Trusts In British Industry 1914–1921.

A Study of Recent Developments in Business Organisation

J. Morgan Rees, M.A.
Fellow of the Royal Economic Society,
Lecturer in Economics and Political Science,
University College of Wales, Aberystwyth.

1922

Batoche Books
Kitchener
2001

Batoche Books

Kitchener, Ontario

Canada

email: batoche@gto.net

Table of Contents

Preface.

In writing this book I have had one great advantage, viz., access to the *Report on Trusts* (Cd. 9236, 1919), and the subsequent publications up to May, 1921, of the Sub-Committees appointed under the Standing Committee on Trusts. I gratefully acknowledge my debt to all previous writers on the subject. My justification for going over the same ground is the profound change that has taken place in British industrial organization as a result of the Great War.

I wish to acknowledge my indebtedness to Mr. Sidney Webb, who kindly read the whole typescript, and advised me on several points; to my friends and colleagues, Professor E. A. Lewis, Head of the Department of Economics, for unfailing advice and encouragement, to Mr. Sydney Herbert, of the Department of International Politics, who read the MSS. and helped me constantly by his suggestions on the various sections of the work; to my brother, Mr. Ivor Rees, of the Ministry of Health, for correcting many errors in the MSS.; to my old teacher, Professor W.Jenkyn Jones, of the Department of Philosophy, for introducing me as long ago as 1907 to the problem of the Trust, and for his suggestions, ready sympathy and guidance.

My grateful thanks are also due to the College Librarian, to the Librarian of the National Library of Wales, and to my old friend and fellow-student, Mr. William L. Davies (of the Library), for many kindnesses in my search for sources.

Without the faith, help and comradeship of my wife the work would not have been undertaken, nor reached completion.

J. Morgan Rees.

University College of Wales, Aberystwyth.

March 20, 1922.

Chapter I: Introduction And Historical Retrospect.

§1. Introduction.

The fact of the existence of "a tendency towards industrial combination," having as its object the elimination of competition and operating in all economically advanced countries, has long been a commonplace for social students, though it has scarcely penetrated the consciousness of the average newspaper reader. The growth of this movement in Great Britain before the war has been adequately described by competent observers and little will be said of it here; the very modest purpose of this book is to set forth the facts as to the present position in British industry, facts which though they have been made public in a mass of official reports have received small attention from the Press and those who depend upon it for information. In brief, the object here pursued is to trace the growth of the Trust movement in British industry since the Armistice; to point out the connexion between this new structure of business organization and the level of prices, and finally to show the influence of its power in politics and over the general well-being of the community. The Armistice came upon the world suddenly. It was a world organized for a definite demand that was always greater than the supply, a demand for all goods and services for war purposes. Cost was a secondary consideration. For the next six months, therefore, there was a period of marking time in industry. War orders could not be summarily finished, though there was an immediate slackening off. Railways were congested with goods, largely owing to the fact that railway rates had not risen so high as freights; everybody sent everything by rail and then blamed "control" for the resultant delays. But slowly the great industrial machine began to move again. Companies were reorganized. A boom was expected. The men began to come home.

There was a world shortage of everything. A good time was expected by everybody. Promises came fast and furious. "A land fit for heroes," "A square deal for labour," and so on were trumpet calls to political and industrial action. Labour was dosed with Whitley Committees, with forty-eight, forty-seven, and even forty-four hour working weeks and so the capitalist ship was with difficulty steered into the main profiteering channel again from the dry-docks and safe harbours of public control. Indeed the feverish haste to get out precipitated some serious disputes and one or two scandals. We refer to the sale of Slough, Beachley and the munition factories; the coal, engineering and railway disputes. But the device of a Commission stilled one, substantial concessions another, and the last went on disgruntled until the strike of September, 1919, settled matters for a time on a "cost of living" basis.

The above were the outward manifestations of a profound change in the direction, structure and methods of business organization. During the war many business methods were found wanting. Science was mobilized for industry more thoroughly than ever before. The Universities were drawn upon during the war to provide expert knowledge to help the nation. After the Armistice why not buy this knowledge to make profits? Business men had met together during the war on Advisory Committees under some Ministry or other. It was quite natural, therefore, for these meetings to result in much closer association, understanding, and finally financial groupings after the Armistice. The year 1919 will be found to be a phenomenal one for regroupings of old companies, fusions, new capital issues, unprecedented prices and profits, and finally for new permanent combinations or trusts. The Profiteering Acts were passed in 1919 and 1920 to see whether profiteering was taking place, i.e., Acts to determine whether the obvious could be made more or less so. These had one good result. The Standing Committee on Trusts from time to time appointed Sub-Committees to inquire into and report on certain trades or industries. Most of the following chapters will summarize the statement of facts contained in these reports, which are most valuable both from the economic and social point of view.

Attempts to eliminate competition from industry are, of course, not new whether in Great Britain or abroad.[1] There has never, indeed, been a period in economic history when free unfettered competition was the universal rule.[2] The guild system of the later Middle Ages was an attempt to establish non-competitive industries on

a local basis. Licensed monopolies were numerous in the sixteenth and seventeenth centuries. In the very first rush of the Industrial Revolution, from 1771 to 1844, the Newcastle Coal Vend successfully regulated that industry.[3] In France, under the monarchy of July the four great glass-making firms that then shared the French market formed a combination of quite modern type; each had its share of the total production carefully allotted to it; while a central sales establishment was founded in Paris.[4] Such organizations as this, however, were isolated and exceptional.

> "The pools and amalgamations among the railways and the rate agreements among oceanic steamship lines must likewise be excluded. Some unsuccessful tendencies towards combination in the iron trade in the decade of the 'eighties must also be passed by in silence. When such qualifications have been made it is possible to date the combination movement from the decade of the 'nineties, and it is undoubtedly true that the tendency towards combination became conspicuous in industry only towards the close of the last century. The years 1899 and 1900 saw the formation of amalgamations and agreements without precedent in Great Britain. A widespread tendency towards combination thus emerges in Great Britain ten or fifteen years later than in Germany and the United States, and even then develops less portentously than in those countries."[5]

While this is perfectly true of the years before the Great War, it will be clear that during the war and after the Armistice great changes have come over the industries of this country, so that the above statement must now be altered. The tendency towards combination has not merely been quickened, but we shall note the emergence of certain strong groups of financiers, company promoters and bankers, becoming more closely linked up with British industry, forming those alliances and common boards which were characteristic of the United States and Germany for many years before the war. For a good account of the pre-war position we refer the reader to other writers who have done this work most thoroughly. We append a list in the footnote of the authors who will be found most useful from the general point

of view. It is not our intention to trace the growth of the movement historically, but merely to analyse the post-war developments of the previous tendencies towards amalgamation and concentration of industry. A definite change in industrial structure has taken place since the war, placing us in line with similar movements abroad. A brief historical retrospect will enable the reader to see these facts in correct proportion.

Note on Books for further reading.

1. Every reader should consult J. A. Hobson's *The Evolution of Modern Capitalism,* Chaps, v, vii, viii, ix, and xvii, 1906 and 1917 Edns.

2. D. H. Macgregor's *Industrial Combination* will be very useful for the theory underlying the movement towards trustification, Part III, p. 191.

3. The same writer's *Evolution of Industry* (Williams & Norgate, Home Univ. Lib.) contains some excellent chapters on the changing structure of industry.

4. Prof. Macgregor's paper on Trusts before the British Association meeting, 1921, in Edinburgh should also be noted.

5. H. W. Macrosty's *The Trust Movement in British Industry* (Longmans, 1907) is an indispensable book.

6. Hermann Levy's *Monopoly and Competition* (Macmillan, 1911) is a most scholarly study of the conditions in England from a German standpoint.

7. F. W. Hirst's *Monopolies, Cartels and Trusts* (London, 1905) is still worth reading.

8. A later book by M. E. Hirst, *The Story of Trusts,* July, 1913 (Collins, Nations Library), is the best short introduction.

9. G. R. Carter, in his *Tendency Towards Industrial Combination* (London : Constable & Co., 1913), gives the position immediately before the war. This book also contains an excellent bibliography.

10. The student should not omit reading Marshall's *Industry and Trade* (Macmillan, 1919) for a comprehensive survey and analysis of American, German, and British methods of industrial policy and organization.

11. For an account of the industrial changes in France and Germany, the student will find detailed information in Dr. J. H. Clapham's *Economic Development oj*

France and Germany, 1921 (Clarendon Press).

12. Porter's *Progress of the Nation,* Ed. 1912, by F. W. Hirst, gives a good background and introduction.

13. S. and B. Webb's *History of Trade Unionism,* 1920 Ed., is the standard work on the period.

§2. Historical Retrospect.

(A) United States.

America is the true home of the Trust, which may be defined as any association of producers or distributers, permanent rather than temporary, which has for its object the regulation of output and the determination of prices at a level "just about right." It is unnecessary to go into the original meaning of "Trust" and to show how the objection in law in the United States was overcome. The above definition is accurate enough for our purpose. There are many other books, mostly American, which explain the early origin of the corporations.

There are several varieties of Trusts. These can best be illustrated by showing that monopolies may be divided into four chief classes: natural, legal, social and artificial. Thus a natural monopoly would be one in some natural product such as oil or salt, a legal one that granted by law, such as a patent for a machine or process or a copyright; a social monopoly would be of the kind that provides public services such as the post office or a water company, while lastly artificial monopolies are those which are due to industrial organization and financial power. We are concerned mostly with the latter type. Trusts generally fall under this latter class, yet they may be due to the possession of a natural advantage such as the concessions over a territory granted by a foreign power or even by political action at home. A Trust again may owe its origin to the possession of patent rights or secret processes. Again, a Trust often depends for its power on being able to provide a better service than a private company and because of this, gradually builds up a monopoly or a semi-monopoly of that service. An instance of this is the wonderful development of the ocean cable or telegraph companies. It must be clear, therefore, that every Trust is a large industrial, commercial, or financial combination, so large as to be a dominant factor in production or distribution. It is artificially organized and carefully planned

by human action for a set purpose—not to get a legal or natural monopoly, though it may rest on this, but to throw off the restraints of competition by absorbing, overawing or crushing would-be competitors. In short, Trusts arise because experience in industrial organization shows that competition does not pay. The captain of industry knows that he does not necessarily get high profits by enlarging the volume of his business if he has to compete with other businesses which are also increasing their volume of trade. The representative firm's cost of production tends to be the cost of production for all the businesses, and no very large profits are possible where there are several firms competing one with the other. A state of unstable equilibrium is therefore reached, so that finally we see the dynamic principle in operation, "where combination is possible, competition is impossible."

The early Trusts in America were those in oil and whisky in the 'eighties and 'nineties.[6] The oil trusts were formed by the union of oil refineries in Ohio and Pennsylvania. Then the sugar refineries amalgamated in 1887. Shortly after this we have evidences of the existence of the Whisky Trust. In 1890 the Supreme Court in America decided that this form of Trust was illegal because it was composed of "trustees" who "issued certificates in exchange for the shares of stock assigned to them and agreed to pay all dividends declared on such stock to the holders of these certificates. All of the earnings of the different companies were pooled, and dividends were declared *pro rata* on the Trust certificates, whatever might be the disposition made of particular plants taken into the combination."[7] The decision of the Court had a curious effect, seeing that instead of making it impossible for a "Trust" movement to exist, it drove the loosely associated companies to combine either in a new single large corporation or by secret understandings among themselves, and divisions of shares in the respective companies continued to control and dominate the particular industries in which they were interested. This was the arrangement of the Oil Trust of America until 1899 when it got a Charter from the State of New Jersey and the corporation of the Standard Oil Company of America was formed. Readers will note the parallel when the British Government gave a Charter to the British South Africa Company in 1889, amplified from time to time by Orders in Council. The organizers of the Sugar Trust had already secured a Charter and had formed themselves into the American Sugar Refining Company.

The United States Steel Corporation was formed in 1901 to combine all the steel business in the country. The form of organization here was slightly different, in that a new company was formed which issued bonds and stocks in exchange for bonds and stocks of the constituent companies, but without unduly interfering with the companies or depriving them of existence. Therefore, this type is a federation of the companies under the control of the new single corporation, the directors of which appoint all the officers of the subordinate companies. But the financial interlocking is complete and all profits are pooled and divided in the usual way to the holders of stocks and bonds of the single corporation.

It appears that up to 1898 the progress of Trusts in America was slow, largely due to the general trend of the period 1873–1896 when prices were falling generally throughout the world. This was the time when the virgin soils and areas of the new world were being exploited and new movements such as railways and steam routes were initiated, so that the old world was drawing closer to the new and becoming dependent on it for its food. America in this period was laying the industrial foundations of its present and future greatness; while providing the granary of the Western World it was building up its great home trade. At this date the chief combinations were "The Standard Oil Trust, the American Sugar Refining Company, the American Tobacco Company, the United States Rubber Company, the United States Leather Company, the American Cotton Oil Company, and the Glucose Sugar Refining Company."[8] According to Seager, however, the aggregate capitalization of these seven combinations was less than £100,000,000.

During the years 1898–1900 a great increase in the number of Trusts was witnessed, due largely to the revival of business prosperity after four years of depression when several large businesses had failed. New investments were plentiful, so that with the new psychological belief in the elimination of competition by combination of powerful interests, enterprises of all sorts took up new orientations and the company promoter was busy. Again we wish to point the significance of the money power of capital as the driving force behind all these big amalgamations. Without entering into any details, it will suffice to note that despite the Sherman Anti-trust Act of 1890 which made contracts in restraint of trade illegal and imposed penalties for any attempt to monopolize interstate or foreign commerce, it was

difficult to prove that the aggregation of large businesses from 1898 onwards had "restraining trade" for its object. Combinations became the order of the day. The United States Census Bureau stated that on May 31, 1900, there were over 183 industrial combinations in operation with a capitalization of over £600,000,000. All sorts of anomalies occurred. Thus Prof. Jenks states that on a cash basis of £20,000, there was often built up £20,000 preferred stock, and £20,000 common stock to the owner, while £30,000 preferred stock was given to the promoter, and £20,000 preferred and £30,000 common stock were given to the underwriter.

In the case of the Tinplate Trust the Industrial Commission pointed out that the promoter received £2,000,000 in common stock for his services and that he received profits amounting to from £400,000 to £600,000 from the undertaking. These facts are interesting in that they are clear evidence of the profits that all promoters get when a Trust is formed, and this, of course, means that the watering process once having taken place the profits to be gained cover all the written-up capital value. This involves a huge drain from the public and is really a tax on all consumers, so that the gains that accrue from the economies of business on a large scale, marketing and distribution or savings in cost, do not go to the public, but are swallowed up in the payments to be made to the owners or controllers of the new corporations.

The total capitalization of the United States Steel Corporation in 1901 was close on £300,000,000 and has grown largely since. Railways, timber, tobacco, have since 1900 become powerfully organized in large Trusts so that it is no exaggeration to state that now "a great part of the railways and the chief manufacturing and mining businesses of America are largely under the control for good and evil of a comparatively small number of powerful financiers."[9]

A Report of the Ways and Means Committee of the United States House of Representatives in April, 1913, enumerated some 224 consolidations of varying degrees of magnitude, the chief of which are the following:—

The United States Steel Corporation with some 800 plants and a capital of about £300,000,000.

The American Agricultural Chemical Company: 45 plants; £9,500,000.

The American Cotton Oil Company: 60 plants; £8,000,000.

The American Linseed Company: 30 plants; £6,500,000.

The American Tobacco Company: 180 plants; £112,000,000.
The American Sugar Refining Company; 70 plants; £28,000,000.
The Central Leather Company: 40 plants; £22,000,000.
The International Harvester Company: 30 plants; £31,000,000.
The National Fire Proofing Company: 30 plants; £2,600,000.
The National Lead Company: 15 plants; £11,200,000.
The United Box Board Company: 28 plants; £3,000,000.
The United Shoe Machinery Company: 15 plants; £7,600,000.
The United States Rubber Company: 22 plants; £28,000,000.
The General Electric Company: 30 plants; £1,800,000.[10]

There is a wide and varied collection of books on the Trust problem written by Americans. Here we can but indicate the more important of the pre-war publications:—

J. W. Jenks, *The Trust Problem* (Macmillan, 1901).

R. T. Ely, *Monopolies and Trusts* (Macmillan).

J. B. Clark, *The Control of Trusts* (1905).

H. D. Lloyd, *Wealth against Commonwealth* (1906).

E. S. Meade, *Trust Finance* (1903).

A. Raffalovich, *Trusts, Cartels et Syndicats* (Gullamin, 1903).

W. Z. Ripley, Editor *Trusts, Pools and Corporations* (Ginn & Co., 1905). (This is a collection of special studies on the problem by various authors with a valuable bibliography and references to the Quarterly Journals of Economics, dealing with Trust problems.)

The United States Industrial Commission Report of 1901, Vol. XVIII, pp. 1–74, will be found interesting on the early period, but the indispensable book for the student of to-day is

The Report on Co-operation in the American Export Trades, by the Federal Trade Commission, 1916, Parts I and II. This contains information about most of the Trust groups throughout the world and supersedes most of the pre-war textbooks on the subject. *See* espec. Part I, p. 6, and Table 16, p. 237.

(B) Germany.

In regard to Germany, the same tendency has been in operation since the early 'seventies, but the form or structure of the powerful groups in that country before the war was that of the cartel or selling syndicate. Every branch of German production was subject to control by a Central Selling Agency of some kind, while in the manufacture of synthetic dyestuffs, drugs, photographic developers and chemicals of all kinds, including scientific instruments, the German method of organization had become so efficient as to constitute practically a European, if not a world, monopoly.

The Cartel is only another form of Trust. It is, at any rate, the half-way house to the Trust, as it always tends to become one strong consolidation. This is exactly what has happened after the war in Germany, where the effect of cartellization has been the formation of the four great all-German, all-roof Trusts of coal, potash, textiles, and steel, embracing practically all the industries of the country.[11]

Germany, Austria and Belgium have been the happy hunting-grounds of cartels in the past, though the form is not unknown in this country as we shall have occasion to note. It must be remembered that if control of the market is in sight, control of output is also very nearly attained. The structure and functions, therefore, of these agreements, alliances, combines, pools and cartels, are very similar, only differing in degree and extent of control. Broadly, a Trust has a single financial entity with definite control over output and prices, and therefore of profits and wages; a cartel fixes prices and regulates the output, but does not assume the direct control of the management or profits of the respective constituent companies. A good example before the war was the Coal Cartel of the Ruhr in Rhenish Westphalia.[12] A Central Selling Syndicate or Company was formed with a nominal capital, the shares of which were held by the separate companies. This syndicate was the sole agent for the sale of coal. It secured statistics from the separate coal companies. It appointed an Executive Committee which made certain arrangements for a uniform price and payment. The mineowners sold all their coal and coke to the syndicate except those amounts which they kept for their own use and certain amounts agreed upon for purposes of local supply. The important point to note is that the syndicate as such was not a profit-making concern, but a clearing house for sales. Its Council fixed the general price norms and made assessments towards the upkeep of the selling

syndicate on the respective companies which belonged to it. It fixed penalties for breach of agreements and enforced a common policy. The syndicate would appoint a Commission to determine the proportion of output allowed to each mine in accordance with its average productive capacity. The committee of the syndicate would receive from members of the association information as to the output of the mines and the general price norms, and it would then proceed to apply and enforce a common policy. It would thus regulate the general and the several outputs and would credit the respective firms with the amounts of its sales on behalf of these firms. It would fix a minimum selling price and when selling in competitive districts it would sell at this, and in non-competitive areas it would sell above or below this, according to the demand and output available. All the expenses would be covered by assessments on the mineowners. There was thus no pooling of the capital interests, no guarantee of a uniform rate of profit; that depended on the separate firms or companies.

The weak points of the cartel were, first, the refusal of certain producers to enter; where they were powerful they would sell above the syndicate price, and where they were weak, below. Secondly, there were complaints by the smaller and weaker mineowners that the rate of output fixed for them was to their disadvantage as compared with the stronger producers. Prof. Marshall, in his book *Industry and Trade,* points to the emergence of powerful mixed companies under the syndicate scheme. Iron-ore, steel and coal companies would amalgamate. They would thus get their own coal supplies secured at low costs and would yet, by joining the syndicate, be able to dispose of their surplus at the fixed syndicate prices; while other steel and iron companies would have to pay higher prices for their coal—i.e., at syndicate prices.

The fundamental defect of the syndicate system was that continuous employment could not be guaranteed to the members. To meet this, a careful export policy was framed as part of the working of every cartel which was thus driven to exports to keep home works running. It would often sell abroad below prices at home. There are plenty of instances of this in the Tariff Commissioners' Reports of 1904 and 1905 in the coal, iron and steel trades. In fact, there are instances of some German cartels losing contracts for engineering and machinery in Germany to competitors, mostly

British, who could undersell them because these British companies were able to secure their raw materials, ore or bar steel or rails from Germany, at prices lower than these German manufacturers could get them themselves in their own country.

In 1870 there were five syndicates in Germany; in 1897 there were 345, covering the entire field of manufactures and commerce, while before the war the number of cartels was considerably reduced in number but increased in power, largely because financial and banking interlocking had taken place and the huge cartels were rapidly becoming Trusts. Since the war this tendency has been accelerated, so that now Trusts are the rule, not the exception.[13]

One of the most famous of German cartels was that which was constituted in 1904[14] by merging three previously existing combinations. Altogether twenty-eight firms belonged to this group. In 1907 the agreement was renewed and also in 1912, when great friction arose on the question of production quotas to be given the respective firms, the "pure" works complaining that they were handicapped by the advantage which the "mixed" (i.e., those manufacturing more finished goods from steel of their own production) firms secured over them by getting their own steel at lower prices, while the "pure" type of works had to buy its semi-manufactured raw materials from the cartel at higher prices.

The syndicates gave bounties for exports and for this purpose at Dusseldorf an Export Bounties Clearing House was formed to regulate the different claims.

Before the war, fusions on a large scale had taken place, so that by 1910 it is stated that two-thirds of the whole Westphalian output of coal was in the hands of ten fusions, which also controlled nearly one-half of the productions of the Steel-Union.[15]

The other type of German organization that must be noted, as it is typical of the modern Trust movement in Great Britain, is the General Electric Company known as the A.E.G. (*Allgemeine Elektrizitäts Gesellschaft*).[16] Before the war this Company held four-fifths of the electrical business of Germany in its own hands. The same change took place in the dyestuffs industry. So that we can conclude definitely that wherever possible a single strong group was the result of cartellization, or if it could be formed it would ignore the cartel simply because it had a monopoly and therefore did not need the machinery of the cartel.

For the pre-war position in Germany in regard to Cartells, *see*

1. G. Fischer, *Handwörterbuch der Staatswissenschaft.*

2. Grunzel, *Ueber Kartells* (Leipzig, 1902).

3. R. Liefmann, *Die Unternehmerverbande* (Freiburg, 1897).

4. Walker, *Combinations in the German Coal Industry,* Part III, chap. i.

5. Prof. Schmoller, *Volkswirtschaftslehre,* Vol. I, p. 449, is effectively quoted by Prof. Marshall on p. 544 (footnote) in his *Industry and Trade,* where he states: "that from 1750 to 1870 we saw only the bad side of associations 'which had their origin in older technical, social and commercial conditions; and hindered rising talents from building new enterprises on a larger scale and with more complete technique.' Men quickly learnt that businesses of modern type were bound to conquer; and 'the last word of economic wisdom seemed to be that competition should be developed; and that every combination of traders and of producers should be restrained or prohibited.' But in Germany since 1879 a movement set in for the promotion of gild-like combinations (*Innungsverbänden*) in provincial and national affairs : and similar combinations were set up in the great industries with local and central organizations with their 'general secretaries; chief officers; special newspapers, tending to influence the Press, Chambers of Commerce, Parliaments and Governments and great public meetings.'"

6. For banking amalgamations and the evolution of the great modern Trusts, *see Report on Co-operation in the American Export Trades,* Part I, p. 260.

The Department of Overseas Trade issue periodically Reports which should be consulted.

7. See *General Report on the Industrial and Economic Situation in Germany in December,* 1920, Cmd. 1114, Appendix XI, for full particulars *re* Stinnes Group, the Kloeckner Group, Thyssen Group, the Haniel Group, Stumm Group, Phoenix Group, Wolff Group, Krupp Group.

(C) Great Britain.

The pre-war position of Trusts in Great Britain need not detain us long, not because the study is not interesting, but because most of the information is now out of date as a result of the war. Yet it is important to know the general trend of events before

the war, though this study has been very thoroughly undertaken by other writers whose works should be consulted for further information.

An excellent survey of the position is given in the Report of the Committee on Trusts (Cd. 9236) and in the monographs of Mr. John Hilton, Mr. Percy Ashley and Sir John Macdonell contained therein.

That wise old economist, Adam Smith, said: "Masters always everywhere are in a sort of tacit but constant and uniform combination."[17] It is clear that in Great Britain the associations before the war were certainly "tacit," but though as someone wrote "there was not a good display in the window, there was good value inside." There has been a great difficulty in getting at the facts. This is recognized by the Committees set up under the Profiteering Acts and it is explicitly stated in the Report.

The causes making for trustification of industries in Great Britain are quite different from those of America and Germany. It will be better to indicate them after stating what types of combination existed in Great Britain before the war. Broadly speaking, there were four types of combinations in this country. First, "honourable" understandings, varying from informal meetings of a Chamber of Trade in a country town to fix closing hours and variation of prices of similar commodities, to tacit and informal meetings of traders to fix minimum prices on certain articles such as nails, boot protectors and leather. Next we have associations, local, district or national, for the regulation of trade and the fixing of prices. These differ from the former in that they are more definite and are properly constituted with a secretary, officers, subscriptions. Some agree on a price schedule, on allocation of area for trading, output or fixed quota. Many were associations for fixing output merely, without any price regulation, in order to prevent "overproduction"; others had elaborate machinery for determining price-lists and heavy membership fees for entrance. In this second type the distinctive feature was that each firm or company was financially independent and could run its own business without interference from the association in any way, make its own arrangements in regard to output if it liked and pursue its own plans in regard to development without consulting the executive of the association. If there were a pooling arrangement in regard to output it would simply pay the fine if it exceeded its quota. It was often an advantage to belong to

such an association and develop the business in the ordinary way as much as possible because a uniform price list was obtained, so that a good firm could always obtain the advantage of the differential returns of a business as well as secure a minimum marginal cost of production price for its products.

The third type of association was the combine, which was an association of a temporary nature for the fixation of prices, for the regulation of output without fixing prices, or for the determination of output and prices, or that would undertake the selling of the members' products. It is important to note that when this last phase has been reached the constituent members are still financially and technically independent. Thus a good example of this type was the

> "Bedstead Makers' Federation formed in 1912 (an association on different lines existed from 1893 to 1900) to put an end to price-cutting, and stated to include four-fifths of the entire United Kingdom trade. Each member on entrance becomes entitled to a share in a 'pool' according to his turnover, for the year 1911, or his annual average for the five years 1907–11 : the accountants of the Federation ascertain monthly the turnover of each member, who then receives out of, or pays into, the pool, according as his output is below or above his proportion of the whole output of the Federation. The Federation regulates conditions and terms of delivery and all selling prices; it occasionally undertakes selling, but this is infrequent; it sometimes also engages in the combined buying of supplies for its members. It collects information as to foreign markets, and particularly as to the credit standing of foreign buyers. The Federation has a joint Trade Mark. A percentage contribution is levied upon the monthly sales by members, for the formation of a Reserve Fund, and the proceeds are invested in a special company, in which the members of the Federation hold shares according to their contributions to the Fund. These shares may be forfeited should a member voluntarily withdraw from the Federation, and the Reserve Fund thus becomes, in fact, a monetary guarantee."[18]

Readers who remember the furious onslaughts on the "pool" of the miners, which was regarded as iniquitous, unjust, sheer robbery, by the general Press, will be entertained by the idea that this "pool" which is so destructive of initiative has been in existence in the inner circles of capitalism and industrial organization for a very long time. The miners were only demanding for wages a "pool" made up of part of the profits, plus a larger part of their own wages, to secure the same ends for the wage-earners—security, standard, stability and a reserve fund—as the owners and capitalists have long ago initiated in the interests solely of prices and profits for themselves.

Arrangements similar to that described above were before the war in existence in almost every large industry or trade in the United Kingdom. The National Light Castings Association had an advanced type of organization. Several associations in the non-ferrous metal industries were highly organized, so also the spelter industry, the white lead, sheet lead and lead oxide industries. The same remarks apply to the electrical industries, while the textile industries, the chemical, building, oil and petrol industries all had associations either for fixing prices or output on the combine or "pool" type.[19]

The fourth type of association is that of the consolidation, which can be described as an association in the same type of industry, financially interlocked with a single board of directors controlling the separate units, though these might continue to trade under their original name; or, secondly, a strong association or merger, again financially a single unit, comprising unifications of businesses in different types of industry. The former are sometimes called horizontal combinations, and the latter vertical. A few examples of each of these will clear up any ambiguity in regard to their structure.

The "consolidation" type of association is usually permanent, not terminable. The "vertical" combination is the kind of association that exists in the coal and steel industries. That is, the financial power controls all the stages of manufacture from the raw material or iron ore and coal to the finished product in the form of engines and bridges. Examples of this type in Great Britain will presently be described.

The "horizontal" type of consolidation is the name given to associations of a permanent character which comprise mergers of industries usually at the same stage

of manufacture or in one type of industry. The textile trades have several good examples of this type of combination. In the spinning branches there are two very powerful associations, one of which is "The Fine Cotton Spinners' and Doublers' Association, Ltd.," which is an amalgamation of over forty similar concerns; the other is the "Linen Thread Company." Then again, in dyeing and printing both in the woollen and cotton industries we have very powerful horizontal combinations, the best known of which is the Bradford Dyers' Association, Ltd., a merger of forty-six firms. We shall refer to the post-war developments of these groups later in Chapter V. It is interesting at this point to be quite clear as to the difference between the two types of "vertical" and "horizontal" combination and detailed examples of each may be given here with advantage.

One good example of the vertical and horizontal type of consolidation in the same firm is that of Palmers Shipbuilding and Iron Company, Ltd.[20] Established in 1865 as engineers and shipbuilders for both Naval and Mercantile Marine Services, the firm has grown until it forms now a huge composite and mixed establishment. It has shipbuilding yards, engine works, iron and steel works at Jarrow and Hebburn, on the river Tyne, while at Hebburn it has a shipyard, boiler shop, foundry and an important graving dock carried on by the Palmers Hebburn Company, Ltd., the whole of the shares of which are owned by the Palmers Shipbuilding Company. The Companies own extensive works and valuable sites on the Tyne, where vessels of large tonnage are built for the British Government as well as for British shipowners. It controls its own supplies of ore, smelts it, manufactures its own steel and converts it into engines of all kinds, as well as forming it into the various multitudinous shapes and conditions necessary for incorporation as passenger, refrigerated tank, cargo and oil tank steamers. The capital of the Company is well over five millions. During the war this Company alone turned out one Dreadnought battleship, one cruiser, three monitors, eighteen torpedo-boat-destroyers and two submarines, all important vessels of war.

Another example of a vertical combination on a large scale in the iron, steel and shipbuilding industries is that of Vickers, which on the marine side has a magnificent shipyard and engine works at Barrow. They have a motorcar works and also works for airships and aeroplanes. In addition to the heavy steel industries as outlined above

in the case of Palmers, after the war there seems to be financial interlocking and amalgamation with other firms manufacturing sewing-machines, machine-tools, heavy oil engines and electric plant, so that the total capitalization of the Company has been increased to 26½ millions.

The Bradford Dyers' Association is a good example of a horizontal combination of twenty-two firms.[21] The issued capital is £3,886,000 and debentures amount to £1,455,000. This firm and the British Cotton and Wool Dyers' Association are "commission dyers." That is, they execute work according to orders. We shall give examples of other horizontal groupings later on in this book. It will suffice at this stage to point out that in addition to powerful consolidations, generally of a horizontal type, in the textile industries, other examples of consolidation of both types of structure are found in entirely dissimilar classes of British industry. Two cement combinations control practically the whole industry, though there are one or two other firms outside. All salt producers and sellers are connected together by the Salt Union, Ltd., or the North Eastern Salt Co., Ltd., while Borax Consolidated, Ltd., represents a grouping of twelve firms originally. Another combination which has secured complete dominance of the trade of the United Kingdom is the Wall Paper Manufactures, Ltd., while the Imperial Tobacco Company, Ltd., with its capital of over fifteen millions, has a very strong grip of the home market. It was formed in 1901 to resist the attack on the United Kingdom market by the United States interests, but we shall refer to this in detail later. It is true that small firms manufacturing well-known brands are able to hold their own, but they form on the whole an insignificant percentage of the total turnover of trade.

The chemical industries noted by Mr. Ashley[22] are the United Alkali Company, Ltd., a consolidation of forty-eight firms and Brunner Mond & Co., Ltd., which has very important connexions with the Mond Gas Co., Ltd., and the Mond Nickel Co., Ltd. The Castner-Kellner Alkali Co., Ltd., has by an exchange of shares consolidated its interests with that of Brunner Mond. Lever Bros., Ltd., has control of both sources of supply and oils requisite for soap manufacture with the consequent practical monopoly of the market.

British Oil & Cake Mills, Ltd., which was formed in 1899, is a combination of seventeen firms. It has refineries and crushing mills capable of dealing with over

one-half of the oil seeds imported into the United Kingdom.

The foregoing constitute the principal groupings that were well known in this country before the war. Several have been omitted because this essay does not pretend to be an exhaustive analysis of the field, but sufficient has been said to indicate the trend of the situation. It remains to add that British firms took advantage of international agreements to regulate prices and output. A brief summary of the participation of our firms in such arrangements will close this section.

"British combinations and firms have in a number of instances been parties to international agreements for the delimitation of markets and the regulation of prices. A well-known case is that of the International Rail Syndicate, and other examples relate to such diverse commodities as wire netting, aniline oil and sulphur black, and some other chemical products, glass bottles, tobacco and certain non-ferrous metals (the conventions in regard to the last named having their centre in the great German Metall-Gesellschaft and the other powerful German metal interests associated with it)."[23]

This quotation is based on a large amount of data which came before the Committee on Commercial Policy. In the memorandum submitted by Mr. Ashley to the Committee on Trusts we have further relevant material.[24] From this it is clear that as far back as 1884 a Steel Rail Makers' Association was formed in Great Britain which entered into agreements regarding export with the German and Belgian makers. After being dissolved in 1886 the present British Rail Makers' Association was formed in 1896 and again made arrangements with foreign, principally German and Belgian, makers. Each country had an exclusive right to its own home markets and the export trade was allocated in certain proportions. In 1904 we note that the American Steel Rail Makers entered the International Association, for by this time the consolidations in the United States had control of nine-tenths of the total steel and iron production of the States. Under these agreements the United States shared in the export trade to Canada and Newfoundland. In a similar fashion, Spanish and Italian producers were guaranteed from competition in their home markets on condition that they did not export to compete with other countries. German makers similarly divided the Austro-Hungarian markets among themselves and settled the division of orders for the Balkans. The same arrangements were effected with

Russia, which was allowed to export under certain conditions. In 1907 the International Association was renewed for five years, and in 1912 for three years to the end of June, 1915. At this last renewal the proportions of the export trade allotted were as follows :—British group, 33.63 per cent; Americans, 23.13 per cent; Germans, 23.13; Belgians, 11.11; and the French, 9 per cent.[25] Most of these agreements were observed except that it is stated that Germany was unscrupulous and broke the regulations frequently. The result of the operations was that the British export trade in steel rails was practically confined to the British colonial markets and our annual average orders to places outside British possessions fell from 157,000 tons in 1901.5 to 56,000 tons in 1911.14; total annual orders falling from 917,000 tons in the first period to 646,000 tons in the last period. It is to be noted that this fall synchronized with the great development of the German and American firms and syndicates, especially seeing that from 1905 onwards our home market was subjected to serious competition from Germany, despite the agreements of the International Rail Makers' Association.

German and English makers were also parties to the International Aniline Convention, each country being given a quota dependent on the average total deliveries of the previous three-year period. Prices were fixed, new companies were prevented from competing and sale contracts were limited to periods of twelve months.[26] Similar international agreements were entered into by the Glass Manufacturers of the United Kingdom, Germany, Austria, Holland, Norway, Sweden and Denmark. A good account of this movement is given in one of the Sub-Committee's Reports to which we shall have occasion to refer later; a detailed account of the organization of the markets and the fixation of prices being given.

Still another international agreement was that of the British-American Tobacco Company formed in 1902, two-thirds of the shares being allocated to the American Tobacco Company and one-third to the British Imperial Tobacco Company. World markets outside the U.S.A. and the United Kingdom were exclusively supplied by the new consolidation.

International Metal Combinations have existed from 1905 onwards. The following is a typical example of an agreement entered into between the Aluminium Company of America and a Swiss Company, the largest in Europe:—

"About September 25, 1908, the defendant Aluminium Company of America acting through the Northern Aluminium Company of Canada, which is entirely owned and controlled by defendant, entered into an agreement with the so-called Swiss or Neuhausen Company of Europe, which is the largest of the European companies engaged in the Aluminium industry and designated in their agreement as 'A.J.A.G.' parties thereof to this action being as follows:—

"2. The N.A Co. agree not to knowingly sell aluminium directly or indirectly to the European market.

"The A.J.A.G. agree not to knowingly sell aluminium directly or indirectly in the American market (defined as North and South America, with the exception of the United States, but including West Indies, Hawaiian and Philippine Islands).

"4. The total deliveries to be made by the Companies shall be divided as follows:—

European market: 75 per cent to A.J.A.G.; 25 per cent to N.A. Co.

American market: 25 per cent to A.J.A.G.; 75 per cent to N.A. Co.

American market: 50 per cent to A.J.A.G.; 50 per cent to N.A. Co.

The Government sales to Switzerland, Germany and Austro-Hungary are understood to be reserved to the A.J.A.G.

"The sales in the U.S.A. are understood to be reserved to the Aluminium Company of America. Accordingly the A.J.A.G. will not knowingly sell aluminium directly or indirectly to the U.S. A., and the N.A. Company will not knowingly sell, directly or indirectly to the Swiss, German and the Austro-Hungarian Governments.

"5. The N.A. Co. engages that the Aluminium Co. of America will respect the prohibitions hereby laid upon the N.A. Co.

"Said agreement became effective October 1, 1908, and provided that it should 'last until terminated by a six months' written notice' and petitioner avers that said agreement became effective and has been continuously since that date, and is now in full force and effect, unless terminated by notice."[27]

Similar arrangements and agreements to the above were entered into by the Metall-Gesellschaft of Germany, which was affiliated to the Merton Metallurgical Company, with extensive interests in Australia. Lead and spelter conventions governed the distribution and sale of these commodities also.

The foregoing will be sufficient to indicate that before the war there were in

existence well-defined world associations controlling raw materials, products and prices. These postulate a very well-organized home market. It is also clear that other countries, such as the United States and Germany, had proceeded farther on the road to trustification than had our own before the war, and this was due in large measure to the realization by them very early in the twentieth century, that competition for the world market was ruinous, wasteful and uneconomic; it was the logical development of this competition to form consolidations and associations on an international scale. British industries were also waking up to the need for organization to meet changed world conditions, but automatic regulation here on lines of trade marks, specialized products and the well-established reputations of individual firms stood in the way of an accelerated world control. The war came upon us unprepared, and its immediate effect was a transformation of British industrial organizations which had the effect of bringing our country into line with the inevitable trustification movement in other countries. It has been pointed out by another writer that the tendency towards unification was becoming most marked about 1912 and 1913.

> "In a broad estimate of the position of the tendency towards industrial combination it appears that it represents essentially the national or almost normal development of a new form of business organization to meet the modern conditions of industry and commerce. Herein lies a considerable contrast with the development of the combination movement in the United States and to a less degree in Germany also."[28]

It is significant that this quotation reveals that, almost despite their will as it were, without the intervention of the promoter, internal and evolutionary processes of development were forcing business men in this country into combinations or trustifications, whereas abroad it had been a policy deliberately imposed by far-sighted men of business, who saw that as the world was becoming one vast economic unit, the sooner arrangements were made to that end the better for their countries. Thus the war came upon us, and its effect was to make conscious and deliberate on a large scale that unification and trustification, which before the war was almost

automatic and haphazard in British industry, owing to its history, its long start over competitors and our national characteristic habit of “muddling through” with a total disregard of the application of scientific methods to our business concerns.

Chapter II: The Effect of the War on the Trust Movement.

Unlike high finance and commerce in Germany, ours had a distrust of governmental interference or even of help before the war. The Germans were ahead of us in the application of science to certain branches of industry— chemical dyes, electricity, steel. Even the railways in Germany had been built on strategic lines for war purposes under the inspiration of the Government. It was not difficult, therefore, for Germany, once war broke out, to mobilize at once all her industrial, financial and commercial power for war purposes, acting through the Executive Committees of her cartels and associations, which were ready to carry out the orders laid down. It was not so here. The whole character of our industrial and commercial life had to be changed before our weight could be felt in the war. Before we could become the armoury of the Allies as well as international banker, Government control over production had to extend to transport, distribution, and even exchange, but gradually all the resources of the nation were concentrated on war work, on munitions or directly working to Government orders.

Many associations in existence before the war were created as the result of a temporary depression in the trade; others were evolved owing to the inevitable development of the processes of industry and the advantages of production on a large scale. What was the effect of the war on these associations? The Trust Report shows that the power of these associations of all kinds was considerably strengthened as a

result of war experience. The Government, when it controlled our industry, or even before this happened, had occasion to consult the best-informed opinion in the trade. Especially was this the case when rationing of material or of food supplies took place. Advisory committees were set up for almost every industry. Firms outside the associations had to come in, therefore, if they were to have any say in their trade at all. The result of all this activity was that representative groups of employers or financiers or owners were set up for each trade and industry to advise the Government on matters connected with the trade. These Trade Associations were organized to control prices and regulate the conditions of industry during the war in a more efficient way than the pre-war associations. The habit of co-operation, of frequent meetings and discussions on Advisory Committees of manufacturers or distributers, was bound to lead to a transformation of large numbers of these groups into associations as soon as Government control over industry was withdrawn. And this is exactly what has happened. It is curious to note from the evidence submitted to the Trust Committee that the effect of associations and combines on labour is one of the causes conducing to industrial unrest. It was found, for instance, that members of the staff of a combine wishing to change their employment for another could not do so if the new firm was also a member of the association, because of the "understandings" between the associated firms. They would therefore be unable to secure an appointment and so were under the control of the combine. Again the Ministry of Munitions representative in his evidence pointed out that it was the large firms that experienced most trouble during the war period.

"The tendency of these large aggregates is necessarily to become impersonal and to make the worker feel that he is dealing with a vast machine not answerable to ordinary persuasive influences, against which his only weapon is to strike."[29]

A trade union organizer pointed out that he could get better terms from a trust or combine than from some one outside the association, but he insisted that having once ousted competition and secured the advantages of monopoly, the consequent power of exploiting the consumer was too big a price to pay for the good conditions of workpeople and the higher prices of the products.

As a result of the experience of the war great distrust on the part of the public as to the operations of Trusts, combines and associations has been aroused. The

disclosure of the vast war profits made by certain firms, the allegations of exorbitant profiteering (whether true or false) were bound to have this effect. No doubt, large fortunes were very easily made, in munitions, shipping and fishing industries, for instance. The report goes on to state its general conclusion that a system which creates virtual monopolies and controls prices for profit-making purposes must be liable to great abuse as experience in other countries abundantly shows.

An important effect of control during the war was the restriction of new capital issues by the Government.[30] This was imposed for the purpose of securing capital for the needful concentration on business necessary to carry on the war. The export of capital was also controlled and strictly limited. Finally, securities held in this country for shares in the United States were bought up by the Government, and exchanged for exchequer bonds or bills for the purpose of regulating the exchanges and avoiding more borrowing abroad than was necessary. A curious feature about this transaction is that at first holders were invited to sell voluntarily to the Treasury, next a higher tax was put on the income from these investments because the response to the invitation was not very satisfactory; next compulsion was practically resorted to and in this way over a thousand million pounds worth of securities were sold. This must have meant more capital available here, but the bulk of it was taken up in war bonds, exchequer bills and war loan. The increase in prices that was an inevitable effect of war borrowing, inflation and destruction of wealth, caused the rate of interest to rise and this meant a difficult in getting capital for new enterprises. When interest on war loan was 5 per cent or over it became very difficult to secure new capital. This meant that a large number of companies used the opportunity of the large profits made to develop their plant and extend their works on a large scale. Where this could not be done and the product was urgently needed for war purposes, the Government would advance the capital or build the factory itself. When decontrol took place and these factories came on the market, it was inevitable that large groups or combines should be formed to buy these large concerns, either to consolidate their own industries or to continue mass production with its attendant economies. This necessitated the unification of many firms and accounts for the mergings and fusions that were frequent in the first half of 1919. Lever Bros., for example, bought up some smaller firms; Vickers Maxim amalgamated with the

Metropolitan Carriage Works. John Lysaght was bought up by a group of financiers who then joined it up with Guest, Keen & Nettefolds; the cotton trade experienced an unprecedented fusion of firms and writing up of capital. In fact, from shipping firms down to the smallest coal units of pits owned by one or two men, there were "understanding" agreements of all sorts right up to powerful fusions. Curiously enough, but very significantly, banking amalgamations took place at the same time and, as we shall try to show later, were almost the cause not the effect of the other associations in industry. From forty-three chief concerns in the banking world in 1913, 1920 saw the number of really important banks reduced to the "Big Five," with an all-powerful grip on British trade and industry.[31]

Before concluding this section, it is important to note that the great industrial unrest that showed itself during the first half of 1915 was due primarily to the feeling that the Government was paying more attention to the big firms, associations and combines, in getting its work done than to labour. "Business" men were rushed in to all sorts of positions. This, no doubt, was necessary because things had to be improvized suddenly and there was no time to work things out on a large scale; but that there was something radically wrong is shown by the magnitude of the interests concerned in the strikes — textile, engineering, coal mining and transport — trades upon which the steady prosecution of the war depended.

Government influence towards combination was inevitable during the period of control.[32] In the first place our great backwardness in invention, in new machinery and in administrative methods, stood revealed throughout 1915. When the State took over munitions it was imperative not merely to take stock of our resources — but to mobilize our whole industrial machinery for war purposes. Now, it is far easier to deal with a group than with a firm, with an association of manufacturers than with one manufacturer, and so when price fixing or raw material rationing was attempted, groups of manufacturers were called together for consultation and discussion. Conferences of manufacturers were constantly held in London, competition was discussed, common arrangements entered into, and working in concert agreed upon. In no industry was this carried out more completely than in iron and steel. Even in the coal industry, with all its thousands of pits and hundreds of companies, some form of unification was inevitable and had to be organized when the Government set

up its Ministry of Mines. The effect of all these arrangements was an increase in the number of amalgamations. There is no doubt that the process of fusions, held up by the war, assumed full play again in 1919 and 1920, but the basis and structure for such arrangements were laid down in the war years. For instance, one effect of the Excess Profits Tax was the buying up of unprofitable concerns by the more profitable, payment being made from excess profits. Standardization and repetition movements in engineering and all kinds of manufacturing processes were accelerated in order to speed up production. All this meant collaboration and counsel and concerts. These were bound to bring manufacturers as well as financiers into closer relations with one another. The great inefficiencies and wastes of an inaccurate costings department in industry became evident, so that a direct result of the war was a definite impetus given to amalgamation of businesses on a large scale. After the Armistice this took place immediately, and throughout the years 1919 and 1920 the groupings in British industry became more significant than ever. It may be objected that this movement was only the inevitable development of tendencies inherent in competitive industry. This may be true, but it would never have taken place on so vast a scale and on so permanent a basis, had it not been driven home to our organizers of capital and our masters of finance that during the war we were behind the times; that automatic regulation and unconscious specialization—that independence of individualism and aloofness—were antiquated, and that if we were to maintain our place as an industrial and manufacturing nation we would have to co-ordinate and amalgamate our big concerns into single units all closely interrelated.

The point to note here is that even politicians saw the significance of the weaknesses revealed. Thus Mr. Runci-man on January 3, 1916, stated that it would be apparent to all close observers that a country which fails to regulate and foster its industries in the national interest cannot in the nature of things long survive the rivalry of another country where the industries are so regulated and fostered.

What Mr. Runciman did *not* say and what his hearers did not realize was that this must mean protection or trustification—both likely to be against the national interest since they tend to favour a smaller section of the community at the expense of the great working and consuming public.

> "Miracles have happened since the war began. Millions of workers have been withdrawn from the field of industry to the field of war. And yet, British hands—a mere weak fraction of Great Britain's whole self—are producing more goods to-day in some departments of industry than ever before in her history. What has been the cause of the miracle? It is simple enough. It is but the pouring forth through burst flood-gates of long dammed-up British energy. And yet, alas! that is hardly an accurate imagery of the facts; since for more than a generation that accumulated force has been wasted, and vaporized into thin air. The image should take rather this shape—the putting forth of an unpractised arm, made flaccid by disuse and forbidden to exercise itself into full power. The productive energy of this critical time is the result of a temporary suspension of the laws ordaining restriction of output."[33]

What was responsible for this restriction of output? Was it due to inefficiency, to bad organization? Our view is that our business organization had long before the war been responsible for restricted output because it had given way to control of prices to prevent cut-throat competition. There was also an absence of understanding as to the importance of research, great inefficiency and ignorance of correct business methods which had the effect of securing a good output only at a high cost, with the result that after the war the business world is organized not to produce cheaply, but for the purpose of keeping up prices "just about right," irrespective of the effect of such methods on the national interest.

The most useful books for a survey of war conditions are:—

1. C. Delisle Burns, *Government and Industry,* 1920; and

2. Sir L. C. Chiozza Money, *The Triumph oj Nationalization,* 1920. This contains facts and figures as to war industries, costings, shipping, the general labour situation and statistics generally.

3. G. D. H. Cole's books: *Labour in War Time,* p, 192; *Self-Government in Industry,* p. 44, etc.; *Labour in the Commonwealth: Chaos and Order in Industry,* p. 215.

4. J. L. Garvin's *Economic Foundations of Peace,* chap. xiii.

5. J. M. Keynes, *Economic Consequences of the Peace,* chap. v.

6. E. Lipson, *Increased Production,* shows the attitude of labour, pp. 15–27.

7. R. M. MacIver, *Labour in the Changing World,* pp. 1–26, gives a masterly analysis of the effect of the war on the economic foundations of Canadian and American business.

Chapter III: The Extractive Industries.

(A) Coal.

Coal is the life-blood of industry. No apology is needed, therefore, for commencing our survey with a consideration of the present position in regard to the control of its production. Nevertheless, it must be said that the combination movement has made less headway in this sphere than in some others presently to be considered. The reasons are partly geographical and geological, partly economic and social, and they can be illustrated by a brief account of the Newcastle Coal Vend (1771–1844).[34] This seems to have been the successor of the monopolies and combinations of the sixteenth century. The Vend regulated the prices of coal in the London market and really performed functions very similar to the German coal cartels. At that time the bulk of London's coal was supplied from Newcastle; the market was watched by a committee who decided how much coal for the winter should be sent by sea for sale in London.[35] The Vend did not steady prices, as is proved by the fact that coal sold by it to the Continent could be got at half London prices, but it did protect the collieries round Newcastle district and secured them a price "just about right." It enabled them to prevent price cutting and reckless overproduction.[36] Poorer collieries also by this scheme had a chance of selling their coal. Its great advantage was access to the sea for the products of exceptionally rich mines.

The reasons which made it possible for the Vend to maintain its effectiveness are to be sought in the external conditions of the industry throughout the earlier years of

the nineteenth century. When these conditions changed the Vend was no longer practicable. The same reasons that account for its break-down apply to the coal industry to-day and account for the difficulty of maintaining any sort of combination movement on a national scale. If the external conditions of the market in a single coal-field approximate to what they were in the Newcastle area up to 1844 there is a possibility of success for combination in that area. This is exactly what is happening in Fifeshire and in South Wales, where in the former over 50 per cent of the coal is being produced by one company, and in the latter area we have a single large Anthracite Combine controlled by Messrs. D. R. Llewellyn and H. Seymour Berry gradually securing the control, yet combination in the steam and bituminous coal has not been successfully carried out. What were the conditions therefore that made it possible for the Vend to succeed? They were briefly as follows: A concentration of the demand from London, which because of its extent made a distinct single market; the development of the coal industry in the North at the time as contrasted with the state of its progress elsewhere; easy access by sea from Newcastle to London and the absence of competition from other coal-fields as yet ill developed and with no good transport advantages; the absence of foreign competition, which has been true of the industry from that date until 1920 when American and continental coal came into this country, and so lastly the Vend had what amounted to a monopoly—both as regards natural sources and marketing conditions. Immediately other coal-fields were opened up in different parts of the country and the railway system developed and extended, competition set in, the monopoly existed no longer, and the Vend was broken up.

The factors that destroyed the Vend have exerted a permanent effect on the industry from that day to this, and they are worth examining in detail. Where there is practically a homogeneous area—e.g., the anthracite field in South Wales with a 90 per cent export trade—attempts probably successful at combination will be made. Or again, if a single coal-field were small with a uniform type of vein of similar qualities easily graded and worked, we might get a large coal combine or company producing the greater proportion of the coal in that small area, but success in this country in this direction has been limited.

