France	Russia	Denmark	Gt. Britain	Russia	Austria	Russia	Russia
6		3104	35	4200	210	1797	719	349	367	1258
	Australia		Gt. Britain	Austria	U. S.	Austria	Austria	Russia	Austria	Austria
7		2262	28	2900	200	1399	503	186	223	851
	Russia		Italy	Italy	Canada	Italy	Italy	Canada	Italy	Italy
8		1095	16	2500	170	1212	280	184	148	632
	Argentina		Spain	Spain	Belgium	Spain	Spain	Italy	Spain	Spain
9		870	8	1370	160	532	221	139	118	372
	India		Turkey	Australia	Germany	Scandi- navia	Scandi- navia	Australia	Belgium	Scandi- navia
10		750	5	1010	150	508	179	108	117	283
	Mexico		Belgium	Belgium	Spain	Danube States	Holland	Spain	Scandi- navia	Australia
Various		11					175	75		266
	Belgium						Belgium	Belgium		Belgium

Data taken from Mulhall's Dictionary of Statistics — Fourth Edition, 1899

RELATIVE RANK OF NATIONS IN ALL IMPORTANT AFFAIRS (Continued)

		11	12	13	14	15	16	17	18
		EDUCATION				COMMERCE			
Rank	Order of Severity in Industrial Depressions	School Children per 1000 Population	Percentage of Adults who can Write	Expenditure for Education	Expenditure per Inhabitant for Education	Exported Grain	Imported Grain	Imports and Exports	Trade per Inhabitant
				Millions £ Sterling 1896	Pence 1896	Millions Bushels 1886-87	Millions Bushels 1886-87	Millions £ Sterling 1889	Shillings 1889
1	Great Britain	210	99	38	132	215	286	740	900
		Switzerland	Germany	U. S.	Australia	Russia	G. B.	G. B.	Holland
2	United States	170	99	14	130	168	72	369	405
		France	Switzerland	G. B.	U. S.	U. S.	Germany	Germany	Australia
3	Germany	145	99	12	120	56	54	320	400
		Holland	Scandinavia	Germany	Switzerland	Roumania	France	U. S.	Switzerland
4	France	140	95	8	98	30	36	311	390
		Scandinavia	France	France	Canada	Canada	Italy	France	G. B.
5	Belgium	140	94	5	86	27	55	199	370
		Germany	G. B.	Russia	G. B.	India	Holland & Belgium	Holland	Belgium
6		140	90	4.7	80	24	18	131	260
		Australia	Australia	Italy	Holland	Argentina	Scandinavia	India	Denmark
7		135	90	3	54	13	15	130	168
		Belgium	Canada	Austria	Germany	Austria	Switzerland	Australia	Canada
8		130	90	2.7	50	12	11	118	163
		Austria	Holland	Australia	France	Australia	Spain & Portuga	Russia	France
9		130	83	2.7	42			111	156
		U. S.	U. S.	India	Scandinavia			Belgium	Germany
10		123	83	2.7	42			94	126
		G. B.	Belgium	Canada	Argentina			Italy	Sweden
Various				1.7	42				100
				Belgium	Belgium				U. S.

RELATIVE RANK OF NATIONS IN ALL IMPORTANT AFFAIRS (Continued)

		19	20	21	22	23	24	25	26	27	28	29
		FINANCE					MONEY					
Rank	Order of Severity in Industrial Depressions	Revenues	Expenditures	Revenues from Taxation	Expenditures per Inhabitant	Debt	Ratio of Debt to Wealth	Money in Circulation	Money per Inhabitant	Money in Use	Industries for Comparison with Money	Money Ratio to Industries
		Millions £ Sterling 1889	Millions £ Sterling 1881-88	Shillings per Inhabitant 1890	Shillings 1881-88	Millions £ Sterling 1888	Percentage 1888	Millions £ Sterling 1890	£ Sterling	Millions £ Sterling 1890	Millions £ Sterling 1890	Per Cent 1890
1	Great Britain	154 Germany	160 France	150 Australia	188 Australia	1269 France	30.3 Turkey	443 France	11.8 France	359 U. S.	3316 U. S.	25.5 Holland
2	United States	121 France	127 Germany	65 Germany	100 Cape Colony	756 Russia	15.5 Italy	436 U. S.	10. Cuba	266 France	3600 G. B.	24.5 Portugal
3	Germany	88 Russia	95 Russia	64 France	84 France	698 G. B.	15. Austria	238 Germany	8.2 Australia	209 Germany	1288 Germany	22.8 France
4	France	88 G. B.	88 G. B.	48 Italy	70 Turkey	580 Austria	14.8 Russia	192 India	7.7 Holland	207 Russia	1169 France	19.8 Belgium
5	Belgium	80 U. S.	82 Austria	46 G. B.	54 Germany	460 Italy	14.7 France	176 Russia	7.0 U. S.	170 G. B.	1073 Russia	19.4 Russia
6		74 Austria	77 India	44 Holland	52 Holland	435 Germany	12.5 Australia	163 G. B.	6.2 Egypt	90 Austria	744 Austria	16.3 Germany
7		72 Italy	72 Italy	43 Belgium	50 Belgium	260 Spain	10.3 Spain	150 China	6.1 Belgium	64 Italy	433 Italy	14.8 Italy
8		69 India	55 U. S.	89 Austria	48 G. B.	221 U. S.	7.7 G. B.	103 Austria	6.8 Cape Colony	39 Spain	296 Spain	14.2 Australia
9		35 Spain	36 Spain	38 Spain	48 Italy	180 Turkey	7.6 Belgium	90 Italy	5.0 Germany	37 Belgium	204 Canada	13.4 Spain
10		27 Australia	33 Australia	38 Portugal	44 Argentina	171 Australia	6.8 Germany	73 Spain	4.4 G. B.	28 Australia	203 Scandinavia	12.5 G. B.
Various		12 Belgium	14 Belgium	26 U. S.	20 U. S.	77 Belgium	1.7 U. S.	37 Belgium	— — —	— — —	187 Belgium	10.8 U. S.

