War Time Control of Industry

Howard L. Gray
WAR TIME CONTROL OF INDUSTRY
WAR TIME CONTROL OF INDUSTRY
THE EXPERIENCE OF ENGLAND

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PREFACE

A part of the information contained in the following pages was gathered for the Commercial Economy Board of the Council of National Defense. Much of it is not easy of access. Despite the summary character of the chapters, therefore, they may be not unacceptable to those who are interested, as all during these days must be, in the industrial activities of the state. Although the experiments in governmental control of industry here recorded are due to unusual circumstances, the experience which they yield will scarcely be without influence upon the future. A necessary defect of any account written at this time is its incompleteness. The outcome of the ventures described is not yet known and the end of the tale remains to be told. Even so, the beginning may be worth the telling.

I am indebted to Dr. Mary Alice Hanna and Professor William Roy Smith for assisting me in revising the manuscript.

H. L. Gray.

Low Buildings, Bryn Mawr.
December, 1917.
INTRODUCTION

British control of industry during the war has passed through three phases. The first, extending over some ten months, was a period of tentative action, the Government taking only obvious self-protective measures; the second, lasting for nearly a year and a half, was a period of determined regulation, the Government now being concerned to increase the output of munitions of war, to secure supplies for the army at prices below those of the market, and to regulate shipping; the third, beginning at the end of 1916, has proved to be a period of stringent control, governmental regulation of the production, distribution, and consumption of food being its marked characteristic. The doctrine of laissez faire, still respected in 1914, had by the end of 1917 passed into at least temporary oblivion.

These stages in the growing control of industry are marked by corresponding political changes. The period of hesitant and relatively slight control coincided with the régime of the Liberal Cabinet which administered English affairs at the beginning of the war. In June, 1915, this Cabinet was enlarged by the inclusion in it of prominent members of the Opposition and became the Coalition Cabinet. The change was only one aspect of the general desire for a more energetic prosecution of the
war, which at the same moment led to the increased mobilization of industry. A year and a half later it was felt that the Coalition Cabinet was too large a body to act as an efficient executive in war time. In consequence, there was set up in December, 1916, the smaller War Cabinet, which has since had the immediate responsibility for important administrative measures. A more thorough-going control of the prices and consumption of food had, it is true, been decided upon before the War Cabinet was constituted. But both movements were indicative of a new attitude toward the prosecution of the war, and the War Cabinet accepted and carried out with vigour a policy which was the expression of its own convictions. This third political and industrial phase had not yet come to an end in the autumn of 1917. It will lend unity to the following chapters to consider for a moment the characteristics of the periods indicated.

At home, as at the front, the first ten months of the conflict proved to be a time of hurried and somewhat inadequate readjustment. Apart from assuming control over such supplies, industries, and foodstuffs as were essential to military needs and the security of civilians, the State showed itself loath to interfere in the economic life of the nation. Ships were, of course, requisitioned for the admiralty and the military, and establishments which could easily turn out munitions were enlisted in the Government's service. Further measures were few. Most bold and immediate was the taking over of the railways, the first comprehensive essay in state control. Almost
as prompt were the measures adopted to insure adequate supplies of food. Since sugar had been imported very largely from enemy countries and would have to be got henceforth in a greatly restricted world market, the Government deemed it best to purchase and control all sugar consumed. Wheat, too, it appeared, might become scarce unless a surplus store were acquired. The Government, accordingly, entered the foreign market as a purchaser and bought a supply which before the year had passed proved of great utility. After the adoption of these measures little was done until a winter and spring of war made clear that further action would be necessary.

This winter of 1914-15 saw a marked rise in the price of foodstuffs and coal. As a result, workmen throughout Great Britain began to reason that there should be either a corresponding increase in wages or an effort on the part of the Government to check rising prices. Since many producers and middlemen seemed to be reaping undue profits, charges of "profiteering" were now heard. The nervousness of labour found expression in a demand for war bonuses, and after February, 1915, these were secured from employers with more or less friction. Where the friction was great the Government had to intervene, and the spring months of 1915 were marked by vigorous efforts to conciliate labour in order that its active co-operation in the prosecution of the war might be secured.

There was the greater need of harmony now that the nation was beginning to realize the magnitude of the
task before it. Such episodes as the battle of Neuve Chapelle and the loss of Przemysl by the Russians demonstrated the imperative need of abundant munitions of war. Thereupon began a campaign for the complete mobilization of such industrial resources as might be directed toward the production of military and naval supplies. It was initiated by the Munitions of War Act of June, 1915, the conception and passage of which may be said to mark the beginning of the second industrial period of the war.

The introduction of the bill in Parliament had been preceded by conferences with representatives of labour. In these conferences the trade unions agreed to relax many of their restrictions and to permit the employment of unskilled workers, but they exacted one concession—the requirement that employers' profits be restricted. Such restriction the bill imposed. On the other hand, provisions for compulsory arbitration of industrial disputes and for the securing by munitions workers of "leaving certificates" were to act as checks upon any interruption of work. The Defence of the Realm Act had already permitted the conversion of any engineering establishment in the country into one producing munitions. Fortified by the two acts the Government entered upon a period of munitions making quite unprecedented, and a year later remarkable results could be announced.

In its mobilization of capital and labour for the production of munitions of war, the Government was more happy than it was in dealing with the coal miners. This
large and influential body of workingmen refused to come under the Munitions of War Act; and, when the Government relative to a threatened strike in South Wales endeavoured to enforce the measure, industrial revolt seemed imminent. Conciliated for the time by the persuasion of Mr. Lloyd George and securing for the most part their demands, the South Wales miners returned to work. At the end of 1916, however, they again threatened to strike, and this time the Government, unwilling to see necessary supplies imperilled, assumed control of the mines, first in South Wales, soon after throughout Great Britain. Difficulties with the coal miners thus marked the beginning and the conclusion of the second industrial period of the war.