There was a scheme by Sir George Eliot in 1897 to form a giant combination to

purchase and work all the British coal-mines. His scheme has interesting parallels with that of Sir Arthur Duckham before the Royal Commission. It was not taken up, though it excited a good deal of interest at the time. It is a well-known fact that attempts at combination or amalgamation have been made in South Wales from 1864 onwards, but with no great success until the formation of the Cambrian Combine under Mr. D. A. Thomas (afterwards Lord Rhondda).[37]

It is also worthy of note that prices of coal fluctuate more seriously than those of almost any other stable commodity and that this is not wholly due to changes in its supply.[38] The same effect was seen in regard to milk in the hot summer of 1921—a very small change in its supply sends up prices much more than the normal. This uncertainty prevents long contracts being entered into during periods of high prices and prolongs depression when trade is slack generally, because the risks that coal exporters and coal merchants have to take are correspondingly heavy. It was just this factor of uncertainty that was responsible for the mistakes made by the Government in its handling of coal control throughout 1919 and 1920. While prices were extraordinarily high good profits were made and the home trade subsidized at the expense of the foreigner; then prices broke suddenly in November and December, 1920, and led to precipitate decontrol.

Combinations in the coal industry which may be successful in Westphalia or the United States might fail here in Britain;[39] the same characteristics were observed in the Natal Coal Industry, where long distances from markets and favourable natural conditions lent themselves to co-ordination and single control of a much more concentrated type than was then possible here. These reasons may be briefly summarized as (a) natural difficulties of districts, seams, etc., and the consequent competition of sellers or producers of different kinds of coal; (b) the comparatively large number of small firms resulting from (a); (c) the dependence of other trades on coal as motive power and so the opposition of these interests to any amalgamations in favour of the producers. Coupled with this is the fact that in 1913 we exported 73 million tons out of a total output of 287,000,000. Any large increase therefore in prices would invite competition in our export trade and this has happened; (d) the vested interests of middlemen and coal exporters and agents with wide functions and great influence who would oppose any amalgamation on a large scale as these would

tend towards decreasing their numbers and perhaps eventually elimination; lastly (e) the high costs of production of coal, making it difficult to regulate output, which if necessary would be burdened with heavy fixed charges and perhaps heavy losses.

In view of the above reasons, it seems that some other counteracting factors have become paramount since 1912, and we see them operating more especially in regard to South Wales steam coal and anthracite, which are monopolistic in nature and so offer favourable opportunities for trustification. Difficulties of valuation of existing companies and the over-capitalization that follow any groupings stood in the way of trustification for many years, but signs are not wanting now that these also are being overcome. One of the soundest methods of overcoming these difficulties seems to have been the fusion of coal and iron companies on a large scale as was the case in Germany. The war has accelerated this movement, so that in the future the difficulties in the way of consolidation seem to be rapidly disappearing. The history of the "Cambrian Combine" seems to be an illustration of the successful organization of a distinct area.[40] From the early days of the industry there was undoubtedly a close connexion between the two industries of iron and coal, but the failure to trustify the coal industry on a national, or even on a district basis has led to the fusion of large combines of iron and steel groups with colliery companies not only to provide themselves with raw material for their industries, but to regulate prices as far as possible by entering the export business. One of the best examples of this movement is the firm of Messrs. Guest, Keen & Nettlefolds, Ltd. Formed as the result of a grouping of Guest Keen & Co., in 1900 with the great screw firm of Nettlefolds, Ltd., in 1902, after the war they amalgamated with John Lysaght & Co., Ltd., but what concerns us here is their entry into the coal industry. In 1921 they acquired a controlling interest in the coal distribution business of Messrs. L. Gueret & Co., Ltd., of Cardiff, one of the largest shippers of coal in South Wales and one of the largest selling agents for the most important collieries of South Wales.[41]

> "In addition they hold a very large interest in the Societe Générale de Houilles et Agglomeres, one of the largest patent-fuel-making and coal-distributing companies in France, a similarly large interest in La Societa Britannico, Italiana, Gueret having depots at Genoa and

> Naples and doing a large coal-distributing business. They are besides largely interested in a number of other important coal and patent-fuel companies having works or depots in France, Algeria, Tunisia, Morocco, the Argentine, Uruguay, Brazil and elsewhere."

In addition to the above merging, we note that the output of the Dowlais and Cwmbran Collieries of the Company as well as that of the Cyfarthfa Collieries of Crawshay Bros., Ltd., will be dealt with by Messrs. Gueret & Co., who will thus provide not only the coal consumed by the great Steel Combine but will arrange for the sale of the surplus coal the combine has to sell. Every phase of the coal industry will be provided for. They have secured a large interest in the Crown Preserved Coal Company, who will take the small coal to be manufactured into briquettes. Among the other interests of the combine are large holdings in Messrs. Brenllier, Urban & Co., of Vienna, large manufacturers of screws, bolts and nuts; the Orconera Iron Company in America, while through their directors they are linked up with the group (Messrs. D. R. Llewellyn & H. Seymour Berry) who control the anthracite area of South Wales and also the Cambrian Combine interests.

Our coal-fields are scattered about in different parts of the country. The type of seam, the difficulties of working vary in each coal-field. They are nearly all possessed of good access to the sea and therefore to markets. They are well served with railways. They are very old established— the oldest in the world. Because of these reasons we find that coal-mining is a very speculative proposition from the general investor's point of view. It depends so much on the efficiency of the company and the kind of coal as well as on the character of the coal-field.

If we take the reasons adduced by the witnesses before the Coal Commission and examine them carefully, we shall see that the same causes that have been responsible for duplication and waste, inefficiency in management and poorly developed resources have been responsible to a large extent for the failure to trustify the industry.

There are 1,452 companies now working the 3,300 collieries of Great Britain.[42] The effect of collective production on reduction of the cost of working and the saving of coal was indicated as follows by one of the witnesses before the Coal

Commission:

> "I think it is generally accepted that the present system of individual ownership of collieries is extravagant and wasteful, whether viewed from the point of view of the coal-mining industry as a whole, or from the national point of view. It conduces to cut-throat competition as between owners in the selling of coal, and is preventative of the purchase of material necessary for the carrying on of the separate enterprises at prices favourable to the coal-miners. The advantages which would result from collective production would be enhanced production, diminished cost of production, and prevention of waste. These would be brought about by the following factors:
> (1) Prevention of competition leading to better selling prices for exported coal being secured;
> (2) Control of freights;
> (3) Economy of administration;
> (4) Provision of capital, allowing of quicker and more extensive development of backward mines;
> (5) More advantageous purchase of materials;
> (6) Reduction of colliery compensation;
> (7) More harmonious relations between the workmen and the operators due to steadier work and adequate remuneration of workmen;
> (8) Obliteration to a great extent of vested interests and of middlemen; and
> (9) Unification of the best knowledge and skill leading to greater interchange of ideas, comparison of methods. If good results are obtained at one mine and bad in another these results would be open to all to benefit therefrom."[43]

The first Report of the Commission issued on March 20, 1919, dealt with hours and wages chiefly, while the second report issued on July 20 was mainly concerned with the question of nationalization and the reorganization of the industry. It is

significant that even in the first report Clause IX of the recommendations runs as follows :—

> "Even upon the evidence already given the present system of ownership and work in the coal industry stands condemned, and some other system must be substituted for it; either nationalization or a method of unification by national purchase and/or joint control."[44]

The other clause that bears on the problem of trustification is the recommendation in Clause XV which stated that—

> "It is in the interest of the country that the collier shall, in the future, have an effective voice in the direction of the mines. For a generation the colliery worker has been educated socially and technically. The result is a great national asset. Why not use it?"[1]

In the Comments on the Evidence before the Commission we read again under XII:

> "Again—economy—(a) in production, (b) in transit, (c) in distribution—can undoubtedly be effected, although it is difficult to place any money value upon them at the present moment."[45]

The second Report is of more immediate interest for our purpose. After deciding hours and wages the problem resolved itself into : How to reorganize the industry? Was it to be by nationalization or trustification or leaving the industry to the control of private enterprise?

There were four Reports presented as the result of the second stage of the inquiry.[1] One by the Chairman, one by Mr. Frank Hodges, Sir Leo Money, Messrs. Robert Smillie, Herbert Smith, R. H. Tawney and Sidney Webb; one by Messrs. Arthur Balfour, N. W. Cowper, Sir Adam Nimmo, K.B.E., Sir Allan R. Smith and Mr. Evan Williams; and one by Sir Arthur Duckham, K.C.B., M.I.C.E. State ownership of all seams of coal, and hence of all royalties, was agreed on by all four Reports in the

second stage. It is interesting to note that the recommendations of "The Acquisition and Valuation of Land Committee" in regard to the ownership of coal-seams were set aside by each of these four Reports as not being elastic enough. The recommendations, after pointing out fourteen defects arising out of the present system of ownership, proposed to set up a new sanctioning authority to acquire seams piecemeal by the State from time to time. The Chairman of the Commission in his report pointed out the inadequacy of this method and advocated "that the seams of coal should be acquired by the State once and for all in a final settlement, together with all usual or necessary easements and rights incidental thereto, together with power to procure all such easements and rights in the future." Compensation would be paid except that Frank Hodges, Robert Smillie and Herbert Smith made a reservation on this.

All the reports again agreed upon the wastefulness of the system by which coal is at present distributed to the household consumer and recommended that the Local Authorities and the Co-operative Movement should be utilized for the purpose of distribution.

After stating reasons why the principle of State Ownership of coal-mines should be accepted, the Chairman suggested a provisional scheme based on local administration to operate for three years, pending the passing of an Act to acquire the mines for the nation, the most vital points of the reasons advanced being those contained in Clauses XXIII, XXIX, and XXXI. These are worth quoting in full as they show (a) why unification and trustification could be obtained without loss of efficiency and responsibility; (b) they are an argument for the advantages of trustification without the suspicion and lack of interest in the work which the workers suffer under any other schemes of combination in British industry.

These Clauses point out that—

> "The other industries and consumers generally are entitled to have a voice in deciding the amount of coal to be produced and the price at which it is to be sold, which they have not had in the past.
> It may be argued that the foregoing defects in the present system could be removed by changes in the direction of unification falling

> short of State ownership.
>
> But a great change in outlook has come over the workers in the coal-fields, and it is becoming increasingly difficult to carry on the industry on the old accustomed lines. The relationship between the masters and the workers in most of the coal-fields in the United Kingdom is unfortunately of such a character that it seems impossible to better it under the present system of ownership. Many of the workers think they are working for the Capitalist, and a strike becomes a contest between labour and capital. This is much less likely to apply to the State as Owner, and there is fair reason to expect that the relationship between labour and the community will be an improvement upon the relationship between labour and capital in the coal-fields.
>
> Half a century of education has produced in the workers in the coal-fields far more than a desire for the material advantages of higher wages and shorter hours. They have now, in many cases and to an ever-increasing extent, a higher ambition of taking their due share and interest in the direction of the industry to the success of which they too are contributing."

Wise words these and how prophetic! If they had been heeded we would have avoided the stoppage in the autumn of 1920 and also the disastrous one of fourteen weeks in 1921. But what is perfectly clear to every impartial inquirer and student on economic lines is often impossible in politics because the power of vested interest is too strong.

The scheme of local administration set up is of little interest here except to state that to avoid bureaucracy the machinery of the District Councils as proposed by the Miners' Federation was advocated. These Councils were to elect a National Council whose Standing Committee was to be advisory to the Minister of Mines, who was to be the supreme authority.

The report of the six members (Hodges, Money, Smillie, Smith, Tawney and Webb) agreed substantially with that of the Chairman with emphasis on several

points. They urged fuller representation of the workers on the District and National Councils in order to secure greater co-operation on the part of the workers; they were against insisting on a contract preventing the worker striking without arbitration; they advocated the addition of all coke and by-product plants to all coal-mines to be acquired by the State and they added that while agreeing to the principle of the payment of just compensation that it should not be computed on the tonnage gotten. Finally, while noting the fall in output they pointed out that no evidence had been adduced to show that it was due to a deliberate policy on the part of the men, but to other causes outside their control, and they recommended that a special inquiry should be instituted into these causes of the fall in output.

The third Report of the four in the second stage published on July 20 was really that of the coal-owners, the main sentence of which ran :

> "We have carefully weighed the whole of the evidence and have come to the conclusion that the nationalization of the coal industry in any form would be detrimental to the development of the industry and to the economic life of the country."

In our opinion after carefully reading the evidence this report flies in the face of economic facts attested by skilled engineers and all patient inquiry. Not only was it against nationalization, but it was not in favour of any change of organization at all, merely recommending some of the Whitley Reports of Advisory Councils with slight alterations to make them applicable to the industry, presumably unaware of the fact that the Conciliation Board arrangements in the industry have achieved for the coal industry what these Whitley schemes may hope to do in others less well organized.

Sir Arthur Duckham's scheme was the fourth Report, and it is worth examining in that it is the only alternative to nationalization on joint control lines eventually. Its defects will be examined because they will be the defects of most schemes of trustification.

This scheme was one of district unification abolishing the present system of private ownership and replacing it by publicly controlled corporations with minimum rates of interest, guaranteed by the Government, and all profits above a certain maximum

of two-thirds limit were to be applied to reduce the price of coal. It is of great importance to note that this scheme is in essence what has been applied to our railways, which are now divided into four great groups, except that private ownership has been preserved, the State retains a partial control through its powers to regulate rates and freights, but there is no profit limitation. Some measure of control of a very limited nature has also been conceded to the men, who refused for very well-known reasons to appoint members on the directorates, though urged to do so by the Minister of Transport.

Under Sir Arthur Duckham's scheme a Commission was to be set up to decide the areas into which the country was to be divided. In each of these areas all the separate colliery companies were to be amalgamated into Statutory

Companies and guaranteed a minimum dividend of 4 per cent by the Government. All profits in excess of this 4 per cent were to be utilized to form such reserve funds as might be approved by the Minister of Mines and then to provide a further 2 per cent dividend. All profits above this were to be divided as to two-thirds to reduce the price of coal and as to one-third to be added to further dividend.[46]

This scheme would involve the setting up of a number of powerful coal trusts, on the German Kartel system for selling purposes and on the All-German-All-Roof system of Dr. Rathenau for productive purposes. Each of these Trusts would be monopolistic in its area. These companies would not be compelled to improve the life of the workers and it would be very difficult to control them if the experience of the United States is at all a guide. They would perpetuate a system of control and would therefore have all the disadvantage of profit limitation without the spirit of public service. Mr. Sidney Webb in his evidence agreed that a gigantic Trust would be the means of remedying waste and inefficiency provided it were large minded and efficient, but objected to such a scheme on the grounds that

> “it would not change the profit-making motive, and thus not solve the housing problem or that of the excessive infantile mortality; that it would still be cheaper for the Trust to compensate for accidents than to prevent them; that it would have no more regard than the separate colliery owners for the most economical use of the nation's

> irreplaceable stores of coal and that it would still be up against the causes of waste and inefficiency incident (as Sir Richard Redmayne had demonstrated) to the present individual ownership of royalties."

It was adduced that the consumer would be committed to the tender mercies of a monopolist whose prices under such a scheme would be the utmost that the traffic could bear or that would produce the greatest net income, not necessarily that amount or output that the nation could conveniently use. In addition such a trust would be violently opposed by all the workers in industry, by the Co-operative movement, by the industrial users of coal and by all the domestic consumers. Lastly, it was made clear by Mr. Webb that even if prices were controlled by the State the effect would be endless disputes about what constitutes a fair price and a fair profit. Opportunities for evasion would be infinite, and even if the Trust could agree to ally itself with the Miners' Federation to share the monopoly in a profit-making alliance, the rest of the community would pay for the privilege. Incidentally it appears that this is likely to happen even now, for under the last settlement of July, 1921, although trustification by districts has not come about on paper, that will be the actual result of the scheme of guaranteeing profits at 17 per cent of the wage bill. It must be made clear that the miners do not approve of the settlement, but it was the best that they could get. It is by no means a permanent scheme and must be revised again before we get anything like peace in the industry.

If we are to get a national system of transport and of electricity supply, we shall be obliged to nationalize the mines.

The law of diminishing returns operates quickly in the extractive industries like mines, fisheries and even agriculture. What makes unification and nationalization a certainty eventually in coal-mining is the realization that what constitutes price differences is not so much management or capitalization, but natural differential advantages due to geological or geographical conditions outside the control of initiative and ability and organization. This is not to say that superior management will not always be advantageous, but the price of coal will be fixed by the cost of production of the least remunerative pit or area worked under the most uneconomic conditions; the great variety of qualities and types leads to competition among the

sellers, but as these become grouped in well-defined organizations, the eventual determinant price will be fixed at a point very much above the price possible if all coal in a single area was pooled and one economic advantage be allowed to offset another difficult position. The curious thing is that this is done *inside* one mine, the good seam very often pays for working the poor seam which, if considered *per se*, would be unremunerative. Yet the same principles that are applied without question to one pit are not allowed to operate in an area.

Both owners and men refused to accept trustification on the lines of the Duckham Report. The owners stated that they would prefer nationalization on fair terms to any scheme that would involve interference with the general direction and control of the industry very different from that obtaining before the Commissioners sat.

The position of the industry between the publication of the second report and the middle of 1921 is very significant in its bearing on the ultimate problem of reorganization.

The Sankey Reports mark a new era in industry from the point of view of humanization. It was recognized that national services should not be performed merely for profit to the owners; that justice demands cannot be separated from economic considerations. The public inquiry and the published evidence won the moral victory from the general public long before the close of the sittings. The owners' case was badly put. They showed lack of vision, and based their conclusions on the assumption that industry will be run in the future on the same lines as in the past. But the lesson was lost on the Government. The coal question was allowed to drift. The Report on hours and wages was carried out by legislative enactment. The second Report in regard to reorganization of the industry was shelved. Coal was controlled throughout 1919 and 1920. The Peace Treaty was signed. Coal was sold to our allies at famine prices, and home industries and the home consumer subsidized out of the profits. The output throughout 1920 went steadily down; the quality of coal deteriorated; the miners grew restless, alarmed and finally amazed at the coal muddle. Baulked of their object of putting the industry on a scientific basis they decided to concentrate on wage demands. The Government increased the price of coal by 6s. on July 10, 1919; then before the end of the year when their figures and estimates were questioned in the House of Commons they reduced the price by 10s.

per ton because of the large profits made by selling coal to the Continent and the high price of bunkers. Meantime a furious campaign against nationalization was organized by Big Business, and in favour of it by the Miners' Federation. The coal question dragged on. In the summer of 1920 the miners demanded a further increase in wages and a further reduction in price of coal by 14s. 2d. per ton. A strike was threatened. It was avoided at first, but towards the autumn it actually took place, though the "political" demand of the reduction in price to the consumer was abandoned. A patched-up agreement was arrived at on the basis of output. The miners were given an increase provided the output reached a certain figure; a National Wages Board was to be formed to regulate the industry. Before the end of the year the market collapsed. The Continent bought coal in the United States during the strike; Germany under the Peace Treaty was sending coal to France. France was glutted with coal. Australian and South African coal came to Europe. France sold coal to Holland and Scandinavia. Prices fell rapidly. The bottom was knocked out of the market. The Government was going to lose money by coal control. It suddenly decided to decontrol the industry at the end of March instead of in August. The men were locked out by the owners on their refusing to accept drastic reductions in wages amounting in some cases to over 7s. per shift. The men were out for fourteen weeks from April 1, 1920. A settlement arrived at eventually because of the exhaustion or starvation of the men is not a permanent one. There is no unification of the industry. The Government subsidizes the industry to the tune of ten millions so as to make the wage reductions for July not more than 2s. a shift, in August 2s. 6d., and in September 3s. After September, when the subsidy will be spent, the wages paid will be determined by the economic position of the industry in each district. In short, it is a settlement based on the districts. The general scheme provides for the establishment of a National Wages Board and District Boards, each with an independent chairman. The districts are to be grouped for wage settlements. The standard minimum[47] is to be at least 20 per cent above the 1914 standard wages and the standard profit is to be 17 per cent of the aggregate amount of wages.[48] Profits remaining after these payments have been made are to be divided in the proportion of 17 per cent to the owners and 83 per cent. to the men. There is an important principle involved here and as Mr. Hodges puts it, "the first principle we have ever

had in the history of our trade, which gives the workmen and the owners well-defined shares in its prosperity." The settlement is arranged for a year from September, 1921, terminable at three months' notice, so there is a chance of peace in the industry until December, 1922. Unfortunately, it is not a stable settlement, for the simple economic reason that it does not provide for a scientific re-organization of the industry. Large economies are possible, but only provided the industry is treated as a unit. The arguments and facts adduced in favour of unification are not removed by the settlement; output may improve, but prices will be stabilized on higher levels because it is clear that a profit of 17 per cent of the wage bill is an arbitrary standard; it is definitely a part of cost of production; it will work out at a higher rate than the pre-war average rate of profit; it subsidizes inefficient pits and areas irrespective of management efficiency, as this is impossible without a scientific grouping, financial as well as technical, of areas and of the industry as a whole. It really hands over to the profit-making incentive a basic industry. The result will be dearer coal. The community will suffer and we fear that the greatest coal-consuming industries, iron and steel, will be adversely affected by the permanent stabilization at higher levels of their fuel costs, which form so large an item in their total costs of production. This is a grave risk to run and will seriously prejudice our position as an industrial and manufacturing country.

(B) Motor Fuel.

The first report of the Committee inquiring into Motor Fuel costs and prices appeared on February 17, 1920,[49] the second on November 30 of the same year.[50] Special attention was drawn in both to the vital importance of securing adequate supplies in view of the extension of motor fuel to most industries, even agriculture. It was shown how the supplies of the world are controlled by two principal capitalistic combines—Standard Oil, and Royal Dutch Shell Group —and that even the British Government could not hope by itself to compete with their world-wide scope and activity. No private competition could affect them, neither was the policy of fixing prices of motor-fuel supplies effective without securing control of these supplies and distribution.

After the Armistice demand outstripped world supply, as a result of which

powerful financial interests raised prices. In 1914–15 ample supplies of commercial petrol could be secured at 5⅛d. per gallon exclusive of duty, while in February, 1920, the cost was 2s. per gallon exclusive of duty, even to a large company. The cost of petrol was divided under three main heads of production, transport and distribution. Crude oil is carried to refineries from wells by pipe lines, being conveyed by tank steamers to all parts of the world. In this country the oil is pumped into large storage tanks from the tank steamers and thence distributed to the garages by rail or road. Or when it comes here in its unrefined state it is pumped from the tank steamer to the refineries and thence distributed, as is the case with the Anglo-Persian Oil Co., at Swansea. In 1919 over 200 million gallons were imported, while in 1920 this reached over 250 millions. The United States sent over 100 millions of this total, while with Mexico added we seem to import more from the West than the East, probably owing to freight costs. Cost of production is difficult to ascertain, the report estimating it at £7 10s. per ton or 6d. per gallon f.o.r. New York. This was sold at £23 per ton or 1s. 6d. per gallon f.o.r. New York—a price revealing " a grossly excessive profit." This is all the more reprehensible as the price f.o.r. in New York regulates the export price in all productive countries. The Committee points out that the Eastern Producing Company selling at £10 10s. per ton or 8s. 4d. per gallon admits a good profit at that figure. The greater bulk of the petrol coming to this country is produced by American, Dutch, or Mexican companies outside our Governmental control. In view of this fact and the difficulty of securing uniformity the Reports suggest that the Economic Section of the League of Nations should deal with the production, price and distribution of motor fuel. It is further added that when the Anglo-Persian Oil Company are able to secure adequate supplies the Government representation on its directorate should secure the sale of its products at reasonable prices despite the prices ruling in other companies, and that "it is far more important that the Government should secure for British users of petrol a reasonable price than that it should participate, as a shareholder in the company, in excessive profits made at the expense of the British public."[51]

Government control of shipping during the war fixed tank shipping rates at 32s. 6d. per ton (1s. 3d. per gallon). After decontrol at end of January, 1919, the rates jumped from 32s. 6d. for the North Atlantic Oils and the United Kingdom to 1505. per ton;

to 1703. between United Kingdom and Trinidad; to 210s. between the United Kingdom and the Persian Gulf and to 280s. between the United Kingdom and Borneo. These high rates are partly explained by the fact that tank steamers are owned by the Oil Trusts. The Committee points out that 100s, per ton, even for Gulf Oils (4d. per gallon) should be a fair average rate, also noting that 85s. a ton was considered an excessive charge for the Gulf a few months before February, 1920. Petrol sold in the United Kingdom is landed usually three to six months before it reaches the consumer, therefore any increase in freight should not reflect itself in petrol increases until after the lapse of this time. When the Committee reported, 200s. per ton was the average rate between the Gulf and the United Kingdom, despite the fact that 85s. was considered excessive a few months before, so that the advance in the price of petrol to 3s. 8½d., at the time attributed to freight increases, was excessive, in view of the fact that any increase beyond 100s, should not be taken as any justification for raising the price.

Distribution and freight charges were fixed at 6.197d. per gallon by the Committee, and in addition an allowance of 2d. per gallon was made to the distributing companies for freight. They advised that this should be reduced to 1½d. In June, 1914, the profit made by the retail distributer was 2d. per gallon, or 11 per cent on the selling price of 1s. 6d. per gallon. This profit was increased during the war at intervals and fixed at 15 per cent on retail cost or 5d. per gallon. This—an actual increase in the rate of profit on an article more than double in value—was regarded as excessive. They advised that 4d. per gallon in all circumstances should be regarded as the maximum and that the Government should fix the retail price for periods of three months.

Benzole is home produced and is a by-product of the distillation of coal, sources of supply being coke-ovens, gasworks, and various systems of low temperature carbonization processes producing smokeless fuels and oils as well as gases. The pre-war production of 17 million gallons was increased during the war by Government encouragement to 42 million gallons, of which approximately 32 million gallons came from coke-ovens and 10 million gallons from gas-works and tar distilleries. Since the Armistice the output had fallen to about 25 million gallons owing to cessation of the practice of scrubbing for benzole by gas companies and

withdrawal from production of a large number of coke-ovens. The National Benzole Association regulates its prices not on cost of production but to conform with price of petrol. The petrol companies began to compete for supplies of crude benzole and refined it in their own refineries, thus attempting to secure the control of an important competitor with petrol. For this reason the Reports suggest the fixation by Government of the price of crude benzole, and benzole sold as motor spirit, to prevent the disappearance of this product from the market as competitor with imported petrol. They recommended its sale (crude benzole) at not more than 1s. 4d. per gallon.

In their summary of findings and decisions the Committee in their first Report emphasize the fact that their conclusions are merely palliatives and that the only ultimate solution of the motor fuel problem was the production of home or Empire produced power alcohol and that without Government control this development would result in *a* similar monopoly as now obtained in the case of petrol. Wholesale and retail prices should be fixed by the Board of Trade, and in view of the large capital sunk in distribution facilities, they did not regard it as probable that this step would result in a restriction of imports. They also advised the fixation of the import duty of 6d. per gallon and pointed out that if it was removed the public would not be the gainers. They fixed the price of the No. 3 petrol at 2s. 8½d. per gallon and urged "that attempts should be made to bring about international agreements, in order to secure unity of action for national protection against excessive prices."[52] Benzole producers should have fixed the commission to the garages at 4d. per gallon and not 5d., and the price of benzole should be fixed at 2s. 8d. per gallon with a prohibition of its export. They predicted the danger of world famine in motor spirit even at very high prices, and urged that home or Empire production is the sole remedy. Power alcohol was regarded as the only potentially unlimited source of supply. Pending the setting up of a special body to control production, transport, and distribution of motor spirit, they recommended that price control and fixation should continue, also the prohibition re export.

The second Report of November 23, 1920, records the further investigations into the subject, particularly into the question of the heavier oils. In their opinion the only hope of reducing prices lies in (1) a greater supply, (2) the introduction of substitutes

and (3) a reduction in the consumption by the adoption or substitution of other methods of obtaining power.

> "The prices of petroleum products are controlled by powerful combinations, whose financial resources are enormous and the scope of whose operations is world-wide.[53] These combinations are the principal sources of supply and their possession of the bulk of the distributive machinery renders effective competition impossible. Their possession of tank steamers so obscures the position that an entirely false impression is created as to the actual cost of freight."[54]

Only Government action can meet the situation, and that, while fixing prices without controlling supplies, would not be effective, because of the danger of the diversion of supplies; yet the British Government could control freight and fix fair distribution and other charges in this country.

Alternative fuels or other sources of power are benzole from coal, cannel and other bastard coals; white spirit from shale oil; power alcohol; electric power, gas either from "producers" or carried in containers.

They state that large gas companies should be required to completely extract benzole from their gases; they are afraid that in the near future the oil-distributing companies will endeavour to obtain control over the benzole industry, therefore they recommend Government fixation of benzole prices at all stages of production.[55] Despite this the Committee do not think that the supply of British petroleum will have any effect on the market for some considerable time. Encouragement should be given by the Government "to the speedy and extensive development of the shale oil industry." Power alcohol is not commercially a practical proposition in England, but where "native labour can be obtained at a low figure," it could be produced in large quantities at a price considerably lower than the price ruling for petrol. They recommend also the adoption of power substitutes, such as electricity, gas and steam for road transport, and that the Government should take steps to gain control over the transport and distribution of benzole or power alcohol if benefit is to be reaped by the consumer. The only other alternative to the production of substitutes, free of

monopolists, suggested by the Committee is combined action amongst the consuming countries of the world, through the Economic Section of the League of Nations.

"Although in general we dislike Government control of industry, we see little chance of success unless action is taken by His Majesty's Government to foster and firmly establish on a lasting basis the manufacture of substitutes in large quantities. Actual and healthy competition so constituted will tend to force down the retail prices of all fuels to the cost of production.

"Coal is a great national asset, and it would therefore seem that the soundest policy is to make use of such treatment of coal, shale and analogous materials as will give to the United Kingdom an ample supply of power derived from coal products in either the solid, liquid or gaseous states. New legislation should also be introduced to prevent, as far as possible, the consumption of coal in its raw state before the by-products have been extracted. If proper use were made of coal it would once and for all free the nation from the necessity of importing liquid fuel at any price which it may suit the outside producer to charge for it."[56]

Wise and prophetic words these! Yet the Government's reply was to decontrol the coal industry six months before the fixed date and thus to throw our vital industry into the greatest confusion. What a glorious opportunity was thus lost of putting our national asset to its right uses! They could have reorganized the coal industry and solved the fuel problem. But why is it that they persistently ignore the studied recommendations of all their Commissions and committees on this subject? There is only one answer, vested interests and an apathetic public stand in the way. We are drifting on as usual until the full danger of the position bursts upon us, then there will be panic legislation instead of a scientific and large-minded handling of the problem. The other disquieting fact is that the Government instead of tackling this problem itself invests millions of public money in a private trust—the Anglo-Persian Oil Company—to enable it to fight the other trusts, the Standard Oil and the Royal Dutch Shell Group. That is, it takes part in a profit-making concern which engages us in all sorts of embarrassments and political entanglements in the Near East and Mesopotamia instead of tackling the problem in the interests of the nation.

"The Anglo-Persian Oil Company, Ltd., was incorporated in 1909 for the purpose of acquiring a concession which had been granted by the Imperial Persian Government covering the exclusive right to search for, carry away, and sell petroleum, natural gas, asphalt and ozocerite throughout the Persian Empire (except five northern provinces bordering on the Caspian Sea) for a period of sixty years from the 28th May, 1901. The company has, since its incorporation, either directly or through subsidiary companies, extensively developed its producing territory, and has built pipelines, refineries, installations and tank steamers to deal with its rapidly increasing production, and has also considerably extended its sphere of operations by the acquisition of concessions in other parts of the world and by the purchase of other established businesses.

The Company and its subsidiary Companies own all the issued share capital of the British Petroleum Company, Ltd. the British Tanker Company, Ltd., the Homelight Oil Company, Ltd., the Petroleum Steamship Company, Ltd., the National Oil Refineries, Ltd., the Tanker Insurance Company, Ltd., and practically all the shares in the First Exploitation Company, Ltd., and the Bakhtiari Oil Company, Ltd. It further holds a controlling interest in Scottish Oils, Ltd., the British Oil Bunkering Company, Ltd., North Persian Oils, Ltd., and holds large interests in numerous other similar concerns.

The capacity of the pipelines from the fields in Persia to the sea-board has been doubled during the past year and additional lines now being laid will enable the through output to be further largely increased.

The fleet of tank steamers and other vessels owned or controlled by the company has been considerably added to both by construction and by purchase during the past twelve months and contracts have been placed for a large number of additional vessels, some of which are now under construction.

The company in its early stages was obliged owing to its then lack of

transport and distributing facilities to make contracts covering all its exportable production of benzene and kerosene for a period of ten years expiring on the 30th December, 1922 Extensive preparations have already been made with a view to enable the company to market to the best advantage through its own organisations the very large quantity of refined products which it will then have for disposal, but to complete these preparations before the contracts in question expire further tank steamers for transportation and installations and depots for distribution are required, and it is mainly for these purposes that the present issue of capital is being made.

Owing to the aforementioned contracts, which were made more than eight years ago, this Company has not benefited to the full extent from the high prices which have recently been ruling for refined products of oil, and consequently the Company will not suffer to any large extent, if at all, from a fall in prices to pre-war level, if such a fall should occur.

The Company's Refinery at Swansea which will shortly be in operation should add considerably to the profits of the ensuing year.

The net assets of the Company as shown by the books, after deducting all liabilities other than the debenture stock, amount to £19,135,307, to which must be added the proceeds of the present issue, making a total of over £22,500,000.

The net profits of the Company, after providing for debenture interest, Income Tax and Royalty, and making liberal provision for depreciation, but not for Excess Profits Duty and Corporation Rights Tax, as shown by the audited accounts of the Company, were for the year ending:—

March 31, 1917, £344,109,
March 31 1918, £1,308,558,
March 31 1919, £2,010,805,
March 31 1920, £2,611,615,

and for the financial year ending 31st March, 1921, it is estimated

> that the profits of the Company calculated on the above basis will not be less than £4,000,000. This sum would be sufficient, after paying the dividend on the eight per cent first Preference Shares, to cover the dividend on the nine per cent second Preference Shares now being issued more than ten times over."[57]

The interesting fact is that the British Government holds £5,200,000 shares in the Anglo-Persian Oil Company, Ltd.[58] So that the Government, though in these two reports on Motor Fuel it condemns Trusts, actually condones them by investing public money in them! The Right Hon. Lord Inchcape, K.C.M.G., K.C.S.I., K.C.I.E., and Sir Edward H. Parke, K.B.E., are the representatives of His Majesty's Government on the Board of Directors of the Company, but (as in the case of the British Dyestuffs Corporation) there is no guarantee at all that this means a control over the price of the products of the respective companies or a real direction over their policies. In short, it means that the hands of the Government are tied and it is bound in effect to defend the Trusts because it participates in them, presumably "on grounds of public policy" whatsoever that may mean to the British people.

In view of the rapid exhaustion of American petroleum supplies (U.S.A. now imports from Mexico) the following quotation is significant as showing the uneasiness which this state of affairs is producing in the minds of Americans :—

> "So far as the United States is concerned—and even during this present era of world peace we cannot entirely overlook the fact that we are Americans—the outlook is less bright. Barring some unforeseen development we may be in the embarrassing position, during our next war, of asking British permission before our battleships can go to sea. The problem we have to face is not entirely industrial after all."
>
> For all practical purposes the results will be the same, so that we may assume that of the known and probable petroleum reserve of the world, at least two-thirds and perhaps over four-fifths is now in the hands of the British Government directly or of British

Corporations."[59]

So we evidently got very busy since the publication of the two Motor Fuel Reports, and we have made our pre-parations for the future supply of petroleum with great care. In this lies a very serious menace to the future peace of the world. The above quotations are based on a very exhaustive analysis of existing and future world supplies of petroleum and natural gas by a distinguished American geologist and engineer.

(C) Structural Materials: — Clay Products, Bricks, Tiles, Portland Cement, Lime, Building Stone, Slates.

In addition to iron and steel the main groups or classes of structural materials of mineral origin used by the engineer or builder are clay products such as bricks, tiles, etc., building stones and cementing materials. Building stone is used in its natural condition while clay products and the cementing materials are manufactured.

In their final report on Stone Brick and Clay Ware issued in February, 1921,[60] the Sub-Committee found that local associations of employers exist in the drain-pipe trade. These though not affiliated yet work together. The Midland Pipe Association, for instance, covers all its area excepting from 1 to 5 per cent.[61] It has a pooling arrangement, fixes maximum prices and has an arrangement with the Builders' Merchants Alliance, noted in the Light Castings Report, whereby the members of the Alliance obtain considerable rebates if they adhere to the Midland Pipe Association's prices, and refuse to buy from non-associated manufacturers. Since most of the manufacturers deal in other commodities than pipes the committee could not obtain proper statistics. Increases in the price of pipes since 1913 for three main classes ranged from 266 to 259 per cent. Wages since 1914 increased 233 per cent, but according to the committee 36 per cent of the association's total output was lost, as hours were reduced from fifty-six to forty-eight. They also state that workers' output has been reduced, but whether in proportion to the reduction of working hours is not clear. There are two associations for flooring and roofing tiles. The Glazed and Floor Tile Manufacturers' Association, representing 90 per cent of the total trade and the National Association of Roofing Tile Manufacturers, who represent 75 per cent of

the total trade, with similar objects to the Midland Pipe Association. The trade sustained heavy losses during the war, and "from the figures submitted to us we are satisfied that the profits that are now being made are not unreasonable." They recommend that all associations controlling more than 60 per cent of an industry should obtain for annual publication: (1) the average trading profit and the average net profit in relation to the turnover of the industry in so far as it is covered by such association; (2) the average ratio of turnover to capital; (3) the average wages earned per hour of skilled, semi-skilled and unskilled labour.

Although there are many associations in existence in the stone trade they found no evidence showing monopolistic tendencies. Prices, they point out, will be kept within reasonable limits owing to the alternatives that can be used in construction.

In the cement and mortar industries combines do exist.[62] Prices, at any rate, in London, are controlled from the producer to the consumer by trading associations. The "Combine" in the cement industry consists of the Associated Portland Cement Manufacturers, Ltd., each unit of which constitutes an amalgamation of a number of firms and companies which formerly operated independently.

The Associated Cement Manufacturers, Ltd., was formed in 1900, and promoted in 1902 a further company, the British Portland Cement Manufacturers, Ltd., and together they produce 75 per cent of the cement manufactured in the British Isles. They are so interlocked financially as to make the two concerns practically one company.

In addition, in 1918 there was formed an organization known as The Cement Makers' Federation, by an amalgamation of the Cement Makers' Alliance, Inland Cement Manufacturers' Alliance and The Tyne and Tees Alliance. This federation includes in its membership manufacturers producing 90 per cent of the cement made in the British Isles. It deals with labour questions affecting the industry as a whole, fixes the minimum prices of cement for home use in the various areas and determines in conjunction with merchants, the rebates allowed to them, and settles trading conditions.

After pointing out that in the past the cement industry in this country has not been financially prosperous, the committee believes that improved organization and increased demand on a reduced output are responsible for the present stronger

financial position of the industry though they do not consider that prices have been increased to an unreasonable extent. The export trade profits enable the prices of home cement to be lower than they otherwise would be because of the larger turnover. The committee condemns the practice of the Cement Makers' Federations which, when deciding to raise prices, does not review the whole costs of production, but simply adds on the increment in the cost to the price schedules "prepared years ago by former organizations without due allowance for such varied cost of production as might accrue, for instance from improved methods of manufacture."[63] Minimum prices should be regulated by periodical revision of production costs for the whole of the processes of manufacture. The consumer who purchases direct from the manufacturer has to pay higher prices than the merchant even when he orders in bulk. Costings investigation revealed the fact that the cost of manufacture of cement has increased from two and a half to three times the pre-war cost, arid that selling prices on the average have advanced from two to two and a half times. Labour, fuel, transport, repairs and maintenance seem to have been mainly responsible for the increases, while the production of two large manufacturers had decreased 44 per cent as compared with a pre-war year. Neither of these two companies of manufacturers was liable to excess profits duty.

> "A merchant, to obtain most favourable terms, must bind himself to trade exclusively with Federation members. A further control has been gained over the selling and distributing of cement by the formation of the Cement Marketing Company, Ltd by the Associated and British Companies in conjunction with the subsidiaries. The report states that as prices are still high owing to the demand, this company has had as yet no effect, but it is possible that when prices fall this company will be able largely to gain control of the whole of the cement supply."[64]

The committee recommended "the continued voluntary limitation of exports of cement so long as the urgent home demands are unsatisfied," the provision of further transport facilities and further co-operation between the manufacturers and the

Government in regard to Housing Schemes. Although this latter was at one time possible, the abandonment of the Government's Housing Scheme (August 1921) makes any such co-operation impossible.

In the case of mortar the Greystone Lime Burners' Association, Ltd., controls prices and embraces all the existing greystone lime burners. It fixes prices for burners and merchants and maintains them by agreements. The association was formed in 1911 “when it was said that competition had reduced the industry to a deplorable state.” It controls practically the whole of the production of grey-stone lime.

> “The members of the Association are collectively the owners of practically the whole of the existing quarries at present opened up in England from which the grey chalk used in the manufacture of lime is derived, and they represent, it is stated, a total maximum capacity of over 375,000 tons per annum.”[65]

Production has never reached this figure, having dropped from 120,508 tons in 1908 to 31,036 tons in 1919.

Burners' price is determined in conference by the burners, and costs of production are not considered in detail in arriving at these prices. An agreement is entered into by the association with its members in fixing these prices, but it is informal in character, no penalty being attached to ensure its being carried out, yet the Merchants' Associations have a trading agreement with the association the effect of which is to put any producer outside the association at a disadvantage, as the merchants' trade would then be closed to him.

> “The retail minimum prices of this product are fixed by the Association in conjunction with the merchants' organization, in which the Committee states that they are convinced the Association exerts a controlling influence, drastic penalties are imposed for failure to comply with the minimum prices, further any merchant not holding an agreement with the Association is quoted the same price as the

> consumer. The Committee also note that, provided that new capital was attached to the industry, considerable economies could be made in the production of greystone lime."[66]

In regard to building sand, the committee find that no effective organization controlling prices exists, because sand is easily obtainable throughout the country.

Slates.[67]

Before the war the slate trade was extremely depressed. Wages were low, orders were irregular and demand was neither stable nor equal to the supply.

North Wales, Westmorland and Cumberland, Lancashire, Cornwall and South Wales are the chief centres of extraction. North Wales supplies 90 per cent of the total product of the British Isles, while the other areas mentioned produce small quantities of slates of a high grade quality, of certain texture and colour, at too high a price for working class dwellings. Penrhyn, Bangor, Bethesda and Dinorwic are the best known quarries in North Wales. The sedimentary rock can be split without difficulty, so that less waste, lower costs and also regular sizes result, as compared with the type obtained in the volcanic quarries.

The slate industry depends on the building trade, and has therefore fluctuated irregularly with that trade and especially with the number of houses built. During the six years 1900–1905 about 130,000 houses per annum were built, while the average was only 62,000 per annum from 1910 to 1913.

Because the largest quarries Penrhyn and Dinorwic had always stood aloof, although small associations existed they were not very powerful. The trade was very bad in 1914 and as a result of the action of the Ministry of Labour, which urged the formation of a National Council in the industry, more co-ordination resulted and hence the North Wales Slate Quarries Association came into being in 1917. About 90 per cent of the slate manufacturers of the United Kingdom belong to the Association, the majority of whom are in North Wales. The organization is very elastic, has no fixed rules, but agrees on a price list, which however is not binding on the members. Dealing with labour organizations regulating wages and conditions of employment seem to be the most important functions. There are no other pooling

arrangements, deferred rebates, nor restrictions in regard to control of output, but the members only sell to slate merchants, and refuse to sell direct, as they argue this would involve setting up depots and mixing up wholesale and retail trades, which the Association thinks is impracticable.[68] Merchants in this trade "serve a useful and indispensable function," but there seems to be no reason why very large buyers, Government Departments and Local Authorities should not buy direct from the quarries and thus save intermediate profits.

As compared with the pre-war period the price of slates at the quarry has increased by about three times, the main causes being attributed to increases in wages which are now three times the pre-war rate, while owing to the reduction in hours from fifty-seven and fifty-four summer and winter, to forty-seven and a half and forty-four respectively, the output per man has decreased. The report gives no evidence to show on what this latter statement is based. It is notorious that wages in this industry were very low before the war, ranging from 4s. 6d. per day with no minimum in 1913 for skilled men to 3s. 8d. per day for labourers with no minimum. In January, 1920, they were paid 14s. per day with 12s. 6d. minimum, while labourers got 13s. 3d. with 11s. 9d. minimum. It is estimated that out of 10,000 men engaged in the North Wales quarries before the war about 60 per cent left the industry, while in January, 1921 not more than 7,000 were engaged. The output, therefore, has necessarily decreased but we fail to see that output per man is necessarily less. At any rate more evidence on this point should have been given in the report. The total output appears to be not more than 50 per cent of the pre-war amount. Until the year 1920 hardly any of the quarry companies were able to pay dividends, while it was stated that no quarry has yet been called upon to pay excess profits duty.

Slate merchants are divided into two classes—those who buy slates from the quarries and distribute to consumers as required, direct by rail from the quarry or from their own wharfs or yards, and those who are roofing contractors supplied direct from the quarries but who contract to fix slates in a building as well. In many cases both classes of business are combined. In the London area, for instance, 80 per cent of the slates purchased from the quarries are used by roofing contractors, but in the country generally the percentage is about 55. The National Association of Slaters deals with the trade in the provinces, while in the London area the Builders'

Merchants Alliance, mentioned in the Light Castings Report, has a section under its wing called The London Association of Slate Merchants, Slaters and Tilers.

> "These associations do not control prices of slates in large lots over one mille (1,200 slates plus 60 to cover breakage), but in the London area in the case of small quatities under one mille prices are fixed monthly."[69]

Profit is taken on cost including freight. In January 1914 the average price per mille for the size 26 inches by 10 inches was £8 17s. In January, 1921, this price had risen to £28 12s. Costs of loading, unloading and transport were £3 5s 4d., thus bringing the price to £31 17s. 4d. per mille of 1,200 slates. To this, if sold to another dealer, 10 per cent was added, and 15 per cent,if sold to a builder. In addition 5s. per ton was made to cover rents, rates etc. The final cost to a merchant being £35 10s. 1d. to a builder £37 5s. 7*d.* per mille. For small lots from stock the merchant charges more.

The increase in such cases may amount to as much as 10 per cent on the cost of slates in the wharf. The merchant gives the builders a discount of 2½ per cent for cash within the month."[70]

In Section 10 of their conclusions the Committee reports

> "that the slate merchants as a whole appear to be obtaining larger profits than in pre-war years. Pre-war the merchant aimed at a gross profit of from 10 to 15 per cent, now he aims at from 15 to 20 per cent, or 5 per cent more than before the war. As the price pre-war was less than one-third of the post-war price, it results that the merchants are working on the basis of an increased percentage of gross profit on a greatly increased price.[71]
>
> As the price of slates has risen three times while the overhead expenses of merchants have risen in a lower proportion, it follows that the net profit per unit realized by the merchants is greater than before the war. There does not appear to us to be any justification for

> the increase in the percentage rate of profit in view of the large increase in cost upon which the profit percentages are calculated. It must, however, be borne in mind that as compared with the pre-war period, the turnover of the slate merchants has decreased owing to the smaller output from the quarries."

We can conclude that during the past two years there has been a transformation in the quarry industry. The superiority of slate over tiles, asbestos and other roofing material has been demonstrated and competition is no longer feared. The pity of it is that large numbers of skilled Welsh quarrymen have been lost to the trade through emigration before the war during the long period of depression. Many of the men who had migrated to the South Wales coal-mines have now returned.

> "The men are mostly engaged on piecework, with a minimum of 12s. 6d. per day—a new departure which the workers were not slow to appreciate. And in justice to them it should be added that there have been remarkably few instances of workers taking an unfair advantage of this provision."[72]

Electricity generated at Cwm Dyli at the foot of Snowdon supplies power now to the quarries in Carnarvon and this fact, coupled with the introduction of improve d machinery, should reduce costs of production considerably and enable the industry to regain its former position in the country.

The following should be consulted for further data, for *Section* (a) *Coal*:—

1. *Coal Industry Commission Reports and Minutes oj Evidence.* 1st Stage, Cd. 359. 2nd Stage, 360. Vol. III, Cmd. 361, Appendices, Charts and Indexes, 1919.

2. *Report on Co-operation in American Export Trade,* by the Federal Trade Commission, 1916. Part I, p. 68, pp. 332–36.

3. *Handbook South Wales Coal and Iron Companies,* 1913–1920 Annuals. (Business Statistics Co., Cardiff).

4. *Business Prospects Year-Books* (Business Statistics Co., Cardiff).

5. South Wales Coal Annuals, 1910–1922 (Business Statistics Co., Cardiff).

6. F. Hodges, *Nationalization of the Mines,* p. 80, 1920.

7. H. S. Jevons, *The British Coal Trade,* 1912.

8. H. Levy, *Monopoly and Competition,* chap. vi. for Northern Coal Trades.

9. Wilkins, *South Wales Coal Trade,* pp. 284–90.

10. H. W. Macrosty, *The Trust Movement in British Industry,* 1907, pp. 85–104.

11. Walker, F., *Monopolistic Combinations in the German Coal Industry,* p. 41.

12. D. A. Thomas (Lord Rhondda), *Some Notes on the Coal Trade,* p. 26, Appendix V. "Coal Exports," 1850–1900, paper read before the Statistical Society.

13. John Thomas, *The Miners' Conflict with the Mineowners,* 1921 (International Bookshops, Ltd.).

14. "Memorandum by the Mining and Metallurgical Section of the East-Europe Institute in conjunction with the University and the Academy of Technological Sciences of Breslau" (Breslau, 1921, for *Coal Resources and Coal Exploitation in Europe,* pp. 7–11).

Section (b):—

1. "Motor Fuel," (Interim) Report of the Sub-Committee appointed by the Standing Committee on Trusts, Cmd. 597, Feb., 1920. .

2. *Final Report on Motor Fuel,* Cmd. 1119, Nov., 1920.

3. *Stock Exchange Intelligence,* 1920.

4. Ida Tarbell, *History of the Standard Oil Co.,* 2 vols. (Heinemann).

5. J. L. Garvin, *Economic Foundations of Peace,* 1919, pp. 300–318.

6. Eckel, *Coal Iron and War,* 1921, p. 131 (for *Petroleum*).

7. Macrosty, *op. cit.,* pp. 104, 106.

8. *Report on Co-operation in American Export Trade,* p. 353, for account on Royal Shell Dutch Group.

Section (c):—

1. *Final Report on Stone, Brick and Clay Ware,* Cmd. 1209, 1921. Trades.

2. *Interim Report on the Prices, Costs and Profits of the Brick Trade,* Cmd. 959, 1920.

3. *Report on Cement and Mortar,* Cmd. 1091, 1920.
4. *Report on Slates,* Cmd. 1338, 1921.

Chapter IV: The Iron And Steel Industries.

(A) General.

This industry seems to have more associations for the regulation of output and prices than almost any other in the United Kingdom. There are five large associations representing over forty firms regulating the production of pig iron. The Steel Manufacturers are organized in the following groups:—

The South Wales Siemen's Steel Association (eight firms),

The North East Coast Steel Makers' Association (ten firms),

The Scottish Steel Makers' Association (seven firms).

Similarly, rolled products are controlled by distinctive organizations, the chief being:—

The British Steel Makers' Association (ten firms),

The Sheet Makers' Conference and

The Welsh Plate and Sheet Makers' Association.

Steel castings, iron hollow-ware, forgings, bar iron and miscellaneous groups like tube makers and wire-netting associations have their separate groupings. The majority of these are concerned solely with price fixing, but since the war we shall show they have become increasingly concerned with output as well. The number and variety of these associations bear witness to the specialization that has been going on in the trade. The Federation of British Industries, for instance, has thirty-eight branches or sections for organization purposes under “Iron and Steel” and seventeen

under "Mechanical Engineering."

Vertical combination has been further developed in the iron and steel industries than in any other. By this is meant the combination of firms controlling or producing ores or limestones, right up to the finished product of rails, bridges or locomotives, guns and ships. It is rather curious that we find less concrete information respecting these combinations in iron and steel in the Trust Report of 1919 than of many other trades. Even the Sub-Committee Reports are strangely silent about the big combinations although they give us some slight particulars as to minor groups in *The Reports on Pipes and Castings, Light Castings, and the Nail, Bolt and Nut Trades.*[73] Sufficient is indicated in these, however, to show the paramount need of more official investigation and reports on these matters. The subject is too vast and complicated to be effectively surveyed by any student. It is a fit field for a commission of enquiry.