RELATIVE RANK OF NATIONS IN ALL IMPORTANT AFFAIRS (Continued)

		30	31	32	33	34	35
		TAXES			BANKING		
Rank	Order of Severity in Industrial Depressions 1886	Amount Taxes levied	Taxes Percentage of Earnings	Duty on Imports	Banking Capital	Savings Bank Deposits	Depositors per 1000 Inhabitants
		Shillings per Inhabitant 1888-90	1888-90	Percentage 1889	Millions £ Sterling 1888-90	Shillings per Inhabitant 1888-90	
1	Great Britain	74	22. Italy	31.0	1030	209	360
		France		Russia	U. S.	Denmark	Switzerland
2	United States	64	15.1	30.3	910	158	240
		Holland	Holland	U. S.	G. B.	Switzerland	Scandinavia
3	Germany	63	14. Portugal	28.2	268	104	180
		G. B.		Portugal	France	Norway	Germany
4	France	60	13.6	23.8	231	101	170
		Australia	France	Spain	Germany	Prussia	France
5	Belgium	54	12.3	19.6	147	88	165
		Italy	Spain	Canada	Austria	U. S.	Australia
6		54	11.2	18.8	134	84	133
		Argentina	Argentina	Italy	Australia	Australia	G. B.
7		45	10.4	15.7	108	65	120
		Germany	Germany	Egypt	Italy	Austria	Italy
8		41	9.5	13.2	106	60	105
		Spain	Austria	Sweden	Russia	Sweden	Holland
9		40	9.3	12.2	47	59	102
		U. S.	G. B.	Norway	Spain	France	Belgium
10		36	7.4	12.1	40	47	77
		Belgium	Russia	Australia	Canada	G. B.	Austria
Various		—	—	France 9.0	—	—	—
		—	5.4	Germany 6.7	30	40	67
		—	U. S.	G. B. 4.7	Belgium	Belgium	U. S.
		—	—	Belgium 1.8	—	Germany	—

RELATIVE RANK OF NATIONS IN ALL IMPORTANT AFFAIRS (Continued)

		36	37	38	39	40	41	42	43	44
		AGRICULTURE								
Rank	Order of Severity in Industrial Depressions	Agricultural Products Millions £ Sterling	Pounds Grain Produced per Inhabitant	Area under Crops Millions	Agricultural and Pastoral Crops Millions £ Sterling	Agricultural Productions Laborers per Man	Population engaged in Agriculture	Earnings from Agriculture	Wealth in Agriculture	Workers Employed in Agriculture
	1886	1888	1888	1888	1887	1887	Percentage (Average 40) 1891-96	Percentage (Average 20) 1891-96	Percentage (Average 31) 1891-96	Thousands 1887
1	Great Britain	776 U. S.	2220 U. S.	201 U. S.	776 U. S.	100 Uruguay	70 Russia	35 Ireland	60 Ireland	22,700 Russia
2	United States	563 Russia	2005 Denmark	190 Russia	563 Russia	98 Australia	62 Austria	32 Russia	45 Italy	10,680 Austria
3	Germany	480 France	1500 Canada	65 Austria	460 France	98 G. B.	52 Italy	28 Italy	43 Russia	9,000 U. S.
4	France	424 Germany	1200 Russia	61 France	424 Germany	85 U. S.	45 Ireland	27 Austria	39 Austria	8120 Germany
5	Belgium	331 Austria	1150 Roumania	59 Germany	331 Austria	85 Denmark	43 Canada	21 France	36 Australia	6450 France
6		251 G. B.	1100 Spain	35 Italy	251 G. B.	71 France	42 France	20 Germany	36 Belgium	5390 Italy
7		204 Italy	990 France	32 Spain	204 Italy	70 Canada	39 Germany	20 Australia	33 Holland	2900 Turkey
8		173 Spain	985 Sweden	21 G. B.	173 Spain	70 Argentina	35 U. S.	18 Holland	32 France	2720 Spain
9		82 Australia	980 Australia	14 Australia	62 Australia	63 Spain	25 Belgium	18 Canada	31 Germany	2560 G. B.
10		58 Canada	850 Argentina	13 Canada	56 Canada	60 Greece	25 Australia	16 U. S.	31 Canada	980 Belgium
	Various	— Belgium	— Germany	— Belgium	— Belgium	— Belgium	— G. B.	— Belgium 14 G. B. 10	— U. S. 25 G. B. 15	— — —

RELATIVE RANK OF NATIONS IN ALL IMPORTANT AFFAIRS (Continued)

		45	46	47	48	49	50	51	
		MINING		WAGES AND FOOD					
Rank	Order of Severity in Industrial Depressions	Mining Iron raised Yearly Millions	Value of Minerals Millions £ Sterling 1888	Wages Day Labor Pence 1880	Food Tons Produced per 100 Inhabitants 1880	Food of Workman Shillings per Week 1880	Wages of Workman Shillings per Week 1880	Percentage of Food Cost Shillings per Week 1880	
	1886	1888	1888	1880	1880	1880	1880	1880	
1	Great Britain	185 G. B.	107 U. S.	66 U. S.	190 Canada	18 U. S.	48 U. S.	62 Germany	
2	United States	160 U. S.	59 G. B.	25 G. B.	180 Denmark	14 G. B.	40 Australia	62 Spain	
3	Germany	96 Germany	25 Germany	25 France	178 Australia	12 France	31 G. B.	60 Italy	
4	France	26 France	15 Russia	20 Austria	172 U. S.	12 Belgium	21 France	60 Belgium	
5	Belgium	23 Austria	10 France	20 Holland	170 Argentina	11 Australia	20 Belgium	57 France	
6		19 Belgium	8 Australia	20 Belgium	112 Sweden	10 Germany	16 Germany	45 G. B.	
7		12 Russia	7 Belgium	18 Germany	100 Danube States	10 Spain	16 Spain	33 U. S.	
8		8 Australia	5 Austria	16 Spain	99 Norway	9 Italy	15 Italy	28 Australia	
9		7 Spain	4 Spain	16 Portugal	94 Holland	—	—	—	
10		—	2 Italy	14 Scandi- navia	90 Germany	—	—	—	
Various		—	—	—	—	—	—	—	
		—	—	—	—	—	—	—	
		—	—	—	—	—	—	—	
		—	—	—	—	—	—	—	

RELATIVE RANK OF NATIONS IN ALL IMPORTANT AFFAIRS (Continued)