Still other features than the production of munitions, the conciliation of labour, and the trouble with the miners characterize the period. In purchasing clothing and leather for the army the War Office soon saw itself faced with rising prices due in turn to a precarious supply of raw material. In the course of 1916 it decided that the wool clip of Great Britain should be acquired and at the end of the year bought also the far larger one of Australasia. Purchases of domestic and imported hides, though on a more restricted scale, were similarly carried through. To secure meat supplies for the army at a reasonable price, the Government in the spring of 1915 was forced to requisition shipping space on British vessels plying to Australasia and to the Argentine. It was the beginning of the control of merchant shipping
prompted by a desire to influence prices. A similar form of control was adopted when, after freight rates for wheat had risen immoderately toward the end of 1915, the Government diverted ships to the North American trade and determined what profits were permissible. By the end of 1916 there was little British shipping that had not been requisitioned or was not controlled. During the same year, also, measures looking toward economy in shipping space became necessary and the importation of certain bulky commodities was restricted.

It was toward the end of 1916 that public criticism and the exigencies of the shipping situation forced upon the Government a policy of still more stringent control over many branches of industry. Behind all lay the increased cost of living. Complaints about this had been rife ever since February, 1915, when the rising prices of necessities first became oppressive. In the summer of 1915 the price of coal at the pit head was limited by statute to a certain advance upon pre-war prices. From the beginning of the war the Government controlled the price of sugar, but kept it very high, since there was added to a considerable initial cost a heavy war tax. The price of wheat and of imported meat had to some extent been affected by the Government's control of ocean freights. There remained, however, the possibility of fixing maximum prices for essential foodstuffs; and, if it should appear that such a policy might discourage the British farmer and deter him from production, inducements to agriculture might well be offered in compensation.
Upon this somewhat hazardous policy the Government ventured after November, 1916. At that time the cost of the principal articles of food as compared with the cost at the beginning of the war had advanced about 80 per cent. Beginning with a limitation upon the prices which might be charged for milk, the Government in the course of a twelvemonth fixed maximum prices for the most important articles of food. In the case of bread, for which a maximum price based upon the cost of imported wheat would still have worked hardship for a large part of the population, a price below cost was eventually established. The loss would be made good, it was explained, by a subsidy from the exchequer. Conversely, the farmer was encouraged to plough arable land for the sowing of grain by the guarantee of minimum prices for wheat and oats during a series of years. Thus with one hand the Government tried to check rising costs, while with the other it endeavoured to stimulate production.

The stimulus to production was one method of escape from what was to prove an imminent danger of 1917, the shortage of ocean tonnage. Much British mercantile shipping having been requisitioned from the beginning of the war, the activity of submarines more and more made serious inroads upon the part that remained. Not only was it essential that more food be produced in Great Britain, but economy of consumption became imperative. In various ways the Government set itself to induce people to save food. Making use of persuasion at first, it
stood ready at the end of 1917 to resort to rationing if necessary. Indeed, in the case of sugar, rations were imposed at the end of the year.

Another aspect of the economy forced upon Great Britain during the year was the resort of priority schemes. Particularly in the apportionment of steel to manufacturers according to the importance of their products from the military or national point of view and in the similar allocation of wool to spinners were priority rulings introduced. They were, indeed, a kind of rationing. Whereas, however, for consumers of food the rationing is impartial, it is the essence of priority rationing to show favouritism. Always in the latter the manufacturer of civilian implements or stuffs gets least consideration. All energies of the nation are concentrated upon the production of what is essential for the war, and other activities receive little consideration.

The following chapters have been arranged to show as far as possible the successive stages of governmental control over industry. First to be subjected to it were the railways. Munitions works and the labour which operates them were next with great effort directed toward energetic and disciplined production. Coal miners and dealers in coal proved more obdurate, forcing the Government to take over the industry. The administration of wool and hides was assumed in order to secure economies in government purchasing and to conserve stocks. Upon the shipping industry depends the existence of a food-importing nation; and to secure supplies at reason-
able rates nearly all merchant shipping was eventually requisitioned or put under blue-book rates. Finally, in the last period of governmental control, food was made available for the consumer at maximum prices and production was stimulated by the promise of possible subsidies to the farmer.

What may be the permanent significance of this governmental control of industry cannot be foreseen. Assurance is given that all measures are temporary and that with peace the conditions of peace will be restored. What will have been created, however, is precedent and experience; and in the industrial world which emerges from the war these may have more importance than is at the moment anticipated.
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ABBREVIATIONS

P. D. C.  Parliamentary Debates, Commons.
P. D. L.  Parliamentary Debates, Lords.
Cd.      Paper by Command.
B. T. J.  British Trade Journal.
B. T. R.  British Trade Review.
L. E.    London Economist.
M. G.    Manchester Guardian.
E. N.    English Nation.
A. R.    Annual Register.
WAR TIME CONTROL OF INDUSTRY

THE RAILWAYS

On August 4, 1914, Great Britain was at war; on August 5, His Majesty's Government assumed control of the railways of England, Scotland, and Wales. It was the prompt, almost instantaneous action of the State to secure for itself command of the arteries of traffic. Henceforth administration lay with a committee of general railway managers, their chairman the President of the Board of Trade.¹

In accordance with the Regulation of the Forces Act (1871) under which the Government acted, interposition involved full compensation to the owners for loss or injury sustained, the amount of this to be determined by agreement or, if necessary, by arbitration. In September the Board of Trade issued a memorandum announcing the agreement reached. The Government undertook to pay to the companies “the sum by which the aggregate net receipts for the period during which the Government are in possession fall short of the aggregate net

receipts for the corresponding period of 1913." If, however, the net receipts of the companies for the first half of 1914 should turn out to be smaller than the net receipts for the first half of 1913, the sum payable should be reduced in the same proportion. The Government's payment together with the net receipts of all the companies was to be distributed among them in proportion to their several net receipts during the period with which comparison was made. The plan in short was the simple one of guaranteeing to the railways the profits which had prevailed during the immediate past. On the other hand, the arrangement covered all special services, such as those in connection with military or naval transport, rendered to the Government by the companies; it, therefore, became unnecessary that payments be made for such services.\(^2\) Not only did the railways pool their net traffic receipts but to a great extent they pooled their rolling stock as well. Arrangements thus made for public ends have persisted with slight readjustments during the war.