Prior to 1875 Britain held the field in the production of iron, steel and allied products. Shortly after 1900 we began to lose our premier position, giving way first to the United States and next to Germany. Specialization of firms was automatic, either in the production of pig iron, of rolled products, of tinplates, of steel, angles, rails, nuts and bolts, engines, etc. But after 1900 we began to feel the pressure of competition from abroad—pig iron from Belgium and Germany, while semi-finished products such as steel bars and rails sold in Britain at prices below those at which we could compete—finally finished products from the United States and Germany competed successfully with those of our best firms. We still held our own in certain heavy steel and iron products—bridges, locomotives, marine engineering, armoured-plate ordnance and the like—but in the last decade of the nineteenth, and throughout the twentieth century up to the eve of the war, our iron and steel producers had been forced to prevent their cut-throat competition by horizontal combinations to fix selling prices, while process and production costs were forcing them to link up firms vertically.[74] Technical changes in processes of manufacture were rapid. We were being left behind by the better methods and higher research applications of Germany and the United States; in short, when the war came we were weakest in organization where we ought to be strongest —in iron and steel, the basis of munitions. It was not until the State took over the problem that a transformation took place. Since the

Armistice these lessons have not been lo?t and the tendency towards amalgamation on a vertical basis in iron and steel, has been accelerated, so much so that in the future small units of firms in these industries will not be able to function as the costs of production will be too high for them to compete even in the home market. Tinplate firms, for instance, having to rely on other steel-producing firms for their bar steel will be ousted from the market. Again, to convert pig iron into steel will be prohibitive to the firm manufacturing rails, angles, blooms and billets. It will be necessary to convert the ore into steel and finished products "at one blow" on the same spot. Especially will this be the case when fuel costs are taken into consideration. By-products, formerly wasted, have now become valuable. Steel firms to-day must secure not merely iron-ore mines, limestone quarries, blast furnaces, steel-producing plants and electrical mills, but also their own coal-mines, docks, ships and their own selling agencies. Thus we have the *raison d'être* for the wonderful organizations of the Federation of British Industries and the National Federation of Iron and Steel Manufacturers.

One of the most useful studies in the Trust Report[75] is that on iron castings used in domestic buildings. It shows what careful organization has accomplished in the iron and steel trade and how special branches are grouped together. The makers of iron castings used in domestic buildings are grouped in an association embracing go per cent of the industry. The galvanized-sheet-iron manufacturers control the whole trade through their association : the metal bedsteads manufacturers have an association comprising four-fifths of the whole. There are great consolidations fewer in number as the separate firms merge together. Firms in the same stage of manufacture have amalgamated horizontally, while firms before the war engaged as separate business concerns, e.g. coal, pig iron, steel, structural or marine engineering, have become one financial concern. This movement is inevitable, for the size of the business unit is increasing in these industries owing to the great economies possible and the increasing cost of the small unit, yet there are consequent dangers to the public.

> "The combination in question has not been of any advantage to the retailer or to the public. They hold a very strong position in the trade, and one of the resulting evils is that competition in the goods referred

> to is greatly curtailed. As a rule when this happens the consumer suffers."[76]

Speaking of another combine (name not given) we read:—

> "This is one of the most complete monopolies in the United Kingdom. In our opinion such a position as this is inimical to the public interest and the initiative that follows from competition; it starves its distribution, its huge profits are a heavy toll on the wages of the poor and the public's necessity becomes their opportunity."[77]

These quotations do not necessarily refer to the iron and steel industries. They are of general application, yet they speak for themselves.

During the war the Government could act as a consumers' combine and so protect the interests of the public against the prices charged by these producers' organizations; but this does not apply now and so there is imperative need for greater powers of investigation and regulation within limits. Representatives of associations pointed out that one of the great objects of such movements was to maintain prices in the home market, so as to enable them to extend their output by selling their products abroad at a lower price or even at a loss. Thus the chairman of an important metal association stated that the cause of the formation of the association was the fact that the industry in Great Britain had been very unremunerative for many years and had stood in danger of being crushed out of existence by foreign competition and by too much competition among manufacturers at home, and it was realized that if the industry was to be saved at all the manufacturers would have to come together and form an association. By securing remunerative prices in the home market they could make a successful bid against foreign competition in the export trade. They had a fund, a fighting fund, for the special purpose of subsidizing members who found it necessary to sell at less than an economic price in order to cut out foreign competitors. That might be called meeting dumping by dumping, but he would not agree that British firms dumped in the aggregate much more than foreign firms. They had dumped in Belgium as a reprisal against Belgium dumping here.[78]

J. Morgan Rees, *Trusts in British Industry, 1914–1921*. 72

The effect of foreign competition from Germany on our iron and steel industries since 1904 is shown by the following quotation:—

> "In the past it had paid Germany handsomely to export a large part of her steel products at a loss. In the future it will pay this country to do the same. There is no doubt at all that it would be a sound policy to sell in foreign markets at a loss. It was true that 80 per cent of their output went abroad, so that it was not any matter of dumping an occasional surplus that the home market could absorb, but a large proportion of their exports went to our own colonies, and by getting some little preference there and sufficiently good prices at home, the industry would be able, as organized in its conference to undersell Germany or America in such markets as South America, even if that meant selling at a loss. About 60 per cent of their output was sold within the Empire and 40 per cent outside. A slightly increased preferential price on the 60 per cent would enable them to hold the 40 per cent against competitors."

In 1905 the estimated cost of German steel joists was 89 marks. Adding 2½ marks for freight and fixed charges, the total cost of exported goods f.o.b. at Antwerp was 91½ marks. The selling price here was 81½ marks, that is, they were sold at a loss of 10 marks per ton. Assuming costs for depreciation 1 mark per ton, the costs of manufacture were 90½ marks per ton. The Germans sold these at 105 marks per ton in the home market. This gives a profit of 14½ marks on every ton sold in the home market. Hence they could sell 14½ tons at the export price for every 10 tons sold at home and be under no net loss. Thus they could sell 59 per cent of the total output at 82½ marks per ton abroad and the rest at home at 105 marks.

If we are to adopt the same policy in this country in future we are going to benefit the foreign consumer at the expense of the home consumer in order to make it possible for production on a large scale to be developed.

There were 300,000 men employed in the iron and steel industries before the war. The metal industries, including engineering and shipbuilding, are the largest group

in the country, forming 12 per cent of the male population and representing 1¾ million workers. The result of the Government's policy during the war was to extend steel works and plant for munition purposes on an enormous scale. It has left the industry with modern plant bought at prewar prices but involving a large increase in capital obligations. The number employed in the iron and steel trades has increased from 300,000 in 1914 to 390,000 in 1920, due largely to the extension of plant and the introduction of the eight-hour day. It gave a great stimulus to the development of home ore. Physical conditions favour this country.[79] It is the only steel-producing country with suitable coal supplies near the coast where foreign ore can be supplied at small cost and the product reshipped. Ore and fuel on the Continent are often 200 miles apart, so that the product has to bear the cost of a long journey before reaching the seaport. If the ratio of British to foreign labour costs can be reduced to something like pre-war proportion in the coal, iron-ore and steel works, it is agreed that this natural differential advantage in situation and resources is great enough to maintain our steel and iron position. Competition from Belgium, Germany and France throughout the latter half of 1920 and 1921 was severe and due to the low level of real wages in those countries and the comparatively low taxation of the Lorraine and Belgian manufacturers. Belgium also grants special railway facilities to the industry and its products. After the war the large supplies of battlefield scraps in Belgium, mixed with a small proportion of pig iron, enabled them to produce steel at a very low cost. The separation of Luxemburg from the German Customs Union and the withdrawal of the Saar Valley under the Peace Treaty to France have broken up the selling organizations in these areas, resulting in competition and severe price cutting. Added to this we have the foreign exchange rates acting as a bonus on exports from these countries. The costs of manufacture have gone up considerably. This fact has a great bearing on trustification as it tends to make for larger units to spread the overhead charges over a bigger product. The value of the products in 1920 is estimated at £193,000,000 (excluding the galvanized sheets and tinplates and wrought iron). The total wages bill is estimated at £51,000,000. The total coal used was 28 million tons, which cost £46,000,000, of which £34,000,000 are supposed to represent coal-miners' wages.[80]

Before the war the British iron and steel industry was relatively stationary as

regards production compared with Germany and the United States. This was due partly “to the deficiency of the United Kingdom's natural resources of iron ore, but primarily to the more modern character, better organization and greater efficiency of the German and American industries in respect alike of the acquisition and development of raw materials of production and distribution.”[81]

The American and German steel and iron industries are of relatively recent growth and have been organized for large-scale production—small installations held and worked by individual owners are comparatively unknown. The individualism of the British character has often led the iron and steel manufacturer to prefer to retain personal “control over a small and relatively inefficient works rather than pool his brains and capital to the greater ultimate advantage of the industry. The iron and steel manufacturers of Germany and America have developed their industries on an immense scale, aiming at the production of large quantities of uniform articles rather than a variety of output.”[82]

This quotation explains why such a great reorganization of plant and factories took place during the war. There was a radical change in methods of production; new machinery was introduced; standardization and mass production became the rule. The manufacturers pooled their resources for the first time, and from being associated in a loose way for price-fixing purposes their relations with one another on advisory committees was a close bond that was inevitably to result after the war in an atmosphere that was very favourable for permanent associations.

War control of the iron and steel trades was efficient and remarkably thorough. It has been described fully by other writers. A summary here may be of advantage as showing the background upon which the groupings after the Armistice took place.[83]

> “The large stocks of pig iron held by the manufacturers at the outbreak of war, sufficed, together with the amount imported for our needs up to June, 1916, but at that date the scarcity forced the Government to control supplies which were rationed to makers according to Government needs. The impetus given by Government control resulted in new furnaces being laid down and old ones reopened, so that our annual production increased by 3,500,000 tons.

> The Ministry of Munitions set up a Raw Materials Department and later this dealt solely with iron and steel production. It organized the supply of steel and shell steel to the various works under control and apportioned supplies between the different services. Home supplies of ore were increased as the import was endangered by submarine attack; quarries were worked by prisoners of war to get adequate supplies of limestone with the result that our supplies of pig iron and steel reached record figures.[84] The supplies for the Allies were also looked after while several separate organizations were set up for the various activities—coal and coke machinery, shell steel, etc. The American import was organized, so that by the end of 1918 over 1½ million tons of shell steel had been obtained from the United States. If labour had been obtainable in 1915 and 1916 no imports of shell steel would have been necessary, as by that time the experts at the Ministry had evolved new methods of treating British ores. For supplies, the country was divided into six areas, each into a committee of steel masters with adequate inspection by the Ministry of Munitions. High-speed steel manufactured in Sheffield was similarly dealt with by a committee which was successful in substituting English bar iron for Swedish.
>
> "Demands between the different Departments were settled through a clearing-house committee set up in September, 1917, upon which the Steel Department, Aircraft Production Department, Mechanical Warfare Department, Mechanical Transport Department and the Controller of Forgings and Castings were represented. Any other Department requiring steel or alloys for war purposes could send a representative to this committee."

The lessons of these arrangements were not lost upon the commercial world and very little time was wasted after the Armistice in profiting by them. As early as December, 1918, we see the trend of thought when the President of the Board of Trade, Sir Albert Stanley, advocated the reorganization of business on the lines of

war experience.[85] The potentialities of mass production were pointed out and the facilities for the development of large-scale production, as opposed to the pre-war methods of competition, overlapping and waste. He claimed that under the new methods an increase in the supplies of raw materials would result and a greater application of scientific research to industry. There would follow better understanding and a co-operative spirit between employers and employed. Government support was promised to the organizations of a more intensive overseas trade, while the development of transport facilities inland would bring about economies in cost. Our pre-war shipping predominance would be restored, and closer imperial trade relations, based on community of interests, would ensue. He promised also speedy relief from Government control of all businesses.

The most interesting observation was the recommendation that the only way to bring the changed conditions about was the consolidation of companies or firms in identical or allied branches of production or by other forms of co-operation.

Towards the beginning of 1919 we find that further reasons are brought forward for developing large-scale production.

The important point to note is that up to the war automatic specialization and amalgamation in British industries had been almost unconscious, except in one or two industries where there were special reasons. Now, after the war, this amalgamation was to become deliberate because it was increasingly felt that the scale on which many of our industries were conducted limited the margin between costs and prices obtainable. The point was made that "if the total profits of some trades were divided among the wage-earners, the extra benefits they would derive would not materially alter their positions."[86] Combination and amalgamation, better leadership and management, were strongly advocated as the only safe methods to meet foreign competition and the evolution of ideal factory conditions. The leaders were not all of the same opinion, of course, and the following is a typical example of the opposing views:—

> "We were getting along well enough before the war; we want to get back to making the things we know how to make; all we ask is men and material to work with; we can make money along the lines we

used to make it."

An early amalgamation after the Armistice was that of Messrs. Vickers & Co., Ltd., with the Metropolitan Waggon and Finance Company. This again illustrates the tendency of iron and steel trades towards permanent or vertical combination with allied firms. A firm starts in a small way in the 'sixties or 'seventies of last century, then by self-development becomes an important unit. It expands to huge dimensions, but finally there is a fusion with other firms in the same line of business or with another business the processes of which are different but supplementary to the main firm.

> "It was his conviction, shared by every one with whom he had consulted on the subject and by all those who had studied the engineering trade, that the English manufacturer was greatly handicapped by working in too small units."[87]

In recommending the proposed amalgamation with the Metropolitan Company the Chairman of Vickers made the point—

> "that what they proposed to do was not the formation of anything in the nature of a Trust—a term somewhat unpopular with them—but was in the main a combination of various allied manufacturing businesses which were just the same but which supplemented each other, which would use each other's products to form a complete organization capable of producing within itself practically all the elements necessary for the largest electrical engineering and transportation problems."

It is clear from this statement that the unification was organized because of the importance of electricity as a motive power in the future. Vickers, even before the war, was one of the greatest shipbuilding and armament firms in the country. The union with the Metropolitan would unite them with the finest electrical carriage and

waggon shops in the country. In addition to their iron and steel connexion would be added the sewing-machine trade, the machine-tool trade, and the heavy oil-engine trade. The Metropolitan Waggon and Finance Company is itself the result of the amalgamation of five of the largest carriage and waggon works in the country with a steel works and a paint and varnish works. The Metropolitan bought up one carriage and waggon works together with large constructive steel works in Belgium, investments in the British Westing-house Company, the South Metropolitan Electric Light and Power Company and the West Kent Power Company. If electric power be developed in the future these interests will be invaluable to Messrs. Vickers, hence the amalgamation of interests of iron, steel, carriage waggons, electricity and finance. The iron and steel consolidation is itself a widespreading organization owning ore-mines at home and abroad, transport, docks, marine and engineering concerns, etc. Its products are probably utilized by the carriage company and so the linking up of interests.

In acquiring the Metropolitan Company, Messrs. Vickers also obtained control of the Patent Shaft and Axle Tree Company. They also own the Wolseley Company—famous for its motor-cars. The total capitalization of the group now amounts to 26½ million pounds.

The chief South Wales companies in the iron and steel and allied trades have all either expanded their plant and equipment as a direct result of the war, or merged with other companies to form larger units. Baldwins Limited, founded in 1902 out of a grouping of several firms manufacturing half-finished products, is a remarkable instance of the growth of mixed or vertical combination in the iron, steel and tinplate industries. Before this date nearly all the tinplate works were owned by private firms and worked up the steel bars they bought into tinplates.

> "By this combination (of Baldwins) the producers of the raw material, from iron ore and coal and the converting of them into half-manufactured material, secured a steady output of such manufactures, without which, had they been left to sell such in the open market without interested combination, they would have been most seriously hampered by the notorious dumping of foreign half-finished material

in competition with themselves."[88]

The firm expanded rapidly. It had steel and iron works at Port Talbot and before the war an extensive tinplate-manufacturing plant at Swansea. At the end of the war the total capital of the Company was about 5½ millions. Soon after the Armistice extensive additions were made to the plant at Port Talbot. By the beginning of 1921 "two of the open hearth new melting furnaces were going, making ingots for the Port Talbot Steel Works; two other furnaces were completed; a fifth and metal mixer were in course of erection."[89] The Baldwins Canadian Steel Corporation had been started and had reached the manufacturing stage. Since April, 1919, the Company has acquired Taylors and Cardiff Navigation Collieries as well as extended its other holdings of coal. This policy was necessary in order to secure its own coal supplies just as the tinplate manufacturing side was acquired to secure a good market for its semifinished manufactured bar steel.[90] The coal supplies obtainable by the Company would eventually equal 2,000,000 tons per annum. An agreement was concluded in 1920 with the British Mannesmann Tube Company by which Baldwins secured a controlling interest, being thereby certain of a weekly market for their steel of over 1,000 tons, ultimately to reach 2,000 tons. The directors are aiming at making the Company thoroughly self-contained. The additions involve an increase of the ordinary share capital from £7,000,000 to £8,000,000.

Another very interesting development was the merging of Messrs John Lysaght, Ltd., of Bristol and Newport, into Messrs. Guest, Keen & Nettlefolds. The former Company some years ago moved its sheet-rolling mills to Newport from Staffordshire for marketing reasons. During the war its blast furnaces and plant increased considerably in Lincolnshire. Towards the end of 1919 this huge concern was bought by the Berry-Rhondda-Llewellyn group for about £5,000,000 and in January, 1920, was merged into that of Messrs. Guest, Keen & Nettlefolds by an interchange of shares and interlocking of directorates. Guest, Keen & Company is itself a combination of three companies— Guest & Co., Ltd., the Dowlais Iron Co., Ltd., and the Patent Nut and Bolt Co., Ltd.—thus guaranteeing supplies of iron-ore, coal, coke, and limestone for the manufacture of steel, in turn used for making the varied products, of the group. In 1902 the famous screw-makers Messrs. Nettlefold

came into the group, thus guaranteeing itself raw materials. Later Messrs. Crawshay of Merthyr were absorbed, bringing addi-tional supplies of coal, iron, limestone and steel to the main firm. About the end of 1919 the total capital of the group (Messrs. Guest, Keen & Nettlefolds) was £7,430,500.[91] In August of that year part of the reserve fund representing £2,895,000 was capitalized and issued to the ordinary shareholders in the form of one cumulative second preference share of £1 carrying interest at 5 per cent free of income tax, and two ordinary shares ranking *pari passu* with existing ordinary shares for every ordinary share held on October 1, 1919. In 19 years £7,867,756 have been paid by this group in dividends, the annual declaration being usually 15 per cent free of income tax. Together with Messrs. John Lysaght Co., Ltd., the total capital of the combination must be now somewhere about £12,000,000 and they are therefore one of the strongest combinations in the country.

Another example of the remarkable impetus given to combination by the war may be given.[92] It is the story of the Dalzell Steel and Iron Works of the firm of Daniel Col-ville and Sons, Ltd., whose jubilee was reached in February of this year (1921). It was founded in 1871 and by the following year the Dalzell Works was completed with puddling furnaces, two blast furnaces, etc. The firm expanded rapidly and its products became famous. Steel was next turned out, so that in 1880 a new steel works was erected and an important connexion established with America, which was supplied by some of the firm's products. In July, 1895, the firm was converted into a private limited liability company. Its products grew from 12,524 tons of steel ingots in 1881, to 318,000 in 1914, and to 467,768 in 1917. To-day the annual production is said to be over 1 million tons of the total British production for 1920—a little over 9 million.

The firm's connexion with outside interests has sprung directly out of the war. In 1915 the Ministry of Munitions wanted more steel, so that the Full wood Foundry Co., Ltd., and the Clydebridge Steel Company, Ltd., at Cambuslang, Glasgow, were acquired by purchase, while, the Steel Works of the Glengarnock Iron and Steel Company were leased. The output of the firm increased 5,000 tons per week owing to these additions. Later the leased works were purchased outright and large extensions carried out at the request of the Government. On January 1, 1917, the firm purchased Messrs. Archibald Russell, Ltd., to secure its coal supplies. Later the

Murchistown Colliery Company was acquired. In July, 1918, these were allied to the Rose Colliery Company, Hamilton, and thus brought into the Steel and Iron Company a total of twenty-four pits employing 6,500 colliers, producing 1¼ million tons of coal per annum. The next step was the acquisition of the Palmaise Patent Fuel Company, Ltd., in 1920, to take up patent-fuel manufacture and use the plant bought up with Messrs. Russell & Company. The sheet-galvanizing works of Messrs. Smith & M'leon at Gartcosh, Milnwood, Mavisbank, Glasgow, were bought next. These comprised four steam-driven sheet mills, one electrically-driven forge train, one steam-driven bar mill and fourteen puddling furnaces. This plant is one of the most modern galvanizing plants in Great Britain. The Clyde Alloy Steel Company, making high-class steel castings and other special steel with electric furnace and two rolling mills, were next controlled by buying shares. The group has its own lime extraction works in Ireland. An exchange of shares with Harland and Wolff took place in January, 1919, and early in 1920 Lord Pirrie joined the Board of Directors, since which date the firm has been closely identified with the combine of which Harland and Wolff is the centre. The firm of Colville and Sons, Ltd., now employs 18,000 workers, produces everything needful for the conversion of iron-ore into every class of rolled steel and heavy steel goods, engines, axles, tools, machinery and even passenger vessels.

This account of rapid extension since the Armistice might be repeated of every large firm in the country, but lack of space forbids. Enough has been said, however, to show the extent of the new movement towards larger and larger units. This was going on before the war, but it is not sufficient to point out that it has been accelerated because of the arresting of this movement by the war years : the end of the war found our manufacturing units larger, and immediately promoters, financiers and business men proceeded to make them larger still by deliberate organization from the outside in order to secure the advantages of the economies of production possessed by a large unit over a small one.

(B) Metal Bedsteads.[93]

The Bedstead Makers' Federation comprises two-thirds of the makers in this country. Metal bedsteads are only one of a number of products made by the plant of a big works, so it is difficult to separate their analysis of costs from those of the other goods manufactured. The Federation came into being in 1912 and includes makers of wood bedstead fittings as well as makers of metal bedsteads. The removal of price cutting, and the complete organization of the home and export trade were the objects aimed at by the Federation. These seem to have been attained and the industry is now profitable, while a conciliation board regulates the conditions of labour. Policy and management, regulation of manner and terms of delivery, and fixation of producer's selling prices are the matters decided by the Federation. In short, it is a terminable price-fixing organization on the "pool" system. A percentage of the total output of the Federation based on pre-Federation figures is given to each firm. For all amounts above this each firm pays into a pool a certain percentage of the value of all rates, and receives from the pool the same rate if its assigned output is not reached. A reserve fund is maintained by a contribution of 1 per cent upon members' sales each month.

Prices are regulated so that no firms sell at lower prices or give higher discounts than those specified by the Federation, whose Secretary has access to all the books of the individual firms. These latter are also circularized with statements of some of the average costs of production of the large factories and are encouraged to make economies in production accordingly. A less efficient manufacturer has then an opportunity of keeping in touch with the best methods, because standardization of tools and dies has been adopted. The central membership of the Federation is organized for the manufacture of the implements. Raw materials are also bought in bulk and unnecessary competition eliminated. This means great economies, as raw materials form the most important element in the cost of an assembling trade such as this is in the main. These advantages in production are obvious. The Committee of Investigation came to the conclusion—

> "that in November, 1919, costs had increased rather more than three times as compared with the cost in June, 1914, but profits had

> increased approximately four times per bedstead sold; and that there is an increase (varying from 1¾ to 4½ per cent) in the percentage of profit on costs of production."[94]

They go on to show that this seemingly points to more profit than the pre-war basis, but as output is down by 50 per cent the total results of sales for 1919 show only an amount in money value equal to sales for some years previous to the war, capital being turned over about once or a little over in a year. But the Committee pointed out that it was impossible for them to find out exactly the amount of capital devoted definitely to the manufacture of bedsteads as these are only one of the products of the industry. They conclude "that we find no evidence to show that the Federation by its organization has sought to raise prices unduly against the public."

If the Committee had had greater powers it would have been possible to go into the question of all the products manufactured and thus ascertain the causes for the increase in costs to three times those of June, 1914. Prices of raw materials were still advancing when the Committee reported, and they indicate that profits accruing to manufacturers on bedsteads of the type indicated had increased approximately four times per bedstead as compared to pre-war rates. The increase in the percentage of profit on cost of production varied from 1¾ to 4½ per cent. The fall in the output in some cases to about 50 per cent of the pre-war figure would in itself explain why the value of the turnover for 1919 did not exceed the value for the pre-war year, bearing in mind the increase in costs and the fall in the purchasing power of money. What accounts for this fall in output? No great light is thrown upon this. Is it labour, management, materials or manufacturing costs? From the profit point of view of the producers it is just as effective to make a high profit on a small output as a small profit on a large output if the demand is steady. Demand throughout 1919 was obviously very great, bearing in mind the leeway to be made up during the war and the drop in output. That is, it was a sellers' market. Demand exceeded supply; the marginal pair of buyers would fix the price; the sellers would be at an advantage and so, even if it were urgently necessary from the customer's point of view, it would not be to the interest of the producers acting in concert to diminish their advantage. The double effect therefore of increased costs and a 50 per cent output would give them

(the producers) considerable advantage. Despite the conclusions of the Committee, "That, in all circumstances, the profits made by the manufacturers do not show marked increase in aggregate amount as compared with those accruing before the war and there is no evidence to suggest that the manufacturers have sought to raise prices unduly," we are not satisfied that prices were really as low as they might have been, especially when we note the sudden drop that took place in the first six months of 1920, when people refused to buy all sorts of commodities because prices had reached impossible levels.

(C) Light Castings.

Of great interest in connexion with the iron and steel combinations is the *Report on Light Castings* issued on February 22, 1921.[95] The Sectional Committee of the Sub-Committee on Building Materials was appointed on the 16th February, 1920, and thus held its investigations over the period of a year. They held seventeen meetings, examined witnesses representing the National Light Castings Association and the Builders' Merchants' Central Committee. It also took evidence from light castings manufacturers who were inside and outside that association, including builders, merchants, contractors' builders, and ironmongers.

The making of light castings—used principally in house building—such as grates, stoves, mantels, rainwater pipes, baths, etc., is a special branch of the ironfoundry industry, quite distinct from the more solid and heavy castings used in the engineering and machine-making trades. Specialization on a large scale has been carried out, so that certain foundries and indeed certain districts devote themselves entirely to this kind of product, and similarly the moulders employed in this trade are grouped in trade unions differentiated from but allied to their fellows in the heavy industries.

The story of this National Light Castings Association is again a very interesting one, typical of a horizontal combination for the fixation of prices and the regulation of output throughout the whole country. It is not difficult to understand that these steps precede the permanent association or merging of large firms into one consolidation embracing the whole country. Though there is little evidence as yet that this has been achieved, it does not require much imagination to forecast that the

amalgamation of the large iron and steel composite manufacturing firms which has taken place since the end of the war is a sign of the closing up of the producers' ranks with correspondingly new problems for the consumers. This has had the definite effect of making impossible the carrying out of the Government's policy in housing as the building costs of materials have proved an insuperable barrier to the speeding up of house building.

The output of the industry is estimated at 250,000 tons per annum and is carried on by 120 firms. Eighty per cent of the whole output consists of castings for houses, so that the bearing of this report on house building is significant. Seventy per cent of the output is obtained in Scotland, 4 per cent in the north-east of England, 10 per cent in the north-west of England, 10 per cent in the Midlands, while other districts account for 6 per cent.. The industry has fluctuated in the same manner as house-building, which, as is well known, is very subject to fluctuation. The demand for light castings has fluctuated *pro rata* with the variations in the number of houses under construction. In 1890 the number was 55,000 : in 1891, 87,000, declining to 39,000 in 1893. From this date there was a continual expansion up to 1899, when 140,000 houses were built. During the next six years the number kept in the region of 130,000 new houses per annum. During the next five years (1905–09) the average number built did not exceed 90,000, while in 1910 the number was 36,000. The average of the four years 1910–13 was no more than 62,000. It is worth while noting that the general price level fell to 1896, then rose steadily, while wages from 1900–13 were practically stationary.[96]

From 1894 to 1904 was a period of steadily increasing demand for light castings with remunerative prices and good profits; new capital came into the industry, so that in the latter year the trade could supply 130,000 houses. From this point onwards a decline set in, demand for light castings fell off, supply was greater than demand, severe competition resulting in low wages, poor returns in capital and depleted financial resources. The years 1909, 1910 and 1911 were very bad ones for the industry.

During that period (1911) the makers decided to try to organize an association and the project of a national organization was set on foot. This was accomplished by the end of 1911 and in December the National Light Castings Association, comprising

about eighty of the leading ironfounders, was formed. The output was regulated and within nine months prices had advanced 25 per cent.

> "By the end of 1912 the membership of the Association had been considerably increased. Only three firms of any magnitude remained outside and the Association probably represented not far from 95 per cent of the Light Castings industry."[97]

The distributers meanwhile were effectively organizing in their own interests to put an end to the unrestricted competition. The Builders' Merchants' Alliance was an association of builders in the London Area, while other associations existed in different parts of the country among merchants and ironmongers. Prior to the formation of the National Light Castings Association the three groups— builders, merchants and ironmongers—had been trying to regulate the distributing trade. Some makers sold direct to ironmongers and could therefore sell cheaply. The other merchants and ironmongers objected to this as it gave them no trading margin. In June, 1912, the Builders' Merchants' Alliance, conjointly with the Ironmongers' Federated Association, approached the National Light Castings Association, proposing that the latter, besides fixing manufacturers' prices, should fix minimum prices to builders and the general public and that direct trading between ironfounders and users should cease. They proposed a system of deferred rebates whereby any traders not conforming should be penalized. In return, they agreed not to buy from any ironfounders outside the National Light Castings Association. No agreement was reached until May, 1913, when a scheme put forward by the National Light Castings Association was agreed to excepting by a small group of merchants which included two of the largest in the United Kingdom. These refused to agree "on the ground that the margin of profit allowed was not sufficient to cover ordinary working costs."

The declared object of the National Light Castings Association is explicit in the following clauses at the head of the original rules of the association:

> (1) The object the Association has in view is that of raising and keeping up the price to the buyer of goods and articles made and/or

> supplied by its members.
> (2) This shall be done by pooling arrangements so controlling production that prices will rise naturally and inevitably as they always must do when supply is brought into equilibrium with, or is ever so little below demand.

It was stated to the Committee that these do not now form part of the rules of the association, but the Committee find that the pooling arrangement is still in force. Its working is now familiar to the readers of this book. The main principles on which it is based are: (1) the ascertainment of the average annual output of all the members of the association, (2) the aggregate annual output of all the members. The percentage of this total secured by each member was thus easily ascertained. These percentages are not fixed but would vary according to the total output of the members at the end of each year. The scheme provides that if a member exceeds his pre-association percentage of the total quota he shall pay 7½ per cent of the amount by which his sales exceed the quota into a pool and correspondingly draws out 7½ per cent of the amount by which his sales fall below his quota. This applies to the home trade only. Export trade is exempt.

One ironfounder, formerly a member of the National Light Castings Association, describes this arrangement as follows:

> "It penalizes progress and encourages laziness."[98]

The Committee state:

> "It must discount to some extent the incentive of the manufacturer to increase his trade; it must tend to make members refuse any order which will not yield a profit substantially greater than the pool percentage; it must tend to stereotype the lay-out of the industry."[99]

In passing it is interesting to note that this is the difficulty which arises with all kinds of horizontal combination, and so leads to permanent consolidations

controlling the whole industry, in order to control the aggregate of output and minimize payments for the inefficiency of some members of the pool. Under the consolidation it pays to pension off former members of the pool by giving them an annual payment for ceasing to produce and taking over their whole establishment and working it under the trust.

Since 1913 the National Light Castings Association has controlled prices "not only by the method of minimum prices, but also by agreements with the Building Materials Supply Committee—an offshoot of the Builders' Merchants' Alliance, the former comprising the majority of the principal hardware merchants; these agreements entail the issue of minimum price lists to the trade by the Building Materials Committee and the granting of deferred rebates by the National Light Castings Association to merchants who conform to conditions laid down by the National Light Castings Association."[100] Under these agreements purchasers are divided into four groups, A, B, C and D. Merchants, ironmongers and others who regularly carry stocks of National Light Castings for re-sale are in group A, and the discounts to these range from 5 per cent on pipes and gutters to 25 per cent on baths. In group B are placed merchants and ironmongers who do not regularly carry stocks of the N.L. Castings, and these are allowed discounts varying from *nil* on pipes and gutters and 2½ per cent on fitted goods to 20 per cent on baths. Group C includes contractors, builders, plumbers, certain industrial concerns and public bodies who get 17½ per cent, discount off list prices on baths (plumbers), while builders get 10 per cent discount. On all other goods there is no discount. The general public belong to group D and they are privileged to pay 10 per cent added to the list prices except in the case of baths, which are sold at the list price. A tonnage allowance over and above these discounts is given to all buyers, while in addition there are deferred rebates, super rebates and cash discounts from 5 per cent for 4 tons to 2½ per cent on one ton in one lot. A discount of 7½ per cent on the net cash received for all scheduled goods is given to merchants and ironmongers on certain conditions, such as adhering to the price schedule fixed and refusing to buy light castings from any firm which does not belong to the National Light Castings Association. The super rebates are given to merchants purchasing goods exceeding £1,000 in value in any one year and vary from 1¼ per cent to 7½ per cent on purchases over £8,000 per

annum. Cash discounts are 5 per cent for cash monthly and 2½ per cent for cash quarterly.

The Building Materials Central Committee referred to above was formed out of the Building Materials Association originally representative of the area around London. All builders' merchants in London and elsewhere belonged to this Central Committee and in this way, although originally an offshoot of the London Area Association, had a membership comprising the majority of the principal hardware merchants throughout the country. This committee has a monthly meeting which fixes the prices at which hardware goods are to be sold retail by builders' merchants including "over the counter" prices. An addition varying from 7½ per cent to 12½ per cent is made to the prices of rougher goods sold to the members of the Committee by the National Light Castings Association. This makes a gross profit of 25 per cent to 33 per cent on these goods above the N.L.C. Association's prices. Thus the Builders' Merchants' Central Committee's prices are higher than those fixed by the -National Light Castings Association, which is only concerned with the fixation of prices *below* which goods must not be sold. It was given out that 21 per cent is the average trading margin aimed at by the Builders' Merchants' Central Committee—a margin not unreasonable for goods of this nature sold from stock, provided the prices to the merchants were fairly reasonable.

The Light Castings Industry, therefore, in both its producing and distributing sides, is effectually controlled by the National Light Castings Association and the Builders' Materials Central Committee.

Only 2½ years intervened between the founding of the National Light Castings Association and the war, which involved the cessation of house-building and transferred the production to munitions of war as well as interfering with supplies of material and disturbing the labour available. In the opinion of the Committee the disturbed conditions brought about by the war make it difficult to trace the effect of the factor of combination on supplies, prices, costs and profit, yet sufficient data exist to estimate the probable influence of combinations on the industry.

Before the war there was no difficulty in getting supplies of light castings, whereas in November, 1920, there was a shortage of rainwater goods and baths which was responsible for delays in house construction. The average output for the three years

pre-war was about 400,000 tons, while for 1920 the Committee estimates an output of 250,000 tons. The monthly rate of house completion was 6,000 pre-war, so that the present rate only suffices for a monthly rate of 4,000 houses. The Minister of Health (Sir Alfred Mond) stated that—

> "The number "of houses to be constructed by local authorities and public utility societies with Government assistance under the present scheme would be limited to 176,000, that being the number built, building, or for which tenders had been approved, and assistance would not be given under the scheme for houses in excess of that total number."[101]

This works out at 4,800 a month for the three years November, 1918, to November, 1921. The output of light castings therefore seems to be the determinant of the house-building rate. At the end of the war the shortage of houses was officially estimated at 500,000, while at the same time there were 180,000 occupied houses unfit for human habitation. There was, therefore, an annual shortage of about 80,000 houses. The provision of the Government under the above ruling is barely sufficient to overtake the normal annual deficiency due to the growth of population and leaves the real problem of making up for the leeway of the war period untouched.

The problem is therefore economic as well as political, and its solution will be determined by the rate of output and costs of light castings.

> "The foundries which, in the early years of the century, coped with the demand resulting from a house-building rate of 11,000 a month are still in existence and, after making full allowance for the shorter working week and limitation upon overtime, are quite equal to three-fourths that output."[102]

The real limiting factor is the shortage of skilled workers to the number of skilled moulders who joined the forces and who have not returned to the industry, preferring to work as skilled labourers elsewhere. The demands of the craft on the physique of

the men seem to be exacting, and the shorter working week has undoubtedly led to a reduction of output, while the disastrous strike of fourteen weeks in 1920 made conditions still worse.

On the question of the effects of "pooling" the Committee reported that the complete control over prices secured by the Association made the reduction of production of little effect. There was overproduction of light castings before the war; after the Association was formed the raising of prices depressed the demand, which equated itself to the price. The pooling arrangement since the war seems to have damped the keenness of the more favourably placed iron-founders, so that it has not been worth their while to introduce more effective methods and machinery.

Once we postulate a complete control of prices, as seems to have been achieved by the Association, the demand is dependent on the price fixed irrespective of the fact as to whether this demand is the total possible or even adequate in view of national requirements. Thus prices of light castings were lowest in 1905. Up to 1911 prices rose mainly because materials were rising. Relative to cost of production, it is estimated that prices were lowest in 1911. At the end of that year the Association was formed. Before August, 1912, a total advance of 25 per cent had been made in the nine months following the formation of the Association, but it must be pointed out that prior to this many firms must have been able to obtain better prices or fallen out, that pig iron in 1913 was 20 per cent above 1911 prices, and that iron and steel products—over which the Association had no control—seem to have advanced in price correspondingly: e.g., bar iron 27 per cent; hoop iron and steel 25 per cent; steel sheets 17½ per cent. Had the Association not been formed prices would have risen, but would they have risen so much? That seems difficult to determine as regards the pre-war period, but since the war the factors making for higher prices are much more easily ascertain-able.

> "Taking the 1914 prices in each case as 100 the 1920 prices are: . .
>
> Scottish pig iron 444
>
> Cleveland pig iron . . . 426
>
> and Foundry coke 343
>
> while wages, skilled day workers, are 327 and unskilled 476 (taking

> into account the reduced number of working hours). Therefore an increase in price of castings from 100 to 384 is almost entirely attributed to the increases in costs of production."[103]
>
> This means that the average increase in the price of light castings used in house construction between July, 1914, and July, 1921, was about 284 per cent. This increase is almost entirely attributed to increases in the cost of raw material and labour, which rose during the period approximately as follows:
>
> Pig iron .... 336 per cent.
>
> Coke ..... 243 per cent.
>
> Skilled wages . . . 227 per cent.
>
> Unskilled .... 376 per cent.
>
> (Wages here have been weighted to take into account the reduced number of working hours and do not therefore represent an actual increase of these amounts to the workers. The Committee have assumed that the reduction of hours from fifty-four to forty-seven has meant an exactly corresponding reduction of output, on which there was a conflict of evidence)."[104]

These prices are National Light Castings Association standard list prices below which goods were not to be sold. There are other sets of prices issued by the Builders' Merchants' Alliance higher than those, and also another list issued by the Department of Building Material Supplies and the National Light Castings Association for castings required and issued to builders under the building programme of the Ministry of Health. Under arrangement with the National Light Castings Association the Department of Building Material Supply was formed within the Ministry of Munitions on February, 1919, to supply bricks, cement, drain-pipes, glass, light castings, sanitary ware, tiles, slates, ironmongery and certain items of joinery for the Government Housing Schemes in England and Wales. This Department was taken over by the Ministry of Health in July, 1920, and they supplied a price list required for hous-mg schemes at which any local authority or contractor carrying out work in connexion with any State-aided housing scheme

could be supplied. These supplies were obtainable at lower prices than National Light Castings Association prices, as the table below shows. This arrangement the Committee regarded as satisfactory both as regards price and standardization, affording manufacturers an ample but not unreasonable profit, attributing the lower price to economies in distribution. The profits made by the N.L.C. Association since the Armistice were regarded as not unreasonable and "afford a fair and reasonable margin to the distributer."

Size. Article.	1914.	1920.	May 15, 1920. D.B.M.S.
	£ s. d.	£ s. d.	£ s. d.
2½ in. Rainwater pipe per yd.	0 1 1	0 4 10	0 3 10½
2½ × 12 in. Offsets for ditto	0 1 10	0 5 6¼	0 4 4½
5 in. Rainwater pipe for ditto	0 1 5½	0 5 7	0 4 8½
3 × 12 in. Offsets for ditto	0 2 1½	0 5 8	0 5 0
4 in. Half-round gutter	0 0 9¾	0 3 2	0 2 10½
3½ in. L.C.C. soil pipe for ditto	0 2 7½	0 8 10½	0 7 2½
36 in. Kitchen Range each	3 6 6	12 12 9	10 17 6
5 ft. 6 in. Taper Bath each	3 5 0	10 2 6	8 15 4

The activities of the Association since the Armistice, though in many instances designed to raise the level of efficiency and lower costs of production, "do not at present adequately balance the restrictive influence of the Association and there is no guarantee that the results of improved efficiency would reach the public in the shape of lower prices."[105]

It was pointed out that the percentage of 21 over the range of goods on the standard list of the Association charged by the Builders' Merchants' Central Committee was not unreasonable for goods of this kind sold for stock. Foreign competition cannot be relied upon as a safeguard against excessive prices owing to the control over transport costs and the agreements of the National Light Castings Association with the distributing trade. The Committee reported finally:

> "We are of opinion that the powers of an Association which wields such monopolistic control over an industry are open to abuse as to make it a menace to the community and we urge that such combinations should be brought under the surveillance of some Department of State on the lines of the recommendations contained in the Report, April 20, 1919, of the Committee on Trusts."

Taken in conjunction with the movement towards amalgamation of the big iron and steel firms it is fairly clear that, unless steps are taken in the near future to control these groupings, the public will only be permitted to purchase commodities at the prices fixed for them and our much-vaunted "competition" as a spur to progress will be at an end.

(D) Pipes and Castings.

The value of this Report lies rather in what it implies than in what it reveals, for here we see that the relevant sections of the conclusions point to the importance of further investigations into the supply and cost of pig iron, the raw material of light castings as well as of pipes and castings, not to mention the steel, allied engineering and other industries. Because the Standing Committee on Trusts was allowed to lapse in May, 1921, no investigation into the pig-iron industry was possible and so a valuable survey of the trade has been postponed at a time when it would have been most useful in view of the depression that has taken place in the iron and steel industries.

Four firms as far apart as Nottingham, Dudley, Chesterfield and Middlesbrough were reported to have tendered for the London County Council for pipes and castings. A question to this effect was asked in the House of Commons, and so an investigation took place as to whether it was true that the tenders submitted were all of the same price. It transpired that the four firms were Messrs Cochrane and Company (Woodside), Limited; Cochrane and Coy, Limited (Cochrane Grove Branch); the Staveley Coal and Iron Company; and the Stanton Iron Works Com-Pany, Limited. Though the tenders were for a variety of items, it was found that the totals for the ordinary and special section were identical in amount.

A letter was circulated to all Public Authorities which revealed the fact that there were eight firms whose tenders to various municipal bodies varied little—at the maximum £10 to £12 and at the minimum 2s. to 5s. Later on, as witnesses before the Sub-Committee, manufacturers admitted the existence of a combination called the Cast Pipe Association, formed in July, 1908, embracing the whole trade, whose objects were:

> (a) To obtain fair remuneration for its members;
> (b) To consult together to get a fair share of the export trade; and
> (c) To protect its home markets by combined action so that the British foundries might be left as far as possible in full operation and give employment to a maximum number of workmen.

As regards this last point it is rather naive to expect the British public at this date to believe that trade is carried on by a combination to give employment to workmen.

To meet foreign competition the Association fixed minimum prices averaged over the whole trade, and in cases where some firms were below this they were able to get reimbursement from a pool so that unremunerative prices fell on the trade as a whole. Agents were appointed in different foreign countries and the firms got export orders in rotation. As regards the home trade the Association dictated when it was the turn of a particular member to quote a tender and others competing were instructed to quote higher. To meet expenses a contribution of 2*s.* per ton was made on all deliveries, but now it is stated that this has been reduced to 3d. per ton.

There are no printed rules of the Association, but meetings of the Committee are held once a month where prices are fixed in accordance with the prices of coal and pig iron. Prices have been controlled by the Association when demand was greater than the supply, so it is practically certain that prices can be controlled when supply exceeds demand, even if this state of affairs is likely to happen.

Tendering arrangements therefore by those firms who are members of the Association are reduced to an absurdity, for the Association fixes prices and regulates supply. An apology from a firm erring in quotation is demanded and an investigation ordered by the Association; this has the necessary effect. At the end of 1920 foreign competition was keenly felt, the French makers being able to sell at 25

to 30 per cent below home prices. During the war there was a shortage of labour and large firms were working to half their capacity only, most of the furnaces being shut down to 25 per cent of their normal capacity. There is a great scarcity of labour and the Committee suggests that unless steps are taken to secure a steady supply the trade will become extinct. One large public body paid for 4-inch cast-iron pipes prices ranging from £4 14s. 8d. per ton in 1906 to £7 in 1914, rising to £23 4s. 6d. in December, 1920. Manufacturers claim that the increase in price was due to the increase in cost of raw material and in wages.

Most of the large pipe founders are producers of raw material as well as coal and iron, e.g., the Stanton Iron Works, Limited. We have also pointed out the tendency of large iron and steel companies to buy up foundries (Chap iv, § d. General. Colville and Sons, Ltd.). These companies keep their accounts for coal and pig iron separately and charge in their costs the current market price for coal and pig iron to their foundry accounts, despite the fact that their costs of production must be considerably less than those for foundries who have to buy their own coal and pig iron from other firms. This was defended on the ground that if this were not done by the big companies it would mean the closing down of the small foundries. This only proves that the cost of production of the least efficient firms determines price and that therefore larger units are able to make large economies and gain large profits—hence the speeding up of the tendency towards large groupings and "mixed" work. The Committee reports that this separation of costings by the large firms is justifiable so long as the profits made in each case are "fair" and "reasonable." These terms are very elastic.

The position therefore is that the ratepayers of the municipalities—large users of cast-iron pipes—are at the mercy of a few large firms who are sole makers of the goods and they can refuse to supply except at their own price. There is no evidence that excessive prices have been charged, but it is obvious that if the costs of production are based on those of the least efficient units there must be large profits for the units whose real costs are less. The Committee suggests that to safeguard the Municipal Authorities they should have access to the costs of production of the firms through reports of qualified accountants of the Board of Trade, and that the latter should be empowered to require submission of audited statements showing costs of

production together with balance sheets. According to the Chief Accountant's Report the surplus (profit) per ton of cast-iron pipes was for firms A and B 17s. 8d.: £1 1s. 10d. and £2 8s. for 1913–14 and £1 14s. 4d. and £3 11s. 1½d. for 1919–20. For the month of October, 1920, when prices dropped considerably, "A" Company had a surplus of only 2s. 3½d. per ton; "B" a deficit of £1 3s. 8d. and "C" a surplus of £2 1s. 4d. on all classes of castings sold.

In conclusion the Committee points out that the Cast-iron Pipe Association is an effective combination comprising all manufacturers of cast-iron pipes, and that in consequence the practice of submitting tenders is of no value as a protection to the tax-payer, so that the Municipal Authorities are at the mercy of the Association. The Association could act unreasonably if it were so disposed. To meet this the Board of Trade should have power to protect the Municipalities by its own costings investigations. Though the firms whose accounts were examined made profits which appear to be not unreasonable they point out:

> "We have not, however, investigated the trade in pig iron; we are aware that the operations of the firms reported upon must depend for their financial results largely upon the price at which pig iron reaches them. Any firm which is interested, not merely as a distributor of pipes, etc., but as a producer of, or trader in, pig iron may have made profits on a much higher scale than anything reported above."[106]

In the public interest, therefore, it seems imperative to continue investigations, and the "winding up" of the Standing Committee was clearly contrary to sound policy.

Chief Sources.

1. *Report on Trusts.* Cd. 9236. 1919.

2. *Report on Iron and Steel Products* (Cut Nails, Bolts and Nuts, and Horse Nail Trades). Cmd. 1268. 1921.

3. *Report on Agricultural Implements and Machinery.* Cmd. 1315. 1921.

4. *Report on Metal Bedsteads.* Cmd. 607. 1920.

5. *Report on Light Castings.* Cmd. 1200. 1921.

6. *Report on Pipes and Castings.* Cmd. 1217. 1921.

7. *Final Report of the Royal Commission on the Natural Resources, Trade and Legislation of Certain Portions of His Majesty's Dominions.* Cd. 8462. 1917.

8. *Final Report on Commercial and Industrial Policy after the War.* Cd. 9035. 1918. P. 10.

9. Dr. F. H. Hatch, "The Ministry of Munitions and its Influence on the Iron and Steel Trades"—articles in the *Iron and Coal Trades Review,* July 11, 18, 25. 1919.

10. *Economic Conditions of the World.* Declaration by the Supreme Council of the Peace Conference. Cmd. 646. 1920.

11. J. Lloyd, *Old South Wales Iron-works.* An account from MSS. of the Mayberry Papers and Letters relating to South Wales iron works and origin. National Library of Wales, X.H.D. 9515, s. 3.

12. *Report of Departmental Committee, Board of Trade, Iron and Steel Trades after the War.* Cd. 9071. 1916.

13. *Report of the Bureau of Corporations in the Steel Industry.* 1911.

14. *Report of the Commission appointed by the Ministry of Munitions on Conditions of the Iron and Steel Works in Lorraine, in the occupied areas of Germany, in Belgium, and in France.* 1920.

15. C. Wilkins, *History of the Iron, Steel and Tinplate Trades,* p. 57.

16.. J. H. Jones, *The Tinplate Industry,* pp. 7, 79. 1914.

17. Carter, *op. cit.,* pp. 61, 67–75, 85, 99–103, 138, 141–3, 343–5.

18. Macrosty, *op. cit.,* chap, i, pp. 24–83.

19. Levy, *op. cit.,* chap vi.

20. *Report of the Controller of the Department on Development of the Mineral Resources in the U.K.* Cd. 9184. P. 145.

21. *Journals of the Iron and Steel Trades Confederation* for 1918, 1919, and 1920.

22. *Proceedings of the South Wales Institute of Engineers.* Vols. I–XXXV.

23. *Journals of the Iron and Steel Institute* (various papers).

24. Handbooks, South Wales Coal and Iron Companies.

25. Business Prospects Year-Books.

26. For early price associations see *Economic Journal,* Vol. XXX, p. 331, on "Early Price Associations in the British Iron Industry," by T. S. Ashton.

27. For American and Continental Views on our Steel Trade see *Report on Co-operation in American Export Trades,* by the Federal Trade Commission. *Op. cit.,* footnote to Chap. III.

28. Also *Memorandum by the Mining and Metallurgical Section of the East Europe Institute, in conjunction with the University and the Academy of Technological Sciences of Breslau,* pp. 4–7, Iron Ores, pp. 11–17, Pig Iron and Steel changes due to Upper Silesian question. August, 1921.

Chapter V: The Textile Industries.

The Sub-Committee reports on these industries are among the most interesting and informative in the whole group. Organization before the war was of the “horizontal” type, although there were signs of “vertical” groupings. Automatic specialization and integration was the rule owing to the intense local character of these industries largely concentrated in Lancashire and in the East and West Ridings of Yorkshire.

(A) Cotton.

There are three reports on sewing cotton. The first was issued on February 3, 1920, covering the period from September, 1919; the second issued on May 26, 1920, covering the period from February 3, 1920; the third and last is dated February 8, 1921, covering the period February, 1920, to February, 1921, summarizing the previous periods, commenting on the changes in price during this time, and replying to criticisms on the first two reports.[107]

> “The raw cotton, after 'opening' and cleaning processes, is 'carded' and 'drawn' by various types of machinery to secure strands of suitable lengths and texture. These strands are then twisted and spun in the spinning process into yarns of varying fineness. These yarns then pass through a 'doubling' stage, in which process strands of yarn are twisted and doubled to make the strong threads used for domestic

> purposes. The 'spooling' process in which the thread is automatically wound by machinery on to wooden reels is the final stage of manufacture."

The Committee found that the manufacture of sewing cotton in this country is largely in the hands of Messrs. J. & P. Coats, Ltd., of Glasgow, and the following firms of which they own the capital and control the operations:—

Messrs. Jonas Brook & Bros., Ltd.
Messrs. Clark & Co., Ltd.
Messrs. I. P. Clarke & Co., Ltd.
Messrs. James Chadwick & Bros., Ltd.
Messrs. Kerr & Co., Ltd.
The Central Agency, Ltd. (selling agency .

In addition to the above, the firm owns and controls other companies abroad, and despite the fact that there are a number of manufacturing companies in this country outside their control, one witness estimated that 95 per cent of the sewing cotton used for domestic purposes, and a considerable percentage of that used in manufacturing, is made by Messrs. Coats and their subsidiary companies. Therefore they may be regarded, at least as far as sewing cotton for domestic purposes is concerned, as having a virtual monopoly. The object of the inquiry was to ascertain whether the price at which the firm sold six cord 400 yards "Blue Ticket" sewing cotton was reasonable or otherwise. Net profits before and after deductions for income tax and excess profits tax were ascertained, as well as the percentage of net profits to total invested capital at home and abroad. Net profits moved from £2,773,998 in 1913 (after deductions for income tax and excess profits duty) to £3,694,011 in 1919. In 1918–1919 the firm's output of sewing cotton was 20 per cent less by weight than in 1913–1914, yet the profits in the former year were immensely higher, having increased from £2,634,388 in 1914 to £4,895,149 (before deduction of income tax and excess profits duty) in 1919—an increase of 86 per cent.