		52	53	54	55	56	57	58	59	60	61
		INDUSTRIES									
Rank	Order of Severity in Industrial Depressions 1886	Value of Manufacture Millions £ Sterling 1888	Value of Mfg. per Inhabitant £ Sterling 1888	Steam Power Horse Thousands 1888	Steam Power Horse Power per 1000 Inhabitants 1888	Textiles M'fd. total Millions £ Sterling Various dates 1841-87	Goods M'fd. total Millions £ Sterling Various dates 1841-87	Iron Consumption per Inhabitant Pounds 1888	Coal Consumption per Inhabitant Cwts. 1888	Total Amt. of Iron produced in the World from 1800-1900 tons	Value of Total Amt. World's Iron Production £ Sterling from 1800-1900
1	Great Britain	1443 U. S.	24 U. S.	14,400 U. S.	250 G. B.	170 G. B.	6871 G. B.	400 G. B.	72 G. B.	257,000,000 G. B.	735,000,000 G. B.
2	United States	820 G. B.	21.5 G. B.	9200 G. B.	240 U. S.	112 U. S.	3949 France	310 Belgium	48 Belgium	99,000,000 U. S.	449,300,000 U. S.
3	Germany	583 Germany	17 Belgium	6200 Germany	140 Belgium	108 France	2621 U. S.	290 U. S.	40. U. S.	75,000,000 Germany	226,600,000 Germany
4	France	485 France	13 Denmark	4520 France	130 Germany	82 Germany	2327 Germany	204 Germany	28 Germany	49,700,000 France	189,400,000 France
5	Belgium	363 Russia	12.7 France	2240 Russia	110 France	52 Russia	1743 Russia	170 Sweden	16 France	22,200,000 Belgium	77,500,000 Belgium
6		253 Austria	12.3 Germany	2150 Austria	100 Switzerland	36 Austria	1307 Austria	112 France	16 Holland	18,600,000 Russia	63,300,000 Russia
7		121 Italy	11.5 Australia	830 Italy	90 Norway	21 Italy	611 Spain	45 Austria	11 Austria	17,200,000 Austria	58,600,000 Austria
8		102 Belgium	11 Switzerland	810 Belgium	80 Holland	16 Spain	583 Italy	37 Spain	6 Scandinavia	15,100,000 Sweden	53,300,000 Sweden
9		85 Spain	10.5 Sweden	740 Spain	80 Denmark	16 Belgium	478 Belgium	22 Italy	5 Switzerland	9,100,000 Spain, Italy, etc.	Spain, Italy, etc.
10		50 Sweden	9.5 Norway	340 Holland	70 Sweden	15 Switzerland	178 Scandinavia	19 Russia	2 Spain	Total World 563,400,000	£1,887,700,000
Various		—	—	—	—	—	—	—	—	—	—
		—	—	—	—	—	—	—	—	—	—
		—	—	—	—	—	—	—	—	—	—

DIAGRAM ILLUSTRATING CONSTRUCTION IN THE UNITED STATES FROM 1896 TO 1910

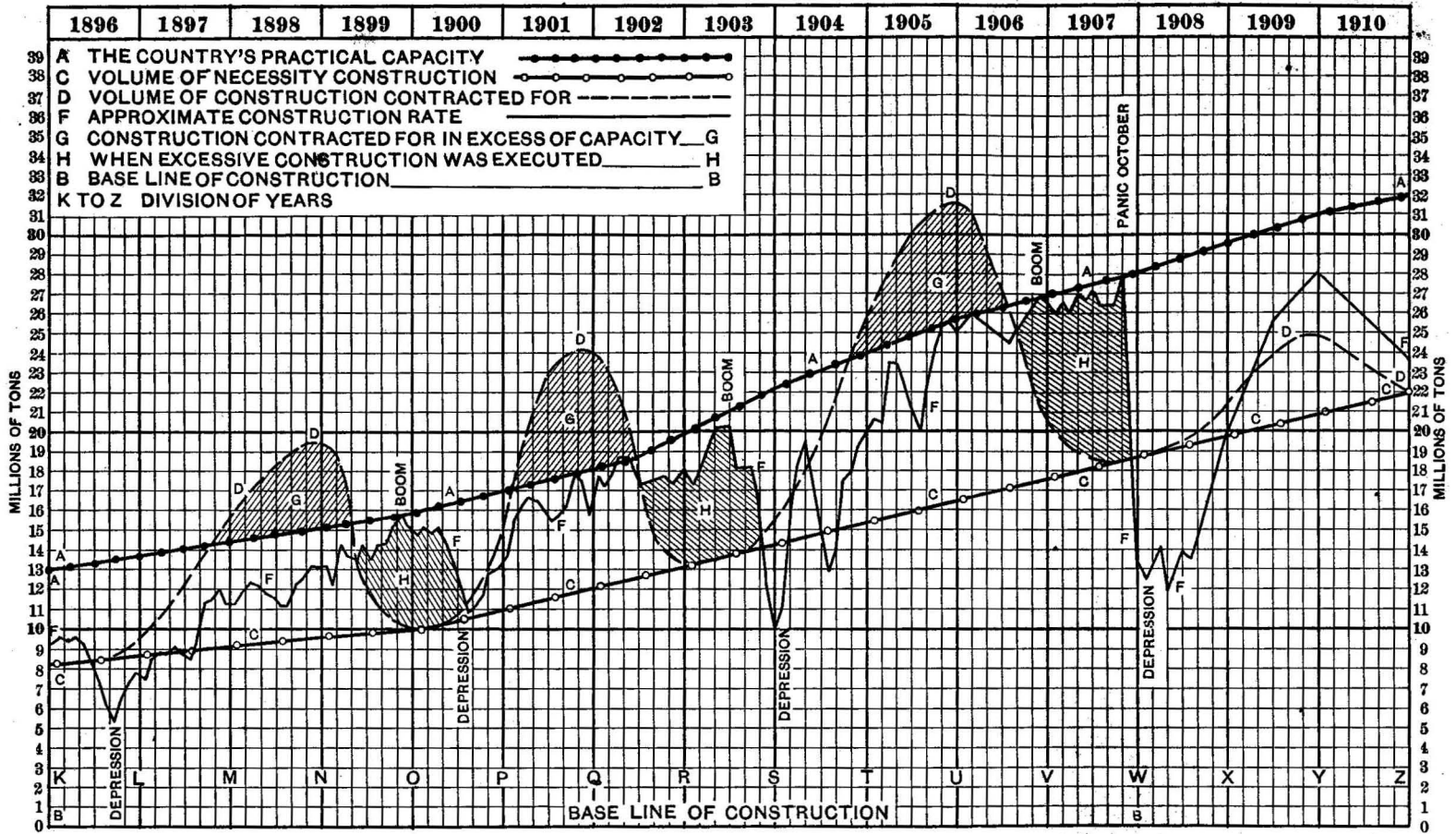
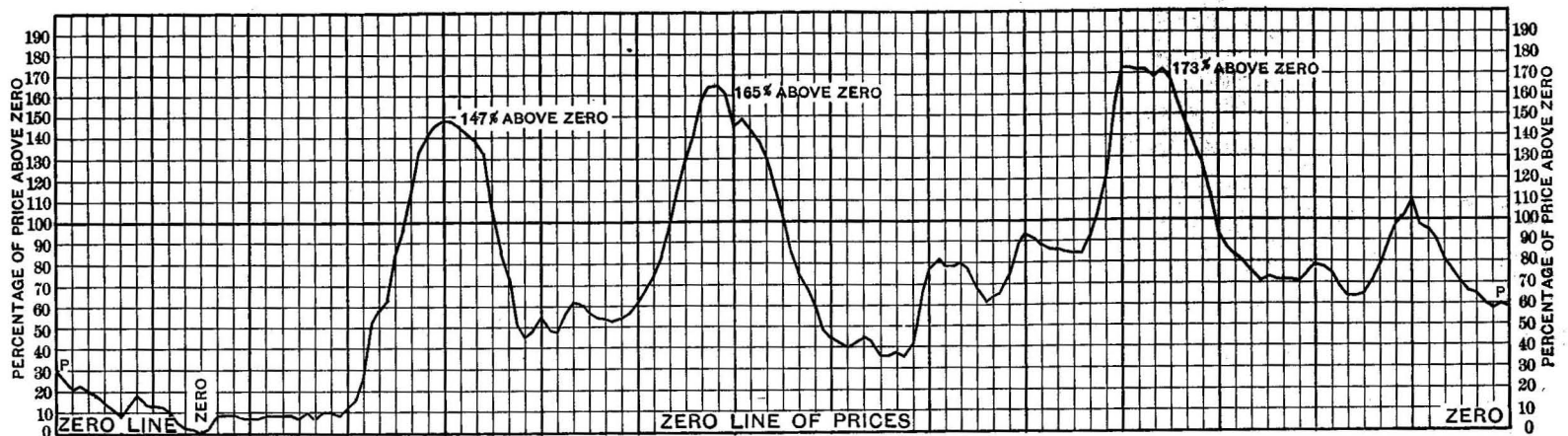