Having come to terms with the owners of the railways, the Government turned to the men. The railway employés of Great Britain are organized in two large unions, the National Union of Railwaymen and the Associated Society of Locomotive Engineers and Firemen. It happened that a scheme of conciliation, worked out between the unions and the owners at a Board of Trade conference on December 11, 1911, became inoperative after November 30, 1914. The avoidance of readjust-

ment and possible industrial conflict at the latter date was imperative. The unions happily showed themselves ready to conclude with the Government in October what is known as "the truce." They agreed that the conciliation scheme of 1911 should remain in force, the men's representatives on the existing conciliation boards of each of the several railways continuing to act. The railway companies or either union might, however, give six weeks' notice to terminate the agreement. Otherwise all existing contracts and conditions of service should remain operative. True to the spirit of the agreement, the men showed public spirit, suspended trade union regulations, worked hard and overtime.

The first occasion for a readjustment came early in 1915. Owing to the increased cost of living, the men asked for an advance of 5 s. per week in their wages. The companies offered less, and the outcome of several conferences, supervised and directed by the government, was the grant of a war bonus. It was fixed at 3 s. for men whose wages were more than 30 s. a week, at 2 s. for those whose wages were less. Mr. A. Bellamy, President of the National Union of Railwaymen, in his address at the annual conference of that body, hailed the outcome as the "largest and widest agreement ever negotiated by any union for the benefit of its members in the history of the United Kingdom, if not of the world."  

4 Ibid.
5 L. T., Je. 22, 1915, p. 5.
But the triumph was not so much over unwilling employers as over an embarrassed government. For it was the Government which frankly assumed three-fourths of the £4,000,000 added to the wages bill. Indirectly it assumed the entire sum, although the companies agreed to pay 25 per cent. of the increase. This was in return for another concession from the Government. The latter had, it will be remembered, safeguarded itself in its arrangement with the companies against the possibility that earnings during the first half of 1914 might be less than during the first half of 1913. This contingency developed into fact with the publication of balance sheets, the northern roads having suffered just before the war from a reaction in the iron trade and from inactivity in the cotton trade. The Government would have been entitled to reduce its payment to the 1914 basis, i. e., to have decreased it by nearly 3 per cent. Instead it stipulated that the companies pay 25 per cent. of the war bonus now promised to the men. Despite this apparent shifting of part of the burden, the meeting, directly or indirectly, of this first demand of labour for increased wages stood forth in February, 1915, as one of the first fruits of governmental control.

Demands of the kind naturally did not end early in 1915. In September unrest was again manifest and a certain section of the National Union of Railwaymen urged the termination of "the truce." Eventually, at

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6 Jennings, op. cit.
a meeting between the executive council of this body and the representatives of the companies, the war bonus was increased from 3s. to 5s. More ominous was the discontent of August and September, 1916. The increased cost of living had now become oppressive, and a further 10s. advance in the bonus was demanded. If the State were compelled to find money for increased wages, the men reasoned, it might do something about prices. Such sentiments found expression at a general-delegate meeting of the National Union at Essex Hall, at a demonstration in Hyde Park, at a mass meeting of Welshmen at Cardiff. In September the Welshmen threatened to stop work unless an advance of wages were conceded within a week. The companies on their part offered to extend the 5s. bonus by 3s. and to refer to arbitration the demand for a further advance. The men declined the offer. On September 15 the Board of Trade intervened, negotiating alternately with the Executive Committee of the National Union and the General Managers of the Railway Companies. Meanwhile at Cardiff the men postponed the strike which had been set for September 17, and by the twentieth an agreement was reached. The war bonus for men of eighteen and over was advanced from 5s. to 10s., for men under eighteen from 2s. 6d. to 5s. 8 The Government, of course, as administrator of the railways, assumed responsibility for the increase. Again, in April, 1917, 5s. was added to

the war bonus, which thus became 15 s. a week. Since these liberal awards affected some 350,000 men, trade union officials could congratulate themselves.

In August, 1917, new demands on the part of one of the unions went beyond the simple question of war bonuses. During the summer both unions had made fresh proposals to the companies. The response of the latter proving satisfactory to the National Union of Railwaymen, a conversion of the war bonus into a war wage was accepted, the effect being an increased payment for overtime and for Sunday duty, which amounted to some £13,000,000 per annum. A like offer was made to the Associated Society of Locomotive Engineers and Firemen, who represent about one-half of the drivers and firemen and claim a membership of 35,000. This body, however, declined to negotiate regarding a wage or bonus unless the principle of an eight-hour day was first conceded. The President of the Board of Trade, Sir Albert Stanley, pointed out that the Government could not consider their proposal, since the question did not arise out of war conditions nor could an eight-hour régime possibly be adopted during the war. Inasmuch as the present system of control, he added, would continue for some time after the war, there would then be an opportunity to deal with the question of hours. Mr. Thomas, speaking for the National Union in the House of Commons, declared that the 400,000 men whom it represented knew