The Company claimed that only 19.31 per cent of their sales was effected on the home market, but they withheld from the Committee's accountant any examination of the firm's sales as a whole on the ground that the disclosure of their foreign

business would be detrimental to the interests of the Company and because according to their contention, the Profiteering Act of 1919 did not apply to any article sold for export from the United Kingdom. The Committee contended that they were not inquiring into destination of sales but into production of the industry as a whole, and that, therefore, as the articles exported had been produced here, they were entitled to the information, which does not seem to have been forthcoming. Throughout the three reports there is much difficulty in ascertaining the exact relation between home and foreign trade costs, the basis of which was supplied by the firm. In the year ended June 30, 1914, foreign trade profit is given as 83.86 per cent of the whole while home trade accounts for 16.14 per cent; while in the year ended June 30, 1919, the proportion is respectively 80.69 per cent to 19.31, the profits corresponding to these two percentage proportions working out at £163,984 for 1914 and £577,291 for 1919. The conclusion is qualified by the statement of the directors that it is arrived at by taking the total net sales for the year and apportioning the profits for foreign and home trade on the percentages given above. This statement could not be verified by the Committee.

The price of the pre-war 400 yards reel was 3d, while in 1919 it was 7¼d.

> "Notwithstanding the increased cost of yarn, spinning and labour, Messrs. J. & P. Coats were able to make more profit per reel during 1919 than during 1914, and the salient facts emerge that whereas in 1914 the firm were making a net profit of 41.33 per cent, on manufacturing costs of each reel, in 1919 the net profit had increased to 49.5 per cent.: that whilst in 1914 the firm's average net profit per reel was .7078 pence, in 1919 it had increased to 1.8963 pence—a percentage increase in net profit per reel of 168 per cent."[108]

If the comparison be made after deduction of income tax and excess profits duty—obviously an improper method of comparison—Messrs. J. & P. Coats' net profit on manufacturing costs on September 5, 1919, may be taken at .995 pence per reel as compared with .662 pence per reel in 1914—an increase of 50 per cent on manufacturers' net profit after deduction of income tax and excess profits duty.

Owing to the exceptional advantages in production, enormous capital reserves enabling them to buy their raw materials at the proper moment, a highly specialized organization and the fact that they spin one third of their own yarns, the Committee reports that Messrs. J. & P. Coats have a virtual monopoly which excludes serious competition in this country, so that, even if any outside firms combined to produce a reel of the quality of Messrs. Coats' they could not do so at a price approaching that of Messrs. Coats. The agreement entered into with the Drapers' Chamber of Trade (representing the retail drapery interests of the United Kingdom) is such that no outside firm can undersell Messrs. Coats, for it provides that where any retailer receives supplies of sewing cotton from another manufacturer through the Central Agency he must make the same margin of profit on the non-Coats cotton as on Coats' manufacture under penalty of having his supplies stopped. Their control of the market is also so absolute that they can curtail supplies or cut down orders for supply with the result that no buying in anticipation of a rise is possible. The firm therefore is in a position

> "(1) to take the fullest advantage of any rise in the price of sewing cotton; and
> "(2) to retain practically all the export trade in sewing cotton in their own hands."[109]

The conclusions of the first report as regards prices were that, although prices had advanced mainly owing to increased costs of labour and materials, because of their hold on the market,

> "Messrs. Coats, with each necessary advance on the grounds of increased costs of labour, have been able to advance their selling prices with a view to making the same and even increased 'profit,' and that after making due allowances for increases in these costs of material and of manufacture, the firm's net profits per reel in 1919 were 168 per cent of those of 1914.
> "The increase from 41.33 per cent to 49.5 per cent on costs of

> Messrs. Coats' rate of net profit per reel undoubtedly resulted, in view of the greatly increased selling price and turnover of these goods, in a very considerable advance in the total amount of the Company's profit during the period under review."[110]

They found, therefore, the existence of a virtual monopoly of the trade by Messrs. Coats; that output and orders are strictly controlled; that no outside manufacturer can obtain a footing in the market without great difficulty; that, as 3.83 pence per reel was the total combined cost of manufacture and selling costs in September, 1919, the advancement in the price could hardly be justifiable, and that, in view of this the Company might have been expected not to increase their percentage of net profit per reel on home sales and that they should have sold at a price not exceeding 6d.

The Committee agreed that Coats' monopolistic position had not been greatly abused by the firm, as was shown by one of their competitors who stated that he could not produce the same type of reel under 1s. (in comparison with the reel sold at 7¼d. by Messrs. Coats). Large quantities of raw cotton had been purchased in advance by the combine, which placed it at an advantage. This, of course, is in the nature of advantages accruing to production on a large scale and it is quite possible for the economies and efficiencies of a combine to make it easier for it to gain a smaller profit per unit on a large turnover than a large profit per unit on a smaller one—with the final result of immensely increased net advantages and profits.

The first report was dated February 3. On February 14, 1920, the price of the 400-yard reel was increased from 7¼d. to 10d. The Sub-committee on sewing cotton was re-constituted on February 24, and immediately proceeded to deal with criticisms on the first report and to examine the justifiability or otherwise of the increase in price.

In regard to control over the market and the effective monopoly possessed by Messrs. J. & P. Coats, an official representative of the Drapers' Chamber of Trade estimated that 80 per cent of the domestic sewing cotton sold by them was Coats' cotton. It follows that despite the objection of Messrs, Coats that there are over sixty manufacturers of sewing-cotton in the country, their effect in the market in fixing prices or in control seems negligible. In fact, Coats' combine determines retail prices.

Messrs. Coats explained that rationing customers was not proof of monopoly, but

it cannot explain away their control of the whole export trade. The Drapers' Chamber of Trade agreement was not denied by Messrs. Coats, although they objected to the word “margin” in the statement that no one could continue to buy their cotton through the trade unless he made the same margin of profit on non-Coats cotton as on theirs. They stated that the correct word was “percentage.” The effect on buyers would be the same. Despite various other criticisms the first report was substantially correct on the question of costs as well as in its general conclusions. Objection was taken to the costs (manufacture and selling) of the reel being stated as 3.83d. while selling price was 7¼d. on the ground that income tax and excess profits duty should be deducted before arriving at net profits and that replacement value should have been the basis. Neither of these objections was valid or really relevant.

The Committee estimated that on February 14, 1920, —immediately before the increase in price—the gross profit per reel was 1.091d. and that the percentage of profit on total cost of reel was 23.5 per cent while percentage of profit of selling price was 19. The cost of yarn per reel in this statement is based on the assumption that all the yarn used by Messrs. Coats had to be purchased from outside spinners, which is not the case as they spin one third of their own yarns and therefore these costs should be slightly less. On the basis of actual costs, therefore, they were making a profit of about 1d. per reel while the price was 7¼d. Raw cotton was advancing in price in February, 1920, and had Messrs. Coats been manufacturing sewing cotton from the materials actually bought in February the costs of manufacture would have been 7.137d. for yarn, 1.089d. for manufacture, making a total of 8.235d. Selling expenses were .366 so that the total costs per reel would be 8.601d. This, with the usual percentage of profit to the retail draper, would mean 7¼d. per reel—a loss of 2¾d., i.e., a percentage loss on the total manufacture of 33.0 per cent. So as from February 14, 1920, the retail price was advanced to 10d.

Manufacturing costs in the above figures were the same as those used in the first report. Slight advances had been given in wages which would have increased to a certain extent the Company's manufacturing costs. After the advance to 10d. on the basis of the Company's actual costs and profits before deduction of income tax and excess profits duty, the highest possible profit which they could make on the 10d. reel was 3.204d. It could at least be assumed to be 3d. Cotton was advancing in price

and when the reel was to be manufactured from cotton actually bought in February, the Company would make a loss of .761d. per reel if the price was to remain at 10d.

The Committee's conclusion was:—

> "Although Messrs. J. & P. Coats' profit—based upon the Company's figures of actual costs of production at February 4, 1920—of 3.204d. per reel on the 10d. reel of the Company's six-card 400-yard Blue Ticket sewing cotton, may appear unreasonable, yet we recognize that they have, up to the present, had to face a continuously rising market both for cotton and yarn and accordingly had to average their costs.
>
> "If, therefore, Messrs. Coats have raised the retail selling price to 10d. with the intention of not further increasing it until the average cost of their entire holding of yarn has very considerably risen, we are of opinion that the present retail price of 10d. per reel is not unreasonable."

Reading between the lines of this report, and after careful examination, one must conclude that the rise to 10d. was made for fear that the same high rate of profit as was made on the 7¼d. reel would not be continued after the rise in price on February, 1920, of cotton and yarn. Yet the 1d. net profit per reel sold at 7¼d. was increased to 3d. when sold at 10d.

The third report covered the period from Feb., 1920, to February, 1921, and was issued on February 13, 1921. After the price of the reel was raised to 10d on February 14. 1921, the price of yarn and raw material fell rapidly, so that by October it was felt that the Standing Committee on Trusts should ascertain why the 10d. price was still charged when cotton and yarn were lower than when the price of the reel was 7¼d. and had been lower from April to October. In February, because of a prospective rise in cost of cotton, the reel went up in price; the high costs lasted two months while the high price of the reel lasted eight months—six months after the break in prices. In reply to a request for a statement Messrs. Coats informed the Standing Committee that they could not give any information as to their prospective

policy in the matter of reduction of prices. They supplied a statement of their costs of production for September, 1920, upon which the Sub-committee was constituted for the third time to investigate and report.

> "It appears that on the basis of the actual costs Messrs. Coats were making in August/September, 1920, a profit of .561d. per reel only as compared with .7078d. before the war and their percentage of profit on manufacturing costs had decreased from 41.33 per cent before the war to 7.71 per cent in August/ September, 1920. On the basis of replacement value the net profit for the reel would be 1.151d. (as compared with .7078d. on costs before the war), and their percentage rate of profit could be 17.21."

From the above statement it seems quite clear, bearing in mind the previous reports, that the Company calculated their profit per reel on replacement costs when the latter were higher than their actual costs (February 14, 1920) and on their actual costs when the latter were higher than replacement costs as was the case in September, 1920. In any case, the Company in fixing its price list takes both into account naturally, but when making an investigation into profits it is obvious that one or other method should be used throughout in order to get a fair comparison, or the two together on some fixed principles for a certain period of time.

Thus the report points out that if actual costs [Before deduction of income tax.] were the basis the pre-war profit of 7078d. per reel increased to 1.893d. in September, 1919; to 3.204d. in February, 1920; decreased to .561d. only in August, 1920. This means that the net profit in September, 1919, was generous, in February, 1920, unreasonable, and in October, 1920, justifiable. If the basis be replacement value throughout, a net profit of .7078d. (on costs) in 1914 becomes .7761d. in October, 1919; a loss of .761d. in February, 1920, and a profit of 1.151d. in October, 1920, i.e., a normal profit in October, 1919, a loss in February, 1920, and double the pre-war profit in August-September, 1920. The Company pointed out that the mean of the two periods February and November (actual costs basis) for 1920 would be the fairer estimate, and this would be 3.204d. and .561, i.e., 1.882d. profit per reel. If

excess profits duty be deducted from this we have a profit of 1.082d. per reel.

The above figures can be more easily comprehended when they are opposed to the aggregate profits for the respective years 1913–1919 of the combine. Readers can then judge for themselves as between the above basis and the profit per reel. For the year 1920 *after deduction of excess profits duty and income tax,* Messrs. Coats declared a profit of £4,164,894 as compared with £3,694,011 on 1919 and £2,508,585 in 1913–1914. The firm points out that most of this profit is due to the export trade, but as the goods were manufactured here the Sub-committee claimed that they ought to be allowed to see the figures for the foreign trade. The Company refused. No clear separation could therefore be made of the profits on net sales of home manufactured sewing cotton for the home market and the market abroad. So that the Committee could not state how much of the above £4,164,894 could be strictly attributed to goods both manufactured and consumed in the United Kingdom, as it represents profits of sewing cotton manufactured, sold for use in this country, exported, and the profits of their factories in America, on the Continent and in other parts of the world.

On January 17, 1921, Messrs Coats reduced the price of their six-cord 400-yard reel from 10d. to 8d.—nine months after the break in prices and eleven months after the rise from 7¼d. to 10d. They carry at least six months stocks of raw cotton. If there had been competition at all these people would have been able to buy stocks in the cheaper market and reduced their price earlier. As things are, therefore, knowing that the increase in price in February, 1920, was brought about by the rise in price of the prospective replacements of stocks, we cannot but conclude that the 3d. profit per reel of February, 1920, should have ceased and dropped back to 1d. after April 1920 in view of the fact that the falling market was likely to continue. The fact that this was not done on a falling market until January, 1921, illustrates the monopoly Messrs Coats had both in the British and world markets.

The agreement with the Drapers' Chamber of Trade commented on in the first and second reports was cancelled by Messrs Coats, presumably because the second Sub-committee reported that “inasmuch as this agreement enabled Messrs. Coats to fix the percentage of profit which retailers must make on sewing cotton manufactured by their competitors to that extent it was a restraint of trade.” So that as far as

Messrs. Coats are concerned there will be no fixing of retail selling prices—though fixed retail prices are strongly recommended by the Drapers' Chamber of Trade—and furthermore Messrs. Coats will not continue to fix the percentage of profits on sewing cotton by competing manufacturers. In effect this will still be practically possible so long as Messrs. Coats continue to have a virtual monopoly, but they will not be able to prevent others selling below them if this were at all possible by an outside firm.

The conclusions of the Committee can be briefly summed up as follows:—

That the 10d. reel showed a profit which was justifiable if based on costs, but if based on replacement value would be double the pre-war profit after deduction of Excess Profits Duty;

That the net profit of £4,164,984 after deduction of income tax and excess profits duty was undoubtedly large, but whether unreasonable or not could not be judged owing to the inability of the Committee to get the facts as regards the home and foreign trade;

That lack of information prevented their determining whether the present price of 8d. reflects adequately the fall in the price of raw material;

That they recommend a further reduction in the price of the reel unless prices of raw cotton advance sharply;

That they are satisfied that Messrs. Coats controlled the retail price through their agreement with the Drapers' Chamber of Trade now cancelled;

That as the excess profits tax is to be abandoned, an early reduction in the price of the reel of sewing cotton should be practicable;

That “the public interest requires that Parliament should arm the Board of Trade with power to ensure that trade agreements of this character (the former agreement between Messrs. Coats and the Drapers' Chamber of Trade) shall not be permitted unless accompanied by adequate safeguards.”[111]

In an addendum one of the signatories of the report complains of the refusal of the Company to allow access to the Committee's accountant “to examine and report on his own findings, but we have had to accept supplied data unproved by our own accountant. Such supplied data did not give the volume of trade on which the increasing profits were being made.”

Such a statement proves the imperative necessity for further legislation to give the necessary powers to the Board of Trade, but the Government's reply was to wind up all the activities of the Standing Committee on Trusts on May 21, 1921.

Messrs. Coats commonly divide 30 per cent profit on their ordinary shares, while they pay 20 per cent on their preferred stock, which represents nearly half of their capital.[112]

Lancashire's industries were organized on such lines that they were automatically associated, especially in the textile trades. It is true that small individual firms specialized on a narrow range of products, yet marketing, bleaching and dyeing were so well organized in large horizontal combinations that this district localization meant great efficiency.[113] Small men before the war manufactured specialities “by renting buildings and 'turning,' and they produced successfully. Sometimes several firms may be found in the same building.” The war has brought a profound change in the size of units of manufacture. The big financial promoter has come into the cotton industry, and whereas, before the war, “The Fine Cotton Spinners,” “Calico Printers and Bradford Dyers” represented the strong combinations in some special processes, and firms like Messrs J. & P. Coats in sewing cotton, now the whole area is becoming rapidly linked up into powerful consolidations from raw cotton supply to the finished product. This is a new phase as regards the cotton industry.

Since the Armistice the capitalization of most of the mills has proceeded apace, changing hands or being written up at two to three times their original value, according as they were sold to new groups or recapitalized. The effect of this on labour was seen in the slump of wages that followed.

> “The employers constantly assured us that without such a sweeping reduction they would not be able to work their mills on a profitable basis, and of course gave us as the one reason the high rates of wages. They had evidently overlooked what appeared to us the most important factor in the cost of production, the capitalization of most of the mills. The fact remains that if the value of any concern is increased from two to three times its original value it must require two to three times the amount of profit to pay similar dividends on

the increased capital."[114]

(B) Woollen and Worsted Industry.

In 1913 the export trade amounted to £38,000,000, about half the estimated gross output of the industry.[115] The world's production in 1915 was about 2,800 million pounds, of which 1,074 were merino, 1,022 crossbred and 700 low wool. Sixty-three per cent of the merino clip came from the British Empire, 10 per cent was produced in France, Russia and Italy, while 16 per cent was produced in North America. Of the crossbred wool the British Empire produced only 40 per cent, South America (mainly in the Argentine) 32 per cent, and North America 12 per cent. Russia accounted for 40 per cent, and the British Empire 9 per cent of low wool. America and Europe consume their own home supplies and export little; the exporting markets are therefore in the British Empire and the Argentine. Of wool for clothing purposes 68 per cent in 1916–17 came from the British Empire and 32 per cent from America, while in the fine-quality merino wools the proportions were 85 per cent and 15 per cent respectively. During 1913, 23 per cent of the merino wool was taken by the United Kingdom and 33 per cent by Germany and Austria, while of the crossbred wool the United Kingdom took 65 per cent from the British Empire and 12 per cent went to Germany and Austria. Germany and Austria took fully a third of the exports from South America, while only 17 per cent went to the United Kingdom. After the war the Textiles Committee reported that there would be a serious shortage of fine wools for clothing purposes in view of the increased demands of the United States, Germany and Austria, and they recommended that strong action should be taken to conserve the wool supplies within the Empire for allied needs.[116]

In 1916 the Government purchased all the British wool clip at a schedule of prices about 35 per cent above those of July, 1914. Later the entire wool clips of Australia and New Zealand were secured and contracts closed covering the latter part of 1916–17 (all those clips not previously sold to private dealers). The prices paid for these was fixed at a base of 55 per cent over the market rates of 1914, while in the case of Australia this basis (or minimum rate) was fixed at 15½d. over the whole clip, the Australian Government to arrange differentiated prices to their farmers according to quality. Wool sold by the British Government for civilian purposes

from the Dominions was to be sold at market prices and one half of the resultant profits over the base rate (15½d.) was to be returned to the Dominion Governments for distribution to their farmers.

For 1917 and 1918 the British clip was requisitioned at 50–60 per cent above 1914 prices respectively and the arrangements were made with the Dominion Governments to continue the above-mentioned agreement to include all wool shorn up to June, 1920. Similar arrangements were made with regard to wool with the Government of India on an agreed schedule of prices. Difficulties intervened in the arrangements with regard to the South American wool clip, but one-third of their 1917–1918 clip was purchased at 55 per cent above the 1914 prices, with similar arrangements in regard to profit sharing as had been made with Australia and New Zealand.

After 1917 private transactions in wool in this country were prohibited except at fixed prices and the War Office gave notice that it would take over at Government prices all wool brought into this country privately. The demand for wool for military purposes was so great that stocks were distributed under a severe rationing system, the first call being for Government manufacturing purposes and the surplus was rationed out by the Trade Rationing Committees under Government regulations and superintendence. Prices prevailing here were even then lower than world prices and much lower than those ruling in the United States. Scarcity of tonnage and control of shipping prevented private supplies. This period of severe control lasted until March 31, 1919, when rationing and restrictive regulations were abolished.

The Government abandoned the idea of purchasing the British wool clip for 1919 owing to the high prices demanded by farmers (80–100 per cent above 1914 prices), with the result that wool was sold in the usual manner at the country wool fairs by auctions which were outside the scope of the Profiteering Act of 1919. At these country auctions the prices realized showed an advance of from 100–200 per cent over pre-war values.

Very little South American wool reached this country during the war, while prices both of this and of East Indian wools appreciated considerably when put on the market. Up to June, 1920, all purchases of Australian wool were on Government account and remarkable increases in prices took place as soon as the auction sales

were held in April, 1919. These increases were greater in regard to the liner qualities. The average prices of British wool moved from 16½d. and 21¾d. per lb. in 1914 to between 37d. and 85d. per lb. in November-December, 1919, when wool was sold in the open auction marts. Prices of the Australian wools show a still greater difference. Qualities 70's to 40's ranged in June, 1914, from 30½d.–14½d. per lb. Under the fixed issue prices of Government control from April 1 to November 30, 1919, they ranged for the same qualities from 63d. and 67½d. to 28½d. and 30½d. per lb.; while the auction prices in London in December, 1919, ranged from 150½d. to 28½d. per lb. The Wool Council was a representative trade advisory body set up by the Ministry of Munitions which had absorbed the Wool Department of the War Office. A sharp division of opinion took place in regard to the advisability of reopening the auction sales as opposed to a "thoroughly systematized Government control through all the stages to the production and distribution of clothing." What an opportunity for public control in economic production and distribution was missed at this point! The latter suggestion was defeated and the wool sales were opened in April, 1919, but it was hoped to stabilize prices by allowing the Ministry of Munitions to distribute certain quantities of wool at fixed prices. These distributions were a gift to the traders as anyone with a rudimentary acquaintance with demand and supply could have foreseen. Over 1,000,000 bales of wool were sold at auction on Government account, while 450,000 bales of the best quality were distributed at fixed prices, which distribution, the Sub-Committee points out, had not the slightest effect in keeping down prices of clothing to the public, the issue prices of merino 70's being 33d., while auction price in 1919 was 60d. When this was noticed the Wool Council proposed that a standard clothing scheme should come into operation in the public interest. Here, again, there was a conflict of opinion as between a compulsory and voluntary scheme. As a result nothing came of it. It was obviously absurd to expect traders voluntarily to put into operation a scheme which involved selling cloth or clothes below the maximum prices which they could get by not taking part in the scheme. The scheme proposed—

> "That 25 million yards of cloth for men's suits and a similar quantity for women and children's clothing should be manufactured from wool

> issued at controlled prices and that the tops, yarns, cloth and clothing should be costed at every stage so that at no point in production or distribution would more than a reasonable profit be yielded."[117]

The Ministry of Munitions pointed out that the matter should be referred to the Board of Trade as they felt they were not competent to put the scheme into operation. The Board of Trade replied that it preferred to rely on the Profiteering Act to keep down prices of clothing despite the fact that this Act could have no effect on wool prices because it excluded from its scope materials sold by auction and therefore wool. The general consumer, therefore, in this country was left totally unprotected in 1919 and 1920 against the rapid increase in the price of wool and clothing of all kinds.

The Dominion Governments did not in any way influence the British Government to reopen the wool auctions. We presume, therefore, that they were satisfied with the profit they were making at the sales of wool at fixed prices. The Sub-Committee on Wool pointed out that the whole of the scheme for standard clothing could have been met by the supply of 300,000 bales of wool and this was more than covered by the 450,000 bales of the best quality distributed to the trade at fixed prices and afterwards worked up and sold to the public at top market prices. The profits made by the British Government were not disclosed to the Committee, but the published figures of prices realized in the auction sales show "they have been on a colossal scale."[118]

Demand was greatly in excess of supply, transport facilities were not forthcoming, so that the concentration of wool sales in London focussed world competition and raised prices. Machinery could not cope with the unprecedented demand in 1919–20, so producers who sell for months ahead quoted high prices to cover themselves on a rising market and if possible to deter purchases for future delivery. All to no purpose. The high prices had to be paid because the wool and clothing was wanted badly after the war. People during the war did not replace their clothes or buy new underclothing. It was difficult to get them, in the first place, and unpatriotic to spend on clothes while wool was required for military purposes. After the Armistice it was obvious that renewals would have to take place, so that the general public were in the

hands of traders and manufacturers. The Government were in a position to see this and to protect the public from what happened. When prices were beginning to ease in the London auction marts they were thrown open to foreign competition with the usual result of a further jump in prices. The difference between the purchase price and the auction price accrued to the British Government and the Australian Government and farmers. The auction prices were determined by world market conditions. Had the Government not been the owners of the wool the prices for Australian wool would merely have increased the profits of the farmers, as in the case of the British wool clip of 1919 the increases in prices had gone to the farmers and merchants.

The Profiteering Act did not affect the situation at all, while the failure to put the standard clothing scheme into operation resulted in the wool distributed to the trade (450,000 bales) being sold to some branch of the trade at the difference between these fixed prices and the prices ruling at auction, the bulk of this difference obviously remaining in the hands of one or other branch of the trade. Prices of clothing, instead of being kept down, soared to unprecedented levels.

The report on wool was issued in January, 1920. Subsequent reports were to deal with tops and worsted yarns. The next issued is dated February 17, 1921, on "The Top-making Trade."[1] The Sub-Committee responsible for this report failed to agree, with the deplorable result that after meeting on March 19, 1920, they were not called together again until November 3, 1920. It is an interesting commentary on this that while wholesale prices began to break in May, 1920, the retail Board of Trade index figure continued to rise until November, 1920. The meaning is clear. Stocks bought at top prices must be cleared at all costs and the burden placed on the consumer; while when prices of raw materials suddenly jump, stocks bought at low prices are sold immediately at the advanced prices. Again the consumer pays.

The worsted industry is highly specialized, the different processes being undertaken by separate and distinct firms, while the woollen industry cards, spins and manufactures under one roof. "Top-making" is a process in the conversion of wool into worsted cloth. It means the special business of purchasing wool in the raw state, sorting it and blending the qualities into one whole, scouring, combing and selling the resultant "tops" either to the worsted spinner or merchant to be spun or

exported. There are all sorts of variation in processes. Thus the top-maker need not own the machinery for converting the blended wool into the top. He can get this done on commission. The top-maker is a merchant, not a manufacturer or fabricator. He is a specialist and his is a highly speculative trade. He has skill and judgment in purchasing, sorting and blending for the different grades of tops.

> "He estimates the yield of clean wool from the greasy wool, finances the stages of the industry up to this point when the wool is taken over by the worsted yarn spinner or merchant and finds the market for the wool when it has been converted into tops."[119]

The difficulties which arose with reference to the purpose and method of investigation centred round the question as to whether actual volume of turnover and actual figures of total profits and rates of profit on capital should be obtained. The employers' representatives on the Sub-Committee refused to give the figures of the total profits because they contended (a) that the figures were not strictly relevant to the purposes of the inquiry, (b) that they could not be legally demanded. Finally a questionnaire was issued to the top-making trade, and the British Wool Federation on their behalf refused information showing total output of the firms concerned and the actual profits on capital and turnover, because of the highly speculative character of the trades. The small number of firms selected for investigation could not disclose the position of the industry as a whole, while they also contended that under the Profiteering Act only data showing rate of profits on turnover and on capital could be obtained. They also contended "that the publication of information as to profits and capital . . . would lead to disclosures of information which would be prejudicial to the legitimate interests of the firms selected for investigation as well as of the trade generally."[120]

It is clear that the rate of profits on turnover and capital is very vague information unless accompanied by particulars as to actual volume of turnover and of profits. We always thought that the Profiteering Acts were not concerned with the interests of any trade but of the public generally. Therefore, we can only conclude that there was something to conceal because the names of the firms selected for investigation need

not have been disclosed to the public even if the information asked for had been obtained.

The British Wool Federation secured their point; five representative firms were selected for investigation, but only on the agreed questions of percentage rate of profit on capital and turnover. Aggregate figures of total profits and total turnover in lbs. of tops over the period covered by the investigation were refused, so the Sub-Committee had to be content with what they could get. This shows again the imperative need of legislation to give powers adequate to the task to the Board of Trade or any other investigating committee.

In the first place three typical grades of wool were considered as representative: 40s. for low-grade wool; 56s. good-quality crossbred and 70s. representative of fine merinos. These were costed in pence per lb. for July, 1914, April, 1919, and December, 1919, clear scoured delivered at London. The low quality moved from 14½d. in July, 1914, to 33½d. in April, 1919, and reached 29½d. in December, 1919. The good-quality crossbred figures were respectively 24d., 58½d. and 86½d., while fine merinos were 30½d., 80½d. and 150½d. for the same periods of 1914 and 1919.

Noils are a by-product of tops. "A pound of wool gives a relatively large proportion of tops and a small proportion of noils."[121] From the figures given of the price of tops and noils in July, 1914, and subsequent dates, we cannot give much indication of the profit on a pound of wool converted into tops and noils unless we know actual turnover and actual profits. The figures given enable us to show that 1 lb. of tops of 40s. quality had increased from 15½d. per lb. in July, 1914, to 35d. in April, 1919, and to 38d. in December, 1919. The 56s. quality moved from 24½d. to 62d. and 99d., while the fine qualities moved from 33d. to 85d. and 162d. Cost of tops includes value of noils produced by the wool to make 1 lb. of tops, so that in examining the figures given the cost of tops shown is in nearly every case greater than the market price of the same top.

Combing costs and profits were given as pre-war .289d. per lb. of tops (net profits) as compared with .4780d. in year ended December 31, 1919. The combing tariffs had increased on an average by about three times. "The actual output of the tops counted was smaller than before the war, but the profit made on merino combing was greater."[122]

The net profit per lb. of tops in pence according to the data available for the five firms is for the year 1912 on an average per lb. .427d., figures ranging from .129d. to .568d. For the year ending December, 1919, before deduction of excess profits duty, these had increased to an average of 9.37d. per lb. and after excess profits duty deduction to 6.35d. The highest profits per lb. before deduction of excess profits duty were 14.045d.; the lowest 4.439d.: after deduction of excess profits duty the highest were 9.919*d.* and the lowest 2.735d. This is an increase in average profits per lb. for five firms of twenty-two times before excess profits duty deduction and fifteen times after, as compared with pre-war net profits per lb. The highest increase was fifty-five times the pre-war profit and the lowest eight times pre-war before excess profits duty deduction and thirty-seven and five times respectively after excess profits duty had been deducted.

During the nine months of 1919 ending December the price of crossbred wool rose three and a half times, whilst best quality was five times, the pre-war price. A rapid increase in the price of wool means large profits for the top-makers; a rapid decrease, a corresponding fall.[123] During the war more business was done in the highest-grade merinos and this meant a corresponding larger profit.

If we take the percentage of net profits on total turnover, the average rate for the five firms was 2.19 for 1912 and 14.76 for 1919 before deduction of excess profits duty and 9.696 after deduction. The lowest profit in 1912 was 0.69 per cent on the turnover, the highest 3.24, while in 1919 the lowest rate was 10.29 before E. P. Duty deduction and 6.99 after. The highest rate was 17.79 before and 11.60 after deduction of E. P. Duty respectively.

The percentage of net profit to total capital employed was 15.72 in 1912 and 59.44 in 1919 before deduction of E. P. Duty and 39.05 after, on an average. The lowest percentage of profit on capital was 6.30 in 1912 and the highest was 67.62; in 1919 the lowest percentage of profit on capital was 42.90 per cent before deduction of E. P. Duty and 26.47 after. The highest percentage before deduction of E. P. Duty was 131.05 and 88.83 after deduction.

Again it is hardly necessary to point out that total turnover in lbs. weight during the two periods should be secured to interpret these figures properly.

Prices of wool and tops have changed considerably since December, 1919. From

December, 1919, to May, 1920, there was a further increase, prices of 70s. quality merino in that month being 130 per cent above the price of May, 1919.

In the six months subsequent to May, prices fell 68 per cent below the level of March, 1919. Losses would undoubtedly follow on this drop to some top-makers. The Committee secured no evidence to determine whether these losses offset the gains received previously.

The Report on Worsted Yarns issued on January 22,1920,[124] showed that during the war the bulk of the spinning machinery was used for the production of worsted yarns for the requirements of military service. Up to the reopening of the auction sales of wool referred to above, the raw material was owned by the Government and supplied to the spinners at fixed prices at a fair and reasonable profit for spinning; that is, they were remunerated for such yarns at a price based on the cost of production plus a reasonable margin of profit. This rate was fixed by the War Office at from 1d. to 3d. per lb. depending on the time the machinery was worked.[125] After investigation the Committee regarded this rate as adequate. After the abandonment of control they point out that, if the War Office Schedule of Prices as operating during the period of control were applied to the existing prices in 1919 (revised so as to include all increases in the price of raw material) as quoted in the trade paper, the resultant figures show a profit of from 13d. to 43d. per lb. This meant that for yarns quoted for November-December delivery 10d. and 40d. above a "fair" profit was being received by the spinners. After hearing evidence by the Worsted Spinners' Association these market figures of the trade paper were regarded as misleading, and that figures prepared by the Worsted Spinners' Association themselves applying the War Office scale (brought up to date by inclusion of all known charges) showed that the rate of profit ranged from 8½d. to 34½d. per lb. These figures "are based on the assumption, with which the spinners agreed, that when selling yarns the spinner has to cover himself forthwith for raw materials; and that when raw materials have been bought ahead a correspondingly increased profit accrues to the spinner."[126]

The Committee conclude that "the Profiteering Act had no apparent effect on the prices of worsted yarns or the profits accruing therefrom." In a note added to the report one of the signatories (Mr. E. F. Wise, C.B.) points out that in the absence of control and under the conditions of the industry prevailing—greatly increased

demand on a limited supply—"spinners were practically unable to avoid making the very high profits which, on any sets of figures before the Committee, they certainly have made."

If the spinners had not accepted the high rates, he pointed out that the manufacturer or yarn merchant would have made them and urged that it must be remembered that the Wool Council wanted a compulsory or voluntary scheme of standard clothing to be adopted to protect the home consumer. We have pointed out in previous pages how this scheme fell through.

The conclusions of the Sub-Committee inquiring into The Prices, Costs and Profits of the Manufacture of Yorkshire Tweed Cloths were issued in July, 1920, and are very interesting as an explanation of the high prices of cloth prevailing in June, 1919, and the subsequent rise in prices after this date.[127]

Yorkshire tweed cloths of average quality were in July, 1919, three times pre-war cost and advanced to over four times before the end of the year. Wages, costs and expenses of production increased from four to six times, while after April, 1919, raw material prices rose to the world market prices presumably after the reopening of the wool sales by auction. Gross profits on sales were 19.7 per cent as compared with a pre-war rate of 10.1 per cent, while after deduction of excess profits duty the profit was 7.9 per cent. It was pointed out that excess profits duty was an outgoing necessarily charged upon the business before distributable profits could be arrived at. Owing to the high cost of machinery, plant and building renewals the Committee estimated that 3.4 per cent on sales should be deducted from the 7.9 per cent referred to above, which reduces the net retainable profit on sales to 4.5 per cent. Owing to the fact that the woollen trade consists very largely of private concerns, super tax as well as income tax are necessarily a charge on the business. This made the paper profits of £1,472,000 of the eight firms examined (19.7 per cent on sales) shrink to £334,000 or 4.5 per cent on sales compared with a pre-war profit of £185,000 or 10.1 per cent.—taxation forming a definite factor in high prices. This assumes that all excess profit duty must be got out of the public and not out of business profits. The cost of raw material represents 50–60 per cent of the total production of cloth and as the trade carries from two to four months unsold raw material stock the trade would incur heavy losses if a slump took place as no deduction for this risk had been made

from the above-mentioned figures.

Gross profits per yard to the manufacturers of fourteen cloths in June, 1919, were 1s. 2½d. of which 9¾d. was the average paid in taxation on the business, leaving 4½d. per yard to the manufacturer. Deduct renewals at 1¼d. per yard and the net profit was 3½d. as compared with 2¼d. prewar. Suits manufactured from the above could be sold ready made from £4 4s.–£6 6s. Allowing 3½ yards per suit, gross profits work out at 4s. 2½d. gross, of which 2s. 10d. went in taxation and 4¾d. for additional cost of machine renewals, leaving 1s. per suit to the manufacturer. We fail to see why the Committee made such play with the taxation costs as if the whole of the charge has to come out of the consumer in every case and none out of the intra-marginal producer. Since June, 1919, owing to rises in costs, cloths then costing 7*s.* to 9s. to produce cost in July, 1920, 9*s.* 6d.–12s. 6d. per yard.

The capital required for financing the business had risen to four or five times the pre-war amount so that bank overdrafts were heavier than before in the history of the trade. The consequence is that the amount of capital in the industry was reported to be insufficient for the purpose after taxation claims had been met. Distinction between goods for export and goods for the home market could not be made, but it was estimated that approximately one third of the output, or rather more than one third of the profit made was in respect of the export trade. The Committee concluded with a prophecy that for a considerable time the cost of woollen cloth manufactured was likely to rise rather than fall.

Unlike the worsted industry, where the various processes are standardized and carried out by separate firms,

> "the manufacturer in the woollen industry in the majority of cases buys his raw material and produces everything up to the finished cloth entirely under one roof. Consequently the risk, which in the worsted industry is spread over a number of firms at different stages and at different times, is concentrated in the case of the woollen cloth upon the manufacturer alone, and in this case the manufacturer includes the woollen spinner."[128]

It is not surprising, therefore, that, though the industry was competitive, the large profits made by the wool buying and selling has resulted in a number of private companies merging into joint stock companies after the armistice in order to have a better organization of the trade. Huddersfield and Dewsbury districts are the two centres of the Yorkshire tweed cloth manufacture, while Bradford specializes in the more expensive worsted qualities.[129]

In regard to Standard Clothing, a sub-committee was constituted in October, 1920, to examine a voluntary scheme put forward by the Wool, Textile and Clothing Trade of Great Britain. Witnesses representing the Wholesale Clothing Manufacturers' Federation of Great Britain and National Association of Outfitters were examined. The scheme was approved and a report thereon presented on April 5, 1921.[130] Unfortunately prices had fallen before the latter date owing to the falling off of trade and to large stocks having been thrown on the market and sold frequently at prices less than actual cost of production. Therefore, as suits were being sold below the prices approved by the Sub-committee, not much interest attaches to the report, except that "such tested clothing will provide a standard of comparison both as regards prices and quality and thus assist the purchasing public in arriving at what is a proper standard of value."

If such a scheme had been put into operation compul-sorily earlier as outlined in Cmd. 535, page 5 (before April, 1919) when the wool sales were thrown open, a great service would have been rendered to the public. Coming as it did too late, it has had little effect as conditions have wholly changed.

An investigation into Uniform Clothing was commenced by a Sub-Committee on Trusts on the 16th December, 1919, and they reported on 19th April, 1921.[131] Their main conclusions can be usefully summarized as showing the existence of a "Uniform Cloth and Serge Manufacturers' Group" comprised of practically all the firms who have specialized in the manufacture of uniform fabrics. The majority of the firms of uniform clothiers are organized in this group, who are specialists in the production of these materials though they produce other cloths as well. Other firms not in the group cannot effectively compete because the group controls the supply of uniform cloths and serges to purchasers such as public bodies, railway companies, etc. Similarly, while the firms in the Clothing Group do not confine themselves to

the manufacture of these fabrics, they control the greater part of the "making up" trade in uniforms. This gives the group a considerable advantage. An agreement exists between the two groups which "is likely to eliminate competition and lead to the establishment of monopolies in the manufacture of uniform cloth and the making up of uniforms respectively."[132] While not denying the increased efficiency of both the cloth and clothing manufacturing firms since the groupings, the Committee reports that the Uniform Cloth Manufacturers' Group raised prices between 1914 and 1919 "to an extent which in some cases appears to us unjustifiable." The Committee is further of the opinion that the two groups could raise prices beyond a competitive level if they so chose, and although they do not suggest that this will be done, they advocate that some method of protection should be devised in the interests of the public demand for this type of clothing, Government departments, local authorities and other public utility services being the greatest consumers. These should come together as consumers and a Standing Joint Committee set up to act in an advisory capacity towards purchasers regard-ing placing of orders with manufacturers for cloth and clothing so as to ensure regularity of employment and economy in manufacture. In this connection we would point out that the government could regularize demand to a great extent, especially so as to avoid overlapping and pressure at certain times. Standardization of cloths and a reduction of the number of types were also advocated. Again, the Committee recommends (as also the other Committees) the setting up of a Standing Joint Committee in connection with the Board of Trade to get information in regard to production, costs of manufacture, etc., with power to examine books so as to negotiate on the basis of accurate costing with manufacturers and clothiers. This would simplify matters, and ensure regularity of employment for plant and labour. Efficiency resulting from combination would be maintained if these proposals were adopted "while at the same time safeguarding the interests of the public and quasi-public authorities who are purchasers of uniform clothing and benefiting the workers employed in the trades concerned."[133]

Two members of the Sub-committee differed from their colleagues in regard to the setting up of the Standing Joint Committee because according to them "the representatives of the Admiralty, War Office and the Post Office did not agree with the suggestion." Despite this, we feel that the Committee's proposal is a practicable

one and should be put into operation with the smallest delay. If successful, it would provide a basis for the organization of other standard clothing schemes for the provision to the public of good cloths and so of suits at reasonable prices with definitely ascertained margins of profit for efficient producers.

(C) Dyeing, Finishing, Bleaching and Printing,

Negotiations with the allied Association of Bleachers, Dyers, Printers and Finishers were carried on for months by a Sub-committee of the Standing Committee on Trusts to ascertain the existence, if any, of Trusts in these trades and the effect of such organization on prices and costs.

Despite the fact that a careful *questionnaire* was sent to such well known combines and associations as the Bradford Dyers' Association, the Calico Printers' Association, the Bleachers' Association, the British Cotton and Wool Dyers' Association and the United Turkey Red Company, very little information was obtained.

On April 28, 1920, a deputation from the above-mentioned Allied Association was received by the Sub-committee, but with little result as it was found by the Sub-committee (April, 1921) that "it was neither expedient nor practicable in the circumstances to apply the compulsory powers conferred by the Profiteering Acts" to extract the information which the Association refused to give voluntarily. All that was secured was the percentage by which prices, costs and profits (on turnover) of 1919 differed from those of 1913. No conclusion could be based on these as to the effect on supplies, prices, costs and profits of the trade combinations known to exist. For instance, the comparative turnover of the years in question is not given. All that can be stated is that the four sections of the industry advanced prices or charges 207 per cent and that profits in 1919 represented a somewhat less percentage of total turnover of that year than the profits of 1913 on the turnover of 1913: this explains nothing. The Committee concludes:—

> "We can accordingly do no more than record our regret that the dyeing, finishing, bleaching and printing trades of this country, acting through the medium of their Allied Association, should have considered it undesirable to furnish us with the information necessary

to the execution of the duties with which we are charged."[134]

It is perhaps a striking commentary on the above to note that the Standing Committee on Trusts was known to be terminating in May, 1921, so no great effort was made by the Combines to furnish the information. All this points to the imperative need of further powers being obtained forthwith by the Board of Trade to secure the information in the interests of the public.

Sources.

1. *Findings by a Committee appointed to investigate the cost of Production and Distribution of Wool, Tops and Yarns at all stages and the Profits rising therefrom.* Cmd. 535. 1920.

2. *Findings by a Committee appointed to inquire into Worsted Yarns.* Cmd. 550. 1920.

3. *Findings and Decisions of a Committee to inquire into the alleged Existence of a Combine among the Manufacturers of Sewing Cotton.* Cmd. 563 and Cmd. 930. 1920. (Two Reports.)

4. *Report upon Manufacture of Yorkshire Tweed Cloths.* Cmd. 858. 1920.

5. *Report on the Top-Making Trade.* Cmd. 1192.

6. *Findings and Decisions of further inquiry into alleged existence of a Combine among Manufacturers of Sewing Cotton* (Third Report). Cmd. 1173. 1921.

7. *Report on a Voluntary Scheme for Standard Clothing.* Cmd. 1314. 1921.

8. *Report on Uniform Clothing.* Cmd. 1339. 1921.

9. *Report on Dyeing, Finishing, Bleaching and Printing.* Cmd. 1371. 1921.

10. *Report on Empire Cotton-growing Committee.* Cmd. 523. 1919.

11. Macrosty, *op. cit.* 1907. Pp. 117–179.

12. Carter, *op. cit.* 1913. Pp. 194–248.

13. L. C. Chiozza Money, *op. cit., The Triumph of Nationalization.*

14. J. L. Garvin, *op. cit., Economic Foundations of Peace.*

15. Chapman, *The Cotton Industry*, p. 168.

16. Dorothy Zimmern, "The Wool Trade in War Time," *Economic Journal*, Vol. XXX, p. 7.

17. G. R. Carter, “Clothing the Allies' Armies,” *Economic Journal,* Vol. XXV, p. 97.

18. S. J. Chapman & Kemp, “The War and the Cotton Market,” *Economic Journal,* Vol. XXV, p. 109.

19. E. Lipson, *History of the English Woollen and Worsted Industries.*

20. *Report on Co-operation in the American Export Trade, op. cit.* Part I, pp. 247–254 for English and pp. 255–259 for German conditions.

Chapter VI. The Chemical Industries.

(A) Oils, Fats, Margarine, Soap.

During the war the importance of oils and fats was brought home to the public in a drastic fashion, especially when butter, bacon and other food supplies could not be imported.

The report of the Sub-Committee inquiring into these trades is rather vague and general.[135] It gives few particulars regarding the actual companies operating in these industries beyond naming them, nor does it show the profits declared pre-war and during the period after decontrol. We must supplement these, therefore, by reports of certain companies, but even these, though carefully scrutinized, do not show us very much.

The edible oils and margarine trades are dependent on animal fats and vegetable oils derived from copra, palm kernels, ground nuts, cotton seed, sesame seed, rape seed and soya beans. India, Ceylon, Dutch East Indies, the Straits Settlements and the South Seas provide copra; West Africa palm kernels; India, North-West and East Africa and China sesame seed and rape seed, while the soya beans come from Manchuria. The United States sends cotton seed oil while coco-nut oil comes from India, Ceylon and the Dutch East Indies.[136]

The West African trade is the most important so far as Britain is concerned. It is the nearest source of supply, and we depend on it for palm kernels, palm oil and, to some degree, ground nuts. There are several companies operating, but the largest

share of the total business is divided among the Niger Company (recently absorbed by Lever Bros.), the African and Eastern Trade Corporation, Ltd., and Messrs. John Holt & Co., Ltd., Liverpool.

Trading stations and barter provide the machinery for the exchange of goods, and the importing merchants usually arrange transactions through a broker, who gets a percentage commission on all trade. The seeds and nuts are crushed and the oil extracted refined. Some firms carry out both processes. The refined oil is converted into margarine, soap, paints, lubricants, etc; while the residues of the crushing is valuable feeding stuff for cattle as oil cake or meal.

The first effect of the war was a drop in prices of oils, oilseeds and fats, of from 5 to 15 per cent owing to good stocks held here and the cessation of continual export. This only lasted a short time, for by the end of the year prices began to advance steadily. By the end of 1915 the increases were considerable; coco-nut oil 10 per cent, tallow, 50 per cent. Other raw materials were in proportion. In 1917 the whole supply of oil and nuts became an urgent problem owing to the shortage, and control with a system of licensing was introduced. Prices were then from 60 to 100 per cent above pre-war levels. All supplies arriving here were requisitioned by the Government, which had allotted freight room for the importation. Prices were fixed at a figure high enough to ensure supplies and released to the trade. From January, 1918, the United Kingdom Oil and Oilseed Brokers' Association conducted the whole business in oils and fats for the Ministry of Food.

Control of supplies meant control of the branches of the trade associations or committees which were formed on an advisory basis to help the Ministry of Food, such as crushers, refiners, margarine manufacturers, etc. Oilseeds and the resultant oils were sold at fixed prices and requisitioned when necessary by the Government to be sold to margarine makers, whose output was again bought at fixed prices and distributed throughout the country. In this way the whole supply was rationed for food purposes and the soap-makers only got limited quantities of oils and fats.

Profits were small in 1914, well above the average in 1916 and 1917, and after control was established importers bought cheaply abroad and sold high at home, while manufacturers made very good profits owing to the great demand for manufactured articles.

After decontrol in 1919 competition for supplies was felt from the continent; Government stocks were sold at market prices and prices went up owing to the operations of speculators and the competition of manufacturers who, during the war, had been able to get very limited supplies only. These bought heavily on a rising market and made enormous profits. The importing merchant bought at low prices abroad and sold here at large profits because of the shortage. Coco-nut oil and palm kernel oil were sold during the control at £70 and £52 per ton respectively; in 1913 they were £45 and £43 8s. With decontrol the competition for the cheaper oil raised its price out of all proportion to its cost and the more expensive oil rose sympathetically. We are not told in the report to what level it rose, but in February, 1920, it was being sold at £115 per ton, cotton seed oil at £110 and palm oil at £98. From the middle of 1919 until the middle of 1920, the margarine manufacturers sold on the basis of existing stocks and bought in a low-priced market. Thus for a year after decontrol the prices of all oilseeds and oil advanced 100 per cent over controlled prices.

The market broke in April, 1920, and heavy losses were incurred by most importers since they had large stocks on a declining market. As usual, we are informed that the enormous profits made during the previous year were more than neutralized by losses. World supplies were about adequate up to September, 1920, and prices were expected to be stable if tonnage were forthcoming.

There are several big combinations in the trade.

> "The British Oil and Cake Mills, Ltd.; the United Premier Oil and Cake Co., Ltd., Messrs. Jurgens, Ltd., and the Maypole Dairy Co., Ltd., are all powerful concerns engaged in the crushing section of the industry: Messrs. Jurgens, Ltd., the Maypole Dairy Co., and Messrs. Van den Berghs, Ltd., are large firms operating in the margarine section."[137]

Importing firms are many. The African and Eastern Trade Corporation is the most powerful. Supplies are too widespread and varied to allow a corner in any particular oil or seed by any one group. Palm kernel prices are regulated by coco-nut, its

competitor, which is found in a variety of places and difficult to monopolize. Yet there is no doubt that co-operation to regulate prices exists. The Sub-Committee recognizes this and recommends that "when there is an indication of a monopoly in any trade or industry resulting in unfair prices, a committee of traders and of a certain number of Government officials should be set up to fix a reasonable maximum remuneration to be allowed on turnover in that trade or industry."[138] Any profit in excess of that would go to the Government.

A manufacturer who could get a higher percentage therefore would increase his production in order to retain his profits by the increased turnover. This increased turnover would mean lower prices. A manufacturer unable to increase his turnover would yet strive to keep his percentage rate of profit within the limit fixed for the trade.

The above suggestions are not likely to be of much practical use since any attempted control of rate of profit based on turnover is illusory without control of the capital on which the turnover is based. The inadequacy of the wool reports giving percentages of profit on turnover can be called to mind to illustrate the difficulty of finding out the real position by this suggestion. In our opinion, fixation of maximum profits is not the best way of dealing with a monopoly, as the Sub-Committee seems to imply, for the simple reason that "profits" is such an elusive term.

Between 55 and 60 per cent of the oils is used for edible purposes (excluding lard) and 40 to 45 per cent for technical purposes.

We do not agree with the report that the facilities that would exist for accommodation in regard to supplies would render it impossible for any group or combination in either branch of the trade to create a monopoly in the whole trade. This can be easily demonstrated by noting the unifications in the trade that have taken place since the armistice. The whole position will be made clearer by examining first the report on the soap industry, the raw materials of which are so closely identified with those of the margarine industry.

This report gives a full analysis of the whole situation and shows what can be done in investigation of this kind, for it brings all the facts about combination in the industry clearly before the public.[139]

The industry is dominated by four combinations. The Soap Makers' Federation,

formed at the request of the Government in June, 1918, to ration supplies released by the Ministry of Food; the United Soap Makers' Alliance formed in August, 1918, composed of the small manufacturers (forty-three in number) in Yorkshire with the objects (a) to secure supplies of glycerine through mutual help in order to satisfy the requirements of the Government and (b) to secure representation on the Allocation Committee of the Soap Makers' Federation; the United Kingdom Soap Manufacturers Association, formed in the early part of 1914: it absorbed the Soap Makers' Association established in 1867, and the Toilet Soap Makers' Association established in 1911: it consists of 80 per cent of the total United Kingdom output produced in all by 220 soap-makers; the fourth and last group is the "Lever Combine."[140]

The first group outlived its function and was practically at an end in March, 1919; the second group is unimportant as the aggregate output of its members is only 35,000 tons per annum out of a total output of 500,000 tons. It is primarily a textile soap-makers' combination—50 per cent of its output is textile soap. As this organization was primarily formed for war purposes its consideration need not detain us. The third group is very important since it controls 80 per cent of the total output of the United Kingdom. In 1917—the latest year for which figures were obtainable by the Committee—the normal annual consumption of soap in the British Isles was approximately 400,000 tons out of the 500,000 tons produced. Imports were stopped during the war; they averaged 17,000 tons pre-war per annum. Our annual exports are about 100,000 tons per annum. The United Kingdom Soap Manufacturers' Association fixes prices: one of its declared objects is "to maintain the minimum net prices and conditions at and upon which soaps are offered and sold" on the home market. Minimum prices with manufacturers and retailers are fixed by a Council of seven members acting through three Committees for Hard Soap, Toilet Soap and Soft Soap respectively. Resolutions passed by these Committees and Council are binding only when agreed to unanimously but there does not appear to have been any difficulty in securing this owing to the type of member, as we shall presently show. Although textile soap and proprietary brands or "specialities" are not directly included in the price lists of the Association, they are however identical, as the manufacturers of both are the same people and make the same classes of soap, so that

either "the leading manufacturers of specialities in effect control the Association prices or the Association controls the prices of specialities."[141]

Non-members of the Association state that it is impracticable for their prices not to conform to those fixed by the Association "so that there is no competition in price" and the prices fixed by the Association "become the standard prices throughout the country."

Lever Bros., Ltd., are the largest and the most influential members of the Association. They first entered the soap industry in 1886 and the present company was formed in 1894 with a capital of £1,500,000. In 1899 occurred the first amalgamation with another Company and by 1909 eight other companies were associated with it. In 1914 forty companies belonged to the group. Each year others were added, so that by 1920 more than 140 companies comprised the group and in these companies Messrs. Lever Bros. hold practically the whole of the ordinary shares or a controlling interest over 50 per cent. The authorized capital had increased from 1½ million pounds to 130 million pounds in May, 1920, of which £42,007,607 was paid up. At this date a reorganization took place which entailed distribution to shareholders of undivided profits to the amount of almost 4 million pounds and an increase of £217,963 annually in dividends.