DIAGRAM ILLUSTRATING THE AVERAGE PRICES OF PIG IRON "ABOVE ZERO" IN THE UNITED STATES FROM 1896 TO 1910



APPENDIX L

DESCRIPTION OF DIAGRAMS

Appendix L contains two diagrams. They are placed one above the other for the purpose of illustrating the effect of high and low prices upon the volume of construction. As usual, the quantity of pig iron consumed is used as the gauge of the quantity of construction.

DIAGRAM OF PRICES

The single line (*P*) in the lower diagram represents the average fluctuation in prices of the four principal grades of iron in the five chief iron markets of the United States, the details of which are shown in Appendix E. The lowest average price ever reached was in July, 1897. For the purposes of description, this price will be called "ZERO," and the line *P* represents the percentage of fluctuations above zero, during this period of fifteen years.

DIAGRAM OF CONSTRUCTION

The space between the irregular line *FF* and the base line *BB* represents the actual monthly consumption of iron up to November, 1905, after which date it represents the estimated consumption. (See footnote, page 179.) This space we call "Approximate Construction Rate."

The space between the lines *CC* and the base line *BB* represents the average volume of construction which goes on all the time, in depressed times as well as in active times, and is what we have designated as "necessity construction."

The space between the line *AA* and the line *CC* represents the highest practical limit of the extra construction which creates the booms; being the highest rate reached during a boom, when all the available labor is employed, the reserve stocks of materials are exhausted and the rate of construction is limited to the rate materials can be produced. This we call "practical capacity."

The line *DD* represents the approximate rate at which contracts for construction are made. The spaces *G,G,G*, represent approximately the amount of construction materials included in these contracts, in excess of the capacity of the country to produce them on contract time, and the spaces *H,H,H*, represent the time in which this excessive construction is carried to completion.

It will be observed that the contracts for construction which resulted in the boom of 1899 were made chiefly during the low-priced periods of 1897 and 1898; that, as soon as prices advanced materially, the contracts for construction fell off rapidly, and that the excess construction contracted for, as per space *G*, kept actual construction up to the maximum height until July, 1900, when actual construction dropped to the necessity basis within three months.

Then during the low-priced period of 1901, the chief volume of contracts was made, which resulted in the boom of 1902 and 1903.

Then during the low-priced period of 1904 and 1905, the chief volume of contracts was made, which brought the boom of 1906 and 1907.

These three illustrations are typical of what has occurred just before each boom in the five industrial nations, ever since these nations became large industrial producers.

APPENDIX M

THE IRON PRODUCTION OF

Year	Long Ton	Long Ton	Metric Ton	Metric Ton	Metric Ton	Metric Ton	Metric Ton
	Great Britain	United States	Germany	France	Belgium	Austria-Hungary	Russia
1500	6,000	.....	5,000	12,000	.....	.....	.....
1700	12,000	.....	10,000	22,000	.....	.....	.....
1740	20,000	1,000	18,000	25,000	.....	.....	.....
1780	68,000	30,000	30,000	40,000	.....	.....	.....
1800	180,000	40,000	40,000	60,000	.....	.....	.....
1806	243,851	.....	.....	.....	.....	.....	.....
1807	.....	.....	.....	.....	.....	.....	.....
1808	.....	.....	.....	.....	.....	.....	.....
1809	.....	.....	.....	.....	.....	.....	.....
1810	250,000	55,000	46,000	85,000	.....	.....	.....
1811	.....	.....	.....	.....	.....	.....	.....
1812	.....	.....	.....	.....	.....	.....	.....
1813	.....	.....	.....	.....	.....	.....	.....
1814	300,000	.....	.....	100,000	.....	.....	.....
1815	.....	.....	.....	.....	.....	.....	.....
1816	.....	.....	.....	.....	.....	.....	.....
1817	.....	.....	.....	.....	.....	.....	.....
1818	325,000	.....	.....	114,000	.....	.....	.....
1819	.....	.....	.....	112,500	.....	.....	.....
1820	400,000	110,000	90,000	140,000	.....	.....	.....
1821	.....	.....	.....	.....	.....	.....	.....
1822	.....	.....	.....	.....	.....	.....	.....
1823	455,166	.....	.....	.....	.....	.....	.....
1824	.....	.....	.....	.....	.....	.....	.....
1825	581,367	.....	.....	195,588	.....	.....	139,642
1826	.....	.....	.....	.....	.....	.....	.....
1827	690,000	.....	.....	.....	.....	.....	.....
1828	703,184	130,000	.....	.....	.....	.....	.....
1829	.....	142,000	.....	217,000	.....	.....	.....
1830	680,000	180,000	120,000	220,000	35,000	80,000	102,952
1831	.....	191,000	.....	224,000	.....	.....	.....
1832	.....	200,000	.....	225,000	.....	.....	.....
1833	700,000	.....	.....	236,000	.....	.....	.....
1834	.....	.....	.....	260,000	.....	.....	.....
1835	.....	.....	.....	294,000	.....	.....	172,009
1836	1,000,000	.....	.....	308,000	.....	.....	.....
1837	.....	.....	.....	331,000	.....	.....	.....
1838	.....	.....	.....	347,000	.....	.....	.....
1839	1,248,781	.....	.....	350,000	.....	.....	.....
1840	1,396,000	290,000	170,000	350,000	73,000	140,000	185,000
1841	.....	.....	.....	377,000	.....	.....	.....
1842	1,099,138	215,000	.....	399,000	.....	.....	.....
1843	1,215,350	.....	.....	422,000	.....	.....	.....
1844	1,999,608	.....	171,000	427,000	.....	.....	.....
1845	1,512,500	.....	.....	438,000	134,563	.....	187,260
1846	.....	765,000	.....	522,000	.....	.....	.....
1847	1,999,508	800,000	.....	591,000	.....	.....	.....
1848	.....	800,000	205,000	472,000	.....	.....	.....
1849	.....	650,000	.....	414,000	.....	.....	.....
1850	2,250,000	563,755	402,000	570,000	144,452	140,000	227,555
1851	.....	.....	.....	445,000	.....	.....	.....
1852	2,701,000	500,000	.....	522,000	.....	.....	.....
1853	.....	.....	.....	660,000	.....	.....	.....
1854	3,218,154	657,337	.....	771,000	.....	.....	.....
1855	3,218,151	700,159	.....	849,000	294,270	.....	268,637
1856	3,586,377	788,515	923,000
1857	3,659,477	712,640	992,000
1858	3,456,064	629,548	871,000