10 P. D. C., Aug. 15, 1917 (L. T., Aug. 16, p. 8).
nothing officially of the threatened strike and were not concerned in it.\textsuperscript{11} Elsewhere he explained that while he was in favour of an eight-hour day for all railwaymen, this movement of the smaller union aimed at the securing of special privileges for a single group. Nor was it a genuine eight-hour-day movement, since there was every expectation of working overtime and receiving therefor additional wages. Above all, the demand was in contravention of the truce made by labour at the beginning of the war to the effect that no pre-war question of dispute should be brought forward during the continuance of hostilities.\textsuperscript{12}

None the less the engineers and firemen persisted. On Friday, August 17, a meeting of delegates threatened a strike unless the Government within twenty-four hours conceded their demands. Next day Sir Albert Stanley and Mr. George Barnes endeavoured unsuccessfully to dissuade them. The hour for the strike was left to the decision of the executive committee, and at the conclusion of the meeting the younger members lustily sang “The Red Flag.” The Government at the same time issued a proclamation applying the Munitions of War Act, which declared a strike illegal until resort had been had to the arbitration of the Minister of Labour.\textsuperscript{13}

Signs of dissent meanwhile appeared within the union. At Plymouth a branch signified that it would not obey an

\textsuperscript{11} Ibid.  
\textsuperscript{12} L. T., Aug. 20, 1917, pp. 7, 8.  
\textsuperscript{13} Ibid.
order to strike. Responsible members declared that the extreme Socialist element was not strong, being confined chiefly to South Wales. On Monday wiser counsels prevailed at London. Conferences between the executive committee of the union and the Board of Trade were resumed, and in due course an agreement was reached. The strike was declared off, while Sir Arthur Stanley renewed and slightly extended the pledge which he had offered to the delegates on Saturday. After the war the Government would continue the control of railways for a time, and within one month would afford an opportunity for the bringing forward of a request for a shorter working day. Any reasonable request would have the immediate and sympathetic consideration of the Government. During the war the Railway Executive Committee would reduce hours so far as possible, and future demands for wages would be dealt with as liberally as demands in the past had been. With this somewhat generous concession on the part of the Government the unrest of the railway men was for the time quieted and the machinery of state control once more moved smoothly.

In its dealings with the railways, the Government’s prime concern, apart from the problem of labour, was economy in the employment of staff and rolling stock. Added to the normal demands upon the home railways was the enormous task of transporting troops and materials of war. Since these claims of course took pre-

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cedence, the result was the frequent delay of civilian freight, especially food. Congestion at the docks became a persistent evil and the increased cost of living was at times and in part traceable to the overtaxed transportation system.

At the end of November, 1916, the Board of Trade, preparing to be mandatory, resorted to exhortation. Pointing to the increased demands upon the railways, they noted that civilian traffic had diminished little and urged that each prospective traveller ought henceforth to ask himself whether his journey was necessary. Should matters not improve, the Government, however reluctantly, would have to interfere. Upon traders the Board wished to impress the importance of avoiding delays both in loading and unloading wagons. The saving of a day by all shippers would mean a substantial addition to the rolling stock of the country. Commendable, too, was economy in the use of sheets for covering wagons.15

With this admonition the Government, after a fortnight, proceeded to amend the Defense of the Realm Act by Regulation 7 B. This conferred upon the Board of Trade extensive powers. They might henceforth take possession of any private owner's wagons on making due compensation; they might enforce prompt loading or unloading of wagons; they might curtail statutory requirements as to the running of trains and the stopping at stations; they might restrict or prohibit certain classes

of traffic, including passengers' luggage; they might modify statutory requirements with respect to maximum fares for passengers.\textsuperscript{16}

Luggage and fares were the Board's first objective. Two Orders in Council of December 31, 1916, provided respectively that luggage carried should not exceed 100 pounds for each passenger and that after January 1, 1917, the companies might charge in addition to existent fares a sum equal to one-half of such fares.\textsuperscript{17} The companies, acting promptly, made new schedules effective with the new year. Passenger trains became fewer, slower, and longer. Through carriages attached to main line trains were decreased in number, passengers had to change oftener. Through traffic between districts was, so far as possible, concentrated on one line. On local services, although morning and evening trains were not greatly changed, others were removed. Reservation of compartments and seats was discontinued, the number of restaurant and sleeping cars curtailed. The London and North Western on its system cancelled 500 trains and shut down 44 stations.\textsuperscript{18} Such changes, together with the 50 per cent. increase in fares, were expected to do away with mere travelling for pleasure.

Hostile criticism was directed not so much against the imposition of restrictions as against their character. Surely it was said,\textsuperscript{19} the first thing to do was to cut off

\textsuperscript{17} D. R. M., 4th ed., p. 360.
\textsuperscript{19} E. N., Jan. 6, 1917, p. 487; P. D. C., 1916, LXXXVIII, 1818, 1846.
luxuries and of these the most conspicuous were first-class carriages. To retain them while raising fares by 50 per cent. was a discrimination against wage earners and poor people. To which it could only be said in reply that workmen’s, season, traders’, and zone tickets were not subject to the increase. The Government, far from hampering the movements of people like munitions workers, was doing what it could to facilitate them.

Two more orders under the new regulation, issued on March 16, looked toward economy in the use of freight wagons. If a wagon was not unloaded by a trader within a specified time (two days at inland stations, three days at ports, always excluding the day of arrival or receipt of notice), the railway company might cause the wagon to be unloaded and its contents stored at the owner’s risk, all expenses to be paid by the trader. For loading, one day was allowed, although two days might be taken in Scotland should the freight be coal. The order was not applicable to the coal traffic of England and Wales. If, the second order provided, a private owner’s wagon would otherwise be sent on a journey empty, the Board of Trade might take possession of the wagon for that journey, giving such directions for loading as they thought fit and recompensing the owner for its use.\(^{20}\) With these orders the policy of economy, foreshadowed in the new regulations of December, was put into more extended operation.