> "Share capital of £10 of any class is entitled to a vote and, of the 4,200,000 votes, Lord Leverhulme and his son, who held all the shares (ordinary), had 228,000 votes; the rest are divided among about 100,000 shareholders—an average of forty votes per shareholder."[142]

Of the 140 companies in the group thirty-nine manufacture soap. Lever Bros, has a direct pecuniary interest in thirty-three of these; they hold 100 per cent voting power in eighteen; 50 per cent in thirteen; in two only have they less than 50 per cent of the voting power and in all but three they have control. These thirty-six controlled companies, in which Lever Bros, have at least £20,000,000 total nett financial interest, make up with Messrs. Lever Bros, itself the group of thirty-seven companies described in the Report as the Lever Combine. Its interests have extended from the

original one of soap to almost every conceivable undertaking including banking, shipping, engineering, mining, building, whaling, seed crushing, oil refining, plantations, fisheries, dyes, chemicals, industrial gases, candles, margarine, disinfectants, polishes, perfumery and paper. Some of these have been directly promoted by them, e.g., the Hebrides fishing industries; others they have acquired by buying shares.

> "Like all large trusts, in addition to developing horizontally by absorbing soap firms, Messrs. Levers have found it necessary to develop vertically in order to ensure their supply of raw materials, i.e., oils and fats of all kinds. One of the principal sources of supply for palm oil is Africa. Here even we find that Lever Bros. are associated with the Niger Company and the African Eastern Corporation; but the obtaining of oil involves not only an export company but a company which has facilities for import so as to exchange commodities for oil: thus the African and Eastern Companies own cotton mills in Lancashire in order to ensure the supply of necessary imports. Again, oil, being one of the chief products of West Africa, its development involves the leasing of land; but land has mineral wealth as well as vegetable wealth, which, in West Africa, is tin. Thus Lever Bros, are reported to be associated with tin areas in Nigeria, a company which, besides doing general trading, is reported to have leased its land to tin-mining companies. Again, local transport, storage, trading in mahogany and many other activities are involved; therefore directors of the African and Eastern are associated with these interests. In this way this combine exerts on West African trade a controlling if not monopolistic influence. But there are other oils than palm oil that are useful for soap—for instance, coconut. Thus an office and mill has been established in Australia for the collection of copra from the Polynesian Islands. Lord Leverhulme is reported to have become the head of a Company called the Philipino Refining Company, an amalgamation of three

> companies trading in coconuts with headquarters in Manila. A factory for the utilization of cotton seed oil has been established on the Mississippi, while further Messrs. Lever Bros, are reported to have interested themselves in the American Linseed Company with a capital—before the war—of 33 millions. Turning to animal oils, it is found that a company called the Improved Whaling Company was registered in the autumn of 1920 with which Levers are closely connected. There are also other whaling companies in which Levers are interested. Thus Levers ensure their supply of raw materials by absorbing, becoming connected with, or promoting companies which will supply them with every kind of oil and fat."[143]

The relation between the Lever Combine and the Soap-makers' Association is seen clearly in the provisions made for the government of that organization, the 1920 constitution showing that on the Council of seven members and the Committees of seven, Messrs. Lever Bros., Ltd., are represented on the council by five members; on the Hard Soap Committee by five and by four members on each of the other two Committees, while the President of the Association is a Director of Lever Bros., Ltd.,—both Vice-Presidents being also Directors of one of the Associated Companies. This close control of the Association has been brought about owing to the absorption by Lever Bros., Ltd., of Joseph Crosneld & Sons, Ltd., and of Joseph Watson & Sons, Ltd., a director of each of which had a seat on the Council and Committees of the Association by its rule. Of the 220 soapmakers in the country only ninety are members of the Association, yet the aggregate output of these ninety represents 80 per cent of the British total, while though thirty-seven only out of the ninety belong to the Lever Combine their output is from 70–75 per cent of the total British output and 90 per cent of the output of the Association. With the exception of the Co-operative Wholesale Society and one or two other firms, all British soapmakers of any importance belong to the Association. The Combine therefore dominates the Association and fixes prices by agreement and not by competition. For non-proprietary soaps 80 per cent are fixed in price by the United Kingdom Soap Manufacturers' Association while the rest (excepting the Co-operative Wholesale

Society) follow their lead.

Thus competition in this country cannot touch the dominance of the Combine, while, owing to the small import (17,000 tons out of 400,000) and the fact that Lever Bros, are the second greatest soap makers in the United States and one of the largest in Germany, they are not affected by foreign competition. If prices fixed by the Association were, say, two or three times as high as was necessary to cover costs and a reasonable profit, we might get a stimulation of external competition, but in view of the above facts this stimulus would have no great chance of success. The surplus margin on the enormous output of the Combine yields large profits in the aggregate. Considerations which apply to monopolistic control in fixing prices are doubtless borne in mind by the Combine, i.e., that it is more profitable to get a small profit per unit on a large scale than a large profit on a small scale, but in view of the relative fixity of demand for soap and a control of the supply these economic considerations need to be revised.[144]

The Co-operative Wholesale Society, Ltd., is the largest soapmaker outside the Association, though smaller than that of many large soapmakers within the Association. The retail co-operative societies buy their soap from the Co-operative Wholesale Society and their prices were lower than those of the Combine by from £2 10s. to £26 per ton for best household soap. The C. W. Society bases its costs in a rising market on actual costs and in a falling market on replacement costs—the exact reverse of what other soapmakers have done. Retail prices are fixed by the retail societies and these vary with the Societies, but like wholesale prices they are lower than the retail prices of other makers. Despite this fact, and the fact that over-the-counter price is subject to a dividend or bonus, it does not seem to have led to a great increase in soap business by the Society, so that the C.W.S. does not act as an effective check to the United Kingdom Soap Manufacturers' Association unless the latter's prices become very extravagant.

The course of prices is very instructive. From it we gather that in the cases where there was a difference of ½d. per lb. in prices, e.g., “Matchless Cleanser” of Joseph Watson & Sons, it was due to the fact that this soap was not controlled by the Combine. After the merging of this firm in Messrs. Lever Bros, on July 20, 1917, the price was increased to the level of those specialities made by the Combine and later

a further increase of 1d. per lb. was added. The same remarks apply to other specialities. A reduction of price took place in March, 1919, to induce an increased demand. Shortly after, oils and fats were decontrolled. The pre-war price of palm oil was £28 per ton; during the war its price was fixed at £44 per ton; after decontrol it rose to £66 12s. 6d. and in February, 1920, reached £98— more than double control price. The proposed reduction did not therefore continue, but prices rose steadily until April, 1920, when fats and oils had fallen sufficiently to cause a fall in the price of soap.

> "Over a period of almost twelve months after decontrol, very large profits appear to have been made in the oil and fat trade" (see previous section).[145]
>
> "The percentage rate of profit on turnover between 1913 and 1919 moved from 8.31 to 16.39 in the case of Lever Bros., Ltd., and from 10.93 to 16.23 in the case of Lever Bros., Ltd. and thirteen associated companies on a money turnover which itself, solely by reason of increased costs and prices and not by reason of any increase in tonnage output, is more than two and a half times as large."[146]

This percentage rate of profit in 1918 and 1919 was very much in excess of the 10 per cent which the manufacturers themselves represented in the Soapmakers' Federation asked for in 1918 as being reasonable.

Taking the aggregate figures for the firms of Wm. Gossage & Sons and Joseph Crosfield & Sons for home and foreign trading, we find from the report that while the pre-war net profit on turnover was 9.23 per cent, the profit for the year ending 1919 before deducting excess profits duty was 15.62 per cent, and after 11.18 per cent. On capital employed the pre-war figure was 14.57 per cent; in the year ending November, 1919 (before excess profits duty), 26.88 per cent and after 19.23 per cent. In the case of Lever Bros., Ltd., for their home trade, on a reduced tonnage output, the turnover had increased from £1,770,955 in 1913 to £3,670,530 in 1918, the profits on which had increased from £140,961 in 1913 to £621,729 in 1918 before deduction of excess profits duty and to £283,729 after deduction of excess profits

duty. *The average profit, on all classes of soap in* 1913 *was* £2 6s. 2*d. per ton*; *in* 1918 £11 8s. 9*d. and* £5 4s. 4d. *before and after deduction of Excess Profits duty respectively*.[147]

The percentage profit on home trade soap turnover in 1913 was 7.96 per cent; for 1918 16.94 and 7.73 before and after deduction of E. P. D. respectively, therefore it is clear that:—

"(1) After paying excess profits duty a similar percentage profit was made by Lever Bros, in 1918 to that of 1913, and (2) the excess profits duty for 1918 has fallen directly upon the soap consumer to the extent of £6 4s. 5d. per ton of soap (or two-thirds of 1d. per lb.), and that by reason of Lever Bros, earning the same percentage profit on a price more than double that of 1913, an extra profit of £2 18s. 2d. per ton (or about one-third of 1d. per lb.) has been paid by the soap consumer."[148]

On capital employed for the home and foreign trade 3.89 per cent in 1913 became 12.43 and 6.17 per cent in 1918 before and after deduction of Excess Profits duty respectively.

On household soap percentage of net profit on average net selling price in 1913 was 6.85 per cent, in 1918 it was 18.38 before and 8.44 after deduction of Excess Profits duty, so that the margin of 10 per cent proposed by the Federation in 1918 is greater than the pre-war percentage, and the actual percentage in 1918 was much greater than that proposed. Figures for 1919 were much greater as this year saw a still further advance in prices and was one of the best years ever experienced. The total advance during the period of control in price per lb. was from 3½d. to 8d.; after decontrol, price went up from 8d. to 1s. per lb. between November, 1919, and January, 1920.

If we examine the relation of costs to selling prices we find that, contrary to the usual custom, on a rising market costs were based on replacement values instead of on actual costs and prices of raw materials, but on a falling market they based costs, not on the actual replacement value, but on the high prices of materials some time before—a case of heads the Combine wins, and tails the public loses in each case.

"The result of this policy, since replacement costs of raw material is during the time of rising prices constantly above actual costs, is that generally speaking large profits are made by holders of large stocks," i.e., the Combine.[149] Lever Bros., Ltd.,

pointed out that this policy would be followed when prices were falling and that unless this were done, those who held large stocks and who refused to follow the market would be undersold. That is, excessive profits made in good times would be used to make up losses in bad times. But what do we find? “The policy of basing selling prices on replacement costs was abandoned as soon as prices or raw materials began to fall.”[150] In August, 1919, the retail price of soap reached 11d. per lb.: the cost of raw materials per ton was £94 10s. On December 20, 1920, retail prices were still 11d., yet the cost of raw material was under £50 per ton. If replacement value were taken and also increase of manufacturing costs between the two dates, the Committee estimate that even allowing 10 per cent profit on turnover as advocated by the manufacturers themselves, the price of the best household soap should have been gd. instead of 11d. per lb. Lord Leverhulme tried to explain this change in policy by stating that the bulk of excess profits made during rising prices had been paid away as Excess Profits duty so that soapmakers could not follow the market down as well as up. In view of the figures given previously this position is not tenable; even if accepted, the Committee point out that in that case the excess profits duty was paid by the soap consumers, that the shareholders received enhanced dividends and that large sums were set to reserve (£500,000 from the profits of 1919 were placed to special reserve by Lever Bros for the purpose of meeting eventual losses in following the market downwards); that the Finance Act makes provision for allowing losses on reduced profits, to be set against earlier excess profits, and that finally it proves that the United Kingdom Soap Manufacturers' Association could fix soap prices above replacement value without fear of competition. It must also be noted that nearly four million pounds were distributed from undivided profits and reserves as bonus shares in the capital reorganization scheme of May, 1920, by Lever Bros. A prospectus dated October 7, 1920, also stated that “the directors anticipate that the available profits for the current year (despite the above distribution) will be sufficient to maintain this rate of ordinary dividend (20 per cent) after payment of dividends on all preference and preferred ordinary capital and making ample provision for reserves.”

In their conclusions the Committee point out that while economies of organization on a large scale have doubtless been secured, the public gets no advantage of these

and "since the prices fixed by the Association will usually be such as to afford to the least efficient member of the Association a sufficient profit, the system of price fixing by the Association tends to protect inefficiency and to ensure added prosperity to the efficient; it prevents prices falling as low as they would under a competitive system. The benefit of any economies that may be made by a particular manufacturer is, as a rule, retained wholly by him in place of reaching the consumer."[151] Strong words these, yet they illustrate the economic law that prices are fixed by the cost of production of the least efficient producer if the market is controlled and the demand steady, just as the price of coal tends to be determined by the least efficient pit in the most inefficient area provided demand is sufficiently stable and no alternative source of supply is available.

It will be advantageous to conclude this survey with an examination of the effects of the Lever Combine on the industry and its organization. One fact seems clear, viz., that though the constituent companies absorbed by the Combine receive the benefit and advice of the experts and their laboratory in the Combine, they have continued their individual organizations and have effected little economy in cost of manufacture of soap—maintaining the same management, goodwill, separate travellers, advertising and distribution. Particular economies in manufacture and distribution due to securing supplies of raw material, etc., have undoubtedly been secured, but the Committee were not able to satisfy themselves that the resulting saving has been sufficient to alter materially the cost of production. Centralization of research facilities does not appear to have resulted in any appreciable economies. "Lever Bros have no vital patents, nor has research developed any outstanding process in the soap industry other than hydro-genation," which does not appear to be of great importance to some soapmakers. The conclusion to be faced seems to be this: that the main effect of the Combine has not been so much to reduce costs of production and to effect economies in distribution as to control selling, and therefore to maintain prices and secure adequate dividends in view of the prices paid for the acquisition of the associated companies. This had the result of being borne by the public without any corresponding advantages to them, but, of course, with good results to the shareholders and other dividend takers.

The ordinary shares of Joseph Crosfield & Sons, Ltd., and Wm. Gossage & Sons,

Ltd., of a nominal value of £900,000, for which Messrs. Brunner, Mond & Co., Ltd., are stated to have paid in 1911 the equivalent of £2,000,000, were purchased in 1919 by Messrs. Lever Bros., Ltd., for the sum of £4,000,000.

In January, 1920, 1,227,165 £1 ordinary shares of the Niger Company, Ltd., were purchased by Lever Bros., Ltd., at £6 10s. per share (£8,000,000), although the mean stock exchange price for the preceding six months was only about £4.[152] In February, 1920, the Combine secured a controlling interest in Messrs. John Knight, Ltd. The £1 ordinary shares which had received from 1913–17 8½ per cent, in 1918 9¼ per cent, and in 1919 12½ per cent dividend were converted by Messrs. Lever Bros, into ordinary preferred shares with a fixed cumulative preferential dividend of 25 per cent per annum. The £1 deferred shares were purchased for £13 10s. a share; dividends on these had been about 15 per cent, in 1913, 18 per cent, from 1914–17, 25 per cent in 1918 and 46½ per cent in 1919. If this latter rate of 1919 were maintained the income of Lever Bros on their outlays would be less than 3½ percent, so that the shareholders of John Knight, Ltd., made a good bargain in that they were guaranteed about 25 per cent by the change. But what of the public interests?

Every holder of a £1 ordinary share of the African and Eastern Trade Corporation received two and a half 15 per cent preferred ordinary shares of £1 each—equivalent to a fixed cumulative preferential dividend of 37½ per cent per annum for each former holding of £1 ordinary share. The dividend paid by this Company in 1919 was 30 per cent.—the highest paid in the West African Trade. The acquisition of the African and Eastern Trade Corporation, therefore, by Lever Bros., Ltd., meant a fixed cumulative preferential dividend equal to 37½ per cent being established for shareholders who in the past had no reasonable expectation of receiving 30 per cent, and this was to be exceeded on a permanent basis in the future, despite the fact that a period of depression was about to set in.

These extra dividends can only be paid by Lever Bros, in two ways: (1) by effecting economies on a large scale in production and distribution; or (2) by charging higher prices than would otherwise be necessary. Lord Lever-hulme stated that the prosperous year 1919 would not be repeated for many years to come in the West African trade, yet the soap trade, controlled as it is, may get the funds to pay these dividends, for it is clear that “there can be no possibility of the benefit of the

economies effected by the Combine being passed on to the soap consumer so long as prices are agreed between all the manufacturers, many of whom would not have the advantage of such economies."[153]

"In the case of the soap trade we have shown that Lever Bros can maintain prices higher than would have been possible under a competitive system,"[2] and that though prices have not been raised to the highest possible limit, this has been due to the importance of not reducing demand. "The price of soap is now definitely higher than it would have been if there were real competition of price between the soapmakers, and over an average of years has been higher than is necessary to provide reasonable profits."

In regard to the supply of raw materials, the Committee reports that there is no immediate prospect of the world's oils and fats being controlled by Messrs. Lever Bros, Ltd., or any other amalgamation. Yet soda ash—an essential ingredient in soap—is controlled by agreement between the principal alkali producers and is not sold on a competitive basis, its prices being agreed upon and respective percentage of deliveries being allotted. The Committee conclude that "any association or amalgamation or an agreement as to supply of alkali between only two companies, viz., Messrs. Lever Bros, Ltd., and Messrs. Brunner, Mond & Co., might seriously prejudice even if it did not jeopardize the existence of independent soapmakers in this country."[154]

In this connexion, and in view of the fact of the close connexion existing between these two large groups, it is important to note that British and German nitrate interests are reported to have made a secret treaty.

"It is reported that representatives of the German Nitrate Combine, the British Ammonia Works and of the Chili Saltpetre industry have come to an agreement in regard to production. The German Trust agrees not to increase its production above the average of 1920 and not to export any of its products to the world market. The British and Chili Trusts on their part undertake to import their products to Germany only at the world market prices. This means that three of the world's great nitrate Trusts are on the way to parcelling out the European markets among themselves."[155]

The manufacture of ammonia and heavy chemicals generally is controlled in this country by three great concerns : Brunner, Mond & Co., Ltd., Castner Kellner Alkali

Co., Ltd., and the United Alkali Co., Ltd. A close working agreement exists between the first two (*see* Chapter II, Sec. 3). In view of the warning given in the Report this is very significant, for the arrangements are bound to have a profound effect on the chemical industries of this country, while their connexion with the soap industry is obvious.

As is the case in the majority of the conclusions of the Reports, the Committee urges that Parliament should take action through the Board of Trade to exercise surveillance over the combinations in this country.

On January 1, 1921, soap fell from 11d. to 10d. per lb., and in an addendum the Committee points out that in view of the fall of raw materials to £47 14s. best household soap could have been sold at 8½d. per pound on that date with prices of other qualities proportionately less.

(B) The Salt Trade.

Salt is a commodity in everyday use and although generally purchased in small quantities at a comparatively low price this price is at present higher than it has been for the past twenty-five years. The amount spent on it by the average consumer is small, but as it is an indispensable article of diet it is worth while investigating.

In the past the trade has been characterized by intermittent periods of price cutting to discourage competition. The methods of production were rather old fashioned prior to 1915—evaporation in open pans over coal fires—except in the case of some half-dozen concerns with scientific plants. In 1888 the Salt Union was formed by the purchase of some sixty works at relatively high prices to eliminate competition. Some of the undertakings bought were dismantled and certain economies effected, but although increases in prices followed for a time the Union failed to create an effective monopoly. Charges of administration were heavy, expenditure in litigation very large, and these, coupled with the high prices paid for some of the businesses taken over, resulted in difficulties. Keen competition from other sources and low prices followed until 1915, when the Salt Manufacturers' Union was formed.

In 1899 the North Eastern Salt Co., Ltd., was formed comprising manufacturers in the Middlesbrough district and the North East Coast, viz., the Salt Union, Ltd., the Tees Salt Co., Ltd., the Cleveland Salt Co., Ltd., Pease & Partners, Ltd., Cerebos,

Ltd., and the United Alkali Co., Ltd. The result of this unification was to limit output to agreed proportions as between the respective companies and to fix prices of different qualities of salt produced. This group also made arrangements with the Salt Union, Ltd., to portion out supplies to different markets at agreed prices, particularly in regard to sales in London and foreign countries. Later direct trading between manufacturers and the consumer was attempted, but not very successfully. The next step in organization took place in 1915, when the Salt Manufacturers' Association was formed of manufacturers in the Cheshire district. The output of its thirteen members was in 1913 90 per cent of the total output of the United Kingdom, and it was composed of the following firms:—

The Salt Union, Ltd.
Verdin Coope & Co., Ltd.
Stafford Salt & Alkali Co., Ltd.
Chance & Hunt.
Alfred J. Thompson.
Stubbs & Co., Ltd.
Murgatroyd Salt Works Co.
George Hamlett & Sons, Ltd.
Henry Seddon & Sons, Ltd.
John Carver & Co.
Ingram Thompson & Sons.
Middlewich Salt Co., Ltd.
The United Alkali Co., Ltd.

The last-named Company and the Salt Union, Ltd., are members of the Salt Manufacturers' Association, and of the North Eastern Salt Co., Ltd.[156]

In 1913 the Salt Union, Ltd., had an output equal to 70 per cent of the companies forming the Association and equal to 60 per cent of the total output of the United Kingdom, so that the Salt Union dominates the Association—one Secretary acting for both—while the Managing Director of the Salt Union, Ltd., is the Chairman of the Association. The North Eastern Salt Co., Ltd., though not a member of the Association, is obviously linked to it, through its chief member the Salt Union, Ltd. This Company (North Eastern Salt Co., Ltd.) in 1914 had an output of 70,000 tons,

equal to 5 per cent of the total output of the United Kingdom and follows the prices of the Associaton which are fixed for the whole trade with the exception of 5 per cent. Thus the Association fixes, directly or indirectly, the manufacturers' selling prices of 95 per cent of the salt sold in this country. The independent manufacturers only produce 2½ per cent of the total: moreover its quality costs more to produce and is therefore a small specialized market. Their action can neither affect the quantity sold nor the prices of salt fixed by the Association members. Since its formation the action of the Association "has increased very materially the prices of salt in this country";[157] it has succeeded in abolishing price cutting and its standard of prices is such as to enable the manufacturers whose costs of production are the highest (the Salt Union) to make a profit, which has sent up the value of their shares to a premium, instead of making a loss as was the case in several pre-war years. The Salt Union, Limited, has thus been able to declare a profit—in combination with profit on other trading—which in 1918 amounted to "15 per cent on the actual share capital (as reduced in 1902 to represent the assets of the Company); they were able to add £50,000, equal to 6¼ per cent on the reduced ordinary share capital, and to provide for an expenditure of £100,000 for current repairs, in addition to £100,000 for deferred repairs, the latter (which will not be presumably a current item) being no less than 17½ per cent on the ordinary share capital."[1] Therefore, if this was the case in regard to one company whose costs of production were admittedly very high, a very liberal profit was earned by other manufacturers on prices ruling on December 31, 1919. The Committee reported also that there was no justification for any further increase on these prices except in relation to labour or fuel increases, yet on May 29, 1920, increases amounting to 5s. 6d. per ton were made owing to increased wages and railway rates. Though wages have been reduced (August, 1921) these prices have not been substantially reduced. The Sub-Committee concluded :

> "We think that with a view to reduction in the cost of manufacture and in the selling prices, the possibility of improvement in the methods of production should have received more attention in the past than it seems to have received. We understand that considerable regard is now being paid to this subject."[158]

There is no evidence of monopoly of brine supplies; neither is there shortage of manufacturers' salt, but it seems clear that the Combine has not as yet achieved many economies in methods of production on scientific lines, so that, just as in regard to soap, the great advantages of the application of science to industrial methods seem to be a secondary matter, the chief concern being in regard to selling, rigging the market, and ensuring the absence of competition and the fixation of prices "at just about the right figure."

The merchants in the wholesale trade are either subsidiary companies of the salt manufacturers, or are owned by the directors of the latter or are agents of the Association. It is unnecessary to go into their costs and profits. Their prices are fixed by the Association. The retailer is therefore absolutely under their control and therefore the consumer also. Imports during the war were negligible; pre-war they were 40,000 tons. Pre-war exports were between 500,000 and 600,000 tons. Our total production pre-war was about 1,200,000 tons.

In 1919 the average profit of the Salt Union on all qualities of salt was 6s. 8d. per ton—16 per cent on the average cost of production. In 1916 (the first complete year of the Association) it was 3s. 7½d. over all qualities. In the years 1913–14, the average price realized by the Salt Union was below the cost by 1s. 4d. and 1s. 10d. per ton respectively. Several manufacturers were selling at a loss in pre-war years. It does seem remarkable how companies manage to live on losses for so many years! We can only conclude that there was something wrong with their capitalization, and this has certainly been the case with the Salt Union because of the heavy sums it paid for acquiring other companies. Yet an examination of the balance sheet of the Salt Union gave the figures given below.[1] How are we to reconcile these with losses? We are told that the profits are accounted for by trading in "other commodities and extraneous trading."[159] In 1913 the total output of salt by the Salt Union, Ltd., was 823,115 tons with a net profit of £82,791. In 1919 the output was only 498,457 tons yet the net profit was £302,781. An examination of the table shows the remarkable jump in net profits in 1916 to £380,555 from £140,523 in 1915. This is understood when we remember that 1916 was the first year of the successful working of the Salt Manufacturers' Association founded in November, 1915.

SALT UNION LIMITED.

Year.	Output in Tons.	Net Profit.
		£
1912	—	80,146
1913	823,115	82,791
1914	—	89,442
1915	—	140,523
1916	—	380,555
1917	—	287,380
1918	—	333,828
1919	498,457	302,781

(C) Yeast.

Prior to 1886 the production of yeast was in the hands of brewers, but since that date the production has changed, and the yeast used to-day in breadmaking is produced at distilleries and is known as distillers' yeast, being obtained coincidentally with the production of spirit.

British trade is in the hands of three groups or organizations outside which only one company exists, and this company is in Cork, does not trade in England and its business is very small. The three Companies have sixteen yeast-making distilleries:

The Distillers' Company, Ltd., Edinburgh (11 distillers).

The United Distilleries, Ltd., Belfast (3 distillers).

James Calder & Co., Ltd., Edinburgh (2 distillers).

Prices are agreed between these distillers and though not always identical the difference in price is constant. They consult one another re amounts of difference and dates upon which they are to be introduced. A pre-war price of 19*s.* per 56-lb. basket reached 43s. or 44s. on October 8, 1919.[160] A reduction in March, 1921, of 4s. brought the figure to 39s., which was an increase of 105 per cent, on the pre-war price.

Prices were fixed arbitrarily by the companies. No costings were made, and while it is clear that the greater number of British distillers did not produce yeast, and that the spirit produced in the yeast-producing factories was quite different in costings

from the former, no attempt at working out a basis of this cost seems to have been made. The yeast was priced at a figure to compete with the yeast prices of foreign origin. Spirit increased 300 per cent, while yeast never increased more than 130 per cent.

Grain prices have an important bearing on these costs— maize barley and rye having advanced in price frequently. Yet "no attempt has been made by the distillers to ascertain their costs of production and to trade on any given margin of profit."[161]

Yeast is distributed through twenty-three wholesalers or merchants and a larger number of "dealers" or retailers. About six of these merchants—the accredited agents of the distillers—receive supplies direct and transmit them to other merchants and dealers, who in turn send them to bakeries or to grocers and so to the consumer. The North of Britain practises more home baking than the South. The Wholesale Yeast Merchants' Association comprises the twenty-three merchants formed in 1893 to safeguard the interests of the trade. The Yeast Dealers' Associations number forty-five in different districts of the country, but they are not affiliated. Some were in existence prior to the war, but since 1915 have become more organized to meet the distribution of the yeast under control.

The merchants of their respective districts are also members of the Yeast Dealers' Association. The distillers fix prices for the merchants, but the latter decide the scale of maximum prices at which yeast shall be sold to the baker or grocer, and the Yeast Dealers' Association seems to have no jurisdiction over the scale of prices fixed by the Merchants' Association. Prices fixed for the North differ from those for the South, being slightly lower owing to the greater quantity used.

The selling price of yeast to the baker and grocer were from 6d. to 8d. per lb. before the war, or from 3s. 6d. to 4s. 6d. per 7-lb. bag with reductions for larger quantities (25s. to 28s. per 56-lb. basket). Present prices (March, 1921) for the Northern Area are 1s. 1d. per lb., 7s. 6d. per 7-lb. bag, and 54s. per basket. For the Southern Area the prices are slightly higher, being 1s. 2d. per lb. up to two baskets, 1s 1d. per lb. up to five baskets, with a slight drop according to the number of baskets taken, e.g., five to ten baskets cost 57s. per basket, ten to twenty, 55s., while twenty and more cost 54s.

The grocer's prices are not fixed by the Association. His margin of profit varies as

he sells in ounces and it is never large. Often “he sells merely as a convenience to his customers for flour and at cost price.”[162]

Distributors' margin was 41 per cent pre-war and 39 per cent post-war. Wholesale profit was about 14 per cent pre-war, and in 1919 a little under 10 per cent.—this to the wholesale merchant only. There is no possibility of the dealer selling below the prices fixed by the merchant; if he did he would fail to get supplies. Maximum prices are therefore fixed by the merchant and become minimum prices to the consumer.

> “The dealer, who has to pay the merchant a price which gives the merchant a profit, is compelled to sell to the consumer at the same price as that at which the merchant is selling, i.e., at a lower margin. A 280-lb. sack of flour providing 180 2-lb. loaves requires 2 lb. of yeast, so that the increase in the cost of yeast is less than one-tenth of 1d. per loaf.”[163]

The Distillers' Co., Ltd., which produces 70 per cent of the aggregate British production, has a controlling interest in the United Yeast Co., Ltd., whose directors are in close touch, as two of them sit on the Boards of both companies. This distributing Company (the United Yeast Co.) sells about two-thirds of the yeast consumed in this country. The United Distilleries, Ltd., distributes through its merchant agents.

To sum up : prices at all stages are virtually controlled by the Distillers, as even the consumers' price is fixed by the distributing merchant firms who are controlled by one or other of the three Distiller Companies; supplies are strictly controlled and no one outside the agents mentioned can set up as a yeast dealer because he could not guarantee supplies; the number of dealers is large and though there is no competition in price there is much competition for volume of trade.

It remains to consider the effect of imported yeast on the situation. Supplies were stopped during the war. Prior to the war imports were 200 tons per week. These, restricted from 1915–17, were prohibited from April, 1917, so that in the last war years we produced all the yeast needed ourselves. In 1919 foreign imports again arrived here, and in March, 1921, were about 70 tons per week. The output of British

distilleries increased from 400 tons a week in 1913 to about 700 tons per week in 1918. Home consumption is now estimated at 635 tons a week, of which 565 tons are manufactured in this country and 70 tons imported. All British distilleries not producing yeast were closed from January, 1917, to the end of 1918 by order of the Government. British distilleries producing yeast were invited to extend their plant and did so in expectation of protection against foreign imports after the war, some assurance to this effect having been given by the Ministry of Munitions, but responsible officials deny ever having given any such assurance.

In the opinion of the distillers foreign yeast cannot be kept out of the market if they worked their plant to full capacity with a view to reducing costs.

Importers of foreign yeast are members either of the Merchants' or Dealers' Associations, as it is considered to be impracticable to carry on any business without some British yeast, which, in general, is considered better quality than the imported commodity. It is significant that in view of this fact "so long as it was difficult or impossible for a dealer to trade solely in foreign yeast that fact was sufficient to ensure his applying Association prices to foreign yeast."[164] Even if the imported article, therefore, is considerably cheaper, its price is controlled by the British Association of Merchants. There are signs that throughout 1921 more foreign supplies have been available, so that the position of the importer is becoming stronger, and the fall in prices in March, 1921, is stated to have been brought about by the fact that importers are no longer dependent on distillers for supplies. British prices being based on imports instead of on costs, it is clear that the chief factor in determining price is the importation or potential importation.

The Government supervision during the war, though not directly controlling yeast prices, had that effect, inasmuch as the distillers were not allowed to make more profit in spirit than the pre-war rate, and in arriving at cost the selling price of yeast was taken into consideration. Any change in the price of yeast had therefore to be notified to the Ministry, which eventually recommended that the increase in the cost of the combined process (spirit and yeast production) should be charged in a greater proportion to spirit than to yeast.

The Committee conclude that unrestricted imports of yeast are the only safeguard for the consumer against a combination of distillers. If protection of the British

distiller be adopted as a policy, they urge that this should involve as corollary the protection of the consumer by legislative enactment “to provide for the surveillance of trusts and monopolies in the manner suggested by the original Committee on Trusts.”

This report on Yeast is very clear and instructive, showing the importance of distributive control as well as of production. By centralizing sales through their merchant agents directly, the main companies regulate and control the market directly. It would therefore be just as easy for a Government Department, such as the Ministry of Food, to arrange for this service. In fact, this report seems to emphasize the ease with which State control and distribution of this product could be carried out.

Chapter VII: The Chemical Industries (continued)

(A) Dyes and Dyestuffs.

If the Profiteering Acts of 1919 and 1921 had only given us the Report on Dyes and Dyestuffs[165] they would have been worth enduring, though we know they did not succeed in preventing profiteering in all sorts of directions.

The Report is full and clearly drawn up. All the relevant facts are given. We are shown the pre-war history of the industry, our lamentable disregard of these important products, Germany's supremacy, the effect of the war on the position, and so on, to an examination of the transactions culminating in the formation of the British Dyestuffs Corporation, Limited, and the post-Armistice position. The Committee does not seem to have been very hard on the promoters of the scheme of the Trust, nor is it over-critical of its working, but these points will appear in our summary.

W. H. Perkin, Esq., discovered the synthetic colour to which he gave the name of mauveine in 1856. Professor Hofman, one of his colleagues, subsequently left for Germany and the industry was established there. Up to 1875 the British dyes industry seemed to flourish, but after this date Germany forged ahead and soon became supreme. In 1887 another discovery—that of primuline—was made by Professor A. G. Green, but the firm (Messrs. Brooke Simpson & Spiller) did not take out a patent. Shortly afterwards this also was manufactured in Germany, and the dyestuffs industry seemed to be permanently lost to this country, owing to two causes

chiefly—the inadequacy of our patent laws and the high price of industrial alcohol. The former made it possible for Germans to take out patents to protect their interests here, while we could not do so in their country, and the latter was important as the manufacturers in this country could not get alcohol duty free as the Germans did in Germany, with the result that the price became prohibitive. There were other causes, such as the greater pushfulness of the Germans. They sent out skilled chemist travellers to sell their goods. We sent out circulars. They spent large sums on research. We starved our universities, our science men, etc. Our pre-war consumption amounted to 20,000 tons, of which 18,000 tons, representing a value of nearly two million pounds, came from Germany. We held our own with regard to the production of the simple dyes such as aniline oil and sulphur black, but on the international convention to which we belonged, German influence predominated. We forced our way into the group making alizarine, but in all other dyes the Germans easily ousted us.

The Germans had two works in this country : one at Ellesmere Port (owned by Messrs. Meister, Lucius & Brun-ning, making synthetic indigo—final processes only) and the other known as the Mersey Chemical Works, owned by the group of three German companies which set up the plant after the passing of the Patents Act of 1907.

By 1913 80 per cent of the artificial dyes used in this country were made by Germans, while they produced half the materials necessary for the manufacture of the other 20 per cent. By 1912, of the sixteen firms in Germany making dyes, five large groups controlled nine-tenths of the output, which groups later fused into two large Trusts with interlocked directorates (the Hochst Casella Group and the Badische Group). These dyes cartels were organized to increase their strength to meet international competition, to secure raw materials and exchange products, to protect their mutual patent and licence rights and to promote research. They also owned jointly all factories in foreign countries. As soon as these two groups were organized it is stated they reduced expenses of marketing by half, while great economies were effected in production. The total capital was not far short Of £10,000,000. All these German firms, together with four principal Swiss firms, were represented in Britain by distributing firms or agents who also advised their

customers about dyeing processes. They competed with one another, not so much in regard to prices as in the different brands of dyes, which numbered several thousands of varieties.

We were absolutely dependent on Germany for synthetic dyestuffs on the outbreak of war. Our stocks were low (the Germans saw to that) so that our textile and other industries were in grave danger of coming to a standstill, as it became very difficult not merely to secure dyestuffs, but materials out of which they could be manufactured. Imports were allowed (under licence) of certain indispensable kinds, but it was soon found that the Germans would only permit to be imported those quantities for which they could exchange rubber and copper—necessary war material of which they would soon be short. The licences were therefore cancelled, and it remained to secure supplies from other sources—a very difficult matter, since the whole continental trade was in German hands. Prize cargoes brought us some supplies, but they were negligible as compared with our great needs. The Board of Trade came to the assistance of dye manufacturers. The Swiss shared ten per cent of the British trade, but as they were dependent for coal-tar supplies on Germany, our first steps were directed to supplying them with the necessary raw material on condition that these should not find their way into Germany. In this way supplies of necessary dyes were secured, at any rate, of limited varieties and qualities. As the war went on the demand for munitions increased. Coal tar products, benzol, toluol and ophenol, raw materials for explosives and dyes, were needed in ever-increasing quantities. These were reserved for the use of the dye manufacturers, and distribution was arranged by the Board of Trade.

In a protracted war the supplies of synthetic dyes, therefore, become a military or munitions problem as well as an industrial one. Certain firms (Messrs. Read, Holloway & Co. of Huddersfield) were subsidized by the Government to increase their plant and equipment; finally a new company (the British Dyes, Ltd.) was floated in 1915, to which the Government subscribed part of the capital, amounting eventually to £1,700,000, with a limitation of dividends to 6 per cent so long as the amount owing to the Government was outstanding. A grant of £100,000 was also given towards research and this was repayable in ten years. Other firms were encouraged to expand and speed up the production of dyes, particularly Messrs.

Levinstein of Manchester. The German works on the Mersey and at Ellesmere Port were taken over, and no effort omitted to make good the shortage. In order to secure greater co-ordination after the war amid this multiplicity of efforts, British Dyes, Ltd., amalgamated with Messrs. Levinstein, Ltd., in July, 1919, with a capitalization of £10,000,000. A great deal of criticism followed this transaction, especially when the terms of unification became known. It was no secret that the German competition would be keenly felt after the Armistice, and to meet this, new arrangements became necessary. The Government had also promised legislation to protect the dye industry after the war, so all things considered, it was felt that the new combination was going to be a very powerful one. Without entering into details it is sufficient to note that the Government subscription of £1,700,000 to the former British Dyes, Ltd., became translated into 850,000 preference and 850,000 preferred ordinary shares in the new corporation, which acquired practically all the shares of British Dyes, Ltd., and Messrs. Levinstein. The resulting combination is known as the British Dyestuffs Corporation and controls 75 per cent of the whole British output. The other important companies outside this group are : (1) the British Alizarine Co., Ltd., founded in 1882 and owned by the United Turkey Red Company, the Calico Printers' Association, Ltd., and other textile firms who are large consumers of its colours; (2) the Scottish Dyes, Ltd.; (3) L. B. Holliday & Co., Ltd.; (4) Brotherton & Co., Ltd.; (5) Clayton Aniline Co., Ltd., owned jointly by three Swiss firms, manufacturers of intermediates also rapidly developing the manufacture of fast colours.

The British Dyestuffs Corporation has thus a potential monopoly, but by the articles of association the public is represented by two Government directors, who are to report to the Board of Trade when prices are unreasonable or any unfair discrimination in the distribution of products is made as regards any customers. The position of these directors must be an anomalous one. Their interests as directors must lie in making the business a profitable investment, for there is no limitation of profits in this concern, as in the case of the first British Dyes Company of 1915. Yet they are to be watchdogs on behalf of the public.

The basis of capitalization of the new Combine has been the subject of much criticism which cannot be entered into here, save to state that according to the Sub-Committee it does not appear to be unreasonable when taking the exceptional high

prices and valuation of plant into consideration. Put at its worst, the following gives one some idea of how the original companies' shares of £100 stand in the new Corporation—these new positions covering goodwill, patents and other rights. A holder of £100 share in British Dyes received £174 in the Corporation, while the holder of £100 in Messrs. Levinstein's received £1,330 in the Corporation! The Committee explain this by stating that "exchange of shares was made not in respect of the nominal capital of the two concerns, but in respect of a valuation of their respective assets." The nominal capital of Levinstein's was "only £90,000, whereas the effective capital irrespective of goodwill and patent rights was £350,000."

They go on to state that Messrs. Levinstein's had paid no dividend for fifteen years before the war. Their £10 shares were quoted at £2 10s. before the war, but they add that the bulk of the shares belonged to the Levinstein family and that it was their practice not to pay profits but to put them back into the business.

> "We do not consider that the Corporation is under the handicap of over-capitalization except in so far as the buildings, plant, etc., of the British Dyestuffs Corporation were erected at a time of high prices and feverish conditions and in so far as they may prove more than adequate to the demands which will be made upon them."[166]

Major H. Barries, M.P., who differs from his colleagues in this and other points, in a reservation states that the fact of Government participation in the capitalization scheme has obscured the inflation, and that the object of the new grouping was to continue to secure during peace time the abnormal profits made during the war.

> "I do not contest the view that the share conversion on amalgamation was equitable as between the companies amalgamating, but I hold that it was inequitable in respect of the consumer whose payments would have to provide for the return on the converted capital."[167]

He considers the Corporation over-capitalized, and that the Government should have insisted that the buildings and plant, provided out of abnormal war profits,

should have been written down to the pre-war cost before investing public moneys.

The Committee regrets that the additional capital required could not be raised from the dye users; that the public were in consequence invited to subscribe one-half of the share capital, and they explain that, owing to the fact that war profits were devoted to extensions, developments and writings off of capital expenditure, the profits since amalgamation have not been up to expectations.

Some of the advantages due to large-scale production and unification have been secured by the Corporation, but the success of the independent small concerns suggests that the advantages of centralization may be exaggerated. The existence of these small concerns provides a salutary check and safeguard against the abuse of monopoly. If this be so, we fail to see why the Committee considers the Corporation has justified its existence and we incline to accept the view of Major Barnes that there was over-capitalization, and that the amalgamation took place on an inflated basis.

The enormous increase in the price of certain dyes as shown in Schedule II of the Report (from 154 per cent to 2,300 per cent) proves that there is something wrong, apart from the famine prices due to scarcity and shortage. These increases are accounted for in the Report by increases in cost of fuel, materials, labour, repairs and renewals, but mainly owing to the fact that the new plant and equipment put up at a high cost has to be paid for, seeing that pre-war we produced only 10 per cent of our dye requirements ourselves. This may certainly be as stated, but again we fail to see why all the buildings and plant, etc., put up during the years of the war should be paid for in one or two years by the enormous prices charged to the consumer.

One may as well argue that because of the enormous cost of building a railway, rail fares should be raised by ten in order to pay off this cost in a few years instead of by spreading them over, say, ten years. It is true that costs of intermediate products have also gone up considerably, but the increases in prices of dyes are unparalleled by those of any other commodity. The increase in price of bananas would be similar if we excluded their import and proceeded to grow them ourselves in hothouses. Something similar, it seems to us, has been done in regard to dyes. During the war any plan was justifiable, but the case for this hothouse treatment of dyes after the Armistice has no justification in economics, in high politics or in common sense,

except that the herd psychology that dictated it cannot free itself from the jungle of militarism and high finance, out to get maximum returns for minimum values.

> "The prices charged during the war were higher than were justifiable on the basis of current costs of production. In some cases the profits were not distributed in the form of dividends but kept in the business in the form of extensions and development of the works."[168]

Because of the close connection between dye making and explosives the Committee fear that the competition in dye making will, in the future, be akin to competition in armaments in the past, and that the world's requirements will be far short of the actual supply, with consequent demand for state subsidies on the part of the dye industries because of their importance in times of war. This actually seems to be happening, so we are forced to keep out German dyes under the "Dyestuffs (Importation Regulations) Act, 1920," the "Safeguarding of Industries Bill" and similar measures.

It would have been a far better method to pay grants to establish the dye industry, either by undertaking the manufacture wholly in governmental laboratories, where the whole personnel of the Universities could be drawn upon, or by a system of bounties on production, rather than have allowed a semi-public-private trust to do so. What has happened is that we have invested public money in a corporation and then allowed it to charge what it likes for its products.

This survey may fittingly conclude with a short account of the international position since the Armistice. As the import of dyes was prohibited, the manufacturers at home were in sole control of the market at the end of 1918. Output was in excess of pre-war imports; there was a shortage in certain colours, vat and lake colours, but output of alizarine and indigo was above pre-war imports. Yet there was naturally a shortage of fundamental materials such as aniline oil, beta naphthol, paranitraniline, etc., due to the decrease in quantity of coal carbonized and by-product reductions in gas works. There was little competition from abroad, as the Germans were also experiencing the difficulties of transition. Imports prohibited under wartime regulations were, by Royal Proclamation in February, 1919,

continued refusal of entry throughout 1919. In December, 1919, it was found that this prohibition was invalid, as dyes could not be construed as coming under "arms, ammunition, gunpowder or any other goods." The result of this judgment by Mr. Justice Sankey was a large import of synthetic dyes into this country between December, 1919, and December, 1920, when in this latter month the Dyestuffs (Import Regulation) Act was passed, making it impossible to import dyes except by licence to be granted by a Committee of five dye consumers, three dye manufacturers and three neutral members, of which one is chairman. It is pretty certain that this hands over the determination of dyestuff imports into this country to a business committee who, however impartial they may try to be, cannot but be influenced by the industry, which may be run quite counter to the interests of the general public and the workers concerned, because obviously, if it is going to be more profitable to sell bad English dyes for a good price, rather than good German dyes for a lower price, it will be done. A man we know was before the war a large user of permanganate of potash, which he used to clean old manuscripts and rare books. He could buy it at 1s. 8d. per lb. and used a small amount of it in solution several times over. After using it once it was re-bottled, and re-used for a period as long as three months. Now he has to pay 4½d. per oz. for permanganate of potash which can only be used once. If it is bottled the permanganate drops to the bottom as a sediment and the water becomes clear.

In Germany, the two groups of Höchst Cassella and the Badische manufacturers, mentioned earlier in the chapter, formed a community of interests in 1916 along with other principal German firms. The following Companies now form part of the combination:—

The Badische Anilia und Soda Fabrik.
The Berlin Aniline Co.
Friedrich Bayer & Co.
Cassella & Co.
Meister Lucius & Bruning.
Kalle & Co.
Weiler-ter-Meer & A. Leonhardt & Co.
Griesheim Elektron.

The reason for this grouping was the breaking off of far reaching international agreements by the state of war, the desire of the German Government to treat with one body for export purposes, the absolute necessity for combination to maintain the German chemical trade after the war, the establishment of new factories in the U.S.A. and in England, and the passing of anti-dumping laws in various countries.

During 1919 a much closer combination was formed among German dye manufacturers with a capital of 1221.6 million marks, when all the special departments excluded under the last agreement were co-ordinated and brought in; all synthetic colour makers are included, while the financial arrangement *re* holding of shares allow for the interchange of members of the Board of Directors and Management. The Combination manufactures intermediate products, dyestuffs, pharmaceutical preparations, photographic preparations, other synthetic organic materials, and also all kinds of mineral acids, heavy chemicals and products of the electro-chemical industry. It has its own coal and lignite mines and German plants for fixing atmospheric nitrogen by the Haber process.[169]

In the United States many new companies were formed to manufacture intermediate products and dyestuffs. The chief was the National Aniline and Chemical Company (1917). A bigger combination is the Allied Chemical and Dye Corporation—a merger of the National Aniline and Chemical Company, the General Chemical Company, the Solvay Process Co. (alkali manufacturers), the Semet Solvay Company (constructors and operators of coke), and lastly the Barrett Company (tar distillers). The authorized capital will not exceed 65,000,000 dollars in 7 per cent preference shares and 3,000,000 shares of common stock without par value. A dividend of 6 dollars per share per annum is anticipated. This combination, one of the most powerful in the world, will combine the carbonization of coal, the distillation of tar, the manufacture of all the heavy chemicals with that of the production of all intermediate products and dyestuffs.

In view of the emergence of these large corporations, the establishment of the British Dyes Corporation is welcomed by the Sub-Committee on Trusts because of its financial power and because they recognize that this international competition in dyes “is a conflict of commercial 'Great Powers' exhibiting all the characteristics of militant diplomacy carried on with commerical and financial brute force in the

background, rather than a single economic matter of striving to offer in competition with others the most acceptable article at the most favoured price."[170]

This is a very accurate description of a trust and its objects and methods. The British Corporation is handicapped at present by its small range of colours—about 500 as compared with 2,000 different shades of dyes open to British manufacturers before the war. Whether it can supply adequately the home market in the future with the best dyes remains to be seen. In regard to quantity of dyes there is no doubt of success, but whether the range of colours provided will reach the pre-war standard is uncertain. Pre-war consumption of dyes was 20,000 tons. In 1920 our total output was 25,000 tons, of which the British Dyestuffs Corporation produced 16,000. Committees are investigating the possibility of improving the range of colours and introducing standardization. About £300,000 has already been spent on research. In the year 1920, £90,000 was spent, but it must be made clear that "volume of trade and quality of research are reciprocal in that only a dyes industry on a large scale can provide openings and careers such as will attract the best scientific brains to the industry." We may add that these people will not be forthcoming so long as industry continues to be run as at present as a machine to produce high dividends for a small group of people. There is not sufficient attraction in such a proposition to draw the best brains; if we had a national or other institution responsible for dye production it might be done, but we fear that so long as big finance dominates business, and while private greed is mixed with public interest, the mixture will block the way to a thorough stabilization of the industry.

The British concern is handicapped as compared with the German and American by the fact that the latter were well equipped before the war. The only way to overcome this is by greater efficiency and research. Raw materials like methyl alcohol, obtained from wood pulping countries, and benzol, obtained from coal and tar distillers, are very important factors in the future of the dyestuffs industry. If the combination can secure adequate supplies of these it will have a chance of success. Heavy chemicals again are outside its control. It will have to make arrangements with the great chemical Trusts to secure these also. In short, the Trust will have to expand vertically as well as horizontally. The suggestion, therefore, in the report that the competition of small concerns with the large is to be encouraged, is beside the

point and valueless, for very shortly the difficulty of getting raw materials and of making arrangements with the other large world groups will make it impossible for the small firms to expand or to stand outside the big combine—the result will be one large chemical and dyestuffs combination in this country. In view of this, immediate legislation is necessary to protect the public against the danger of monopolistic control by these organizations. The connection between Acts of Parliament such as the Dyestuffs (Import Regulation) Act and large business interests, as represented by the dyestuffs industry, is obvious. Our political machine will soon become, if it has not already done so, the handmaiden of economic power as represented by big business.

(B) The Explosives Industry.

There are four combinations in this industry, viz.— the High Explosives Trade Association, the Safety Explosives Trade Association, the Electric Detonator Fuse Trade Association and the Fog Signal Association.[171] These fix manufacturers' and retail prices of practically all the explosives, detonators and fog signals manufactured and sold in this country. Agreements exist with foreign manufacturers which eliminate price competition, so that, except in regard to sporting and rifle ammunition, there is no foreign competition. Standardization of prices and territorial restriction of markets exist, so that because of the predominant influence of the Nobel Combine there is no likelihood of any competition in the future.

Nobel Industries, Ltd. (or the Nobel Combine) controls or owns all the explosives companies in this country, and a short sketch of its growth and present position is instructive.

The organization was formed in 1918 under the name of the Explosives Trades, Ltd. As the Treasury was in control of new capital issues during the war, permission was required for the purpose of consolidating twenty-nine firms manufacturing explosives. The main reasons for the merger were that the combination would be able to meet foreign competition effectively after the war, and further that purchase of raw materials, standardization in manufacture, distribution, and concentration in scientific research, could only be attained by a large group.

Price associations had been in existence for years, so that a consolidation would

be still more powerful. The danger of monopolistic control of explosives was examined by the Board of Trade, but they were satisfied that progress in the industry could only be secured by the merge. This was agreed to, especially as the Ministry of Munitions regarded the move favourably. One condition was imposed, viz., that the Board of Trade should be invested with powers to intervene in respect of the prices of the Company.

The consolidation, under the name of the Explosives Trades, Ltd. (changed later to Nobel Industries, Ltd.), was formed in 1918 with a capital of £20,000,000. No public issue of shares was made because the companies forming the group exchanged their shares for shares in the new company. Initially, the number of firms concerned was twenty-nine, but later four others were acquired. The combine secured the interests of 75 per cent or over in fourteen other firms; holdings of between 33½ per cent and less than 75 per cent in twenty other companies; and minor financial interests in seven additional firms, making a total of seventy-eight companies associated with the Nobel Combine. Of the £20,000,000 authorized capital £18,789,737 had been issued and fully paid by May 5, 1921.[172]

Practically all the share capital of 33 of these firms is held by Nobel Industries, Ltd. Explosives ammunition or accessories are manufactured by twenty-eight of the thirty-three. Of these six are liquidated or in process of being wound up. Explosives are produced by seven firms out of the fourteen in which a controlling interest is held. Of the twenty-four businesses controlled up to 75 per cent of their capital, explosives are produced by eight only and five of these are in other countries. All the minor companies associated with the Combine manufacture explosives, but all, with one exception, are situated abroad. Even in these companies, therefore, Nobels have a minor financial interest. That is to say, Nobels have control of all explosive companies in this country (where they have pecuniary interest) with one exception. The activities of the Combine now embrace, in addition to explosives, industrial collodions, metals, motor cycles and accessories, chemicals, fancy goods, artificial leather, machinery, nails, stoves and lamps. The Combine states that practically 60 per cent of its capital is employed in the manufacture of commodities other than explosives, and this is the reason they give for their change of name from Explosives Trades, Ltd., to Nobel Industries, Ltd.