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APPENDIX M

THE WORLD BY NATIONS

Metric Ton	Metric Ton	Metric Ton	Long Ton	Various		Figured at Long Ton
Sweden	Spain	Italy	Canada			World's Production
					37,000	60,000
					60,000	104,000
					92,000	157,000
					110,000	278,000
					130,000	460,000
					180,000	616,000
65,000						
					270,000	1,010,000
105,000	20,000	10,000			62,000	1,585,000
130,000	40,000					2,774,000
130,000	40,000					4,468,000

APPENDICES

THE IRON PRODUCTION OF

Year	Long Ton	Long Ton	Metric Ton	Metric Ton	Metric Ton	Metric Ton	Metric Ton
	Great Britain	United States	Germany	France	Belgium	Austria-Hungary	Russia
1859	3,712,904	750,560	.....	864,000	.....	.....	.....
1860	3,826,752	821,223	530,000	898,000	319,934	310,000	335,255
1861	3,712,390	653,164	.....	966,000	.....	.....	.....
1862	3,943,469	703,270	.....	1,090,000	356,000	.....	.....
1863	4,510,044	846,075	812,600	1,156,000	392,078	.....	.....
1864	4,767,951	1,014,282	904,700	1,212,000	449,875	.....	.....
1865	4,825,254	831,770	988,200	1,203,000	470,767	.....	299,432
1866	4,523,897	1,205,663	1,046,900	1,260,000	482,404	.....	.....
1867	4,761,023	1,305,023	1,113,600	1,229,000	423,069	.....	.....
1868	4,970,206	1,431,250	1,264,400	1,235,000	435,754	.....	.....
1869	5,445,767	1,711,287	1,413,000	1,390,000	534,319	.....	.....
1870	5,963,515	1,665,179	1,391,100	1,178,000	565,234	400,000	359,531
1871	6,627,179	1,706,793	1,536,700	859,000	609,230	393,352	359,253
1872	6,741,929	2,548,713	1,988,400	1,217,000	655,565	459,657	399,253
1873	6,566,451	2,560,963	2,240,600	1,381,000	607,373	534,508	384,221
1874	5,991,408	2,401,262	1,906,200	1,415,000	532,790	494,055	380,219
1875	6,365,462	2,023,733	2,029,400	1,448,000	540,473	463,163	427,182
1876	6,555,997	2,868,961	1,846,400	1,435,000	490,508	400,426	441,433
1877	6,608,664	2,066,594	1,932,700	1,506,000	470,488	387,630	398,238
1878	6,381,051	2,301,215	2,147,600	1,521,000	518,646	434,250	417,239
1879	5,995,337	2,741,853	2,226,600	1,400,000	389,330	404,162	432,636
1880	7,749,233	3,835,191	2,729,000	1,725,000	608,684	464,234	448,411
1881	8,144,449	4,144,254	2,914,000	1,886,000	624,736	543,640	469,476
1882	8,586,680	4,623,323	3,380,800	2,039,000	726,946	611,739	498,400
1883	8,529,300	4,595,510	3,469,719	2,069,430	783,433	698,856	481,679
1884	7,811,727	4,097,868	3,600,612	1,871,000	750,812	734,346	509,519
1885	7,415,469	4,044,526	3,687,434	1,630,848	712,876	714,784	527,536
1886	7,009,754	5,683,329	3,528,658	1,616,574	697,110	760,000	532,104
1887	7,539,518	6,417,148	3,907,364	1,507,850	755,781	719,980	612,447
1888	7,998,969	6,689,738	4,337,421	1,683,349	826,984	704,530	683,315
1889	8,322,824	7,603,642	4,524,558	1,722,480	847,000	790,227	740,067
1890	7,904,214	9,202,703	4,685,461	1,970,160	781,958	855,822	926,471
1891	7,406,064	8,279,870	4,641,217	1,897,000	684,126	921,846	1,004,661
1892	6,709,255	9,157,000	4,937,461	2,057,258	753,268	940,646	1,070,800
1893	6,976,990	7,124,502	4,986,003	2,032,567	760,296	892,247	1,148,923
1894	7,427,342	6,657,388	5,380,038	2,069,000	818,597	1,072,357	1,332,489
1895	7,703,459	9,446,308	6,464,501	2,003,868	829,234	1,127,673	1,454,325
1896	8,563,209	8,623,127	6,372,575	2,339,537	959,414	.....	1,612,669
1897	8,796,465	9,652,680	6,864,405	2,484,191	1,034,732	.....	1,868,671
1898	8,631,151	11,773,934	7,215,927	2,534,427	979,101	1,427,240	2,222,469
1899	9,305,319	13,020,703	8,142,017	2,567,388	1,036,185	1,467,663	2,710,972
1900	8,959,691	13,789,242	8,351,373	2,669,966	1,001,872	1,472,695	2,889,789
1901	7,928,647	15,378,354	7,860,893	2,888,823	764,180	1,496,347	2,831,680
1902	8,679,535	17,821,307	8,529,810	2,404,974	1,069,050	1,218,500	2,592,918
1903	8,935,083	18,099,252	10,085,634	2,840,517	1,216,500	1,428,158	2,453,958
1904	8,562,658	16,497,033	10,103,941	2,974,042	1,283,190	1,454,803	2,978,352
1905	9,592,737	22,992,380	10,813,979	3,028,089	1,290,400	*1,560,000	2,977,981
1906	10,149,388	25,307,191	12,098,551	3,266,580	1,354,033	*1,575,000	2,618,977
1907	10,114,282	25,781,361	12,839,593	3,532,233	1,405,374	*1,823,761	2,776,327
1908	9,289,840	15,936,018	11,813,511	3,344,145	1,182,311	1,952,750	2,751,000
1909	9,664,287	25,795,471	12,917,653	3,544,638	1,632,350	1,947,300	*2,817,000
1910	10,216,745	27,298,545	14,793,325	4,032,459	1,803,500	1,990,684	*2,956,000