Soon after there was outlined a plan for attain-

ing economy in the transportation of coal. The Controller of Coal Mines officially called attention to the saving of haulage which would result if all possible descriptions of coal were purchased from collieries situated as near as possible to the points where the coal in question was to be consumed.\textsuperscript{21} By July he had worked out a scheme which, from September 10, 1917, would make compulsory the saving indicated. For purposes of transportation, Great Britain was divided into twenty areas indicated on widely distributed maps prepared for the Controller by the railway clearing house. Between these areas transportation was to take place in accordance with certain principles. Consumption should be as near the producing point as possible; in consequence, coal produced and consumed within one area would be ignored, and an area producing less coal than sufficed for its own needs should not send its product to other areas. Coal passing from one area to another should follow main trunk lines, since these had superior facilities, and should, as far as possible, move in such well defined directions as north to south, north to south-east, north to south-west, east to west. In pursuance of this end the map indicated by straight lines and arrows the approved movements. London and its environs, for instance, form one area, and converging lines from midland, northern, or western districts show whence it may most economically draw its supply.

In carrying out the scheme, factors, merchants, and di-

\textsuperscript{21} B. T. J., Mar. 15, 1917, p. 725.
rect consumers were not asked to take any initiative. District Coal and Coke Committees, acting for the Controller of Coal Mines, assumed administrative powers. Every colliery owner, on receiving instructions from the Committee in whose area his colliery is situated, was required to inform the Committee of his sales of coal and of the place or region supplied by the purchaser. The Committee in due course informed him what supplies were to be diverted elsewhere after September 10, 1917, and it then became his duty to make this known to the merchants and factors affected. By these seemingly simple arrangements, 700 million ton-miles, it was estimated, would be saved annually.\(^{22}\)

In its administration of the railways the Government has been perhaps more fortunate than in any other of its essays in state control. Acting promptly, it met with no opposition from the owners, and the terms on which it acquired possession cannot be called unfavourable; the successive demands made by the men have led to no very serious deadlocks, owing perhaps to the highly conciliatory attitude which the Government in each instance eventually adopted; economies in traffic have since the end of 1916 been secured and this without serious inconvenience to the public. The record is undramatic and enviable, especially when compared with the crises and discontent which marked the advent of government control in other industries.

MUNITIONS AND LABOUR

During the first half of 1915 events abroad and at home made clear to British statesmen that all was not well either in the trenches or in the workshops. The battle of Neuve Chapelle disclosed British inferiority in guns and shells; a series of strikes announced growing industrial unrest. Obviously the two situations reacted upon each other. The production of munitions could not be increased so long as the producers were indifferent or rebellious; and, on the other hand, the continuance of the war tended to increase the cost of living, the burden of which fell most heavily on the workers and was passionately resented by them. For they reasoned that the increase was unwarranted, and due to "profiteering" by capitalists and middlemen. Such exploitation the Government could prevent if it would; and prevent it the Government must. The double task of His Majesty's ministers in 1915, therefore, was to increase greatly the output of munitions of war and to arouse labour by an appeal to its patriotism, while conciliating it by a limitation of employers' profits.

At the outbreak of the war the government munition plants for the army (Woolwich Arsenal, Enfield, and others) were far from being in the state of readiness which characterized the navy's dockyards. Nor were
private armament firms better off. Particularly was there a shortage of machine tools, habitually got by both England and France in large measure from America. Although any one can make shells, only skilled workmen can produce tools. In the case of both the belligerents and the United States there was, therefore, a period of delay before the equipment for turning out munitions on a large scale could be installed.

Already in October, 1914, Great Britain began to take stock of the military and industrial situation. The old assumption of the Committee of Imperial Defence that an expeditionary force should not exceed six divisions had been discredited and preparations were on foot to send many times this number of soldiers to France. Not only were munitions needed on an unprecedented scale, but the character of them had to be changed. High explosive shells were proving more important than shrapnel. "I do not know," said Mr. Lloyd George, "that we have got to change the whole of our machinery, but at any rate it makes a vast difference to change the actual character of your ammunition in the midst of a war and begin afresh." ¹ A report was got from France and, following French example, the larger armament firms introduced a system of sub-contracting. Larger and more experienced plants retained in their hands the difficult processes and the putting together of parts, exercising likewise supervision over the less experienced establishments. Before mid-spring of 1915 the Government,

¹ P. D. C., 1915, LXXI, 314.
either by direct contract or by sub-contract, employed between 2500 and 3000 firms. The War Office and a Cabinet Committee made arrangements by which men from engineering works went to armament firms for some six weeks while their own shops were being adapted; and the knowledge acquired was in turn valuable in carrying out the adaptation. If 20 be taken as representing the output of artillery ammunition in September, 1914, the output of succeeding months was: October 90, November 90 (since new machines had not yet come into operation), December 156, January 186, February 256, March 388. By April the Government was free from anxiety regarding munitions and could largely supply its allies. Lord Moulton in particular had done much to increase the supply of high explosives.2

In December, 1914, however, it had been discovered that contractors were likely to be late in fulfilling their orders owing to lack of labour. Efforts were then made through labour exchanges to transfer workers to armament works. At first a considerable number of men came, but during February, 1915, fewer, and by March it was clear that deficiencies could not thus be made up.3

The Government consequently adopted a “second best course.” On March 9, Mr. Lloyd George introduced the Defence of the Realm Bill, the cornerstone upon which was to be reared an elaborate structure of state control. The immediate purpose of the measure was to