> "This combine at the present time practically controls the policy of the various trade associations and is thus substantially able to determine the prices at which explosives and detonators are sold in this country. The power of the Combine is not affected by the competition of the independent manufacturers, and there is nothing to prevent the Nobel Combine from maintaining prices at a higher level than they would have been had their constituent companies remained unassociated."[173]

The Board of Trade's right to fix prices does not seem to carry with it the right of investigation and costing, so that the Committee recommends that statutory authority be given the Board to review the operations of the Combine and its prices in order to protect the consumer.

Under the scheme large economies will be possible in Management costs, overhead charges, production, buying, selling and research. This should mean reduced prices to the consumer, but, as the Report points out, these large benefits will not be passed on without some better arrangement than exists at present.

Small firms outside the Combine are dependent on it for their supplies of gunpowder; but the latter is the sole source of supply of nitro-cotton in this country, so it does not seem practicable for any small firms to exert any influence on prices. They may also experience great difficulty in getting other supplies of raw materials on the expiration of the Trade Associations in 1922, especially in view of the fact that nitrate of soda and glycerine are in the absolute control of other large Trusts, such as have been described in previous chapters—particularly in the salt and soap trades.

To conclude: the Explosives Trust dominates the market. It will probably enter into arrangements with allied industries and Trusts to make its organization still more perfect, working vertically from the raw materials upwards rather than horizontally. There is only one combination strong enough to deal with the group, and that is the State, which should be urged by an enlightened public opinion to control effectively these mammoth trade and financial organizations without delay. If it does not, we shall find them controlling the State despite all our so-called democratic safeguards.

(C) Quinine Sulphate, and Aspirin.[174]

Two very short but interesting reports are those dealing with the supplies and prices of quinine sulphate and aspirin tablets. They reveal the extraordinary ramifications of the Trust interests throughout the world. The former report, in its account of the supply, proves that a Dutch Trust practically regulates the supplies and prices of quinine to the world with a corresponding effect on British trade organization; while the latter shows the power and influence of the Proprietary Articles Trade Association.

The world's supply of cinchona bark is drawn from Dutch and Anglo-Dutch plantations in Java. The Dutch owners number 120 and the British 6—the former supply ten-elevenths and the latter one-eleventh of the total production. The cinchona tree, though of South American origin, has been so successfully cultivated and developed in Java that 90 per cent of the world's supplies are obtained therefrom—India supplying the remaining 10 per cent, which is not sufficient for its own needs.

A combination of manufacturers was formed some years before the war to prevent fluctuations in price and to eliminate competition. This was followed by a combination of planters, both bodies finally entrusting their interests to an organization known as the Kina Bureau with headquarters at Amsterdam. Three representatives of the planters, three of quinine manufacturers and an outside chairman, constituted this Bureau. German interests were represented before the war, but the control passed exclusively to the Dutch after 1914. No British representatives sit on the Bureau.

Messrs. Howards and Sons Limited, practically the sole British manufacturers, placed their output at the disposal of the Controls Department during the war. Stocks were requisitioned and supplies released for the needs of the trade from time to time.

On June 25, 1918, the six British-owned plantations were approached by Messrs. Howards and Sons and an arrangement entered into, whereby the whole output from these would be secured to them, provided that the price for the bark would be no less than that which they would have received if they continued in agreement with the Dutch. This means that the Kina Bureau will continue to fix prices.

During the war the Allied nations made their own arrangements with the Dutch

manufacturers. This agreement terminated on September 1, 1919. Quinine was sold to them by the Dutch for the period of agreement at about 1s. 8d. per oz. in Java. After the war, arrangements had to be entered into to secure supplies for this country, as obviously the supplies from the British-owned plantations were inadequate. A conference was arranged and, as a result, the British Quinine Corporation (fourteen firms) was formed with the object of effecting the co-operative purchase of quinine from the Dutch Combine. A contract was entered into, to come into effect on September 2, 1919, whereby the Kina Bureau agreed to supply, provided sales were effected at prices not less than those fixed by the Bureau. The members of the Corporation get 7½ per cent discount on these sales as fixed by the Bureau.

This gives the monopoly of price-fixing to the Kina Bureau which, at the expiry of the "War Contract" on September 1, 1919, immediately increased the price from 2s. 11d. to 3s. 5d. per oz. Actual prices in Java cannot be more than 1s. 8d. per oz. according to the Committee; add insurance and freight, and we have 1s. 10d. per oz., including manufacturers' profit. This means increasing the planters' share to 14 or 15 guilder cents per unit as compared with a war price of 8 to 10½ cents.

The War Office Contracts Department sold its stock of 840,000 oz. to the British Quinine Corporation at 2s. 11d. per oz. on August 11, 1919. Before the sale, the Managing Director of the Corporation predicted that after the removal of Government control prices would fall. The Kina Bureau raised its price as from September 2. The Corporation paid £125,000 to the Government for the quinine and as the Bureau had raised the price its value to the Corporation had increased by £21,000—a gratuitous profit.

In investigating prices of drugs and medicinal preparations the Committee found that there are over 10,000 retail pharmacies in the country while about 20,000 persons other than pharmacists are licensed to sell "patent medicines."[175]

There are three methods of doing business on the part of the large manufacturers of medicines and medicinal preparations:—

(1) Spending large sums on advertising, and thus persuading the public to buy and compelling the pharmacist to stock their goods;

(2) Allowing a large profit to retailers and expecting goods to be "pushed" as a reward, but spending very little on propaganda; and lastly

(3) Spending large amounts on propaganda and fixing a price to the public, allowing a large profit to wholesaler and retailer.

The Proprietary Trades Association was formed in 1896 to protect the small pharmacist against the price-cutting methods of the stores and others. The Association is an organization divided into three sections:— (a) Proprietors, (b) Wholesale distributers, and (c) Retail Distributers. There are 310 firms owning proprietary articles who are members. It is governed by a council of thirty-six members, a third representing manufacturers, a third wholesalers and a third retailers. All the 310 firms and between 20,000 and 30,000 others are engaged in the production and sale of these articles. The object of the Association is "a fair rate of profit" (i.e., 12½–25 per cent.) to the wholesaler and retailer respectively. Anyone selling below the fixed schedule of prices is refused supplies. The retail pharmacists are well pleased with the Association, as in their opinion, it ensures a fair remuneration without undue increase to the public.

The Committee took evidence on the costs and prices of aspirin or acetyl salicylic acid, before the war the exclusive property of Bayer and Company of Elberfeld. During the war several British firms succeeded in manufacturing it on a commercial scale. "Aspirin," the trade name exclusively applied to the German product before the war, is now applied to many British brands of acetyl salicylic acid.

The Report, dated March, 1920, points out that aspirin could be manufactured then at 5s. 6d. per dozen screw-topped bottles of 25 five-grain tablets; that these bottles could be sold at 6d., but that this leaves only a very narrow margin of profit to the retail pharmacist; that 1s. per bottle is an excessive price and that, taking everything into consideration 10d. per bottle of 25 five-grain tablets gives a reasonable profit to the manufacturer, the wholesaler and the retailer. Before the war the price of Bayer Aspirin was about 18s. Per lb. less various discounts. In 1916 it reached 40s. per lb. During 1919 its price in bulk ranged from 3s. 20d. to 4s. 6d. per lb. One pound of aspirin represents approximately 1,400 five-grain tablets.

Sources.

Sections (a), (b), and (c) :

1. *Report on the Oils, Fats and Margarine Trades.* Cmd. 982. 1920.
2. *Report on the Soap Industry.* Cmd. 1126. 1921.

3. *Report on the Salt Industry.* Cmd. 832. 1920.

4. *Report on Yeast.* Cmd. 1216. 1921.

5. *Report of the Committee on Edible and Oil Products, Nuts and Seeds; with a dispatch from the Secretary of State for the Colonies.* Cd. 8247. Evidence, Cd. 8248. 1916. Shows for the first time for many years the exploitation of a British Colony for the commercial advantage of Britain.

6. W. S. Culbertson, *Commercial Policy in War Time and After,* pp. 33–49 and 221, for conditions in United States and attitude towards World Policy. 1920.

7. Macrosty, *op. cit.,* pp. 181–207.

8. J. L. Garvin, *op. cit.,* p. 35.

9. *Report on Dyes and Dyestuffs.* Cmd. 1370. 1921.

10. *Report on the Explosives Industry.* Cmd. 1347. 1921.

11. *Report on the Position of Prices and Supply of Quinine Sulphate.* Cmd. 499. 1920.

12. *Report on Aspirin and Aspirin Tablets.* Cmd. 633. 1920.

13. *Report on Co-operation in the American Export Trades.* Federal Trade Commission, 1916. P. 68, etc. Parts I and II for American, German and British development in the respective chemical industries, with Charts. Part I, pp. 88–91 and 285–95.

14. *British Mission to Enemy Chemical Factories.* Report. Cmd. 1137. 1921.

Chapter VIII: Foods.

(A) Meat.

The first Interim Report[176] on Meat was issued in November, 1920, and the Final Report[177] in April, 1921. The former dealt with the meat trade in hides and fats generally, in so far as they affect the British consumer; the latter dealt chiefly with products, bacon and lard.

As far as home-grown meat is concerned, the Committee found no evidence of the existence of a combination which had any serious effect on traders or consumers. Butchers were not hampered by rings of sellers or dealers, and the Wholesale Meat Association set up by the Ministry of Food, when meat was controlled, served a very necessary purpose in carrying out the rationing scheme and it dissolved as soon as rationing ceased. So far as could be ascertained, the Committee state that where combinations exist they do not exercise control over supplies or prices. The retail trade is organized as to 70 per cent of its members in England and Wales in associations locally, and nationally in a National Federation; and 1,600 of the retailers in Scotland are members of twenty-nine local associations included in the Scottish Federation of Meat Traders, which was formed some eighteen months before the Committee reported. Although these have for their objects the elimination of the wholesalers and the prevention of speculation, they do not seem to be able to organize sufficiently to buy cattle co-operatively, though in view of the growth of the farmers' national organization they, in conjunction with those bodies, may be able

to run co-operative slaughter-houses with national advantage. Speculation on the part of middlemen took the form of reselling cattle at several markets before slaughter, reselling meat by jobbers at Smithfield before handing it to the retailers, and gambling in cargoes of Australian meat. Most of these dangers are, however, sporadic and not organized, as new supplies are always coming forward, while as regards fresh home-grown meat it can be easily prevented by keeping the cattle from market, as was done before the abolition of control with the intention of raising prices.

A good deal of time was spent by the Committee in investigating the "Meat Trust" composed of the following five American firms:—

Messrs. Armour & Co., Ltd.,

Messrs. Morris & Co., Ltd.,

Messrs. Swift & Co., Ltd.,

Messrs. Wilson & Co. (in London Archer & Co.) and

The La Blanca Co. (owned by Armour & Morris),— which import their meat from their own works in America. The British and Argentine Meat Company, Limited, and the Smithfield and Argentine Meat Company, Limited, are the two British companies, while one Argentine company (the Sansinena Company) has acted in co-operation with the American companies. Another British company (Vestey Bros., Ltd.—connected with the Union Cold Storage Co., Ltd.) acts independently and has works in Argentine and Brazil since 1917.

Besides the two Reports of the Sub-Committee on Trusts, the other sources of information as to the operations of these companies are contained in the Departmental Committee's Report on Combinations in the Meat Trade of 1808–9,[178] and of the Inter-Departmental Committee on Meat Supplies of 1918.[179] For full information on the American companies the Federal Trade Commission of the United States has a Report on "The Meat Packing Industry" which is quoted in the general report of our Committee on Trusts.[180]

From the American Official Report we can quote at length before examining the findings of our first Interim Report.[181]

"Five corporations—Armour & Co., Swift & Co., Morris & Co.,

Wilson & Co. and Inc and Cudahy Packing Co.—hereafter referred to as the 'Big Five' or the 'Packers,' together with the subsidiary and affiliated companies, not only have a monopolistic control over the American Meat Industry, but have secured control, similar in purpose if not in extent, over the principal substitutes for meat, such as eggs, cheese and vegetable oil products and are rapidly extending their powers to cover fish and nearly every kind of foodstuff.

"In addition to these immense properties in the United States, the Armour, Swift, Morris and Wilson interests, either separately or jointly, own or control more than half the export production of the Argentine, Brazil and Uruguay and have large investments in other surplus-meat-producing countries, including Australia.

"Under present shipping conditions the big American packers control more than half of the meat upon which the Allies are dependent.

"The monopolistic position of the 'Big Five' is based not only upon the large proportion of the business which they handle, ranging from 61–80 per cent of the principal lines, but primarily on their ownership, separately or jointly, of stockyards, carlines, cold-storage plants, branch houses and the essential facilities for the distribution of perishable foods.

"The control of these five great corporations rests in the hands of a small group of individuals, namely J. Ogden Armour, the Swift Bros the Morris Bros, Thomas E. Wilson (acting under the veto of a small group of bankers) and the Cudahays.

"A new and important aspect was added to the situation when the control of Sulzberger & Sons Co. (now known as Wilson & Co., Inc.) was secured in 1916 by a group of New York Banks —Chase National Bank, Guaranty Trust Co., Kuhn, Loeb & Co., William Saloman & Co. and Hallgarten & Co. The Report of the Committee appointed by the House of Representatives to 'Investigate the concentration of control of money and credit' (the Pujo Committee) states: 'Morgan & Co. control absolutely the Guaranty Trust Co.'[182]

“The Chase National Bank is closely affiliated to the First National Bank, a majority of its stock being owned by George F. Baker. William Saloman & Co. and Hallgarten & Co. are closely affiliated with Kuhn, Loeb & Co. Thus we have three of the most powerful banking groups in the country, which the Pujo Committee classed among the six most active agents in forwarding and bringing about the concentration of control of money and credit, now participating in the rapidly maturing food monopoly described above. The entrance of the bankers into the packing business was not at all displeasing to the big packers. J. Ogden Armour and Louis F. Smith were frequently consulted during the negotiations and Paul D. Cravath is quoted by Henry Veeder as giving assurance that the final arrangements would be 'more than satisfactory' to Armour and Swift.

“The menace of this concentrated control of the nation's food is increased by the fact that these five corporations and their five hundred odd subsidiary, controlled and affiliated companies, are bound together by joint ownership agreements, understandings, community of interests and family relations.

“The combination among the Big Five is not a casual agreement brought about by indirect and obscure methods, but a definite and positive conspiracy for the purpose of regulating purchases of live stock and controlling the price of meat, the terms of the conspiracy being found in certain documents which are in our possession.

“There are undoubtedly rivalries in certain lines among the five corporations. Their agreements do not cover every phase of their manifold activities, nor is each of the Five a party to all agreements and understandings which exist. Each of the companies is free to secure advantages and profits for itself as long as it does not disturb the basic compact. Elaborate steps have been taken to disguise their real relations by maintaining a show of intense competition at the most conspicuous points of contact.

“The Armour, Swift and Wilson interests have entered into a

> combination with certain foreign corporations by which exports of beef, mutton and other meats from the principal South American meat-producing countries are apportioned among the several companies on the basis of agreed percentages. In conjunction with this conspiracy meetings are held for the purpose of securing the maintenance of the agreement and making such readjustments as from time to time may be desirable. The agreements restrict South American shipments to European Countries and to the United States.
> "Since the meat supplies of North and South America constitute practically the only sources from which the United States and her Allies can satisfy their needs for their armies, navies and civil population these two agreements constitute a conspiracy on the part of the 'Big Five' in conjunction with certain foreign corporations to monopolize an essential of the food of the United States, England, France and Italy.
> "The power of the 'Big Five' in the United States has been and is illegally and unfairly used to:—
> "Manipulate live stock markets.
> "Restrict interstate and international supplies of food.
> "Control the prices of dressed meats and other foods.
> "Defraud both the producers and consumers of food.
> "Crush effective competition.
> "Secure special privileges from railroads, stockyard companies and municipalities and profiteer.
> "The packers' profits in 1917 were more than four times as great as in the average year before the European War, although their sales in dollars and cents at even the inflated prices of last year had barely doubled. In the pre-war years 1915–16–17 four of the five packers made net profits of 178,000,000 dollars."

The Sub-Committee of the Standing Committee on Trusts in Great Britain, reporting on November 6, 1920, found no evidence of combination in the home-

grown meat trade or in the trade in meat imported from the Dominions, and while it is clear that speculation took place at times, it is unorganized and is not characteristic of the meat trade as a whole.

In regard to the American Meat Companies a tacit understanding amounting to "the economic advantages of an active combination" exists.[183] Attempts have been made to fix prices at Smithfield but they have not been successful for more than a few days, though the quantities placed on the markets weekly have been fixed, and country prices vary according to the movement of London prices. Prices are occasionally cut to clear surplus stocks, while the share of British trade held by the American companies has increased considerably. This is serious, because for a long time we shall depend for our beef supply on South American output, which is in the hands of the American meat companies. They control "60 per cent of the beef output from Argentine and Uruguay; 75 per cent of the capacity of the meat works built or building in Brazil, whereas in 1909 they had only about 35 per cent of the River Plate meat trade."[184]

This state of affairs has been brought about by the severe competition waged against the British companies by the "Big Five," who in 1914 forced the former to a pooling agreement to share the trade between the respective companies. The "Big Five" have definitely adopted the policy of reducing the share of the trade held by the British companies and this involves risk to the British consumer. One of the most interesting British Companies is that of Vestey Bros controlled by English owners resident abroad. This Company is outside the "Big Five," and the report points out that should this company be amalgamated with the American group the consequences might be serious for our meat supplies.[185] Vestey Bros control also:—

1. The Union Cold Storage, Ltd.
2. Other meat works in Australia and New Zealand operated by W. & R. Fletcher, Ltd.
3. W. Weddell & Co., Ltd.
4. The Colonial Consignment & Distribution Co., Ltd., who are large importers of Australasian produce.
5. Multiple shops, retail companies of W. R. Fletcher.
6. The Argentine Meat Co., Ltd.

7. Eastmans, Ltd.

They also own the Blue Star Line, Ltd., and do a large business in importing poultry and eggs from China; in addition, before the war they had a similar trade from the Continent and Siberia.

The demand of the world for meat is likely to increase in the future, which means that the power of these Trusts will increase correspondingly, and therefore their development requires careful watching so that every country will have to adopt some policy in regard to this rapid extension of Trust control of meat. The Sub-Committee recommended that steps should be taken by the British Government to prevent the percentage of the beef trade in foreign hands increasing, and that investigation and publicity should take place in regard to their activity and methods of business. They pointed out that these foreign companies were at an advantage compared with ours, owing to the fact that they were not subject to the same basis of taxation. This should be remedied, and for purposes of comparison of costs and price the Las Palmas meat works in Argentina should be retained in British hands. Our control or ownership of shipping was one effective method of control over meat supplies moving from the United Kingdom elsewhere. Therefore, to prevent British meat supplies falling under the domination of foreign interests, reserve powers in regard to the ownership and control of insulated shipping should be secured by the Government, which should also take steps with other Governments for common action in regard to the world's meat situation.

The Report points out that in England hides are sold at auction by people who collect and sell them on commission. The buyers act for the tanners and so demand is concentrated in one or two hands. This sometimes leads to abuse; in Scotland "buying agents fix the auction price beforehand to squeeze the independent bidders."[1] But as long as the auctions are honest no difficulties of distribution or prices are experienced.

Fats are also sold by auction in Scotland, the evils of "mock" auctions being more rampant than in the case of hides. The representatives of the "Raw Fat Melters' Association," and "The Hide Market Federation," fix prices in the North and Midlands, but often those prices are not enforced. The London trade fixes its prices in the weekly market letter "drawn up and issued by the Market Committee after the

weekly auction of Australian and New Zealand Tallow."

The Committee denounce the auction method and recommend the direct sale to users, while they strongly recommend the development of public abattoirs, not only as being conducive to public health, "but [they] would enable butchers to set up organizations for the co-operative sale and treatment of their hides, fats and other by-products which would realize greater economies and would prevent the present evils which attend the method of disposal by auction."[186]

The Final Report on Meat issued on March 18, 1921, deals with bacon and lard.[187] It examined the criticism directed against the Ministry of Food for the resumption of control in August, 1919, after the partial decontrol of March, 1919, as tending to continue high prices, but the Committee do not go into this matter as they consider it outside the scope of their investigation.

In 1913 278,696 tons of bacon and hams were imported into the United Kingdom, of which 150,000 tons were our home supply, about half of this last coming from Ireland. In the same year we exported about 6,300 tons of home-grown bacon. In 1920 our home supplies had fallen to about one-half, largely owing to the greater demand for pork, but imports were about 282,400 tons. There are 3,000 curers, but only sixty keep books and are of considerable size. The West and Centre of England are the chief centres of production, but there are small curers in almost every locality. The largest producers in the West are Messrs. C. & T. Harris & Co., Ltd., of Calne. This Company is an amalgamation of nine firms, three of which cure bacon, while the others are importers of provisions, wholesale grocers, cheese factors and galvanized iron works. The issued capital is £1,450,000. In the Midlands the leading firm is Messrs. Marsh & Buxter of Brier Hill. They draw supplies from the Eastern, Central and Western counties, and from Ireland according as prices are favourable.

No trace of any active combination exists. In the West of England there are two organizations, "The Bristol Provision Trades' Association," and the "Western Curers' Association," but neither of them seems to regulate prices or supplies, and their main objects are the systematization of terms, credit, discounts and other matters pertaining to the interest of the trade. The Committee is satisfied that the price of English bacon is governed by free competition.

The two groups in the Irish bacon trade are the Southern and the Northern, both acting independently until coordinated by the Ministry of Food during the war. In the South the chief firm is Messrs. Henry Denny, Ltd., but there are five other firms who, before the war, were members of the "Southern Curers' Association" dealing with labour questions but not with supplies or prices. In the North a similar organization exists, but there is doubtless competition of a brisk kind between the individual firms and the co-operative societies who cure bacon. Sales were effected through commission agents, the Irish supply in 1920 averaging 1,000 tons a week from October to May, and 300 during the rest of the year.

"The Scottish Co-operative Wholesale Society is the largest individual buyer of pigs for bacon in Scotland." It was stated that a free market from the farmer to the curer exists in that country.

It is rather curious that whilst in England and in the South of Ireland pigs are bought alive, in Scotland and the North of Ireland they are killed on the farms and only the dead meat is taken away for curing. The former method is undoubtedly the more hygienic and more satisfactory also from the public health point of view.

In Denmark forty-five co-operative and seventeen private factories control the bacon trade. In 1913 the latter were responsible for one-fifth of the killing; in 1916 for less than one-seventh. An association for general trade and scientific purposes exists. The largest of the private factories is that of Messrs. E. M. Denny & Co., Ltd. All the bacon from both types of factories is sold through agents in the United Kingdom, twelve operating in the South and about fifty in the North of England. The Danish Bacon and Co-operative Trading Company is the largest and does about 27 per cent of the trade, representing seventeen factories which hold more than half the shares in the Company, the rest being held by traders in this country. "The Company pays 7 per cent free of income tax on its capital, the remainder as to 15 per cent to the staff (excluding the Managing Director) and as to 85 per cent between the factories and the purchasers who are shareholders."[188] Competition exists between private agents, who are practically salesmen on behalf of the factories, and the Danish Bacon Company mentioned above. The former state that if all the distributing trade fell to the latter they would succeed in dictating prices. The Committee doubt this, as the Co-operative Wholesale Societies buy bacon direct from the factories in

Denmark while competition from other sources of supply would make monopoly impossible.

During the war Denmark was out of the market and we were dependent to a large extent on the United States and Canadian bacon. The chief importers were the "Big Five," and about thirty-five independent importers who together did as much business as the "Big Five." Evidence tended to show that competition existed between these groups as there was no sign of common action between the agents of the American packers in the United Kingdom. Since the war the importations from the United States have diminished while those from Denmark have increased.

During the war the Canadian bacon trade developed considerably and a good deal of the trade has remained since the Armistice. Two Canadian companies of large size control it, "The William Davies Company," and the "Matthews Blackwell Company." Several others exist, while Swift Armour and Morris have branch establishments in Canada. All these sell through agents here who act independently. The Canadian farmer has not taken kindly to the hog, so there is small prospect of the Canadian ousting the American bacon trade.

The Dutch bacon exports are small. Sweden has a small trade, but it can never rival that of Denmark. South Australia, the Argentine and China are now producing, but the cost of transport will militate against their efficiency. The Argentine trade is likely to increase and will be in the hands of the American Meat Companies.

In London and in the South of England, an association of agents and wholesalers exists, protecting one another's interests by a rule that agents must sell to wholesalers and certain retailers only, and that wholesalers must buy only from the agents. This refers to the Danish, Irish and Dutch bacon trade, as the American, Canadian and British curers are not members. The above rule is enforced by boycott, but the Committee find that the result has not been to keep prices higher than they would have been otherwise. In the rest of the country all bacon may be sold by importers to anybody they please. Despite this arrangement of agent, wholesaler and retailer, and the possibility outside London and the South of direct trade being maintained by the curer-retailer, the Committee are not convinced of the wisdom of the latter arrangement being applicable throughout the country, owing to the present constitution of the retail trade. As things are at present it is agreed that the wholesaler

cannot buy direct from abroad and retain his knowledge of the retailer's demands.

The Committee conclude that “so long as the policy of free imports of bacon from all sources is maintained, we are satisfied that the ordinary processes of competition will make it impossible to create either a general monopoly embracing all kinds of bacon, or a partial monopoly of a particular kind of bacon of such a character that prices either of all kinds or of some kinds of bacon can be controlled in the interests of the producer or importer.”

In regard to lard also the same conditions and conclusions apply: “Supplies and prices are not artificially controlled, nor do we think that they can be.”

The report is very clear and convincing, but despite its reassuring tone and its optimistic conclusions, we cannot fail to be struck by the danger of monopoly by the American companies in the beef trade. This may extend later to the bacon trade should the policy of the 'Big Five' extend in that direction. There seems to be nothing to prevent such a group getting financial control of the non-co-operative factories in Denmark and so obtaining a footing in the Danish trade. The only safety in this direction is the promotion of co-operation both on Irish and Danish lines.

(B) Milk.

The Report on Milk discusses the pre-war custom of selling milk retail at the same price during winter and summer, but the producer obtained differential prices from the retailer or wholesaler, the summer price being usually low. It is curious that imported cheese governed the price of milk, because home grown cheese competing with the imported cheese would be dependent on supply of milk, and the amount of milk to be turned into cheese would naturally depend on its price. Therefore the wholesale price of milk is based on the price of surplus milk, which, in turn, is governed by the price of cheese. To gain the advantages of the control of surpluses, and incidentally to get the wholesalers' profits, a large number of Co-operative Dairy Societies were organized by the farmers before the war. They were not run on really co-operative lines, for the members got a guaranteed price for their milk and they were out to get the maximum prices, not necessarily to promote efficiency and lower costs. “Their factories which were intended to deal with surplus milk, were utilized as alternative means of disposal of their produce when the prices which they

considered remunerative could not be realized."[189] As a result winter supplies of milk were short before the war, and summer supplies were cheap and plentiful, because it was more profitable to produce cheese than milk. During the war, winter supplies of milk for the sick and wounded were imperative, so that those who produced it had to be guaranteed a profit at least equal to that obtained from summer production.

The various channels through which milk reaches the public are as follows:—

Producer to customer direct,

Producer—retailer—customer,

Producer—factory—wholesaler—retailer—customer.

If the producer sells direct to the customer he can, of course, do so more cheaply than if he has to pass the milk through other channels. The controlled price (producer's average) in 1919 was fixed at 1s. 7*d.* per gallon, with a margin of 2d. per gallon to factories and wholesalers sending by rail; 3d. maximum margin was allowed in addition to those wholesalers delivering to buyers' premises, margin to include rail carriage. Retailers were allowed a maximum margin of 8d. to cover cost of distribution, including delivery to customers.

State control was necessary because of the great difference during the war between the winter and summer prices. The reasons given were the increased cost of labour and feeding stuffs of farm produce generally. The Ministry of Food fixed prices for summer and winter. Milk was decontrolled on January 31, 1920, and the immediate effect was a fall in the price. The margin of profit allowed wholesalers and retailers under control was sufficiently high to attract the new farmers' Co-operative Dairy Societies to undertake the work of wholesalers also, but it seems that they were not very successful until they grouped together. Thus the wholesale firms decided to co-operate soon after the war broke out. In this way they economized in horses, materials and men. The United Dairies, Ltd., was one resulting large combination. It had a capital of £1,000,000 in 1915, in which year it was formed, and it included the Dairy Supply, Ltd., the Great Western and Metropolitan Dairies, Ltd., F. W. Gilbert, Ltd., and the Wilts United Dairies, Ltd., which controls the Grande Compagnie Laiterie de Normandie. This group represents the principal London wholesale business, with numerous country creameries. In 1917 the nominal capital was increased to £4,000,000 in order to secure control over the principal London

retail milk businesses. So successful has this policy been that its control now extends over 470 retail shops. The issued capital to June 30, 1916, was £933,002, with a net profit of £66,549 before deduction of excess profits duty. In 1919 the issued capital was £2,430,681 and the net profit was £233,444, the percentage of profit to issued capital being 9.60. Dividend at the rate of 10 per cent has been paid on the ordinary shares since its incorporation. In December, 1919, 500,000 further ordinary shares were issued at 5s. premium.

United Dairies claim to have effected large economies through their amalgamation, such as improved quality of milk, good service, elimination of waste and overlapping, and best use of surplus milk, which, during the flush season, is turned into cheese. They have also been able to consolidate 736 rounds of milk, to take 592 horses off the streets, and to close 63 depots or redundant shops. In their whole-sale section they claim to have been able to employ plant continually at selected factories, to centralize milk supply before distribution by rail, thus preventing waste from soured milk due to long distance carriage, and finally to arrange distribution from nearest depots. All this is probably true, but our comment is, how much of these economies have reached the public? And if the wastes of private enterprise have been proved to exist by the changes brought about by the Combine in the interest of private profit, why not go a step further and eliminate the luxury of the wastes even of a Combine for profit or dividend-making out of milk, by concentrating on a public milk service for use by the municipalities or by co-operation?

There is no doubt about the wastefulness and inefficiency of the present methods of distribution. Bottle delivery is more hygienic and would cost little more if carried out on a large scale, but to do this we must have milk depots, centralization and municipalization. Our experience in a town like Aberystwyth, where milk has been as high in price throughout the season as in a big industrial centre, confirms the view that municipal monopoly of distribution would secure the great advantages of the grading of milk according to its qualities and so a better quality, cheaper and more plentiful supplies, together with the elimination of a large number of distributers who now overlap in each ward or area. Local producers, retailers in hundreds of areas, have combined to raise prices, especially in towns in agricultural districts. Small country towns have either been unable to get milk at all or had to pay as much for it

as in Birmingham or London. There is no successful solution to this except by giving to the municipality sole power to purchase and distribute local supplies of milk. The danger of the producer feeling aggrieved and abandoning milk production can be risked, while we are convinced that should this result the remedy would soon be effective—co-operative dairy farms or municipal dairies on the Danish model.

The Committee found no evidence of combination or agreement between manufacturers of milk products such as condensed milk, dried milk, malted milk, etc., which compete with one another. We do not think this generalization is sound, as since the Armistice there has been a good deal of interlocking between condensed milk firms. When sugar is so dear this is inevitable, as control over cheap sugar (beet) gives such a firm a big advantage. Consequently, arrangements for combination and pooling of resources have been entered into between the British and Continental firms, but space forbids going into this matter.

The milk problem is becoming acute. Not only is there agreement possible between combinations like United Dairies, Ltd., and the large farmers' Co-operative Dairy Societies, but it is natural to expect that as the National Farmers' Union grows and covers the whole country, the danger of a producer-distributer alliance will become still more pressing, and without co-operation or municipalization the consumer will be helpless. Producer-retailers have charged exorbitant prices for milk and in many cases are still doing so; producers selling to their own factories or to other wholesalers have also charged very high prices, which have been passed on to the consumer. In view of these facts, and of the significance of large movements of combination in existence, some definite action in the public interest seems imperative. Milk is a food of specially high dietetic value for children. The matter is vital and brooks no delay.

The Committee's conclusions are rather timid. They state first that the combinations of distributers “have operated in the interests of the consumer as well as in the interests of their shareholders.” We see no evidence of the former, although presumably the consumer cannot help benefiting by some of the advantages of a combine when it promotes quicker or better service; but in addition the price could be lowered as well as the service improved, yet this seldom happens. Even if, therefore, the consumer gains a little, it does not follow that he gains as much as he

ought. It is bad principle to allow the consumer to gain in service only at the price of allowing some other people first to gain a substantial profit.

Next the Committee advocates milk distribution in bottles. To do this, as they recognize, involves combination. "We consider that either some form of combination among the distributers is inevitable or municipalities should be empowered to undertake the distribution."

We suggest that only the latter recommendation is really practicable in the interests of the public, or some form of distribution through the co-operative (consumers) societies. The Committee also suggest granting powers to municipalities to take over milk distribution as a precautionary measure where profiteering is proved to exist, but since May, 1921, this provision has lapsed owing to the winding up of the Committee on Trusts, so that further legislation is necessary.

The Committee also warns the public "that should amalgamation of the producing and distributing interests in the milk industry mature, we consider that the consumer would require to be adequately protected."[190]

(C) Fruit.

The inquiry into fruit prices was due to the high prices of 1919 and the fear of consumers that, following upon decontrol, prices were rising to alarming levels. A Fruit Traders' Association was also deeply concerned about the alleged speculative forward buying of fruit by a combine, which was stated by some to be proof of the existence of a combination of jam manufacturers.

The Committee reported that no such combine exists among fruit growers, fruit dealers, or jam and preserve manufacturers in this country. Growers' Associations, where they exist, are for the purpose of marketing members' produce at a discount and do not control prices or supplies. Keen competition is said to exist, and although wholesalers and retail fruit dealers have associations, the Committee failed to discover any evidence of attempts to raise prices.

Amalgamations exist in the jam and preserve trade, the largest being Messrs. Crosse & Blackwell, Ltd. There are between four and five hundred jam-manufacturing firms in the country; the co-operative societies produce a good percentage of the total jam production, so that there is independent trading and keen

competition, with little likeli-good in the opinion of the Committee, of any combine of ordinary traders effectively controlling the industry.

Messrs. Crosse & Blackwell, Ltd., own or control the Companies and businesses of Crosse & Blackwell (Manufacturing Company) Ltd., James Keiller & Sons, Ltd., E. Lazenby & Son, Ltd., Cosmelli Packing Co., Ltd., and Robert Kellie & Son, Ltd. They have also acquired Batzer & Co., and Alexander Cairns & Sons. Their capital is over £10,000,000 and they estimated that in 1919 they produced one-fifth to one-sixth of the total jam production of this country. "Any further extension of so large a combination as this should be carefully watched in view of its possible ultimate effect on the market."[191]

Forward contracts for the supply of strawberries and raspberries for two, three, or five years are entered into by several companies, first out of fear that the combine would secure the supplies, or in order to guarantee to growers a market for their fruit at a stable price, though, before the war, these prices were not fixed beforehand but the bargains between the growers and the jam manufacturers were concluded at the market prices ruling at the time of purchase. Companies which had no forward buying contracts objected to this method as, in their opinion, it meant a control of the sources of supply and an absorption of a preponderating proportion of the crops of certain fruits, and so resulted in a very small margin being left for other buyers, with the consequent scramble and speculation for this surplus. These contracts, according to them, created artificial prices and eliminated competition among the growers, operating harshly against the small manufacturer who was not able to make speculative arrangements. It appears, however, that growers frequently disregarded arrangements entered into with the manufacturers. The Committee felt that these forward contract prices, provided they are fixed at a price giving the grower and distributer a fair profit, "are not unreasonable and not against the interests of the consumer, but that contracts made for the purpose of controlling a larger supply of fruit than is necessary to meet the normal proportionate requirements of the purchasers, tend to disorganize the usual -channels of supply and deprive other manufacturers of an opportunity to obtain such fruit as is necessary for their businesses."[192]

We fail to see how the forward contract method of fixation of prices can possibly

be prevented from becoming a question of control of supply, because prices cannot be fixed for long without securing the control of supplies. Therefore, Government costing through the Ministry of Food should have been retained. No solution of this problem of provision of food for the people at reasonable prices will be forthcoming without the scrutiny and publicity provided by the Ministry of Food, which has now been abandoned. The Ministry of Agriculture may do a great deal to foster fruit growing, but this is insufficient unless the marketing and commerical side is looked after as well. This will be impossible without a Ministry of Food charged with the responsibility of scrutinizing prices and, if necessary, with large powers of control in the interests of the consumer. Fear of the possible actions of combines is a direct incentive to speculative buying. Combines are on the increase, therefore "Government action is necessary for the protection of the public and the prevention of similar unnecessary addition to the cost of such food to the public in the future."[193]

(D) The Fish Trade.

The five first-class fish ports are Grimsby, Hull, Fleetwood, Aberdeen and Milford Haven. The first two are responsible for the distribution of more than one third of the white fish landed in the United Kingdom. Subsidiary ports are scattered up and down the coast between the above five large centres. "Pelagic" fish (shallow-water fish) such as herring and mackerel, are dealt with differently from white fish ("demersal" or deep-sea fish).

The "white" fish is caught by four methods, in nets by large steam trawlers, in nets by small steam or motor vessels, in nets by sailing trawlers and on lines by small craft. The first method is the most efficient, as the vessels have a larger area for operation and often spend three weeks away in Moroccan or Icelandic fields. This is the large scale method of production, the catches being usually large and the cost per unit low. The fish is kept in ice and is usually landed in good condition. A good account of this method is given in *London River* by H. M. Tomlinson—a realistic picture of the trawler fleet on the Dogger Bank. The freshest fish are marketed by the small steam and motor vessels whose catches are smaller and therefore more costly.

Prices on landing vary directly with the supply. In many parts the fishermen are paid a nominal wage and a share of what the catch "fetches" at auction, so that their

wages depend on the catch and its selling price. Rings or combinations, therefore, may gain by keeping down prices to the fishermen as well as by raising them to the public. Professional fish salesmen sell by auction about 80 per cent of the fish landed. Wholesale merchants and curers are the buyers, though sometimes the trawler owner combines these functions that with of retailer. Retailers order direct from the wholesalers at the ports, or secondary wholesalers in inland markets buy direct from the port wholesalers, or in some cases send their own buyers to the port's auction, or, lastly, wholesalers at the ports distribute direct to customers in baskets or basses, this trade being known as the “bass trade.”

Boxes, ice, labour, cartage to the nearest station, and cost of rail transport to the customer, are provided by the wholesaler. The dominating factor in price is supply and the extreme perishability of the commodity. Quickness and rapidity of despatch are essential. Every wholesaler competes, therefore, to send to the retailers as early as possible in time for the following morning. At an early hour prices are high, but if demand exceeds supply, prices will hold throughout instead of falling rapidly. The merchants' demands having been satisfied, the rest of the supply is iced back or bought up cheaply and sent inland to be sold on comnnssion. Retail merchants will visit this inland market the next morning after having secured the usual supplies from the ports. In the inland markets, also, early morning prices are usually higher than those ruling later in the day. The balance of the fish is absorbed by hawkers at low rates. The retailer has thus fish to sell at various prices: (1) the prices charged at the ports of landing which may vary on the same day and (2) the varying prices paid in the inland market. He usually buys only enough to supply his regular customers, “chance” custom being limited. Average prices and standing charges are constant, but in practice his prices do not vary greatly from day to day, except that he often suits them to the purse of his customers. In a prosperous neighbourhood, the best fish will be sold at the best prices to keep his good customers, so that he has a standard price for the different kinds of fish. Some days, therefore, he makes a good profit and other days a loss. If the weather be hot, he loses on account of the perishability of his commodity, while if supplies are short and he has paid a high price, he cannot advance his prices beyond certain limits which his customers are accustomed to pay. No evidence of agreement seems to have been forthcoming from retail fishmongers,

but obviously a short supply will affect all alike. At the ports, with reasonable access to railways and markets, normal competition prevents fishermen's prices being kept down, though the growing practice of owners of vessels being also auctioneers and wholesalers may secure a certain agreement.

> "The attempt from time to time to establish rings or combinations in the smaller ports for the purpose of depressing prices paid to the fishermen does not frequently benefit the consumer as, in the areas of production, prices of retail sales often rule high when low prices are ruling in the wholesale markets."[194]

Information spreads quickly in the fish trade. There are occasionally struggles between the established merchants against the operation of a newcomer, until a decision is reached in favour of the man with the longest pocket.

In several small inshore fishing centres such as Brightling-sea, Tollesbury, Leigh, Southend and some Cornish ports, there are no auctions, the fishermen selling direct through their own agent, or through the Fishermen's Co-operative Organization, which is growing in the small ports. The fishermen consider they can do better by selling direct themselves or by consigning direct to the inland markets. There is no doubt that the only method for the adequate protection of their interest in the small ports is the method of distribution made possible through the Co-operative Organization, though in the large ports this method seems to avail little against the capitalistic organization already in operation.

Competition and perishability govern the situation in the inland markets. By 9 a.m. a salesman who has a surplus rapidly reduces his prices to clear and a drop of from 20 to 50 per cent often takes place. Fluctuations in the price of fish are thus very great from day to day, and even from hour to hour, being dependent in the main on supply. A shortage of 50 per cent in the supply will often result in more than double the prices, so that "the total sum realized for a short supply may therefore greatly exceed that realized by a normal or even an excessive supply."[195] Consumers would gain by anything that lessened these fluctuations in supply and so in price. While the Committee found no evidence of restriction in supply with a view to securing a

scarcity price, they remarked, “at the same time it is to be noted that in theory there may not be the same motive, among those concerned in the fish supply, for obtaining the largest possible production and for securing the greatest stability of price as there is assumed to be, under a system of private enterprise, with regard to commodities produced with greater regularity and less promptly perishable.”[196] This seems to point out definitely the urgent need for organization in the consumers' interest.

The Committee, while clear that no formal agreements exist for forcing up prices, point out that in regard to the smaller ports, attempts are made periodically to hold down prices to the fishermen. They recommend that the Board of Agriculture and Fisheries, the Fishery Board of Scotland, and, until it was wound up, the Ministry of Food, should give special attention to the improvement of the machinery of fish distribution generally. Transport is inadequate. In its recommendations the Committee reports that the main causes of the holding up of supplies, and consequently the high prices prevailing, are the lack of systematic provision of “road transport for common use from the landing-places to the nearest railway station, regular fast trains with properly equipped insulated fish wagons, adequate refrigerating storage at large centres and a properly situated central market and distribution centre in London with adequate railway facilities for all lines in substitution for Billingsgate, which is habitually congested and involves expensive cartage of two-thirds of the normal supply from distant railway termini.”

Sources.

1. *Interim Report on Meat.* Cmd. 1057. 1920.

2. *Departmental Committee's Report on Combinations in the Meat Trade.* Cd. 4643. 1908–9.

3. *Committee of Meat Supplies.* Cmd. 456. 1918.

4. *Final Report on Meat.* Cmd. 1356. 1921.

5. *Report on Milk.* Cmd. 1102. 1920.

6. *Report on Fruit.* Cmd. 878. 1920.

7. *Report on Prices, Costs and Profits at all stages in the Biscuit Trade.* 1920. Cmd. 856.

8. *Findings by a Committee appointed to inquire into the Fish Trade.* Cmd. 514.

1920.

9. *Report on British Industry after the War.* Cd. 8181. 1916.

10. C. S. Orwin, *Reports on the Home Production of Food. Economic Journal.* Vol. XXVI, p. 105.

11. J. R. Clynes, *Food Control in War and Peace. Economic Journal*, Vol. XXX, p. 147.

12. *Report of the Cost of Living of the Joint Committee of the Trades Union Congress*, 1921.

13. *Statistics of Retail Prices. Labour Gazette* (Official).

14. *Abstract of Labour Statistics.*

15. *Wages, Prices and Profits,* Report prepared by the Labour Research Dept., Nov., 1921, p. 86 for tables.

16. Christopher Tumor, *The Land and its Problems.* 1921.

17. F. E. Green, *A New Agricultural Policy*, 1921.

18. A. E. Davies and D. Evans, *Land Nationalization*, 1921.

19. Sidney and B. Webb, *The Consumers' Co-operative Movement,* see Chapter IV, p. 233, for effect of war on the movement.

20. *Report on Co-operation in American Export Trades,* 1916, for U.S.A., and German and French data.

Chapter IX: Miscellaneous Industries.

(A) Tobacco.[197]

This is an important industry, inasmuch as tobacco is a conventional necessity. The value of the tobacco-leaf imported in 1918 amounted to £15,674,102. The duty on this amounted to £40,386,488. After import, the leaf is manufactured into tobacco, snuff, cigars and cigarettes. Because of the large amount paid in taxation in comparison with the actual cost of the leaf, price depends more on taxation changes than on production expenses. A large capital is therefore required in proportion to the cost of raw material, plant and labour, to pay the duty when taking the leaf out of bond. The interest on this is added to the cost of production and paid by the retailer who, buying at this enhanced price, charges his customers interest on the money he has advanced. The Committee suggests that some readjustment of the payment of duty should take place so as to defer its payment to a later stage in manufacture and distribution to enable the consumer to pay the cost of production, the profit of the manufacturer and distributer and the Government tax, but he should be relieved of the payment of interest on the money which the manufacturer borrows to take the leaf out of bond, and of the interest which the retailer pays on his payment.

Similarly the raising or the lowering of the duty on tobacco causes prices to rise immediately, even on stocks bought before the duty is imposed or causes prices to be lowered very gradually, even though notice of such a reduction of duty has been given. About 35,000 people are employed in the industry, while 378,000 were

licensed to sell tobacco in 1917–18, this figure including all the small sweet-shops, bars, kiosks, etc., selling other goods as well.

For a full account of the Imperial Tobacco Company, and the causes of its origin and development, the reader should refer to other sources, particularly Mr. Macrosty's admirable volume.[198] This important trade combination was formed in 1901 to defend the British manufacturers against an American invasion. The struggle that followed is historic. Its object was to capture distribution and secure the goodwill of the retailers. Finally, a truce was called when the whole of the United Kingdom trade was conceded to the Imperial Tobacco Company, and the export trade was divided up between it and its rivals by the formation of a new company, "The British and American Tobacco Company," the proportion of whose stocks was one-third British and two-thirds American. The two companies work together throughout the world and control the bulk of the world's trade.

The Imperial Tobacco Co. of Great Britain and Ireland, Ltd., is comprised of eighteen companies and, in addition, a firm of multiple retailers with 170 shops. It controls about 60 per cent of all the tobacco consumed in this country, but no exact information on this point was forthcoming. It is claimed that one result of the Combine has been to maintain a high quality of the goods sold. The Committee seems to agree with this. The firms united in the Combine keep their own trade-marks and proprietary brands and employ their own travellers and representatives, but they employ a central accountancy and organization of prices.

> "To maintain and extend the sale of its goods the Company has established a bonus scheme which in its effect employs the individual retailer as the advertising agent of the Company and certain lines of goods the sale of which it is desired to push are specially indicated in the price list by being printed in red ink."[199]

The retailer gets a bonus on the sales of the Company's goods which he agrees to display preferentially in his shop, though not excluding the goods of trade rivals, who agree that the Combine has not acted unfairly in the administration of the system. The Combine fixes a minimum price below which the goods must not be

retailed to the public, with withdrawal of supplies as a penalty for a breach. These minimum prices become, in reality, maximum prices and fix the standard prices of other manufacturers, who have been compelled to imitate the methods of the Combine in regard to the bonus scheme and price fixation.

Though there is no monopoly the Committee found that because it controls two-thirds of the trade the Combine "practically dictate the prices at which the majority of consumers purchase the common standard lines of tobacco and cigarettes."[200]

Prices have risen since 1914 110 per cent. This includes the Customs Duty, which was raised from 3s. 8d. to 5s. 6d. per lb. in 1915 to 7s. 4d. in May, 1917; reduced to 6s. 5d. in September, 1917, and raised again to 8s. 2d. in 1918—a total increase of 4s. 6d. since 1914 upon unshipped leaf. This rise in duty amounts to 122 per cent, so that out of a price of 10s. 8d. per lb. charged to-day for a cheap tobacco 8s. goes for tax. Excluding the tobacco tax, the retail price has risen by between 95 and 141 per cent, while popular brands of cigarettes have risen by between 78 and 122 per cent. Between June, 1917, and January, 1919, maximum retail prices were fixed by the Tobacco Control Board, which allowed increases with alterations in duty after hearing sworn statements by the Tobacco Combine and investigations into expenses of production of independent manufacturers. The statements were confidential and all the papers of the Control Board were destroyed. In April, 1918, when the last increase was made, the figures showed an actual loss was made by the independent manufacturers on most of the standard lines. The Combine also claimed to be making a loss on most of them, but the total costs of production on all lines were lower in the case of the Combine than those of the independent manufacturers.

Profits of wholesale distributers responsible for about 60 per cent of the trade were reported to have remained at 4½ per cent of the turnover, whilst retailers' profit ranged from 22½ per cent to 33⅓ per cent on cigarettes, varying according to quality.

> "It may be observed that the same percentage on a doubled cost yields a doubled gross profit on each pound or packet handled; against which has to be set not only the rise in the cost of keeping shop, but also the loss of profit involved in the repeated shortages of

supply."[201]

No evidence was found by the Committee pointing to the Combine's agreements with retailers being responsible for any part of the rise in prices from 1914 to the present, while the lower costs of production of the Combine, as compared with those of the independent manufacturers, prevented the Control Board raising prices to the point desired by the independent manufacturers. Since decontrol, the Committee reported that the Combine keeping prices unaltered since the last control price, despite a rise in the cost of production, while the independent manufacturers admitted that this policy prevented them from raising their prices. Some of the latter have increased their prices by a penny per oz. since the last control price, irrespective of the Imperial Tobacco Co., because of the further rise in the price of the leaf, the loss on the American Exchange and the increased rate of wages granted by the Tobacco Trade Board.

The Committee's conclusions, therefore, are that the Combine had not raised prices unduly to the consumer up to December 13, 1919, but on the contrary had had an opposite effect while exercising a favourable influence on the trade generally. Its activities have been beneficial to the retailer and the community, "though the evidence with regard to the latter was less directly representative than with regard to the former."[1] The Combine controls slightly less than two-thirds of the trade, so it has been compelled to maintain high quality goods at the lowest price against its competitors, causing the latter also to purchase best raw materials to maintain a high standard. This mutual competition has restrained prices, while in regard to many cheaper tobaccos some are being placed on the market at a loss made good by extra profit on higher-priced goods. The effect of combination on the British export trade in tobacco, which is very large, was not inquired into.

The Committee sound a note of warning in that the policy of the Combine might be changed. "We exist only on sufferance," was said by one of the largest and oldest firms in the trade.

> "A business of such magnitude (the Combine) commanding so extensive an influence on the retailers and possessing such large

> reserves has in its power the foregoing of its ordinary profit for a short time to cut prices to such an extent as to place all its rivals out of business and secure the entire, or very nearly the entire monopoly of the tobacco trade. In this case, while for a short time the consumer would have the benefit of low prices, such an organization would be able, as soon as the monopoly was secured, to raise prices to any extent desired."[202]

The difference in the duties between manufactured and unmanufactured tobacco is such as to make any importation of standard kinds of tobaccos and cigarettes impossible, so that once such a monopoly was secured new competition would be impossible.

As in nearly all other Reports the Committee suggests the imperative need of more information and more statistics relating to the net profits in proportion to turnover as well as the actual capital on which net profits are earned, because as things are to-day, the modern balance sheet is unreliable because it lies in every line. The issued capital of the Combine on October 31, 1918, amounted to £21,217,808.

(B) Matches.[203]

During the war no increase in price was more criticized than that of the box of matches for the householder and the smoker. The trade employs just under 10,000 persons, while there is also an import trade which is small in comparison. From October 1, 1919, to March 31, 1920, the amount of matches manufactured in this country was twice the amount imported. The Committee investigating the trade noted the important effect of the duty on the price. Since 1916 the Customs or Excise duty amounts to a heavy tax on matches. Under the Finance Act, 1918, the duty was raised to 5s. 2d. per standard gross when the contents of a box are less than 80, and 3s. 5d. when the contents of a box are more than 80. The Excise duty is 2d. less per standard gross and so is to that extent in favour of the home manufacturer. As might have been expected, many people made representations to the Committee to the effect that a prohibitive duty should be levied on the imported matchbox, but they did not show how this would reduce the price to the consumer.

In 1914 manufacturers were selling matches at 1s. 6d. per gross; in 1920 the lowest price was 8s. 6d. per gross for large quantities and 9*s*. 4d. for small quantities. A table of costs runs as follows:

	s. d.
Excise duty	3 11 per gross of boxes
Timber	1 1
Other materials	.0 11
Labour	0 6
General expenses, of which 3d. 1s taxation	0 5
	6 10[204]

The Committee made inquiries to see if it were possible to sell a box at a halfpenny. They found that raw material costs of aspen and poplar were too high. To reduce these, they point out that we are not on a level with continental match-producing countries and that any afforestation scheme should include provision of suitable trees, whether as coppice or hedge-grown timber, for the match-making industry. In their opinion removal or reduction of the duty would at present only operate to increase the manufacturers' profits and not to reduce the price to the consumer. They agreed, therefore, that a halfpenny box of matches is impossible at the prevailing cost of raw material, but they believed that a reduction of the duty combined with a fall in the price of timber would enable a box to be sold for ¾d. The fall in the price of timber has taken place, but there has been no reduction in the price of matches.