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THE WORLD BY NATIONS (Continued)

Metric Ton	Metric Ton	Metric Ton	Long Ton	Various				Figured at Long Ton
								World's Production
Sweden	Spain	Italy	Canada					
185,019	50,000	.....	.....	.....	.....	.....	.....	7,300,000
266,620	.....	.....	.....	.....	.....	.....	.....	9,250,000
.....	.....	.....	.....	.....	.....	.....	.....	9,300,000
.....	.....	.....	.....	.....	.....	.....	.....	9,250,000
.....	.....	.....	.....	.....	.....	.....	.....	10,400,000
.....	.....	.....	.....	.....	.....	.....	.....	11,875,000
.....	.....	.....	.....	.....	.....	.....	.....	11,900,000
300,338	70,000	.....	.....	.....	.....	.....	.....	12,500,000
298,761	.....	.....	.....	.....	.....	.....	.....	13,925,000
339,409	.....	.....	.....	.....	.....	.....	.....	14,675,000
345,720	.....	.....	.....	.....	.....	.....	.....	13,500,000
327,852	.....	.....	.....	.....	.....	.....	.....	13,675,000
350,639	.....	.....	.....	.....	.....	.....	.....	13,475,000
352,467	.....	.....	.....	.....	.....	.....	.....	13,675,000
344,636	.....	.....	.....	.....	.....	.....	.....	14,118,000
340,858	.....	.....	.....	.....	.....	.....	.....	13,950,000
342,547	.....	.....	.....	.....	.....	.....	.....	17,950,000
406,713	85,939	21,000	.....	.....	.....	.....	.....	19,400,000
430,042	114,394	27,800	.....	.....	.....	.....	.....	20,750,000
398,945	120,064	24,778	.....	.....	.....	.....	.....	21,000,000
422,647	139,920	24,306	.....	.....	.....	.....	.....	19,475,000
430,534	126,269	24,778	.....	.....	.....	.....	.....	19,300,000
464,737	159,225	15,991	.....	.....	.....	.....	.....	20,386,000
442,457	156,204	12,291	.....	.....	.....	.....	.....	22,171,000
456,625	188,634	12,265	.....	.....	.....	.....	.....	23,575,000
457,052	212,116	12,538	.....	.....	.....	.....	.....	23,345,000
420,665	197,874	13,473	.....	.....	.....	.....	.....	27,157,000
456,103	179,782	14,346	19,439	.....	.....	.....	.....	25,718,000
490,913	278,460	11,930	21,331	.....	.....	.....	.....	26,474,000
485,664	211,436	12,729	37,896	.....	.....	.....	.....	24,813,000
453,421	234,563	8,038	49,953	.....	.....	.....	.....	26,600,000
462,809	223,798	10,329	44,791	.....	.....	.....	.....	28,871,000
462,930	206,452	9,213	37,829	.....	.....	.....	.....	30,500,000
488,400	246,326	.....	60,030	Japan	China	India	Mexico	32,700,000
530,891	146,940	8,393	53,798	.....	.....	.....	.....	35,500,000
531,766	113,492	.....	68,755	23,652	.....	.....	.....	40,841,348
497,727	295,840	19,218	94,077	.....	.....	19,631	.....	40,087,616
518,263	289,315	23,990	86,090	.....	.....	.....	.....	39,968,511
528,375	296,858	15,819	244,976	24,495	28,805	.....	.....	43,495,847
606,825	350,284	43,335	319,557	32,435	15,805	.....	.....	46,368,000
506,825	390,000	75,279	265,418	36,515	38,873	30,756	21,550	45,291,937
528,525	294,000	89,340	270,942	112,328	38,770	40,878	26,554	54,034,508
518,967	315,635	140,818	468,003	190,375	32,314	47,042	4,229	60,179,960
604,789	382,309	133,168	541,957	38,945	50,622	47,000	25,319	48,174,788
615,778	355,240	135,296	581,146	42,919	61,148	40,000	16,238	60,365,780
563,300	430,000	80,000	563,672	147,217	66,409	38,000	16,615	65,607,788
443,000	420,000	147,000	677,090	*161,020	74,000	39,350	58,859	.....
604,300	425,000	343,600	740,210	*162,000	130,000	35,933	45,000	.....

From various sources, including Mulhall's Dictionary of Statistics, American Iron and Steel Association, James Watson & Co., Glasgow, Iron Age, and various foreign authorities.

*Estimated.