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2 Ibid., pp. 311-323. Speech of Mr. Lloyd George, Apr. 21, 1915.
3 Ibid.
enable the Government, i. e. the War Office and the Admiralty, to take over such private engineering works as would insure supplies for the future. Already they had power to take over works in which war material was being produced, but these were insufficient. No trouble with the owners was anticipated — indeed, the bill was expected to enable owners to get out of difficulties when they were asked to throw everything into the common stock. Mr. Bonar Law said that the Government might have had these powers six months earlier. The debate turned upon the compensation to be made and a commission to consider this was promised.\(^4\)

In March, 1915, however, the owners of possible munitions plants were not the group most threatening to the mobilization of industry. Events were proving that it was quite as important and far more difficult to conciliate the workers in munitions and shipbuilding establishments. The unrestricted enlistment of skilled operatives had to a considerable extent impaired productive capacity; and this tendency was intensified by the behaviour of the men who stayed at home. Instead of working harder than in normal times, many of them took advantage of their increased earnings to indulge in idleness, amusement, and drink.

So serious had the situation become by February 4, 1915, that the Government appointed a Committee on Production. It was to report measures which might “ensure that the productive power of the employés in

\(^4\)Ibid., LXX, 1271.
engineering and shipbuilding establishments working for Government purposes shall be made fully available." This Committee, consisting of Sir George Askwith, Sir Francis Hapgood, and Sir George Gibb, recommended that no stoppage of work by strike or lockout should take place in such establishments and that there should be set up an impartial tribunal to investigate and settle disputes. Deferring the compulsory element in these recommendations, the Government appointed the Committee itself a court of voluntary arbitration.\(^5\)

Before long it had plenty to do. The number of strikes was rapidly increasing with the progress of the new year. Until then the efforts of the three committees which controlled trade unions had had highly satisfactory results. Of the 100 strikes in progress at the beginning of the war only 20 were unsettled at the end of August, 1914, and the number had been reduced to 10 by January 1. In February, however, industrial unrest, induced largely by the increased cost of food, resulted in 47 fresh disputes which involved stoppage of work. During March there were 74 others, during April 44, and during May 63.\(^6\)

The first serious strike of 1915 was that of the engineers on the Clyde, beginning on February 16. In some parts of Glasgow rents had risen 10 per cent., and in general foodstuffs were costing from 20 to 25 per cent.


\(^6\) P. D. C., 1915, LXXII, 1572–3.
more than before the war. The men were feeling the strain of the winter's work and they saw their employers reaping large profits. They asked, therefore, for an increase in wages of 2 d. the hour. When the companies offered only ¾ d., some 10,000 men resolved to strike. In this they disregarded the advice of their trade union executive, following instead obscure leaders of Syndicalist tendencies. The Government intimated that work must be resumed, promising that representatives of the men should meet the newly appointed Committee on Production and arrange for arbitration. The meeting was set for March 8, the strike committee meanwhile on March 4 recommending a return to work, which forthwith took place. But the men declared that if they did not eventually receive the 2 d. demanded they would adopt the policy of "ca' canny," i.e. remain at work but do as little as possible. The arbitration of the Committee on Production was duly accepted. Its award, however, made known on March 24, disappointed the men, since an advance of only 1 d. an hour (or 10 per cent. on piece work) was granted. Thereupon they kept their word, although the fact was not generally known.\(^7\)

The Committee meanwhile made three reports. Time available for production was being lost through absenteeism, through stoppages by strikes and lockouts, through "demarcation" disputes between unions about the allocation of work, and through trade union restric-

\(^7\) A. R., 1915, p. 86; Alden, op. cit.; A. Shadwell, The Industrial Factor in the War, Nineteenth Century and After, Aug., 1915.
tions, which among other things prevented the employment of semi-skilled, unskilled, and female labour. The suspension of these restrictions was recommended.

To meet the situation, representatives of thirty-five trade unions were summoned to an interview on March 17 with the Chancellor of the Exchequer and the President of the Board of Trade, the so-called Treasury Conference. Mr. Lloyd George, after demonstrating the need of munitions, announced that the Government intended to limit the profits of employers. To the unions he proposed that during the war all restrictions on output should be suspended and that no strikes should take place on Government work, any dispute to be settled by an impartial tribunal nominated by the Government. At the conclusion of the conference on March 20 these proposals were embodied in a memorandum which the representatives of the unions agreed to recommend to their fellow members. Trade union practices should be relaxed, but neither this nor the admission of semi-skilled or female labour should affect adversely the rates customarily paid for work. Disputes over wages or conditions were henceforth to be discussed in a conference between employers and employed; if agreement should prove unattainable, the matter should be submitted to the Committee on Production, or to a single arbitrator agreed upon by both parties or appointed by the Board, or, finally, to a Court of Arbitration upon which employers and men should be equally represented.⁸

This memorandum did not have the wide acceptance hoped for, although it was by no means disregarded. In April there were fewer strikes, and a number of important disputes were referred to the Committee on Production. This body, transformed into a court of arbitration, showed a tendency to compromise by fixing wages at a figure half way between the demands of the men and the offer of the employers. For the rest, trade union practices were relaxed only in certain trades and localities—not elsewhere. The men were disinclined to follow the lead of their official representatives, nor was there any compulsion which could be brought to bear upon them. If employers discharged them, other jobs were waiting on every hand. In some districts the situation became worse than before.\(^9\)

Scarcely had the memorandum been published when a strike of dock labourers at Liverpool and Birkenhead caused the Government serious concern and was ended only by a semi-military device. The dispute had to do with over-work at week-ends and payment for it. Despite an admonitory letter on March 21 from Lord Kitchener and a patriotic appeal on March 30 from Mr. James Sexton, one of their leaders, the men were obdurate. To carry out government work at the port, a Dockers' Battalion was formed during the first week in April under the command of Lord Derby. These civilian soldiers, liable to home service only, were subject to military law and received both civil and military pay with a guarantee to

\(^9\) P. D. C., 1915, LXII, 1573-79; L. T., Je. 1, 1915, p. 5.
each man of a minimum wage of 42 s. a week. Membership was limited to the Dockers' Union, and trade union rules prevailed. On April 12 the battalion was inaugurated, Lord Derby reviewing the 350 men who had enrolled. At the same time the brief strike of dockers at Birkenhead came to an end.  