The revenue from the excise duty on British matches amounted to £2,310,000 in the financial year ended March 31, 1920, while the revenue from the import duty was £1,086,000.

There are seventeen firms engaged in the manufacture of matches in this country, of which fifteen fall into three groups, each under the control of the largest organization contained in each group. Group (1) contains seven firms, the largest being Messrs. Bryant & May. Group (2) contains five firms, two of which have lapsed, their businesses being taken over by Messrs. Maguire Paterson & Palmer, Ltd., the largest unit of the group. In group (3) are three companies controlled by a firm of match importers acting as commission agent for Swedish manufacturers.

> "The Company was established in this country for the convenience of its Australian trade in order to receive the benefit of Imperial Preference, and we feel that it should not be allowed to enjoy any privilege over the British manufacturers."[205]

One of the methods by which this is achieved is charging it higher prices for its raw material, which results in higher profits to the Swedish supplier and a loss of revenue here, thus escaping its share of Income Tax and Excess Profits Duty. This Company's shares are held by persons of Swedish origin up to 52.8 per cent of the total shares.

The relations between Messrs. Bryant & May and the Diamond Match Co. of America are interesting from the standpoint of trustification. After the failure of an attempt to sell its patent rights to the British Company the American Company set up its factory in Liverpool. After a year this was transformed into an English company with English directors. There followed a period of extreme competition between this group and Messrs. Bryant & May. At the end of this period the Company was sold to Messrs. Bryant & May, "payment being made in preference and ordinary shares of the English House in which as a result the Diamond Match Co. held a controlling interest."[206] The shares have since been absorbed by British shareholders and the Committee reports that the holding of the Diamond Match Co. in Messrs. Bryant & May's now amounts to about one-eighth of the ordinary shares. From the list of names of their shareholders resident in foreign countries and in England we find that the total issued preference stock amounts to £480,000, of which £4,100 are held by shareholders resident abroad, and £2,405 by shareholders with foreign names resident in Great Britain. Of the issued ordinary shares of £800,000, shareholders with foreign names resident in this country hold £129,491, including the Diamond Match Co. holding of £73,900.

In 1907 as a result of Swedish competition British manufacturers formed an association for the defence of their trade called the "British Manufacturers' Association" for the regulation of prices and conditions of sale. The Association comprised eleven firms, two of which have since gone out of business. Firms acting as agents for Swedish or other foreign manufacturers were excluded. The

Association is still in existence and rendered considerable assistance to the Tobacco and Matches Control Board during the war. “The larger manufacturers undertook to compensate the smaller men who, at the controlled price, were unable to “work their businesses at a profit.” Once again, this is an instance of a successful “pool” in an industry; the demand of the miners therefore for a pool in the coal industry was not so far-fetched as we were led to suppose, because in its essential features it was designed to enable the smaller men or poorer districts to produce at a uniform price and to pay uniform wages if the whole industry was treated as a unit.

There is a Whitley Council in the industry, and this gave rise to the “Society of British Match Manufacturers.” It includes all the match manufacturers in the United Kingdom and provides employers' representation on the Joint Industrial Council. It is stated that 95 per cent of the workers engaged are organized in trade unions. The “Society” mentioned above fixes prices to wholesalers and retailers, “but it has not hitherto been found practicable to make the observance of these prices binding conditions of sale.” This is largely due to the jealousy between manufacturers who manufacture only and those who import as well.

There is a “pool” in the industry worked by the British Match Manufacturers' Association which is exclusive of foreign interest. This pool has the same features of price regulation, quota allotted and penalties for breach, as described in Chapter I, Section (C).

In its conclusions the Committee notes that foreign import duties press hardly on the British export trade, that Belgian manufacturers can place their goods here at prices below those of our manufacturers. They attribute this to the rate of exchange operating between this country and Belgium, but they give no evidence in support of this contention. They recommend finally that while no interference is necessary in the early stages of combination attention should be directed to the facts that:

> “(a) The action of foreign interests in attempting to secure an effective monopoly of the British market;
> (b) The probability that the defensive policy of British manufacturers may in the end result in the fusion of individual firms into one monopolistic interest.”[207]

In our opinion this latter probability is bound to be the next logical step of the combination movement in the match industry. There is nothing remarkable either in the forecast that sooner or later a working financial agreement will be arrived at between the British and foreign firms. Both eventualities would be highly undesirable from the point of view of the consumer, but highly advantageous to the shareholders.

(C) Glass Bottles and Jars and Scientific Glass-Ware.[208]

At the time of writing the Glass-bottle Industry is in a bad state owing to industrial depression. We also understand that for the year ended June, 1921, the production of glass bottles in this country had increased by at least 50 per cent of the total pre-war production and consumption. In another sphere it appears that the English production of optical glass[209] —an innovation due to the war—exceeds the pre-war output of the whole world by 50 per cent. Prices of jam jars, dispensing and beverage bottles were from 180 to 200 per cent, higher in 1920 than in 1914. A great deal of capital was attracted into the industry in 1919 by the prospect of quick returns in a new industry. In short, trustification on a large scale, involving great over-capitalization, has taken place in the industry since the Armistice. While it is true that methods of production have improved and economies been achieved, the necessity of paying large dividends and profits on its huge capitalization makes it very unlikely that the public will secure any advantage in the shape of lower prices from the reorganization of the industry.

The two main branches of the glass-bottle industry are: (a) that producing bottles used as food and beverage containers; (b) that producing bottles used by chemists and doctors for medical and other purposes.

Costs of production have increased, while there has been a reduction in working hours, but the introduction of labour-saving machinery has greatly increased output and reduced average working costs. The "Owens" machine is an American invention, automatic in character, which produces bottles almost without human aid. British machines of the semi-automatic kind are also in use. A saving of from 19.41 to 43.56 per cent in the manufacture of bottles is effected by the use of these machines.

The two principal Associations in the Glass-bottle Industry were the Association

of Glass-bottle Manufacturers of Great Britain and Ireland, and the English and Scottish Association of Glass-bottle Manufacturers. With a view to meeting the depression of 1907 and combating foreign competition, the first Association was formed in that year embracing 97 per cent of the trade. Prices were fixed from time to time and monetary penalties imposed for breaches of agreement. Ruling prices are, however, usually in excess of the prices fixed by the Association. The American owners of the "Owens Automatic Machine" offered the patent rights for this country for £600,000, but the British group were unable to raise the money. As a result a German Syndicate known as the *Europäischer Verband der Flaschen-fabriken* acquired the patent rights of the machine and manufacturers in Great Britain, Austria-Hungary, Sweden, Holland, and Denmark took shares *pro rata* to their powers of production.

The capital of this European Syndicate was £600,000 and approximately 90 per cent of the members of the original British Association became members in the German Gompany, forming a limited company known as the British Association of Glass-bottle Manufacturers, Ltd., contributing £200,000 for the British rights. This Association is distinct from the Association of Glass-bottle Manufacturers of Great Britain and Ireland, though closely allied to it. Arrangements were entered into with the European Company fixing prices in this country and limiting markets to the respective groups. The output from the new Owens machine was strictly limited and gradually increased so as not to affect prices unduly.

The next stage in the evolution of the combination was an attempt made in 1912 to strengthen the operations of both the original price-fixing organizations and the new British Association of Glass-bottle Manufacturers, Ltd., by amalgamating all the interested companies in this country. Though not entirely successful from the promoters' point of view, the result was the formation of the United Glass-bottle Manufacturers, Ltd., comprising—

Messrs. Cannington Shaw & Co, Ltd., St Helens;

Messrs. Nuttall & Co. (St: Helens), Ltd., Ravenshaw, St. Helens;

Messrs. Robt. Candlish & Son, Ltd., Seaham, Co. Durham;

Messrs. Alfred Alexander & Co., Ltd., Leeds;

Messrs. E. Brefitt & Co., Ltd., Castleford, Yorks; and

Messrs. Moore & Nettlefold & Co., Ltd.

This new Company represented about 60 per cent of the original (price fixing) Association and were members of both this Association and of the British Association of Glass-bottle Manufacturers, Ltd., which owned the Owens rights. The new Company owned about 50 per cent of the shares of the group owning the Owens rights in this country. The United Glass-bottle Manufacturers, Ltd., increased their capital until, at the end of 1919, it had increased from £550,000 together with £200,000 debentures to an addition of £499,800 preference and £417,530 ordinary shares respectively, debentures remaining the same.

Prices fixed by the Association were the same for handmade as for the "Owens" machine products, though costs of production by the latter method were often reduced to half the former.

The next step was the formation of the British Glass Industries, Ltd., which was an entirely new Company formed in 1919 by certain financial interests "entirely unconcerned with glass manufacture," but convinced that large dividends could be made by manufacturing glass. The original capital was £300,000 at £1 each at par in April. The absorption of other companies involved the issue of further shares, raising the capital to £1,950,000. This group had very little knowledge of the manufacture of glass, or of the extent of production, or of the British makers already in the field. It was entirely unconnected with the British Association of Glass Manufacturers, Ltd.; so that it seems to have been unaware of the strong patent and financial position of the latter. When this was realized in the autumn of 1919 it found that its prospects of success were very small in competition with the older group, which it then approached with a view to amalgamation.

> "Ultimately the British Glass Industries, Ltd., acquired the whole of the £1 ordinary shares of the United Glass-Bottle Manu facturers, Ltd., at £3 10s. per share. To do this they issued another 800,000 £1 shares at £3 10s. each, which raised their capital to £100,000 and their premiums to £2,450,000. Subsequently the Company capitalized these premiums to the extent of £2,100,000 by presenting their shareholders with three shares for every two they possessed, thereby

> bringing the total capital up to £3,500,000 out of £5,000,000 circularized."[210]

This capitalization of premiums means that the dividends would have to be at such a high rate as to be open to serious criticism, seeing that the market quotations of the £1 ordinary shares of the British Glass Industries at the time the Committee took their evidence was about 23s. to 24s.

> "The original investors in the British Glass Industries, Ltd., were led to anticipate considerable dividends, but these will now have to be paid on a capital enormously increased by the capitalization of the premiums received on the issue of shares made by the British Glass Industries, Ltd., for the purpose of enabling them to purchase the £1 ordinary shares of the United Glass-Bottle Manufacturers, Ltd., at £3 10s. each."[211]

The moral is obvious. While this sort of thing goes on in British Industry we are faced with the prospect, as consumers, of having to pay very high prices for our products simply because such prices are necessary to cover the high speculative paper capitalization or inflated values fixed by the promoters of the Combine.

In its conclusions the Committee notes:—

> "We are not satisfied that its financial history (the British Glass Industries, Ltd.) is consistent with a reduction in prices, and we are of the opinion that, having regard to the profits that have been made in recent years, the prices of bottles are unduly high, and last, that in view of the greatly reduced cost of production likely to be brought about by the extended use of the 'Owens' automatic machine, very substantial reduction in prices ought to be enjoyed by buyers in the near future. In this connection the great influence which the cost of glass containers has upon the price of many foods, beverages and medicines should not be overlooked."[212]

(D) The Electric Lamp Industry.[213]

In 1878 Swan in England and Edison in America simultaneously invented the first incandescent lamp. In this country the manufacture of electric lamps thus became a monopoly of one company until the expiry of the patent, after which other British factories developed rapidly. The patents were declared invalid in other European countries, consequently German manufacturers, free from restrictions, progressed very quickly both in volume of output and technique of manufacture, so that they were able to send lamps into this country much below the British price.

An Austrian and German firm produced independently in 1906 a squirted tungsten filament lamp and in the following year the General Electric Co., Ltd., secured the rights of the British patents for both processes. Meanwhile, in the United States, process changes were rapid. The drawn tungsten wire filament lamp was invented in 1909 and the half-watt lamp, known as the gas-filled lamp. The British Thomson-Houston Co., under their arrangements with the General Electric Co. (of New York), which has a majority interest in the British Thomson-Houston Co:, acquired the British rights for these patents. The gas-filled (half-watt) lamp was further improved in 1914 when it was discovered that smaller sizes could be made commercially disposable if filled with argon instead of nitrogen. "Argon had no commercial value and its manufacture had not been developed." Attempts were made in the early days of the war but without success. A Dutch firm (Messrs. Phillips of Eindhoven), were meanwhile manufacturing argon-filled lamps in large quantities, having discovered a special process. After many delays the Dutch manufacturers provided a supply of the argon plant in consideration, among other things, of a large purchase of argon-filled lamps from the Dutch firm. The General Electric Co. erected it at their lamp works in Hammersmith and started manufacture on a large scale.

The pre-war output of incandescent electric lamps in this country was about 25 million; United States, no million; Germany, 100 million; and Holland, 16 million. It is stated that the U.S.A. increased its output by 60 per cent during the war, while Britain increased its production by 20 per cent. Holland seems to have progressed much more rapidly, having acquired a great deal of our foreign trade. Imports in 1913 amounted to £196,000 in value and were practically balanced by exports to the same amount. During the war imports increased and exports declined, and,

significantly enough, the exported lamps were only two-thirds the value of the imported ones. It is estimated that home consumption totals 30 millions per annum.

A powerful trade organization exists. The Tungsten Lamp Association was formed in 1913, having as its objects the protection of the manufacturers' interests in the United Kingdom and the promotion of research. To combine patents and prevent litigation the British Thomson-Houston Co., the General Electric Co. and Messrs. Siemens came to an agreement, recognizing one another's patents and licences and interchanging experience. Selling arrangements followed. The Ediswan Electric Co. joined and these four formed the Tungsten Lamp Association. This Association was incorporated in the Electric Lamp Manufacturers' Association of Great Britain, Ltd., in April, 1919, with objects similar to the former. Other firms joined, so that when the Committee reported the membership included the following firms :—

The British Thomson-Houston Co., Ltd.
The General Electric Co., Ltd.
Siemens Bros., Ltd.
Ediswan Electric Co., Ltd.
Foster Engineering Co.
Stearn Electric Co., Ltd.
"Z" Electric Lamp Manufacturing Co., Ltd.
British Westinghouse Electric Manufacturing Co., Ltd. (now Metropolitan Vickers Electric Co., Ltd.—see Section Iron and Steel).
Dick Kerr and Co., Ltd. (Britannia Lamp & Accessories Co., Ltd.).
Popes Electric Lamp Co., Ltd.

There are in addition to the above non-associated firms as follows:—
Cryselsco Lamp Co., Ltd.
Crowther and Osborn, Ltd. (Secundo Lamp Co.).
Imperial Lamp Co., Ltd.
Corona Lamp Works, Ltd.
Harlesden Lamp Co. (Stella Lamp Co.).
Maxim Lamp Works, Ltd.
Notable Lamp Co., Ltd.

Before the war the Associated firms were responsible for 85 per cent of the total British output. For 1919 the proportion was estimated at about 90–95 per cent.

The association fixes prices of lamps sold to the public and allows a discount to the retailer varying from 20–39 per cent according to the net value of the purchases. If the trader is entitled to a discount above 22 per cent he signs an agreement which binds him not to advertise stock or solicit orders for lamps of other than Association make. To get 30 per cent discount he must, in addition, agree not to sell other makes. Thus a factor cannot sell non-association lamps; a retailer may do so, so that the large factors are in effect agents of the Combine. For breaches of agreements there are various penalties, the chief of which amounts to a refusal of the usual discount and the placing of the retailer on a "black list." The Association thus controls trade distribution, while, because of its monopoly of the half-watt lamp, it can refuse to supply this to non-association agents or retailers at the usual discount, thus practically confining the distribution of the products of non-associated companies to small retailers who distribute less than £70 worth of lamps per annum. The result is that even for non-associated firms the prices fixed by the Association become standard prices, and while the non-associated manufacturers may allow greater discounts to the middleman as they sell more cheaply, yet the public pays the same prices for both kinds of products. The non-association agents can sell all the lamps they can get at the prices fixed by the Association for theirs, so that if they sold at lower prices they would get no advantage. The supply at present is well within the demand, so that there is no prospect of the non-associated manufacturers cutting prices because of the small amount of the market (10 per cent) which they supply. Foreign competition is unlikely. If it is threatened it could easily be made ineffective by international agreements between the British, American and Dutch Combines, so that "apart from some public accountancy of costs, prices and profits, supplemented by power of control should necessity arise, the determination of what is a reasonable price for electric lamps sold to the general public will rest with the Electric Lamp Manufacturers' Association."[214] The whole advantage of electric lighting as compared with gas, where such advantage exists, will generally go to the makers of the electric lamps, who can fix their own prices before the public can get the benefit.

"Trading discounts received by factors and retailers are considerably higher than

is necessary and should be reduced,"[215] while standard vacuum lamps, sold in 1920 at 3s., could have been sold at 2s., at which price the manufacturers and distributers would still have had a very satisfactory working profit. From tables of costs submitted to the Committee they ascertained that non-associated firms, with a much smaller output, can sell lamps at a lower price than Association firms and still make a satisfactory profit, and "that because of the standard price policy of the Association the public was compelled to pay the same price for non-Association and Association lamps, the whole price advantage of the former (which to the factor was 9¼d. in 1912 and 2¾d. in recent years) being denied to the householder."[216]

In 1912 lamps bought by the public at 2s. 6d. were sold by the manufacturers to large factors at 9d. Between September, 1913, and April, 1917, lamps bought by the public at 2s. 2d. were sold by the manufacturers (presumably at a profit) at 6d. for export, while in 1920 lamps sold to the public at 3s. were sold by the manufacturers at 1s. 4¾d. for export. If lamps can be sold for export at such low prices with a profit to the maker it should be possible to reduce prices considerably in the home market. The markets in U.S.A., Japan and Mexico are left to the American manufacturers, who leave the British market to the Associated Companies, but the latter are free to export anywhere else.

This control of the home market and of prices by the Electric Lamp Manufacturers' Association is closely connected with patent rights, the control over which was one of the main objects in the formation of the Association. "The principal patent-owning firms in the Association grant licences to manufacture under these patents to other firms in the Association who pay to the licensors a royalty of 5 per cent on nett selling prices in the home market and 2 per cent on export in the case of standard vacuum lamps; in the case of gas-filled half watt lamps 7½ per cent and 3¾ per cent respectively."[217]

Output is restricted under these licences, the licensee being allowed to increase his output by not more than 10 per cent per annum.

One other interesting fact in this report is that of the deal in lamps from Holland. In 1919 one and a quarter million half watt lamps were purchased in Holland by the British Thomson-Houston Co., Ltd., Siemens Bros, Limited, and the General Electric Co., Ltd., at about 3s. per lamp and sold to the public at 12s. 6d. If the price to the

public had been 8s. this would have left “ample margin for the importers and distributers.”[218]

> “Importers and distributers between them made profits on these lamps of something like £280,000 over and above what would have appeared to us to be reasonable.”[219]

In short the Electric Lamp Manufacturers' Association seems to have been created in the interests of the above-named firms, which limit the output of the licensees controlled by them, lay down conditions relative to the validity of their patents, stating that they shall not be questioned or disputed.

Thus a trade combination controls the British electric lamp industry. Further, its connections with the leading manufacturers abroad make it a strong international combination. The largest of the three dominant firms in the Association is controlled by an American firm. The General Electric Co. of America hold the majority of the shares in the British Thomson-Houston Co., Ltd., in England and have also joined interests with Phillips Glowlamp Works, Ltd., — one of the most important firms in Holland, which has acquired one-eighth of the Ediswan Electric Co., Ltd., shares. Two of the Phillips directors have joined the Ediswan Board. Thus the group could, and probably does, dominate the world market, fixes prices and regulates output. World markets are allocated. The British Associated Manufacturers' through the General Electric Co. of America, control the best American glass bulbs and have prevented the non-associated manufacturers from obtaining supplies of that particular bulb.

(E) Road Transport.[220]

The average cost of road transport has risen since 1914 by 300 per cent. Road transport costs directly affect the cost of living because they enter into the cost of production of almost every article of use or consumption which is carted by road from the ports. This cost is incurred several times by all sorts of commodities, from raw materials to finished products, as they are moved from place to place, factory to factory, and so via the railways to the consumer.

Combination among road transport contractors exists. In some places (e.g., Bristol) it is so strong as to prevent competition. During the war, the District Associations of contractors united to form the National Alliance of Road Transport Associations. Though it has no monopoly, it is becoming extremely difficult for any person to get his own carting done except through one of these associations. In some districts, of course, membership is looser than in others, but in most of the important centres all the contractors belong to the Association.

The President of the National Alliance stated that this organization has no influence on its constituent bodies in the fixation of prices, but it is clear that the District Association habitually fix scales of charges for road transport in such a way as to secure their adoption by all members.

> "The Swansea Commercial Road Transport Association admittedly fixes a common minimum rate of 30s. per day for a single horse, van and man, on an estimated cost of £7 10s. 6d. per week including all outgoings, together with an item for 'cart' and another for 'insurance' and proportion of 'establishment expenses.' This allows a profit of just under 20 per cent., out of which all time not hired must be met."[221]

Tonnage rates for different classes of goods are fixed by all district associations according to distance, nature of the roads, etc. In Liverpool and Manchester the rates have moved up from 1s. per ton to 4s. 6d. and 5s. 3d., the Manchester rate being slightly lower than that of Liverpool.

Though there is no penalty for breach, arrangements are generally carried out. The Secretary of the Bristol Commercial Road Transport and Warehouse-Keepers' Association keeps a secret register on which are entered names of all customers served by each of the members. If a non-customer asks a contractor for a rate the latter informs the secretary, who looks up his register to see if this new customer is already on his books as having done business with another contractor. If so, the former contractor sees his old customer with a view to settling the grievance. If the name is not on the register a rate is quoted for him "at a price not detrimental to the

other members." No member of the Association is allowed to tender a rate until a period of forty-eight hours has elapsed in order to allow time for the above arrangements. Obedience is secured by an undertaking to pay the sum of £100 as "liquidated damages and not by way of penalty or fine" recoverable by law on any breach of the regulations. Thus in this case the combination amounts to an effective monopoly, subject, of course, to an individual's power to purchase horses or motors to do his own cartage.

The Committee could not get definite figures from any of the Associations to determine the cost of a horse and van per week. They were told that costs had risen in proportion to prices and that while rates had risen from 250 to 350 per cent they could not prove without elaborate costing investigations what the exact effect of combinations had been on prices. They were informed that the cost of a single horse and van in Swansea was £1 5s. 1d. per day or £7 10s. 6d. per week. On these figures the Swansea Association had fixed a minimum rate for horse haulage of 30s. a day Reductions in the length of the normal working day were urged by witnesses as another chief factor in the increase of prices.

In regard to Motor Transport, the Committee were unable to obtain information as to whether combination existed among haulage contractors using motor vehicles exclusively. Many members of the Road Transport Associations let motor vehicles on hire, so that it was difficult to determine whether any check upon rates charged for horse haulage existed through competition of motor vehicles. It was ascertained through the prospectus of a Road Transport Company that in four years a fleet of motor lorries earned £900 per annum each. After writing off depreciation at £500 per annum from the certified profits per annum of £1,100 for each lorry, we get £600 as the net profit for each lorry. This was "irrespective of (a) profits on sale of motor lorries and (b) the advantage of joint working or securing of return load in all cases."[222]

Sources.

1. *Report on Tobacco.* Cmd. 558. 1920.

2. *Report on the Price of Matches.* Cmd. 924. 1920.

3. *Interim Report on Glass Bottles and Jars and Scientific Glassware.* Cmd. 1066. 1920.

4. *Final Report on Glassware.* Cmd. 1385. 1921.
5. *Report on Electric Lamps.* Cmd. 622. 1920.
6. *Findings of a Committee on Road Transport Rates.* Cmd. 549. 1920.
7. Reports Cd. 9035, 1918. Cd. 8462, 1917, Cmd. 646, 1920. Cd. 9071, 1916. All *op. cit.* footnote to Chapter IV.
8. Hobson, *op. cit.,* pp. 167–234.
9. Macrosty, *op. cit.,* p. 308, etc. Cf. also *Notes on Trust Literature,* p. 388.

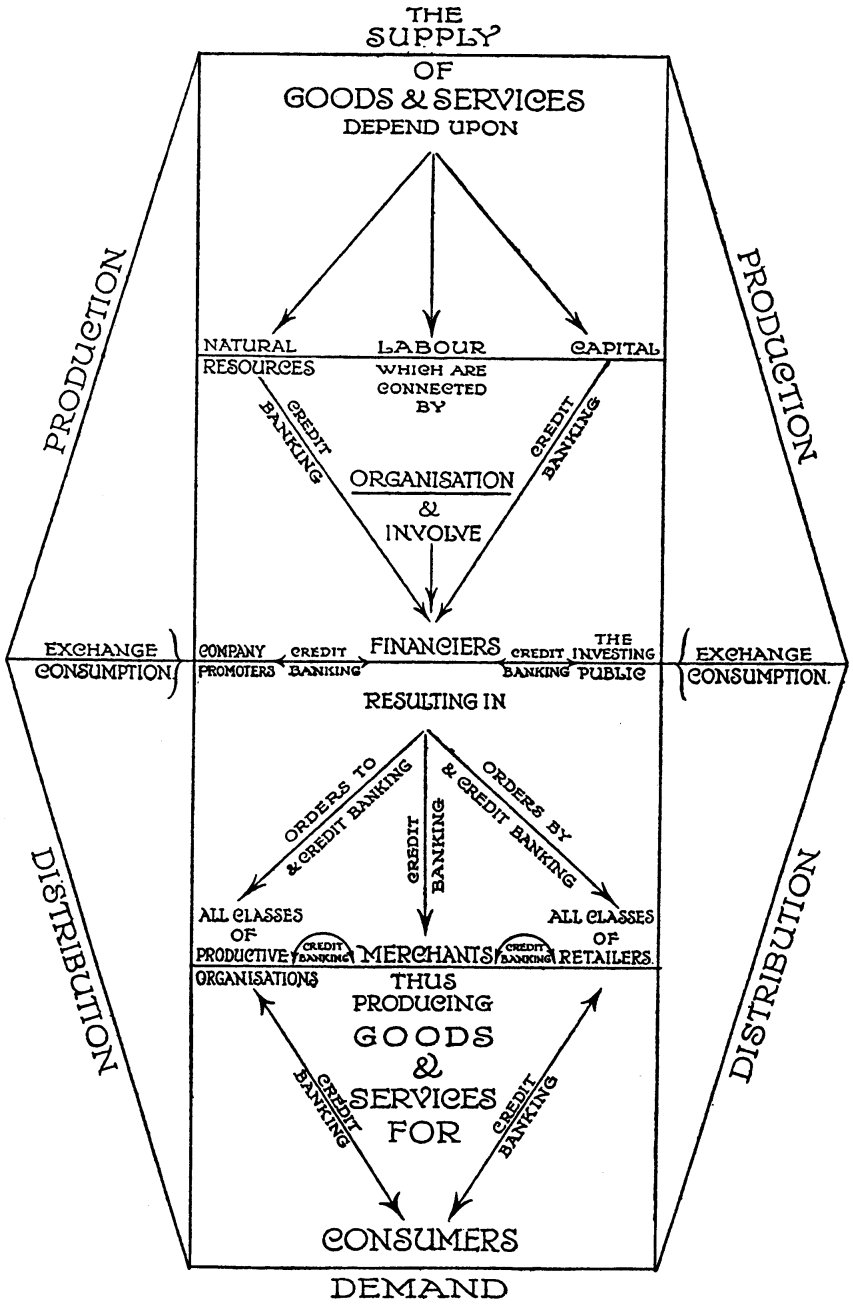
Chapter X: Banking and Finance

(A) Money and Prices. Credit and Banking.

The merchant is the middleman in the world of business. He acts as the connecting bridge between the manufacturing world on the one hand, and the consuming world on the other. Similarly the financier is the middleman of the world of money and prices, credit and banking. He is the link between company or business promotion on the one hand and the investing public on the other. What, then, is the function of the banker and of banking? The banker may be described as the connecting link between the company promoter, the merchant, the manufacturer, the retailer and the consumer. A good analysis of the place of the banker may be made by stating that he is the mobilizer of the credit of the nation, but he does this, as most things are done in the world of business, for a profit and as a means of gain to himself and to his shareholders.

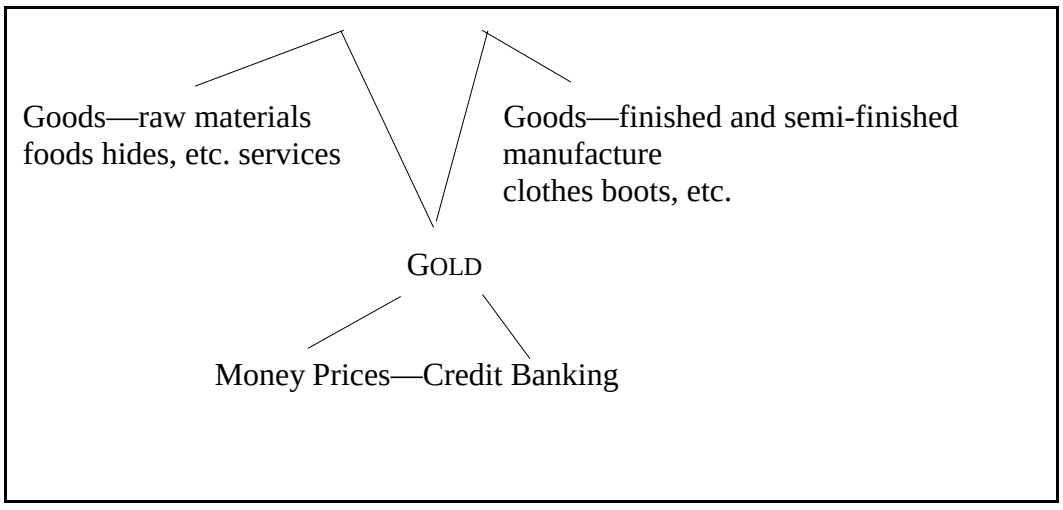
A diagram will be useful here.

J. Morgan Rees, *Trusts in British Industry, 1914–1921*. 210



An examination of the steps that caused the great industrial depression of 1920 and 1921 will throw light on the points of contact between these groups of producers, consumers, exchangers and distributers.

General wholesale prices rose steadily in nearly every country in the world throughout the Great War and after the Peace until about March, 1920, despite variations in the relative prices of different commodities. The causes may be briefly summed up under the headings of war destruction of wealth and of life, and the consequent shrinkage in the supply of raw materials, of food and of consumable articles of all sorts; loss of life meant loss of labour, its displacement from relatively useful and productive work to less useful and destructive work. Parallel causes aggravating the above were inflation of the currencies of nearly every country in the world, war borrowing and the resultant increase of the purchasing power in the hands of the consumers without a corresponding relative productive increase in consumable goods and services. The result was a general rise in prices. Before the war, stability in the value of gold reflected in its purchasing power, was generally attained by keeping a due balance between the volume of goods on the one side and the volume of goods on the other side of a balance, the index figure of which was the amount and movement of gold money, currency and credit. Thus:—



Immediately after the war a shortage occurred on the left side and an increase in the demand for goods on the right side of the balance. These exchanges were facilitated by an increase of gold, currency or credit. The goods and services were destroyed by war. They did not therefore set up corresponding exchanges of real values. As a result there was a definite shrinkage in the world's consumable goods and services and an *increase* in the tokens of paper money or credit documents or credit money. Bank deposits in Great Britain increased two and a half times, whereas it was equally clear that our volume of goods and services at the end of the war was less in consumable commodities, than the world needed for its everyday life than in the pre-war year of 1913; but our production of guns, shells, munitions of all sorts, valued at high prices, was much greater than in recorded history.

The transition back to peace-time production was made very rapidly, and we must confess without much understanding of the changed world conditions due to the disturbance to the stability of the world's monetary unit. Interallied indebtedness, the regroupings of the European states, the reshuffling of the economic resources of Europe on political grounds, regardless of the economic effect of such arrangements, all made for chaos.[223] Finally, the reparation payments and the indemnity demands under the Peace Treaty put an end to any hope of world stabilization of debts, of currencies, of exchanges and of credits. The short boom from the beginning of 1919 to March, 1920, hid the real situation for a time. Warnings were given, but they were unheeded. Politicians and others were busy making a new world by smashing the old, forgetful of the interdependence of the world as an economic unit. Prices meantime continued to rise steadily and by March, 1920, the wholesale index figure in Japan had reached 320 above the pre-war level.

> "The lead in the general movement towards lower price levels was taken in March, 1920, by Japan where inflation, as measured by wholesale prices, had reached the figure of 320. In June this index figure had already been brought down below 250. In May a corresponding movement began in the United States where the price

> index of the Bureau of Labour then stood at its highest point, 272. A year later this index had been brought down to 151. The United States have by this violent reduction of prices, probably brought themselves nearer to the pre-war price level than any other country."[224]

The break in the wholesale price level began in a dramatic way. Japan had become during the war an exporting country with a balance of trade in her favour for the first time in her history. After the Peace she lost ground and could not compete with America and ourselves. A financial crisis resulted and two banks stopped payment. The State prohibited further imports. This involved the cancellation of orders here, in America and elsewhere. South American and United States merchants were badly affected. These people had given orders here and all over the world. The industrial world hangs together. Prices broke in Japan and in the States. The wholesale merchants cancelled their orders. British manufacturers with books filled up for a year found that these orders were being cancelled. Curiously enough the Chancellor of the Exchequer, in introducing his Budget of April, 1920, announced the policy of the restriction of credit which thus occurred simultaneously with a break in the world's wholesale prices. The crux of the whole matter is here : the merchant gives the order to the manufacturer who obtains credit from the banker to put through his orders for raw materials and pay wages. The merchant depends for his profit on being able to sell the goods he buys from the manufacturer at a higher price, usually sufficient to enable him to make a profit of from 10–15 per cent. He is financed by the banker to whom he pays interest for the time that the goods remain in his warehouse. The quicker his turnover the greater his profit. On a rising market, even with interest at 6 or 7 per cent, the merchant is sure of his profit and if demand is good sells easily; on a falling market the first thing that happens is inability to clear his goods from the warehouse. People hold back demands in the hope of a fall. Commercial travellers come back with no orders. The merchant is pressed for payment by the bank. Immediately the break in prices occurs the merchant ceases to give new orders to the manufacturers. He is finally forced to cut his losses, sell his stocks below their cost in order to pay the bank. This forced selling depresses prices

still further. The manufacturers work off what orders they have on hand and very soon the industrial machine begins to slow down. There are just one or two other points for consideration.

Before the merchant cuts his losses, the consumers and retailers must have ceased to give him orders. Why is this ? The simple answer is that they could not buy any more at the levels which prices had reached. It is a curious fact that although wholesale prices broke in March, 1920, retail prices rose steadily until November, which proves that as much of the stocks as possible was cleared by the merchants before the market broke.

If the advice of the bankers, therefore, is in favour of deflation and the restriction of credit just at the time the price level has reached such a point as to cause the consumer to refuse to buy, a double effect is produced : the consumer ceases to give orders because prices have reached the limit; the banker restricts credit at the very time that the merchants or manufacturers need it most, and the result is a rapid fall in prices, collapse of the. market, widespread depression, unemployment and general industrial stagnation. Thus the influence of credit on the industrial machine is a dominant one and the control of banking and finance is correspondingly vital to the security and well-being of the community.

(B) Bank Amalgamations.

So far is this control from being attained that since 1914 it is increasingly clear that the grip of the financiers and the bankers over the credit machine and therefore over industry is becoming stronger. Note must be made here of the difference between control of industry—of the capital of land, houses, machinery, raw material, labour organization, etc., and of the control of the tokens or “money” which enables the productive and distributive machine to be set in motion. The power of finance is a fiction because it is based on a belief that the financiers and bankers have it; immediately it is known that their exercise of this power depends not on other financiers or on other money, gold, or credit but on goods and on the productive capacity of a State or a nation, this power they at present wield will disappear “like snow upon the desert's dusty face.”

At the outbreak of war the Government saved the banks (and the country) by

coming to their assistance with the credit of the British nation. The banks still refused to undertake new business until the Bank of England practically undertook to accept responsibility for all losses that would ensue from the discounting of new bills. Similarly the position is made clear again since the Armistice when the Government's offer of £26,000,000 to help finance trade between us and Europe could not be utilized because the banking community regarded such trade as too speculative and risky. They are only prepared to deal provided the Government guarantees them against all the losses and allows them to take most of the profits for their services or monopoly.

During the war several banking amalgamations on a large scale took place. The tendency towards the amalgamation of a large joint stock bank in London with a small country bank gathered force throughout the nineteenth century, but it was not until the war that another type of amalgamation became common, viz., that of one large joint stock bank with another, sometimes covering the same area but more often, of course, covering different parts of the country or covering a special trade. These large amalgamations proceeded farther and absorbed or fused with large foreign or colonial banks in all parts of the world.

A short survey of these bank fusions will help the reader to understand the position which excited such alarm before the end of 1918 that a Departmental Committee sat to inquire into the question.[225]

Over 300 amalgamations have occurred in the last fifty years without exciting any comment. The number of private banks has fallen from thirty-seven in 1891 to six, and, now that Messrs. Coutts & Co. have been absorbed by the National Provincial and Union Bank of England, Ltd., there remain only five well-known private banks. The number of English Joint Stock Banks has fallen from 106 to twenty in 1922 (*See* Appendix, Table VI).

The old type of amalgamation—a local bank merging with the widely spread joint stock bank with central offices in London secured advantages to each, more particularly a seat on the Clearing House. Lancashire and Yorkshire clung to their local banks longer than any other areas, but even these are now linking up. The new type of amalgamation —absorption of large joint stock banks with other joint stock banks—secures conveniences and gains for trade purposes by the extension of bank

areas so that there is a quicker mobilization of county savings for commercial purposes, but in many cases no extension of area has been achieved by amalgamation, particularly in London and other large towns. The following shows the number of branches of the principal groupings in 1918:[226] —

		London Branches.	Provincial Branches*	Foreign Agencies.
(a)	National Provincial	26	251	31
	Union of London & Smiths	31	78	150
(b)	London County and West-minster	110	180	400
	Parr's	35	160	35
(c)	London City Midland	107	419	850
	London Joint Stock	41	109	70

* Excluding sub-branches, and Cd. 9052.

The absorption of one large bank by another in these cases means very little extension of area and some reduction of competition in London and other large towns ; while if each of these banks lent up to its full capacity before union, home trade as a whole does not get any additional accommodation as a result of the amalgamation. One fact is significant: the big combines may obtain larger advances from the combined group and they may do this at the expense of the small business man for whom there will be no surplus deposits to lend. Another factor should be noted here ; the tendency of the big combines to finance themselves from trading profits by building up huge reserves and using these to develop their business. This tendency in itself is a cause and a result of bank amalgamation, so that the policy of devoting a bigger percentage of profits to reserves than is being paid out as dividend is becoming the rule rather than the exception. Big business without banking alliances tends to finance itself; big business with banking connexions makes for further bank amalgamations, the boards of which contain representatives of different combines. The argument for size is that large banks help traders more than small banks because the former have larger reserves and therefore they can make advances

on easier terms. As trade grows, banks must grow to enable them to deal with advances which may be necessary to finance a very large foreign trade. The Committee point out that in practice the large firms got advances from two or three banks before the war, now they will tend to deal with the one bank in which they are specially interested.

The following table shows the growth in paid-up capital, reserves and deposits of the principal banks from balance sheets of December 31, 1913, and December 31, 1917.

	December, 1913.	December, 1917.
	£	£
London City and Midland	101,882,230	230,083,434
London County, Westminster and Parr's	143,000,000	228,000,000
National Provincial Union of London and Smiths	118,864,590	185,223,173
Lloyds Bank	98,720,663	183,076,718
Barclay's	66,940,267*	135,675,971
London Joint Stock	41,678,237	62,274,280

* June, 1914. (Cd. 9052.)

Before the war the English banks treated foreign trade advances with special caution, with the result that this side of our business abroad was largely in the hands of foreign banks. English banks were dependent on deposits withdrawable at call or short notice. This meant that their policy was to keep out of foreign business ventures, to keep their reserves as liquid as possible, and to leave risks to other financiers. Now this policy will be changed in order to meet the changed conditions of world trade. The necessity for bank amalgamations is not proved according to the opinion of the Committee, but they admit there is weight in the arguments advanced for the new arrangements. We feel this amalgamation movement is not merely necessary but inevitable and synchronizes with the remarkable change in the movement towards combination outlined in previous chapters. In short, banks

amalgamate firstly because they have been brought into closer touch with the actual business of manufacture and trading by an interchanging of directorates, secondly, because they fear that if they do not follow the changes in business structure by becoming stronger groups themselves, their functions of arranging for new capital issues and arranging the finance of new groupings will be taken away from them by the big combines providing their finance out of their own supplies.

While the deposits of the banks have increased considerably the ratio of the paid-up capital and reserves to these deposits has steadily decreased as the following table shows:[227] —

	Paid-up Capital and Reserves. Million £	Deposits. Million £	Ratio.
1880	68	369	18
1895	69	456	15
1900	79	587	13
1905	82	628	13
1910	81	721	11
1915	82	993	8
1917	84	1,365	6

Anything that depresses still further this ratio is bad for the stability of banking. The dangers of amalgamation were dwelt on by the Committee, but we fear that these do not touch the real problem—the inevitability of trustification of all kinds of other businesses. We tend to the former view that bank grouping precedes rather than follows business tendencies towards changes in industrial structure. Banking movements abroad have been concentrating for years in close agreement with the other forms of Trusts. In Great Britain, therefore, the essential preliminary to any permanent movement towards real trustification of business is seen in banking amalgamations. It is significant that the Federation of British Industries founded in 1916 recognizes this by devoting a special section of their activities to Banking and Finance.

Here it will be advantageous to give the principal bank groupings mainly since

1914. The list does not profess to be exhaustive and we have deliberately omitted the figures of total deposits and capitalization except where these are necessary.

The London Joint City and Midland Bank, Ltd., originally established in 1836 has now a subscribed capital of £38,116,815, a paid-up capital of £10,860,565, a reserve fund of £10,860,565 and deposits of £371,322,381 (June 30, 1921). In 1889 the Birmingham and Midland Bank, as it was then called, purchased the Coventry Union Banking Company. The business expanded and in 1891 purchased the Central Bank of London, thus securing a seat on the Clearing House and changing the name to the London and Midland. In 1898 the business of the City Bank was acquired and the name was changed to the London City and Midland. After ten years of further activity and prosperity the North and South Wales Bank was purchased; in 1914 the Metropolitan Bank of England and Wales and in 1918 the London Joint Stock Bank, Ltd. After this last amalgamation the name was again changed to that of London Joint City and Midland Bank, Ltd. In order to develop and link up Scottish business it affiliated with the Clydesdale Bank, Ltd., in December, 1919, while it had previously linked up with the Belfast Banking, Ltd. The whole group have between them 1,550 offices in England and Wales.

Towards the end of 1917 the London and Provincial Bank, Ltd., joined the London and South Western, and in 1918 this new group joined Barclay's, Ltd. As early as December, 1915, Barclay's & Co. had begun their policy of amalgamation by announcing an agreement with the United Counties Bank, Ltd., which could not be completed at the time owing to the ban on new capital issues. On November 8, 1919, Barclay's joined the British Linen Bank and the Union Bank of Manchester. A still further amalgamation took place in April, 1920, when Barclay's joined the Anglo-Egyptian Bank and absorbed also Messrs. Tuft & Co. of Bicester, established in 1793—an old county bank. The issued and paid-up capital of this group now amounts to £15,592,372. It has a reserve fund of £8,250,000 and deposits (June 30, 1921) of £332,206,417 with over 1500 branches in England and Wales.

The National Provincial Bank of England, Ltd., joined the Union of London and Smiths on January 1, 1918, and the name was changed to include “and Union.” Judged by the figures, this is reported to be the biggest amalgamation in banking history because the ground covered by the banks overlaps only to a small extent.[228]

> "Both banks have the reputation of being conservative and the fact that they have decided to amalgamate at this particular period therefore shows that some of the most thoughtful of our leading bankers are prepared to participate in the movement for consolidating industrial, commercial and financial organization in this country. The advantages of large scale working have been amply demonstrated in the manufacturing industries under the stress of war which called for the greatest possible maximum output. And it was found that the handling of the banking situation at the beginning of the war was greatly facilitated by the existence of a few large amalgamated institutions.
>
> "Unified control not only enabled agreement to be arrived at more easily than would have been possible among a multitude of small banks scattered up and down the country, but made possible an effective concentration in subsequent problems. In financing the Great War the large banks have been able to do much more than they would have done had they been split up into a number of small unrelated units."[229]

Since 1918 the National Provincial and Union has joined the Sheffield Banking Co., Ltd. (August, 1919) and the Bradford District, Ltd. (December, 1919), while early in 1920 Messrs. Coutts & Co.—one of the most important of the old established private banks in the city—joined the group. Messrs. Coutts itself acquired the business of Robarts Lub-bock & Co. some time previously. An old-established Welsh Bank, Messrs. Richards & Co., Llangollen, was acquired by the group in 1919, while in the same year the Northamptonshire Union Bank was acquired. The result of these groupings and amalgamations has been to increase the deposits of the National Provincial and Union, Ltd., to £260,000,000, while three years ago they were less than £100,000,000.[230]

Lloyds Bank, Ltd., has also expanded its interests and enlarged its area of operations. In May, 1914, it absorbed the Wilts and Dorset Banking Co., Ltd.[231] After the war it amalgamated with the Capital and Counties Bank, Ltd., giving it an important sphere of operations in the Midlands; with the West Yorkshire Bank, Ltd. (1919), and by the purchase of shares in the National Bank of Scotland and in the

River Plate Bank, its connexions were broadened to meet the post-war changes in industry.

On February 8, 1918, it was announced that the London County and Westminster, Ltd., had joined Parr's, and this group again in the same year (November 30) acquired the Nottingham and Nottinghamshire Banking Co., Ltd. The current and deposit accounts of this group were well over £200,000,000 after their amalgamation with Parr's.

> "The Board of the Bank have for some time past felt the urgent need of a direct connexion with the industrial districts of the Midlands and the North of England to meet the growth of their home and foreign business, and more especially to prepare for the altered conditions during the period of reconstruction after the war. Such a connexion can best be obtained by amalgamation with some bank already established in those districts."[232]

This explains the fusion with the Nottingham Bank.

The Bank of Liverpool and Martin's, Ltd., announced the completion of arrangements for amalgamation in December, 1918. This shows how a specialized banking business in London with a long history and an important city and foreign connexion, links up with a great provincial bank in Liverpool which feels the need of a London centre. Martin's Bank is associated with Sir Thomas Gresham and the spacious days of Queen Elizabeth. The Palatine Bank, Ltd., was acquired in September, 1919, and in December the Halifax Banking Co. joined the Bank of Liverpool and Martin's, Ltd., while in January, 1920, the latter purchased the business of Messrs. Cocks, Biddulph & Co.

The foregoing constitute some of the principal groupings, and while the list is not exhaustive, sufficient has been shown to make clear the point that this acceleration of the trust movement in banking is not merely a change in the speed of an old movement but a reorganization in the method and structure of banking. Where actual fusions have not taken place agreements for joint working have been made. This method is adopted more particularly in foreign trade. Thus on February 26, 1918, we read that an agreement was arrived at whereby Williams Deacons' Bank, Ltd., the

Anglo-South American Bank, Ltd., and the London and Brazilian Bank, Ltd., secured mutual working with direct representation in Manchester. In this way representatives of both these foreign banks will attend daily in Manchester and an opportunity is given of discussing matters personally instead of making a special journey to London.

> "As agents of these banks Williams Deacons' Bank, Ltd., will make advances on shipping documents. Acceptances will also be given in Manchester and direct banking arrangements available between all branches of the three banks."[233]

Other bank fusions which may be noted are the union of the Anglo-South American Bank and an old Chilian bank, "the Banco de A. Edwards y Cia," of Valparaiso and Santiago, by the purchase of 60 per cent of its capital by the former. The English, Scottish and Australian Bank purchased the shares of the London Bank of Australia, while Hambros—a great private bank with important Scandinavian connexions—united with the British Bank of Northern Commerce. All these took place in 1920.[234]

A colonial grouping of great interest was the Union of the Standard Bank of South Africa and the African Banking Corporation. After this fusion the deposits of the combined institutions will amount to sixty-four millions. The National Bank of South Africa and the Natal Bank had already amalgamated.

This movement is likely to be further accelerated in the near future. The next step will be unions of foreign banks in particular countries. An indication of this tendency is furnished by the announcement of the agreement of the Anglo-South American Bank to purchase the shares of the British Bank of South America on condition that 80 per cent, of the shares are secured.[235]

(C) Profits.

The disadvantages of amalgamation from the standpoint of the public were summarized by the Treasury Committee as (a) the writing down of bank capital, (b) the elimination of competition between the banks, and so (c) the dangers of

monopoly. As is clear in the table on p. 229 above, the proportion of capital to deposits is getting smaller. Amalgamations mean reductions either in the total paid-up capital or in the uncalled liability of the pre-amalgamated units or in both. The amalgamation of the National Provincial Bank with the Union of London and Smiths reduced the total paid-up capital by over £1,000,000 or 16 per cent and involved a reduction of £9,000,000 or 48 per cent in the uncalled liability of the Union shareholders. The union of the London County and Westminster and Parr's meant an addition of £243,000 to the total paid-up capital, but a reduction of £1,770,000 or 17½ per cent, in the uncalled liability of the shareholders of Parr's. A reduction of nearly one million was effected in the total paid-up capital by the fusion of the London City and Midland and the Joint Stock Bank, while in addition a reduction of over 50 per cent (£9,000,000) was made in the uncalled liability of the Joint Stock shareholders.

> "In each of these three cases therefore substantial benefits to shareholders are purchased at the expense of some of the security of the depositors. But the reduction of capital (as opposed to the reduction of uncalled liability) resulting in two of the cases appears to be only nominal, the sura written off or some sum approximating to it being added to the inner reserves at any rate at present."[236]

The elimination of competition between the banks was stated by some witnesses before the Committee to mean a difficulty in getting accommodation for municipalities, overdrafts, etc. They pointed out that it was not in the national interest to allow large funds belonging to the public to be in the hands of one or two companies. It was feared also by the Stock Exchange and Money Market representatives that the former ease with which they could get money from the different banks would disappear now that these banks were united, therefore they pointed out that the market and the rates would be less flexible, because they argued that a reduction in the number of banks means a reduction in the number of first-class acceptors of bills. This is a serious result.

The danger of a monopoly is thus real. The approach to a Money Trust would

cause great apprehension.

> "Such a combine would mean that the financial safety of the country and the interest of the individual would be defenceless, and traders would be placed in the hands of a few individuals who would naturally operate mainly in the interests of the shareholders."[237]

The position of the Bank of England would be undermined by such a strong Money Trust Combination and it might find it extremely difficult to carry out its important duties as a supporter and regulator of the Money Market. This would be a grave menace to the public interest because the Government could not disapprove any course which the Combine approved. The Committee goes on to point out that every bank amalgamation is met by another and that "the result is the creation of a few preponderant combinations; and if these combinations amalgamated or entered into a joint agreement as to rates the Money Trust would immediately spring forth." We believe it is already in existence and it constitutes one of the gravest menaces of our time, as it can control the credit machine so effectively as to prevent the wheels of production moving unless a certain tribute is forthcoming to itself, though in reality credit itself is based on goods.

The recommendations of the Committee were that Government approval should be obtained before any further amal-' gamations are announced or carried into effect: "that all proposals for interlocking directorates or any agreements which would alter the status of a bank as regards its separate entity or control, or for the purchase by one bank of the shares of another bank should be submitted to the Government before being carried out." The principles to be observed in granting permission were suggested to be (a) whether public facilities would be increased by the extension of the area; (b) if the area is extended without such advantages giving an undue predominance to a larger bank, that permission should be refused. Legislation was to be passed empowering the setting up of a Statutory Committee to advise the Treasury and the Board of Trade on these matters, the Committee to consist of one commercial representative and one financial representative, with power to appoint an arbitrator should they disagree.

This arrangement has not prevented fusions. The only logical way out is nationalization of banking and the conversion of the Bank of England into the Nation's Bank. In no other way will it be possible for the Treasury or any Government on behalf of the nation to regulate and control credit, which is the lifeblood of the nation. That there is something radically wrong in the present method of banking and financial operation is made clear by one or two concrete examples of what does happen.