APPENDIX O

RAILROAD MILEAGE OF THE UNITED STATES

Years	Miles Built	Miles in Operation	Years	Miles Built	Miles in Operation
1830		23	1871	7,379	60,301
1831	72	95	1872	5,870	66,171
1832	134	229	1873	4,097	70,268
1833	151	330	1874	2,117	72,385
1834	253	633	1875	1,711	74,096
1835	465	1,098	1876	2,712	76,808
1836	175	1,273	1877	2,274	79,082
1837	224	1,497	1878	2,665	81,747
1838	416	1,913	1879	4,809	86,556
1839	389	2,302	1880	6,711	93,262
1840	516	2,818	1881	9,846	103,108
1841	717	3,535	1882	11,569	114,677
1842	491	4,026	1883	6,745	121,422
1843	159	4,185	1884	3,923	125,346
1844	192	4,377	1885	2,975	128,320
1845	256	4,633	1886	3,018	136,338
1846	297	4,930	1887	12,876	149,214
1847	668	5,598	1888	6,900	156,114
1848	398	5,996	1889	5,162	161,276
1849	1,369	7,365	1890	5,915	167,191
1850	1,656	9,021	1891	4,844	172,035
1851	1,961	10,982	1892	3,656	175,691
1852	1,926	12,908	1893	4,143	179,834
1853	2,452	15,360	1894	2,899	182,733
1854	1,360	16,720	1895	1,895	184,628
1855	1,654	18,374	1896	2,053	186,681
1856	3,642	22,016	1897	2,163	188,844
1857	2,487	24,503	1898	2,026	190,870
1858	2,465	26,968	1899	3,466	194,336
1859	1,821	28,789	1900	4,628	198,964
1860	1,837	30,626	1901	3,324	202,288
1861	660	31,286	1902	4,965	207,253
1862	834	32,120	1903	6,169	213,422
1863	1,050	33,170	1904	6,690	220,112
1864	738	33,908	1905	5,084	225,196
1865	1,177	35,085	1906	5,565	230,761
1866	1,716	36,801	1907	6,188	236,949
1867	2,249	39,250	1908	3,654	240,603
1868	2,979	42,229	1909	3,475	244,078
1869	4,615	46,844	1910	3,918	247,996
1870	6,078	52,922			

First Annual Report Com. of Labor, p. 68.
 Statistical Abstract U.S. 1908, p. 248.

APPENDIX P

BUILDING PERMITS OF FIFTY-SEVEN CITIES, 1906 AND 1907*

Cities	1906	1907	Percentage of Gain or Loss between 1906 and 1907	
			Gain	Loss
Baltimore	8,611,708	6,439,580		25
Birmingham	2,132,469	1,964,079		7
Bridgeport.....	2,684,399	2,448,598		8
Buffalo	8,686,030	8,411,000		3
Chicago.....	64,822,030	59,093,080		8
Cambridge	1,458,105	2,729,345	87	
Cleveland	12,972,794	15,888,407	22	
Chattanooga.....	2,231,742	1,700,490		23
Cincinnati	6,911,190	7,737,062	11	
Davenport.....	717,187	653,503		8
Denver.....	7,000,996	6,349,604		9
Detroit.....	13,275,250	14,226,300	7	
Duluth.....	2,761,023	2,483,735		10
Evansville	1,048,680	1,077,745	2	
Fall River.....	1,012,790	1,343,125	32	
Grand Rapids... ..	2,181,306	2,053,755		6
Hartford	3,732,915	4,026,970	9	
Indianapolis	5,530,971	5,787,556	5	
Kansas City	10,765,480	9,611,922		10
Little Rock	1,242,138	1,063,055		14
Louisville.....	5,116,917	3,032,548		47
Los Angeles.....	18,158,540	13,304,696		26
Manchester.....	811,828	719,015		11
Milwaukee	9,713,284	10,771,244	18	
Minneapolis	9,466,150	10,006,485	6	
Memphis	4,346,767	4,957,999	14	
Mobile	1,121,653	1,295,112	15	
Nashville.....	2,840,212	2,078,044		26
New Haven.....	3,018,890	2,804,882		7
Newark	10,411,328	9,543,520		8
New Orleans.....	5,563,437	4,710,523		15
Manhattan	126,075,565	91,722,799		27
Brooklyn	65,066,325	64,150,107		2
Bronx.....	28,889,090	21,648,874		25
New York	220,030,980	177,521,780		19
Omaha	4,273,050	4,536,643	6	
Philadelphia	40,711,510	36,659,655		10
Patterson	1,077,471	1,500,192	39	
Pittsburg.....	15,116,252	13,145,311		13

* From Chicago Contractor.

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Cities	1906	1907	Percentage of Gain or Loss between 1906 and 1907	
			Gain	Loss
Reading	1,631,245	1,499,550		8
Rochester	6,175,499	6,752,615	9	
St. Joseph	1,069,737	1,667,563	55	
St. Louis	29,938,693	21,893,167		27
St. Paul	9,537,449	9,750,000	2	
San Antonio	1,111,550	1,951,471	75	
San Francisco	56,574,844	34,927,396		38
Scranton	2,075,075	2,423,849	16	
Seattle	11,980,488	13,573,270	14	
Spokane	3,710,859	5,778,876	56	
South Bend	1,073,397	1,125,825	5	
Syracuse	3,313,261	4,222,282		27
Salt Lake City ..	2,249,355	4,183,800	86	
Topeka	827,408	1,233,832	49	
Toledo	4,696,970	3,400,665		27
Tacoma	3,032,855	9,985,425	228	
Trenton				
Washington	12,414,457	9,890,464		21
Worcester	2,939,403	3,068,896	4	
Wilkesbarre	2,224,833	2,486,861	11	
Totals	667,032,499	580,492,196		

APPENDIX Q

UNFILED ORDERS OF UNITED STATES STEEL CORPORATION

Year	* Date	* Tonnage	Average Monthly Rate of INCREASE	Average Monthly Rate of DECREASE
1901	December 31	4,497,794		
1902	January		40,553	
	February		40,553	
	March 1		40,553	
	April		40,553	
	May		40,553	
	June		40,553	
	July 1	4,741,993	33,671	
	August		33,671	
	September		33,671	
	October 1	4,843,007	168,082	
	November		168,082	
	December 31	5,347,253	168,082	
1903	January		21,155	
	February		21,155	
	March		21,155	
	April 1	5,410,719		248,047
	May			248,047
	June			248,047
	July 1	4,666,578		312,613
	August			312,613
	September			312,613
	October 1	3,728,742		171,206
	November			171,206
	December 31	3,215,123		171,206
1904	January		307,279	
	February		307,279	
	March 31	4,136,961	307,279	
	April			314,895
	May			314,895
	June 30	3,192,277		314,895
	July			54,947
	August			54,947
	September 30	3,027,436		54,947
	October		556,256	
	November		556,256	
	December 31	4,696,203	556,256	

* From official Reports of the U. S. Steel Corporation.