During April and May the Government gave much attention to the drink question. On March 29 a deputation from leading ship-building firms, received by the Chancellor of the Exchequer and the Secretary for Scotland, declared with conviction born of long experience that 80 per cent. of the current avoidable loss of time was due to drink. Mr. Lloyd George summarily described the situation: "We are fighting Germany, Austria and Drink; and so far as I can see the greatest of these deadly foes is Drink." The effect of example was tried. On April 6 it was announced that by the King's command no wines, spirits, or beer would henceforth be consumed in any of His Majesty's households. Lord Kitchener made a like renunciation. The Government, making inquiries, found that the mischief-making liquors were spirits and the inferior but more potent kinds of beer. After Easter proposals of a highly restrictive nature were brought before the House of Commons. Taxes on liquors were to be much increased, a greater dilution permitted, and public houses in certain areas were to be closed. Opposition arose particularly from the Nationalists, who deplored the injury which would be done to a great Irish industry

and threatened to use all constitutional means to defeat the bill. Learning of this Mr. Lloyd George met a deputation of "the trade" to arrange a compromise. The taxes were withdrawn and it was agreed that the sale of spirits less than three years old should be prohibited and that existent stores should be put in bond. With this somewhat slight result, the agitation died down and the subject dropped from discussion.\(^{11}\)

The proposed bill had been, of course, symptomatic of the concern with which the Government regarded the military and industrial situation. By the middle of May it was clear that the measures taken in March had not been adequate. Especially was labour still unconciliated, feeling that employers' profits had not yet been restricted. A political and administrative change now marked the initiation of a new endeavour to increase productivity. On May 19 it was announced that a Coalition Government would be formed and, when the House met on June 3, the composition of it was complete. Twelve Liberals, eight Unionists, one Labour member, and Lord Kitchener assumed the administration affairs.\(^{12}\)

That arm of the new Government which was to grapple with the industrial situation was, like the Coalition, an innovation. Mr. Lloyd George was to become Minister of Munitions, and a bill passed by Parliament to establish the ministry received royal assent on June 9. During the discussion in the upper house, Lord Stanhope,

\(^{11}\)Ibid., pp. 90, 97, 98, 103.

\(^{12}\)P. D. C., 1915, LXXI, 2392.
about to return to the front next day, described the sit-
uation. "I am stating nothing that every German staff
officer does not know when I say that, speaking broadly,
the French hold their trenches by a few rifles and the
support of their wonderful 75 mm. guns; while we hold
our trenches, broadly, by rifle fire. The French system
is expensive in ammunition; ours is expensive in life.”
He added that a man who refused to do his duty in the
workshop should be sent to fight whether he liked it or
not.\textsuperscript{13}

This application of compulsory measures to labour
came up for debate in the House and was subject to sharp
criticism. It was said that the new Minister was being
given power to tyrannize over the working classes, to
conscript labour, to impose slavery on the country. Sir
John Simon, in charge of the Bill, replied that, if special
powers were needed in respect to labour, they would be
asked for from the House. Next day an amendment
was accepted, declaring that the Minister of Munitions
would have no power to impose penalties upon workmen
for doing what they had hitherto been entitled to do.\textsuperscript{14}

Mr. Lloyd George entered upon the duties of his new
office with great energy. On June 10 he received repre-
sentatives of twenty-two trade union organizations. On
June 11 and 12 he made important speeches at Cardiff
and Bristol. By June 23 he was introducing in the
House a great legislative measure to mobilize industry,

\textsuperscript{13} P. D. L., 1915, XIX, 36.
\textsuperscript{14} P. D. C., 1915, LXXII, 107-115, 210.
and by July 3 this bill had become law. His exposition of the situation and his plans for improving it were as follows.

The Central Powers were turning out shells at the rate of 250,000 per day. The pouring of 200,000 shells within an hour upon Przemysl had driven the Russians out of that fortress. Germany’s victories thus far were due to the organization of her workshops, and ultimate victory or defeat would depend upon the supply of munitions. In the production of munitions France was crippled, since 70 per cent. of her steel plants were in the hands of the enemy. Not only had Germany accumulated great stores beforehand, but she had mobilized all her industries since the war. Most marked was her superiority in heavy guns, in high explosives, in rifles, above all in machine guns. The last had proved to be about the most formidable weapon of the war, almost superseding the rifle. But, alas, to construct machinery for making them required eight or nine months. The history of ten months of trench warfare, which the Germans had correctly anticipated, was the defence of one’s own trenches with machine guns while battering one’s enemies’ trenches with heavy guns and high explosives.

To meet the twenty-five fold expansion in its activities, Mr. Lloyd George continued, the War Office first resorted to the existing armament firms and had them issue sub-contracts. The method, however, had not resulted

15 The expenditure of the War Office in time of peace has been £28 million but within ten months had increased to £700 million.
in the greatest possible productivity, since the firms had not been able to control the subsidiary staffs. A district which he had recently visited produced under sub-contracting some 10,000 shells a month, but under his new arrangements at once accepted orders for 150,000 shells a month and would in time double even this output. Areas seemingly unpromising could do much. Showing to the House a fuse for the highest explosive, requiring in its making 100 gauges, the Minister of Munitions declared that London could make such delicate parts.