> "The amount which was set aside in the aggregate for the purpose of writing down securities out of the profits of 1918 was £246,000 as compared with £305,000 in the previous year and with very much larger figures in the years immediately preceding, £6,902,357 having been applied from the profits of 1916 and £5,994,550 from those of 1915. These figures, however, require considerable qualification for various reasons. In the first place it has been an increasing practice with the banks not to disclose the actual amounts applied in writing down securities, but to state the amounts of profits after providing for such depreciation. A factor in the growth of the plan has undoubtedly been the expansion of the gross profits of banking owing to the great increase of resources resulting from the inflation of credit due to the financial operations of the war period. As banking capital (figures given in *Bankers' Magazine*, October, 1919) has not been increased to anything like the extent of banking resources, these profits have been somewhat disproportionate and consequently there has been a tendency to keep the published figures of profits somewhat below the actual realized amounts, and the method of writing down investments before arriving at the figure to be disclosed has provided one means of keeping the published profits at a low figure in comparison with the sums actually received.
>
> "Only two banks in the list of banks of England and Wales stated the definite sums set aside for depreciation and investments and even these two allocations took the form of the transfer of sums to 'Investments Account.' "[238]

Similar methods have been adopted by almost every large business unit in the country to conceal the exact amount of profits earned on a certain definite capital. Another common method is the issue of bonus shares to the shareholders to escape the criticism that would follow from a very high rate of profit. These bonus issues are not always made on the total paid-up capital but on a certain part of it, i.e., to the privileged shareholders. In the table given on next page we get a remarkably interesting examination of the extent of the bonus issues in 1920:[239]

Industry.	No. of Companies.	Paid-up Capital on which Bonus is paid.	Amount of Bonus issues.
		£	£
Amusement	6	990.558	530,588
Coal, Iron and Steel	21	9,965,055	6,141,171
Engineering and Shipbldg.	26	8,156,570	4,562,874
Finance Banking	11	6,322,887	3,395,310
Food, Drink, Tobacco	22	19,827,466	7,779,094
Merchanting	11	4,631,302	1,208,708
Metals	10	3,557,279	873,749
Miscellaneous	24	9,135,629	6,987,344
Shipping, Railways and other transport	20	13,055,786	5,510,406
Tea, Rubber, etc.	50	8,951,510	10,898,434
Textiles, Clothing and general distribution	27	12,169,322	16,716,470
Warehousing, Storage	7	1,193,750	636,250
	235	£97,957,114	£65,240,398

Private companies are excluded from the above list. Some public companies have

issued shares, particulars of which are not available, and lastly, cases are excluded where shares have been issued to shareholders at a price below the market price, which is another method of issuing a bonus. For instance, in 1920 the Imperial Tobacco Company issued one new share of £1 for every three held at a price of 40s., which were immediately afterwards quoted at 55s. 6d. If a shareholder sold out his holding he thus got 15s. 6d. per share on the transaction.

Scarcely any comment is needed on the table given. For 235 companies it means that £65,240,398 were returned in the form of bonus shares on a paid-up capital of £97,957,114. No wonder the issue of bonus shares has been very popular since the beginning of the war! It gives a very convenient opportunity for hiding the profits. A company which has doubled its profits (say 10 per cent– 20 per cent) can keep the rate of profit at the same figure of 10 per cent by issuing bonus shares, thus doubling its capital. There is another advantage to the shareholders in that bonus shares given in this way are free from liability to super-tax despite the fact that this issue of bonus shares is equivalent to the payment of dividends. A case on this question was contested on January 3, 1921, in the House of Lords when by a decision of 3 to 2 it was decided that bonus shares were not liable. Lord Dunedin said :

> "In the present case the company... might say, and it did say, to its shareholders: — 'There is a large sum of undivided profits. We shall allot to each shareholder his proportional amount of these profits, but we will not pay that amount in cash but will impute it to the payment of the shares we are issuing, and give each shareholder the shares for which his allotted amount effectuated payment.' He could not himself escape from the feeling that that was just giving to the shareholder his share of undivided profits not in cash, but in the shape of paid-up shares, and if that was so, it seemed to him to fall within the description of taxable income."

When we remember that the total income assessable for super-tax in 1918–19 was £333,500,000 and that in 1920 over £65,000,000 was paid in bonus shares it would appear that 20 per cent escaped tax in this way.

The profits realizable from shares issued to shareholders at premiums were larger

in amount in 1920 than the bonus shares. The Shell Transport and Trading Co. issued 6,433,832 £1 shares at par to its ordinary shareholders. The price of the ordinary shares immediately after this operation was quoted at £6; at this price consequently the shareholders were able by selling all these shares to make a profit of £38,603,112.[240]

A remarkably interesting table was compiled by the Labour Research Department to illustrate this practice for 1920 and we append it below.[241] The number of companies involved is 197 plus 28 (columns 2 and 3), but evidently 28 of these are not dealt with on the Stock Exchange.

> "Even if the figure of £108,003,994 (estimated profit to shareholders) is held to be an exaggeration of the real position, in view of the above considerations (that the shareholders do not sell the shares issued to them at a premium) it is outweighed by the fact that this table is by no means comprehensive : at least eighty public companies are not included owing to their method of issuing these shares being so complicated."
>
> "Finally a comparison is made in the August issue of the *Circular,* with the figures of capital applications given in the *Economist,* extended, however, to include these premium bonus shares. These figures show that whereas £143,180,500 was applied for by public limited companies from the public in 1913, £271,477,900 was applied for in 1920. These figures do not include either bonus shares or shares issued at a premium. So in reality to the figure for 1921 should be added £65,240,398, the total amount of bonus issue as given in the first table above, plus £70,460,536, making in all £407,178,834. It may be said that a few issues of these kinds were made in 1914, but in view of the fact that both our tables are incomplete this addition may be taken as justifiable. Thus we get in 1920 alone a permanent addition to the capital of public companies of 184 per cent, as compared with 1913 on which dividends must be earned."[242]

PROFITS REALIZABLE FROM SHARES ISSUED TO SHAREHOLDERS AT PREMIUM

Industry.	No. of Companies whose shares are Quoted,	UnQuoted.	Amount of issue (excluding Bonus) of Shares. Quoted.	Unquoted.	Profit to Companies.	Estimated Profit to Shareholders.	Per cent. Profit obtained by shareholders on capital supplied.
			£	£	£	£	
Banking	7	1	6,928,519	201,527	6,513,795	10,675,577	154
Chemicals	16	Nil	3,059,833	Nil	2,507,617	2,281,727	75
Coal, Iron and Steel	13	1	7,122,910	70,000	181,781	3.443.217	48
Engineering and Shipbuilding	24	2	4,001,514	209,646	971,274	1,694,865	34
Food, Drink and Tobacco	18	3	13,408,128	203,550	6,371,709	29,546,071	220
Merchanting	4	Nil	1,865,558	Nil	626,389	1,742,921	94
Metals	9	3	1,039,594	70,803	1,122,379	1,280,751	123
Oil	7	Nil	8,106,532	Nil	503,228	39,961,028	493
Shipping, Railways and other Transport	11	Nil	4,753,523	Nil	951,804	7,459,704	157
Tea Rubber etc	46	8	5,211,035	184,385	9,338,118	2,867,910	55
Textile, Clothing and Distribution	9	4	4,006,855	2,336,000	1,880,846	3,343,641	83
Warehousing, Storage, etc.	3	Nil	159,000	Nil	13,500	41,820	26
Miscellaneous	13	4	3,058,438	155,000	409,428	1,688,424	55
Total	197	28	66,975,962	3,484,574	32,901,987	108,003,994	161 aver.

As production increases, therefore, the burden of dividend payments on unreal capital also increases rapidly. This is the great leakage and accounts for the difference between the purchasing power in the hands of the consuming public in

any one year and the real wealth (goods and services) produced. This difference may or may not be translated into purchasing power; the bulk of it is kept as capital, but a good deal of it can if necessary be put into circulation by the owners of the £333,000,000 assessable for super tax. As the wealth of the country increases, therefore, the demands of the banks, financiers and large shareholders on that wealth goes up. Despite the fact that the general standard of life may improve gradually and that the comforts of the masses may be better than in the past, this leakage must be stopped, or else we must put off indefinitely the hope of a reconstructed world.

This section may fittingly close with some further facts of supreme importance, as their bearing on the tables given are significant.[243]

Out of a total of 334 public companies in 1920 divided into sixteen groups, twelve groups showed increases in profit and four a decrease. Yet in the last quarter of 1920 when the slump was heavily upon us there was an average increase of 27.1 per cent in the net profits for the whole of the sixteen, and the four groups in which there was a decrease in 1919 made enough to pay substantial dividends—they were Breweries, Land Mortgages, Tea Companies and Tramways.

For the year we find that on £881,000,000 of capital the average return of net profits was 15.2 per cent; carried to reserve (after payment of excess profits duty) 5.3 per cent making a total of 20.5 per cent. The average total of 15.2 per cent was made up as follows:—

Debenture average rate	4.4
Preference	5.3
Ordinary	11.6

Textiles headed the list at 17.8 (average net profit) as against 30.4 for 1919. Banks, Railways, Mines and Insurance Companies are not included in the above figures, which apply to the following groups:—

Breweries
Hotels, Restaurants
Iron Coal and Steel
Land, Mortgages and Finance
Motors and Cycles
Nitrates

Oil
Rubber
Shipping.
Ships and Stores
Tea
Telegraph
Textiles
Tramways
Trust Companies
Miscellaneous

The figures do not include benefits derived by the shareholders from the issue of bonus shares or shares issued below the market value. A list of the latter has been given, so the picture is complete. And what do we find? A return of 20.5 per cent, on £881,000,000 of capital, if we add reserves to the average return of the year, after payment of excess profits duty, together with an issue of at least £65,000,000 of bonus shares on a paid up capital of £97,000,000 of 235 companies. In addition an estimated profit of nearly £33,000,000 to 235 companies on profits realizable from shares issued to shareholders at a premium while the shareholders of this latter group by the same "issue of shares to them below market value" secured an estimated profit of £108,003,994 all in the year 1920. It is unnecessary to point the moral or adorn the tale. So long as this method of getting goods produced and services rendered applies, so long will the leakage continue, the cost of living will go up and finance will remain mistress of the situation. Profit is the end of all activity; prices must be "just about right" to secure this end and the community travailleth in order that this tribute shall be paid.

Chief Sources.

1. *Report on Increase of Wealth* (*War*). Cmd. 594. 1919.
2. *Report of the Treasury Committee on Bank Amalgamations.* Cd. 9052. 1918.
3. *Report on the Reorganization of the Board of Trade.* Cd. 8912. 1918.
4. *Report of the Commitee on Currency.* Cd. 9182. 1918.
5. *Report of the Working Classes Cost of Living Committee.* Cd. 9182. 1918.

6. Report of a Court of Inquiry Concerning Transport Workers. Wages and Conditions of Employment of Dock Labour. H. of C. paper, 55. 1920.

7. Board of Trade: Company Reports for 1918 and 1919. H.C. 182 (1919). H.C. 190. 1920.

8. Share Price Lists.

9. Stock Exchange Intelligence.

10. *Times* Reprints, July and Dec. Prospectuses of Public Companies and New Issues. 1913–1920.

11. Inland Revenue, Commissioners Reports for 1914 and 1919. Cmd. 8116 (1915); Cmd. 1083. (1920)

12. Labour Research Department. Monthly Circulars.

13. Reports issued from time to time by the League of Nations. Thus *Report of the Brussels Conference,* Nov. 1920, pub. Harrison & Co.

14. For text books consult:—

Bowley, *Prices and Wages in the United Kingdom.* 1914–1921.

E. Burns, *Modern Finance.* 1921.

C. H. Douglas, *Credit, Power and Democracy. New. Ed.* 1920. *Economic Democracy.* 1920.

T. E. Gregory, *Foreign Exchanges.* 1921.

Hawtrey, *Currency and Credit.* 1920.

Hobson, *Taxation in the New State,* 1920.

Kiernan, *British War Finance.* 19:0.

Kirkaldy, *British Finance,* 1914–1921.

Labour Research Dept., Nov., 1921. *Wages, Prices and Profits.* 1921.

Laughlin, *Money and Prices.* 1918. *Credit of the Nations.* 1918.

Pethick Lawrence, *Why Prices Rise and Fall.* 1921.

Nicholson, *War Finance.* 1916.

A. C. Pigou, *A Capital Levy and a Levy on War Wealth.* 1921.

Snowden, *Labour and National Finance.* 1920.

15. The following articles are important:—

Sir Chas. Addis, “Bank Reserves and Depreciation”: *Econ. Journ.,* Vol. XXVII, p. 414.

G. Cassel, “Further Observations on the World's Monetary Problem,” *Econ. Journ.,* Vol. XXX, p. 39.

G. Cassel, “The World's Monetary Problems,” pp. 19–28, 1921. Two Memoranda.

Sir J. C. Stamp, “An Estimate of the Capital Wealth of the United Kingdom in Private Hands,” *Econ. Journ.*, Vol. XXVIII, p. 276.

“The Special Taxation of Business Profits,” *Econ. Journ.* Vol. XXIX, p. 407.

16. *Report on Co-operation in American Export Trade, op. cit.* Part II, pp. 519–534, for “Apparent Interrelations of German Banks and Industrials.”

Chapter XI: Conclusions.

In their Conclusions and Recommendations the members of the Committee on Trusts state :—

> "We are satisfied that Trade Associations and Combines are rapidly increasing in this country, and may, within no distant period, exercise a paramount control over all important branches of British Trade."[244]

In our opinion, this period has arrived, and British trade at present in the autumn of 1921 is under the paramount control of large combines, governed and directed by the large money and banking trusts whose power over public deposits, overdrafts, and loans is so great as to give them in all cases control of the levers that set trade in motion. More than this, their power of advising the Government of the day is such that, as things are at present, this advice cannot but be directed by self-interest and concern for their shareholders, so that the Government (composed as it is to-day of the moneyed classes) cannot act except in accordance with the money trade Trusts' advice. Measures, therefore, that would ease the situation or mitigate the severity of a trade depression, cannot be passed through the House of Commons, and we seem to be blindly groping for the next step among a mass of confused directions and mis-statements of facts.

More information is urgently required. With the powers at their disposal, the Sub-committees appointed by the Standing Committee on Trusts could not get in all cases

the facts that were really necessary. Time after time they could only get the difference in the percentage rate of net profit to turnover for the post 1914 and the pre-1914 years. This is obviously useless without an ascertainment of (a) the exact amount of real capital invested in the business; and (b) the exact volume and cost of turnover in a particular year. Little wonder that one report concludes as follows:—

> "We can accordingly do no more than record our regret that the dyeing, finishing, bleaching,and printing trades of this country, acting through the medium of their Allied Association, should have considered it undesirable or inexpedient to furnish us with the information necessary to the execution of the duties with which we are charged."[245]

Despite these disadvantages the surprising thing is the amount of information that is available, which we have endeavoured to give to the reader in the foregoing pages. We cannot but confess, however, to the real difficulty experienced in getting at the facts, with all the material at the National Library of Wales at our disposal and practically all the Government Reports on the various trades and businesses. Very sensible of this, the first recommendation of the Committee on Trusts is that it ought to be the duty of the Board of Trade to obtain from all sources information on these matters and that it "shall present annually to Parliament a report upon the nature, extent and development of such forms of organizations."[246] This involves preliminary inquiry into complaints, followed by investigation into specific companies, firms, combinations, etc. If the information available to the Board of Trade be inadequate to enable it to discharge its duties properly, then it should be empowered to ask :

> (c) (1) A "Tribunal hereafter provided, for an order to such Companies, firms or individuals as may be specified in the application to furnish such information as may be specified thereunder; or (2) it shall refer the whole matter to the said Tribunal for investigation and report."
> (d) "There shall be established a Tribunal consisting of a person of legal qualification as permanent Chairman and not less than two or more than seven other members selected by him from time to time from a panel

> appointed for the purpose by the President of the Board of Trade after considering nominations made by representative trades organizations including the Cooperative Movement and Trade Unions, which Tribunal shall have power:—
> (1) "On the application of the Board of Trade to make orders of the kind specified under (c) (1) above; and
> (2) "On reference to the Board of Trade to investigate the operation of any organization specified in (a) firm, company, trust, etc., and for that purpose to call for all books and papers, to take evidence upon oath and to adopt such other measures of inquiry as it may deem necessary to elicit the facts, and when it shall be proved that acts injurious to the public interest have been committed, such facts as are relevant to the particular offence shall be published immediately on the conclusion of each inquiry."
> (e) "It shall be the duty of the Board of Trade to make recommendations as to State action for the remedying of any grievances which the Tribunal may find to be established."[247]

An Addendum (or Minority Report) was added to the foregoing Conclusions and Recommendations of the Committee. It was felt that the proposals fell short of what would be necessary to safeguard the public interest. It pointed out that free competition no longer exists and that prices do not oscillate about the necessary cost of production, so that in consequence, combination or Trust control "now loads in varying degrees the price of practically everything that we purchase."[248]

The gains obtained by the Trusts are those due to:—

> (1) "The saving of wasteful costs of competition."
> (2) "The reduced expenses of production by better technical and business organization."
> (3) "The monopolistic fixing of prices at what the trade will bear."

The above gains explain in the first place why combination is not always followed by an increase in selling prices (1 and 2) and also the last gain (3) involves restriction of output and an actual rise in prices where "the organization control articles or

services so essential to the community that the elasticity of demand is slight." These gains are obtained at the expense of the whole public of consumers and amount to a very large sum annually.

The Minority Report does not suggest that any action should be taken to prevent or obstruct trustification, for the obvious reasons that it makes for efficiency, increased economy and better organization of industry; but it strongly urges that this change towards combination involves corresponding developments to secure to the community "safeguards against the evils of monopoly, and at least a large share of the economic benefits of the better organization of industry which it promotes."

While pointing out that time has been insufficient to draw up a full programme of what should be done for this purpose, it urges that this should be the task of the suggested "Trusts and Combinations Department of the Board of Trade." The Addendum concludes with the general statement of four main directions along which the remedy is to be sought. We quote them in full below :—

> (1) "Profiteering may in some cases be kept in check, without preventing the better organization to be obtained by combination, by the existence of a rival who cannot be persuaded to enter the combination, and who can be relied on to serve only the public interest. The Co-operative Movement, which returns to its customers in proportion to their purchases all the surplus that it makes over cost, serves incidentally as a check on profit-making combinations into none of which will it ever consent to enter. The National Factories have been found by the Government extremely valuable in this respect during the War. If they could be continued in peace for the production of certain essential commodities, for the protection of the public of consumers, their value in serving as a check upon capitalist combinations might be considerable."
>
> (2) "In considering the prevalence of capitalist combinations in British industry, it is impossible to leave out of account the check upon profiteering which may be afforded by foreign imports. This operates, however, only so long as the foreign producers are not also brought within the Combinations. Whilst the imposition of import duties would increase the power of Combinations to raise prices, "Free Trade" is not in itself a complete

safeguard against it. Nor is the objection to the profiteering of Capitalist Combinations removed by the imposition of a tax which diverts to the Exchequer some or all of what is unnecessarily extracted from the consumer. Such a tax, whilst levied upon profits, may be held to make the Government *parti-ceps criminis* in these overcharges. Such a tax has the further evil that the Government has even an interest in the increase of his gains. It may be better to have an Excess Profits Duty than not to have it, when there are Excess Profits about; but it would be far more profitable to the community (and, therefore also to the Exchequer) if there were no excess profits to tax."

(3) "The only effective safeguard against the absorption by a Capitalist Combination of more than the necessary return appears to be the control of prices. We regard the experience during the war, of the full and precise costing of every part of a commodity, as affording valuable suggestions for the future fixing by Government Departments of a Maximum Price for particular articles which can be standardized. Where, as in the case of gas and electricity, such a prescribed price can be made to vary with the amount of profit taken by the capitalist producers such a 'sliding scale' of prices and dividends appears a useful expedient. It involves, it will be noted, the full application of two principles which may be destined to ever-wider application in business, but to which the business world is at present hostile, namely, Publicity and Measurement."

(4) "Where, as is evidently the case in various highly organized capitalist enterprises, competition is being rapidly displaced by combination, largely monopolistic in structure and powers, and tending to restrict output, with a view to raising prices or preventing their fall, we hold that it is contrary to the public interest to allow such enterprises to remain in private hands. In some cases their functions may more advantageously be assumed by the Co-operative Movement. In others their place may be taken by Municipal Enterprise. Where the enterprise is National in scope, and especially where its product enters into practically universal consumption, we see no alternative to State Ownership. But State Ownership does not necessarily imply State Management. In some cases it may be preferable to lease the

> enterprise, with prescribed schedules of price and wages, and other necessary conditions for management either by a Local Authority, or Cooperative Society, or a Joint Stock Company. The subject in our view urgently needs further study."[249]

Before summarizing the argument set out in the preceding chapters, it will be worth while to bear in mind the experience of other countries in regard to Trust control, in order to avoid their mistakes.

Experience abroad shows that in the Colonies and in the United States, machinery has had to be devised to control trusts, monopolies and combines. This varies from the power to demand full investigation on the part of six persons of any attempt at trustification or restriction of competition as in Canada,[250] to the provisions incorporated in the constitution of the States like New Hampshire, or New Jersey, forbidding agreements to increase or control prices of commodities.[251] In New Zealand, a rebate or discount given on the expressed or implied condition that the person receiving same will deal exclusively with the vendor is unlawful, while in South Africa "contract or conspiracy in unreasonable restraint" of the Meat Trade is dealt with by Special Act.[252]

The Sherman Act of the United States has been supplemented by the Federal Trade Commission Act (1914), and the Clayton Anti-Trust Act (1914). The Federal Trade Commission Act provides a permanent Commission for investigation and report on any Trust activities, while the Clayton Anti-Trust Act is intended to render illegal any arrangements substantially reducing competition, or which create monopolies.

No legislation will be effective if it sets out to secure a longer life to the "competition" form of production if that form has outlived its usefulness because of its wastefulness, its uneconomic character, and its antiquated machinery. The interference or control we need in Britain must be such that we can profit by the experience of these other countries, but let us beware of the vital error of legislating for the continuance of a form of industrial organization, or a method of production, which has given way, in the ordinary process of development, to large-scale operations involving financial groupings of such magnitude that competition within a country becomes impossible and is further impracticable. We need elasticity in our

treatment of the problem.

The reader is now aware of the fact that where combination is possible, competition is impossible in most British industries, from brick-making to banking. The era of competition within a nation has passed. It is being rapidly superseded in the international sphere. It was a development of nineteenth-century industrial organization. We in this country introduced it at the time of the Industrial Revolution, and we have clung to it longer than any other of the countries which profited by our early mistakes and were less tied by the bonds of tradition, of the "founder of the business," and old established connections. The Great War finally demonstrated the inefficiency of the method and its inadequacy for the production of goods and services at prices to suit the consumers. Trustification has taken its place in the British Industry. What is going to be our attitude to the new state of affairs? What legislative steps are immediately necessary to safeguard the consumer? The restrictive enactments tried by other countries have not succeeded in their objects to any great extent, except that we have had far greater publicity in regard to Trust operations. We know far more about the Trusts of America, for instance, than about Trusts in Great Britain, because of the machinery that exists to examine, enquire and collect evidence. The adoption of such machinery here would serve a useful purpose. It would let the public know the facts, but any enactment that is against the stream of economic tendency would not solve our problem—the control of Trusts so as to secure products and services at prices as low as possible—if we start out with the idea that what we want is more competition.

We want neither more competition nor more bureaucratic control, but we must have goods and services at reasonable prices—"reasonable" that is, not exclusively to those whose sole interest in a business is to make money or dividends, but reasonable to the great mass of the peoples of these islands and abroad who pay for them and who must get them.

The following paragraphs summarize certain large policies which need to be carried into effect before the present great cleavage between Capital and Labour can be bridged :—

(1) State ownership of the primary industrial enterprises of power (coal, electricity and oil) and transport (railways airships, canals, docks, harbours and shipping) is

practicable and economically urgent, provided we ally to it democratic control, so as to get the co-operation of all the workers concerned—technicians, professionals, and general workers. This will have to precede any successful handling of the Trust problem. Nationalization of banking is the *sine qua non* of the success of any scheme of State Ownership. Once these steps are taken, a particular Trust could be dealt with by price fixing, control of capital issues, or by a costings scheme, leaving the trust to perform its services as at present, subject to these controls.

(2) An essential preliminary step to bring about the policy outlined in paragraph (1) is more publicity, and the Board of Trade should present an annual report to Parliament "upon the nature, extent, and development" of all forms of trustification. It should be reorganized, not in order to provide another department as has been suggested, i.e., "The Trusts and Combinations Department," but to carry out the functions performed during the war by the Ministry of Munitions. In short, the Board of Trade should split up into two sections, one to carry out the administrative functions as at present, the other, under such a name as "The Ministry of State Trading." The war machinery of the Ministry of Munitions should be overhauled and reconstructed. Its various sub-committees should buy and sell raw materials and semi-finished products in bulk as during the war, costed at every stage. Thus the way would be prepared to assume State Ownership, but not necessarily State Management. That would depend on social education and to the extent that democratic control had been applied.

The above two main principles of policy and method having been laid down, it remains to add some subsidiary paragraphs on special industries :—

(a) The Coal Industry must be safeguarded for the country. The Sankey Report still stands as the best solution. Nationalization would be accepted by the miners on these terms because *it* provides some form of democratic control. The alternative is to see the coal companies becoming linked up with the Iron and Steel Trusts, and the loss of a key industry to the nation. The practical reorganization of the coal industry is an essential preliminary step in any control of Trusts.

(b) Coal power leads one naturally to consider Motor Fuel. Combined action by the consuming countries of the world through the Economic Section of the League of Nations is necessary to meet the international control of the oil trusts.

> "Coal is a great national asset and it would therefore seem that the soundest policy is to make such use of such treatment of coal, shale and analogous materials as will give to the United Kingdom an ample supply of power derived from coal products in the solid, liquid or gaseous states."

(c) Exports of Structural Materials should be limited until home demands are satisfied. This involves Government costings and the emergence of the State as trader on a large scale to buy in bulk, particularly for housing and public utility purposes. Thus the municipalities would be saved enormous expenses.

(d) More publicity is urgently required in regard to the groupings and mergers in the heavy Iron and Steel industries. Under the Ministry of State Trading, the iron and steel firms could be controlled establishments again, but in a more elastic way. Where our weaknesses were revealed they should be remedied by the setting up of Government factories to produce for use trucks, waggons, and locomotives. Our Naval Yards—soon to be derelict—could be turned easily to produce merchant ships.

(e) The Textile Industries should be left as at present, except that here again the State as Trader should publish standard costings of standard materials. To do this in the woollen industry would be comparatively easy by buying up, as during the war, the world's wool supplies. One efficient civil servant conducting the negotiations between , ourselves and the Colonies could arrange this, while in the cotton industry, after a full investigation, a certain profit on manufacturing costs would be allowed after ascertainments of real paid-up capital and volume of turnover. Once full access to the books of a Trust is secured to a Government Auditor, the position would soon be revealed. If the profit be exorbitant, the State could give two alternatives—fixation of prices or control of the establishment.

(f) The Chemical Industries should be controlled through three firms—Messrs. Levers, Brunner Mond and Co., and the British Dyestuffs Corporation. Socialization of the Explosives Industry would follow. Control of the Chemical Industries in the future as the sole monopoly of the nation, run in the interests of the nation, is as necessary to preserve the peace of the world as control of the navy in the past.

(g) The Meat Trusts should be dealt with internationally under the Economic Section of the League of Nations. The Food Trusts could be dealt with through the

Board of Agriculture and Fisheries. Its experience during the war stands on record. An initial step is the re-establishment of the Ministry of Food with its Advisory Council. The control of the chemical industries—soap, oils, fats, dyes—would make food control possible and cheap supplies practicable.

(h) With the possible exception of Electric Lamps, Miscellaneous Industries should be left alone.

(i) Control over Credit and Banking would make the whole planning of our economic life possible. The Bank of England should be declared the Nation's Bank; banking should be nationalized, and municipal banks on the Birmingham plan encouraged. Control of the currency could be safely entrusted to the Governors of the Bank of England, and not to the Treasury, once the large joint stock banks were made subject to the Nation's Bank and ceased to be credit-making institutions for private profit.

We must plan our economic life as a nation or face collapse. Competition has failed to carry us through the Peace. Our politics are bankrupt and the House of Commons cannot control industry. Let us free it for government and statesmanship, by erecting at once an economic and industrial parliament subordinate to it but responsible for the economic life and well-being of the whole people. The time is short. We preach co-operation between Capital and Labour in vain unless there is identity of aim between them. There is none at present. Trade Union help and direction is essential to Capital. How can it be secured without some form of democratic control ? Men will not work a soulless machine when they know that they, as human beings, are means and not ends in themselves. Men will no longer be content to be mere hands. A link between big business, trade unions and the Universities and professional people, is necessary to save our national trade, our very existence. The only way to secure this is to make industry a service and not a means of gain to a favoured group in society.

It may be objected that these proposals are academic and Utopian. We venture to assert that they are practicable and urgently necessary to save our industrial life from a greater and final chaos. The twentieth century will be the century of co-operation, as opposed to the competition of the nineteenth. We have won political liberty, in theory at any rate, in the nineteenth century; the next step will be the battle for

economic freedom : that way lies hope and safety:—

> Oh cease! must hate and death return?
> Cease! must men kill and die?
> Cease! drain not to its dregs the urn of bitter prophecy;
> The world is weary of the past.
> Oh, might it die or rest at last.

The world of civilization will die and that soon, unless it rests on the assumption that no man is born who is great enough to use his fellow-men as a tool for his own industrial profit.

Appendix

TABLE I

IRON-ORE PRODUCTION OF PRINCIPAL COUNTRIES IN TONS

Year.	United Kingdom.	Germany.	France.	Spain.	U.S.A.
1883	17,383,000	8,757,000	3,298,000	4,526,000	—
1886	14,110,000	8,486,000	3,286,000	4,167,000	—
1889	14,546,000	11,002,000	3,070,000	4,854,000	14,518,000
1890	13,781,000	11,223,000	3,472,000	6,055,000	16,036,000
1895	12,615,000	12,152,000	3,680,000	5,514,000	15,958,000
1900	14,028,000	18,659,000	5,448,000	8,676,000	27,553,000
1901	12,275,000	16,304,000	4,791,000	7,907,000	28,887,000
1902	13,426,000	17,675,000	5,004,000	7,905,000	35,554,000
1903	13,716,000	20,890,000	6,220,000	8,304,000	35,019,000
1904	13,774,000	21,693,000	7,023,000	7,965,000	27,644,000
1905	14,591,000	23,067,000	7,395,000	9,077,000	42,526,000
1906	15,500,000	26,305,000	8,481,000	9,449,000	47,750,000
!907	15,732,000	27,252,000	10,008,000	9,896,000	51,721,000
1908	15,031,000	23,896,000	10,057,000	9,272,000	35,983,000
1909	14,804,000	15,104,000	11,890,000	8,786,000	51,155,000
1910	15,226,000	28,231,000	14,606,000	8,650,000	56,890,000
1911	15,768,000	28,879,000	16,408,000	8,674,000	41,660,000
1912	13,790,391	27,200,000	18,808,000	8,970,000	55,150,000
1913	15,997,328	35,941,000	—	9,861,000	61,980,000
1914	14,867,582	25,405,000	—	6,819,000	41,440,000
1915	14,235,012	23,850,000	—	5,617,000	55,526,000
1916	13,494,658	—	—	5,551,000	75,168,000

1917	15,027,902	—	—	—	75,324,000
1918	15,044,378	—	—	—	72,630,000
1919	12,254,000	—	—	—	48,812,000

TABLE II [1]

PIG IRON WORLD'S PRODUCTION IN THOUSANDS OF TONS

Country.	1914.	1915.	1916.	1917.	1918.	1919.[2]
United States	23,050	29,662	39,434	38,647	39,051	30,586
Germany[3]	14,390	11,790	13,285	13,142	11,759	—
Great Britain	9,006	8,793	9,048	9,420	9,072	7,393
Canada	706	825	1,069	1,046	1,066	—
Austria-Hungary	1,988;	1,570	1,969	2,418	—	—
France[3]	5,000	—	1.447	1,684	1,297	2,376
Belgium.	1,5471	68	128	8	—	247
Italy[2]	385	376	467	471	—	—
Russia[3]	4,260	3,048	4,148	3,000	—	—
Spain[3]	382	439	498	358	—	—
Sweden[3]	735	767	732	837	750	—
India	234	270	246	251	264	—
Other Countries	250	250	500	500	500	—

[1] Quin's *Metal Handbook*, 1920.

[2] *Business Prospects Year Book*, 1922.

For 1920 U.S.A. production was 36,403,000 tons.
France production was 3,265,000 tons
U.K. production was 8,006,000 tons.

[3] Metric Tons. In 1919 U.K. Pig Iron dropped to 7,398,000 tons.

TABLE III

OUTPUT OF STEEL PRODUCTS IN UNITED KINGDOM

(From Memorandum issued by the Iron and Steel and Allied Trades Federation. Table shows output of semi-finished, rolled and manufactured steel products during 1917 and 1918.)

	1917. Tons.	1918. Tons.
Blooms, billets, slabs	2,073,178	1,992,822
Sheet and Tinplate bars	1,089,749	1,301,904
Total semi-products	3,162,927	3,294,726
Rails, new	340,088	357.940
Tram rails	2,646	4,400
Sleepers and fish-plates	28,445	35.623
Plates not under an eighth inch thick	1,326,584	1,345,493
Plates and sheets under ditto	753.775	839,577
Blackplates	142,403	212,698
Sheet steel	1,746,000	996,000
Girders, beams	222,440	253,113
General merchant steel	523,437	514,139
Hoops and strips	198,944	202,946
Wire rods	204,121	243,770
Tyres and axles	50,846	54,047
Steel forgings	207,848	261,031
Steel castings	202,520	306,851
Unenumerated products	837,824	1,593,640
Total finished products	6,787,921	7,221,268

TABLE IV

* IRON AND STEEL PRODUCTION PRINCIPAL COUNTRIES 1913–18, IN THOUSANDS OF TONS

	Great Britain.		United States.		Germany, including Luxemburg.	
	Pig Iron.	Total Steel.	Pig Iron.	Total finished Iron and Steel	Pig Iron.	Total Steel.
* 1913	10,482	7,664	30,724	24,791	19,309	18,959
* 1914	9,006	7,835	23,050	18,370	14,390	14.946
* 1915	8,793	8,550	29,662	24,393	11,790	13.258
* 1916	9,048	9,196	39,434	32,380	13,285	16,180
* 1917	9,420	9,894	38,647	33,068	13,142	16,590
* 1918	9,072	9,591	39,052	31,156	11,758	14,875
y 1919	7,398	7,926	p 30,586	—	—	—
y 1920	8,006	9,057	p 36,403	40,000 (in round figures)		
p[1]1921	2,064	p 2,802	—	50 per cent of 1920 for 1921 estimated.	—	—

* From Quin's *Metal Handbook.*

y From. Nat. Federation of Iron and Steel Manufacturers.

p *Business Prospects Year Book,* 1922.

p[1] 10 months: Jan.–Oct.

TABLE V [1]

IRON AND STEEL OUTPUT FOR 1920

Districts.	Pig Iron.		Steel.	
	Tons.	Per cent, of Total.	Tons.	Per cent. of Total.
Derby, Leicestershire	—	—	—	—
Notts and Northampton, and parts of Lancashire and Yorkshire	1,301,800	16.2	590,800	6.5
Lincolnshire	593,400	7.4	332,200	3.7
N.E. Coast	2,624,700	32.8	1,958,400	21.6
Scotland	881,420	11.	2,077,600	22.9
Staffs, Shropshire, Worcester and Warwick	701,700	8.8	809,000	8.9
S. Wales and Mon.	692,900	8.7	1,852,200	20.5
Sheffield.	205,900	2.6	1,169,000	12.9
West Coast	1,004,100	12.5	267,600	30
Total	8,005,900	100.	9,056,800	100.

[1] From the *Iron and Coal Trades Review.*

TABLE VI

(From p. 101, *Wages, Prices and Profits,* Nov., 1921, Labour Research Department.)

DEPOSITS, ETC., OF PUBLIC JOINT STOCK BANKS IN ENGLAND AND WALES

Year.	No. of Banks.	No. of Branches.	Capital and Reserves.	Deposits.
			£	£
1913	43	5,797	82,068,000	809,352,000
1914	38	5,869	81,904,000	895,561,000
1915	37	6,027	81,731,000	992,555,000
1916	35	5,993	81,089,000	1,154,877,000
1917	34	6,004	84,475,000	1,365,297,000
1918	26	6,285	92,902,000	1,583,412,000
1919	21	6,298	106,273,000	1,874,184,000
1920	20	7,257	128,154,000	1,961,527,000

Of this total of £1,961,527,000 *deposits* the “Big Five” (Barclay's, Lloyds, London County Westminster and Parr's, London Joint City and Midland, National Provincial and Union) account for roughly 83 per cent, of the total.

Name of Bank.	No. of Branches.	Capital and Reserves.	Deposits.
		£	£
Barclay's	1,510	23,842,000	327,788,000
Lloyds Bank	1,530	24,138,000	345,029,000
London County Westminster and Parr's Bank	828	17,507,000	305,381,000
London Joint City and Midland	1,489	21,720,000	371,842,000
National Provincial and Union Bank of England	648	18,187,000	278,335,000
	6,005	£105,394,000	£1,628,375,000

TABLE VII

(From p. 101, *Wages, Prices and Profits,* Nov., 1921. Labour Research Department.)

NUMBER AND NOMINAL CAPITAL OF NEW COMPANIES REGISTERED IN ENGLAND, SCOTLAND AND WALES (BOARD OF TRADE RETURNS.)

Year	No. of Companies.	Nominal Capital.
		£
1913	7,425	157,186,653
1914	6,214[1]	113,251,583
1915	4,062	53,354,606
1916	3,393	50,442,871
1917	3,963	67,813,926
1918	3,504	127,879,495
1919	10,725[1]	412,967,204
1920	11,011	593,189,032

[1] 5,386 of these in 1914 and 9,709 in 1919 were private Companies.

Notes.

1. Hobson, J. A., *Evolution of Modern Capitalism,* 1917 Ed., p. 61, and Chaps. V and XVII.
2. Abram, A., *Social England in the Fifteenth Century,* pp. 1–52.
3. Ashley, Sir W. J., *British Industries,* pp. 35–7; Dunn's *Coal Trade of the North of England*; also Parl. Papers, 1800, 1830, 1836.
4. Lavisse, *Histoire de la France Contemporaine,* Tom. V, p. 188.
5. Usher, A. P., *Industrial History of England* (Harrap), 1921, p. 475.
6. *See* Jenks, J. W., *The Trust Problem* (1901), p. 8, and Ripley, W. Z., *Trusts, Pools and Corporations* (1905), Ch. XVII, p. 414.
7. Seager, *Introduction to Economics,* p. 477.
8. Seager, *op. cit.,* p. 477 *et seq.*
9. Marshall, *Industry and Trade,* p. 540.
10. Trust Report, Cd. 9236, p. 42.
11. *Report on the Industrial and Economic Situation in Germany,* Cmd. 1114, p. 5, 1921. *See* also "A Letter from Germany," *Fortnightly Review,* Sep., 1920.
12. Carter, G. R., "The Rhenish-Westphalian Coal Syndicate," *Economic Journal,* March, 1912.
13. *Co-operation in American Expert Trade,* pp. 102–108, Part I, 1916.
14. Hilton Report. Trust Report, Cd. 9236, p. 42.
15. Dawson, *Industrial Germany,* p. 95; Marshall, *Industry and Trade,* p. 562.
16. For full account, see *Co-operation in American Export Trade,* Part I, p. 68.
17. *See* Cole, G. D. H., *Chaos and Order in Industry,* p. 225.
18. Trust Report, Cd. 9236, p. 39.
19. The "combine" is sometimes used to describe the fourth type of association, i.e., the "consohdation," which is financially a single unit. Where the combine is permanent rather than temporary, it is really a consolidation type.
20. *Times* Reprints of Prospectuses and New Issues of Public Companies. 1914–1921.
21. P. 40, Trust Report, Cd. 9236.
22. Memorandum in Trust Report, Cd. 9236, 1919, p. 40.

23. Committee on Commercial and Industrial Policy after the War, Cd. 9035, 1918, p. 36, paragraph 170.

24. Trust Report, p. 40.

25. Trust Report, p. 41.

26. *Ibid.* p. 41.

27. Quoted p. 183, *Industrial Combination and Trusts*, Stevens. United States of America *v.* Aluminium Co. of America. Petition in equity in the District *Court* of U.S. for Western District of Pennsylvania, pp. 15, 16.

28. Carter, *Tendency towards Industrial Combination*, p. 341.

29. Trust Report, p. 7.

30. *See* Kiernan, T. J., *British War Finance*.

31. *See* Appendix, Table VI.

32. Pigou, A. C., "Government Control in War and Peace," *Economic Journal* Vol. XXVIII, p. 363. Report of the Working Classes Cost of Living Committee, Cd. 8980 (1918) and Report of Commission of Enquiry into Industrial Unrest, Cd. 8668 (1917).

33. Gray and Turner, *Eclipse or Empire*, p. 113.

34. *See* Carter, *The Tendency towards Combination*, pp. 13–16.

35. Marshall, *Industry and Trade*, p. 585 and note. *See* also Macrosty, *The Trust Problem in British Industry*, p. 85; Levy, H., *Monopoly and Competition*, chap. VI.

36. Carter, *Tendency towards Industrial Combination*, pp. 189–190.

37. *See Report on Co-operation in American Export Trade*, Part I, p. 336.

38. *See* Carter, pp. 223–240.

39. Carter, *Tendency to Combination in British Industry*, p. 294.

40. *See* Carter, pp. 291–298. *Report on Co-operation in American Export Trade*, pp. 333–338.

41. Report of the Chairman and Managing Director of Messrs. Guest, Keen & Nettlefolds, *Western Mail*, Sept, 16, 1921.

42. *Stock Exchange Year Book*, 1921.

43. Sir Richard Redmayne, Evidence, March 11, Coal Industry Commission.

44. *See Further Facts from the Coal Commission*, compiled by R. Page Arnot, Pub. Lab. Research Dept., and *Reports Coal Industry Commission*, Cd. 359, Cd. 360, 1919; Cmd. 361, 1919.

45. *See Further Facts from the Coal Commission*, compiled by R. Page Arnot, Pub. Lab. Research Dept., and *Reports Coal Industry Commission*, Cd. 359, Cd. 360, 1919; Cmd. 361, 1919.

46. *Further Facts from Coal Commission*, also Cmd. 361 (1919).

47. *See* Thomas, J., *The Miners' Conflict with the Mineowners*, p. 54.

48. Note Cl. 7 of Settlement. The standard wages shall be the district basis rates existing on March 31, 1921, plus the district percentages payable in July, 1914 (or the equivalents in any district in which there has been a subsequent merging into new standards), plus, in the case of the pieceworkers, the percentage additions which were made consequent upon the reduction of hours from eight to seven. Cl. 8. In no district shall wages be paid at lower rates than standard wages plus 20 per cent thereof. — Clauses 7 and 8 of Terms of Settlement, July 1, 1921.

49. Cmd. 597.

50. Cmd. 1119.

51. Cmd. 597, p. 4.

52. Cmd. 597, p. 7.

53. Cmd. 1119, p. 8.

54. *See* Labour Research Circular, Vol. X, No. 1, Jan., 1922, for a full account of the relations between Standard Oil, Royal Dutch Shell and the Anglo-Persian Companies.
55. Labour Research Circular, Vol. VIII, No. 3, March, 1921.
56. Cmd. 1119, p. 9.
57. Prospectus Mar. 11, 1921.
58. *Daily News,* Aug. 20, 1920.
59. Eckel, *Coal, Iron and War,* p. 131; also Labour Research Dept. Monthly Circular, Vol. X, No. I, Jan., 1922.
60. Cmd. 959 and Cmd. 1209.
61. Monthly Circular Lab. Research Dept., April, 1931.
62. Cmd, 1091.
63. Cmd. 1091, Report, p. 17.
64. Lab. Research Circular, Feb. 1, 1921.
65. Report, Cmd. 1091, pp. 13, 14.
66. Labour Research Dept. Circular, Feb. 1, 1921.
67. Cmd. 1338, Report on Slates.
68. Cmd. 1338, Report on Slates, p. 4.
69. Cmd. 1338, Report on Slates, p. 6.
70. *Ibid.,* p. 5.
71. Cmd. 1338, Report on Slates, p. 6.
72. *Western Mail,* Aug. 24, 1921.
73. Cmd. 1217, Cmd. 1,200, May 1921, Reports.
74. *See* Carter, pp. 40 *et seq.*
75. Trust Report, p. 3.
76. Trust Report, p. 3.
77. *Ibid.,* pp. 3 and 4.
78. Trust Report, p. 7.
79. Memorandum Nat. Fed. Iron and Steel Industries, May 17, 1921.
80. Memorandum previously cited.
81. *Final Report of the Committee on Commercial and Industrial Policy after the War,* 1918, p. 10.
82. *Final Report of the Committee on Commercial and Industrial Policy after the War,* 1918, p. 10.
83. *See* "Ministry of Munitions and its Influence on the Iron and Steel Trade," Dr. F. H. Hatch, *Iron and Coal Trades Review,* Jan. 27, 1919.
84. *See* Appendix A for tables.
85. *System,* December, 1918, "What Business Faces To-day."
86. Sir H. Morgan, "Why Large Scale Production is Necessary," *System,* March 1919.
87. *Times,* March 25, 1919. Speech, Mr. Douglas Vickers.
88. Carter, *Tendency towards Combination,* p. 87.
89. Chairman's speech, Birmingham, Jan. 26, 1921. *Economist,* Jan. 24.
90. See J. H. Jones, *The Tinplate Industry,* p. 79.
91. *South Wales Coal and Iron Companies,* 1920 (Business Statistics Co. Ltd.)
92. *See Iron and Coal Trades Review,* April 22, 1921.
93. Cmd. 607, 1920, *Report on Metal Bedsteads.*
94. Cmd. 607.
95. Cmd. 1200, 1921.

96. Cmd. 8668, Commission of Inquiry into Industrial Unrest (1917).
97. Report, Cmd. 1200, p. 4.
98. Report, Cmd. 1200, p. 4.
99. Lab. Research Dept., Vol. VIII, No. 4, p. 56.
100. Cmd. 1200, Report.
101. House of Commons reply to Mr. Hogge, July 14, 1921.
102. Report, Cmd. 1200, p. 8.
103. Report, Cmd. 1200, p. 9.
104. Report, Cmd. 1200, p. 14.
105. Report, Cmd. 1200, p. 14.
106. Cmd. 1217, p. 6.
107. Report on Sewing Cotton, Cmd., p. 563.
108. Report, Cmd. 563, p. 6.
109. Report, p. 7.
110. Report, p. 8.
111. Report Cmd. 1173, p. 6.
112. *See* Marshall, *Industry and Trade*, pp. 596–8.
113. Chapman, *The Cotton Industry*, p. 168.
114. Walter Gee, President United Textile Factories Workers' Association, Blackpool, July 26, 1921.
115. *See* Report, Cd. 9035. Committee on "Commercial and Industrial Policy after the War."
116. *See* Cmd. 535, January 1920.
117. Cmd. 535, p. 5.
118. Cmd. 535, p. 6.
119. Cmd. 1192, p. 3.
120. Cmd. 1192, p. 4.
121. Cmd. 1192, p. 5, § 4.
122. Cmd. 1192, p. 5, § 4 (b).
123. Cmd. 1192, p. 6.
124. Cmd. 550.
125. May, 1919.
126. Cmd. 550, p. 4.
127. Cmd. 858.
128. Cmd. 858, p. 3.
129. Cmd. 1314.
130. *Ibid.*, p. 4.
131. Cmd. 1339, p. 4.
132. Cmd. 1339, p. 8.
133. Cmd. 1339, p, 8.
134. Cmd. 982 (1920).
135. Cmd. 982 (1920).
136. *Ibid.*
137. Report 982, p. 5.
138. *Ibid*., p. 5, para. 7.
139. Report, Cmd. 1126, p. 4.

140. *Ibid.*, p. 5.
141. Report, Cmd. 1126, p. 5.
142. Report, Cmd. 1126, p. 5.
143. *Labour Research Circular,* Vol. VIII, No. 3, *March* 1921.
144. Cmd. 1126, p. 7.
145. Cmd. 1116, p. 8.
146. Cmd. 1116, p. 8.
147. *Ibid.*, p. 8.
148. *Ibid.*, p. 9.
149. Cmd. 1116, p. 17.
150. *Ibid*., p. 17.
151. Cmd. 1116, p. 17, par. 14.
152. Cmd. 1116, p. 13.
153. Cmd. 1116, p. 15.
154. *Ibid.*, Conclusions, p. 18.
155. *Daily Herald,* Aug. 8, 1921.
156. Cmd. 832, p. 4.
157. *Ibid.*, p. 11.
158. Cmd. 832, p. 12.
159. Cmd. 832, p. 8.
160. Cmd. Yeast, 1216.
161. Cmd. Yeast, 1216.
162. Cmd. *Ibid.*, p. 5.
163. *Ibid.*, p. 5.
164. Cmd. 1216.
165. Cmd. 1370 (1921).
166. Cmd. 1370, Report, p. 23.
167. *Ibid., p.* 25.
168. Cmd. 1370, Report, p. 23.
169. Cmd. 1370 Report, p. 19.
170. Cmd. 1370, pp. 20–21.
171. Cmd. 1347. *Report on the Explosives Industry*.
172. Cmd. 1347. *Report on the Explosives Industry*, p. 6.
173. Cmd. 1347. *Report on the Explosives Industry,* Conclusions, p. II.
174. Cmd. 499 and 663.
175. Cmd. 633.
176. Cmd. 1047.
177. Cmd. 1356.
178. Cd. 4643.
179. Cmd. 456.
180. Cd. 9236.
181. Final Report on Cost of Living, Parliamentary Committee Trade Union Congress, 1921.
182. *Ibid.*, p. 59.
183. Cmd. 1057, p. 12.

184. *Ibid.*, para. f.
185. Cmd. 1057, p. 8, para. 19.
186. Report Cmd. 1057, p. 13.
187. Cmd. 1356, 1921.
188. Cmd. 1356, p. 5.
189. Cmd. 1102.
190. Cmd. 1102, p. 7.
191. Cmd. 878, p. 5.
192. Cmd. 878, p. 6.
193. *Ibid.*, p. 10. Report by Mr. W. H. Watkins.
194. Cmd. 514, p. 5.
195. Cmd. 514, p. 5.
196. *Ibid.*, p. 5.
197. Cmd. 558, 1920.
198. Macrosty, *The Trust Movement in British Industry*, p. 229 (1907).
199. Cmd. 558, p. 4.
200. Cmd. 558, p. 5.
201. Cmd. 558, p. 5.
202. Cmd. 558, p. 6.
203. Cmd. 924.
204. Duty of 3s. 5d. calculated on conventional gross of 10,000 matches.
205. Cmd. 924, 1920, p. 6.
206. Cmd. 924, 1920, p. 6.
207. Cmd. 924, 1920, Conclusions, p. 8.
208. Cmd. 1066, 1920.
209. *Round Table*, March, 1921, p. 348.
210. Cmd. 1066, p. 7.
211. *Ibid*., p. 7.
212. *Ibid.*, p. 9.
213. Cmd. 622, 1920.
214. Cmd. 622, 1920, p. 7.
215. *Ibid.*, p. 14.
216. *Ibid.*, p. 9.
217. Cmd. 622, 1920, p. 11.
218. *Ibid.*, Conclusions, p. 15.
219. *Ibid.*, Conclusions, p. 15.
220. Cmd. 549.
221. Cmd. 549, p. 4.
222. Cmd. 549, p. 6.
223. See J. M. Keynes, *Economic Consequences of the Peace*; N. Angell, *The Fruits of Victory*.
224. Second Memorandum by Prof. G. Cassel for the Assembly of the League of Nations: *The World's Monetary Problem*, October 27, 1921.
225. Cd. 9052, 1918. Treasury Committee on Banking Amalgamation.
226. *See* Appendix, Table VI.

227. *See* Appendix, Table VI, for later years.
228. *Journal of the Institute of Bankers,* January 18, Vol. 39.
229. *Times,* December 17, 1917.
230. *Bankers' Magazine,* Vol. CIX (1), 1920.
231. *Bankers' Magazine,* Vol. CVII February, October, 1918.
232. *Ibid.*
233. *Journal of the Institute of Bankers,* Vol. 39, April, 1918.
234. *Bankers' Magazine,* Vol. CIX. (2); July–December, 1920, p. 310.
235. *Journal of the Institute of Bankers,* Vol. 41, March, 1920.
236. Cd. 9052.
237. Cd. 9052 (1918).
238. *Bankers' Magazine,* Vol. CIX, p. 182, Part 1. Progress of Banking in British Isles, 1918.
239. *Monthly Circular Labour Research Dept.,* Vol. IX, No. 2, August, 1920.
240. *Monthly Circular, Labour Research Dept.,* Vol. IX, No. 2.
241. *Monthly Circular, Labour Research Dept.,* Vol. IX, No. 4, October, 1920.
242. *Monthly Circular, Labour Research Dept.,* Vol. IX, No. 4. p. 53, October, 1921.
243. *Economist,* Jan. 8, 1921, "Industrial Profits."
244. *Report on Trusts.* C.D. 9236, p. 11, 1919.
245. Cmd. 1371, May, 1921. *Report on Dyeing, Finishing, Bleaching and Printing.*
246. C.D. 9236, p. 12.
247. C.D. 9236, p. 12.
248. *Report of Committee on Trusts.* C.D. 9236, p. 13. Signed by Mr. tmest Bevin, Mr. J. A. Hobson, Mr. W. H. Watkins and Mr. Sidney Webb.
249. *Report of Committee on Trusts.* C.D. 9236, p. 13.
250. Combines Investigation Act, 1910.
251. Commercial Trusts Act, 1910.
252. Meat Trade Act of 1907.