APPENDICES

Year	Date	Tonnage	Average Monthly Rate of INCREASE	Average Monthly Rate of DECREASE
1905	January		300,452	
	February		300,452	
	March 31	5,597,560	300,452	
	April			255,968
	May			255,968
	June 30	4,829,655		255,968
	July		345,241	
	August		345,241	
	September 30	5,865,377	345,241	
	October		579,903	
	November		579,903	
	December 31	7,605,086	579,903	
1906	January			195,458
	February			195,458
	March 31	7,018,712		195,458
	April			69,708
	May			69,708
	June 30	6,809,589		69,708
	July		375,765	
	August		375,765	
	September 30	7,936,884	375,765	
	October		184,279	
	November		184,279	
	December 31	8,489,718	184,279	
1907	January			148,620
	February			148,620
	March 31	8,043,858		148,620
	April			146,660
	May			146,660
	June 30	7,603,878		146,660
	July			392,957
	August			392,957
	September 30	6,425,008		392,957
	October			600,152
	November			600,152
	December 31	4,624,553		600,152
1908	January			286,403
	February			286,403
	March 31	3,765,343		286,403
	April			150,489
	May			150,489
	June 30	3,313,876		150,489
	July		36,033	
	August		36,033	
	September 30	3,421,977	36,033	
	October		60,517	
	November		60,517	
	December 31	3,603,527	60,517	
1909	January			20,310

* From official Reports of the U. S. Steel Corporation.

APPENDICES

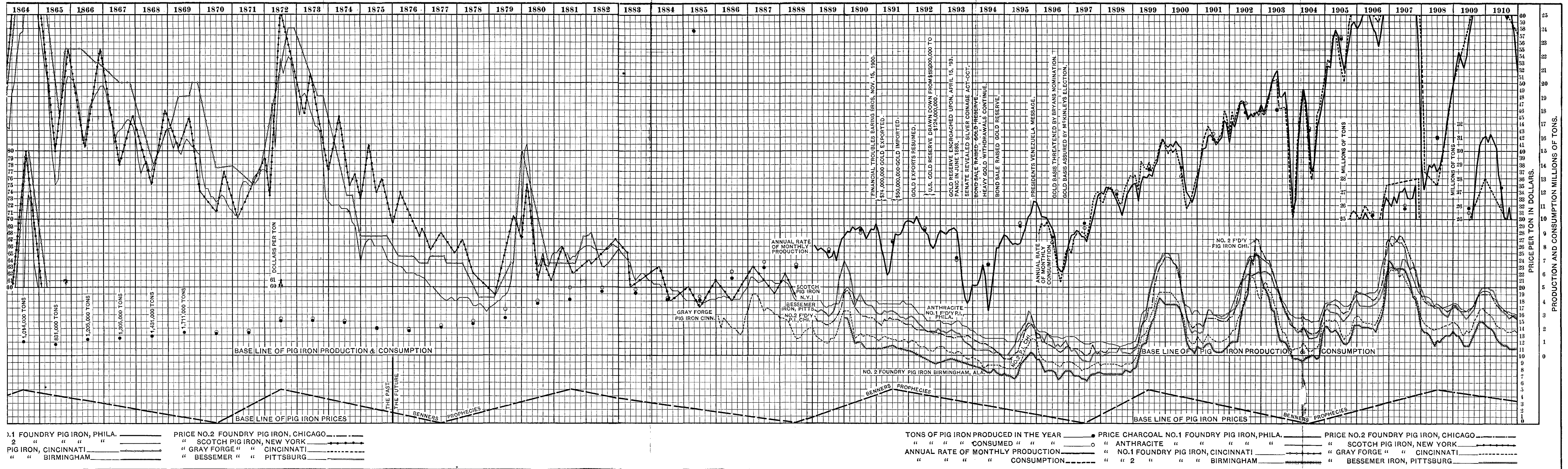
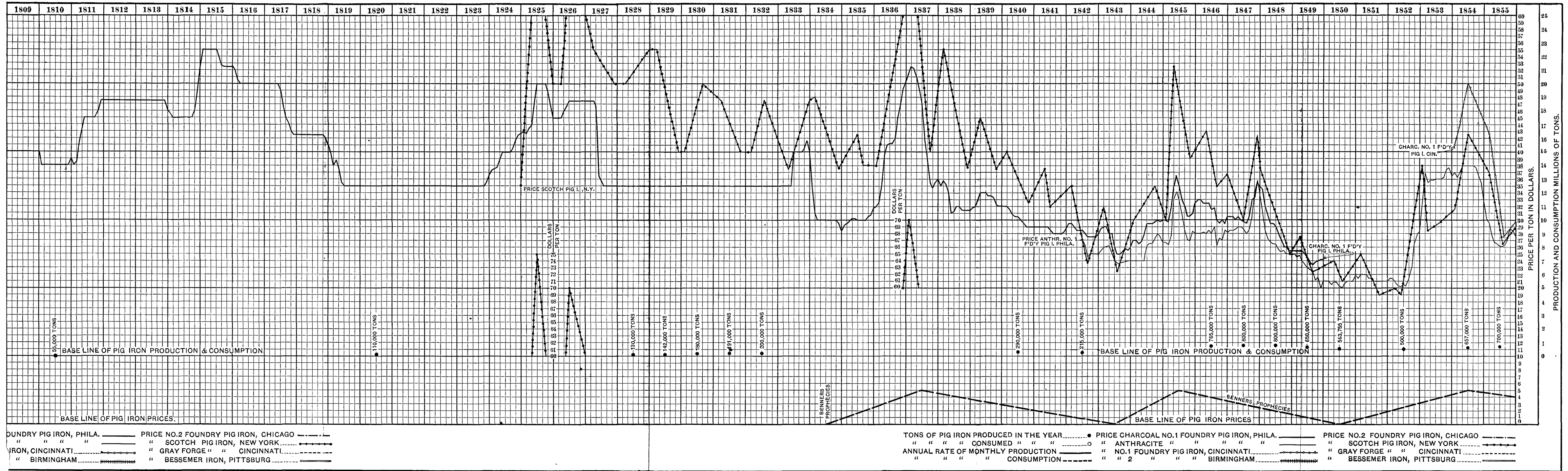
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Year	Date	Tonnage	Average Monthly Rate of INCREASE	Average Monthly Rate of DECREASE
1910	February			20,310
	March 31	3,542,595		20,310
	April		171,781	
	May		171,781	
	June 30	4,057,939	171,781	
	July		246,298	
	August		246,298	
	September 30	4,796,833	246,298	
	October		376,733	
	November		376,733	
	December 31	5,927,031	376,733	
	January			174,839
	February			174,839
	March 31	5,402,514		174,839
	April			381,573
	May			381,573
	June 30	4,257,794		381,573
	July 31	3,970,931		287,763
	August 31	3,537,128		433,803
	September 30	3,158,106		379,022
	October 31	2,871,949		286,157
	November 30	2,760,413		111,536
	December 31	2,674,757		85,656

* From official Reports of the U. S. Steel Corporation.

DIAGRAM OF PRODUCTION, CONSUMPTION AND PRICES OF PIG IRON IN THE UNITED STATES FROM 1800 TO 1910

(APPENDIX Z)



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A

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