The first requisite was to find the organizer, the man who could make best use of the expert. Many business men of this type the Ministry had secured, men who would be asked to organize the Central Office and the resources of various localities, while, as a Central Advisory Committee, they would assist in dealings with other business men. To each of these men would be given his special field — to one metals, to another machinery, to another explosives, to another labour, and the like. The country had been divided into ten munitions areas, each under local business men formed into committees of management. In the centre of each area representatives of the Ministry of Munitions would have headquarters where specifications, samples, etc., would be available. Although every opportunity had already been given to British engineers to go through government arsenals or through arsenals of the Elswick Co., of Vickers and Maxims, of Beardmores and the rest, the same facilities ought to be available in every district, where advantage
might be taken of them without loss of time. Associated with every local Committee would be an expert engineer and representatives of the Admiralty and the War Office.\textsuperscript{16}

In his Cardiff speech Mr. Lloyd George outlined the three possible methods of utilizing private engineering plants. In any area, from one to three existing works might be converted into national factories directed toward nothing but the production of shot and shell. Since new machinery was difficult to get, machinery from the various shops throughout the district would have to be requisitioned to fit out these new arsenals. Leeds and two or three other centres in Yorkshire had proceeded thus. Lancashire preferred a more individualistic method, the one adopted in France with great success. Each workshop there estimated its own capabilities and added such machinery, especially gauges, as would enable it to turn out some type of munitions. A third method combined the other two. Two or three works might be converted into a kind of national arsenal, which would then serve as finishing plant while the others did preparatory work. This was feasible in South Wales. War Munitions Committees, like the one first constituted at Newcastle-upon-Tyne, should decide which method was preferable for each district. To engineering firms that offered to convert their works, but objected to trade rivals getting their business, assurance was given that there should be equality of sacrifice.\textsuperscript{17}

\textsuperscript{16} P. D. C., 1915, LXXII, 1183–1206.
\textsuperscript{17} L. T., Je. 12, 1915, p. 8.
Although materials of certain sorts were abundant enough, others had to be husbanded. The latter must not be wasted on non-essential work or the Government might be ultimately compelled to take control of the market. That the Ministry might be regularly and accurately informed about the stocks of raw or semi-manufactured metal in the country, it would ask for monthly returns. There were unfortunately indications that in certain quarters supplies were being held for higher prices. Such action caused serious delay and must be stopped.\(^\text{18}\)

From the question of enlisting private engineering firms in the business of munitions making, Mr. Lloyd George turned to the problem of labour. For this had led him to introduce the new bill. Were he able to furnish skilled workmen, the supply of machine guns could be doubled in a few days. A Midland firm could greatly have increased its output had it only been able to set up idle machinery; but it could not find seventy five millwrights to perform this task. One remedy was to get such engineers as could be had back from the front. The ministry had issued a circular to engineering firms asking for the names of men who had left them for the war. Lord Kitchener had instructed his Adjutant General to invite such men to return to works turning out munitions of war. Some men were unwilling to come back and some had unfortunately been sent to India, but the War Office would do what it could.\(^\text{19}\)

\(^{18}\) P. D. C., 1915, loc. cit.

\(^{19}\) Ibid.
As to men who were still at home, difficulties arose from their readily leaving one job for another. Employers were ready to outbid one another or to accept discharged employés; but without control over their workmen, they found that they could not prevent slackness or attain a maximum output. What would be most valuable, however, was an increased supply of labour and to this end trade union regulations should be relaxed. Although in France there were great trade unions and the organizer of the munitions supply was a young Socialist, the employment of women and unskilled labourers had already been permitted. Fuse making was done there by female labour. At home a Bristol firm had reported that, if it could eke out skilled labour by unskilled, it could put a night shift on its machinery and double its output. If union rules should be suspended, the nation, on its part, must give a pledge that the suspension would be temporary and that the safeguards which the unions had with such difficulty acquired would be restored.

Lastly, there ought to be no strikes. Mr. Lloyd George admitted that he would like to see compulsory arbitration of disputes during the war and still hoped to get it. As things stood, although the cotton operatives and the miners stood out, the men who turn out munitions and ships had assented to such a measure. This had been the outcome of the March conference with the thirty-five trade unions and of other conferences held since then.20

20 Ibid.
Thus prepared for and introduced, the Munitions of War Act, 1915, met with little opposition in Parliament. Carrying to fulfilment the principle embodied in the Defense of the Realm Act, the principle that the Government may assume control of any private works which it needs for the manufacture of munitions, the new Act was perhaps the most decisive step in state control of industry taken during the war. The Minister of Munitions, it provides, may declare "controlled" any establishment in which munitions work is carried on. Such declaration, as affecting the owner, limits the profit which he may enjoy. His net profit may exceed the standard unit by only one-fifth, and the standard unit is the average amount of his net profit during the two corresponding periods before the outbreak of the war. After the war, priority in employment in any establishment will be given to workmen who have been with the Colours and to those employed when the establishment became controlled. No change in rules or customs made during the war shall prejudice the position of the trade unions in regard to the resumption of such rules and customs after the war. Notice of any change in working conditions shall be given to the workmen, who, in turn, may request an opportunity for local consultation. The introduction of semi-skilled and female labour shall not affect the wages paid for any kind of work, and the workers so introduced shall receive the wages customary in the district for the class of work in question. Record of all changes shall be kept and shall be open to inspection by
the Government. Such were the regulations imposed upon the employer.

Regarding the workmen, the Act embodies provisions tending to apply the restrictions suggested by Mr. Lloyd George in his speeches. Any person whose last employment has been on munitions shall not be engaged by an employer unless he holds a "leaving certificate" from his last employer or from a munitions tribunal. This was to remedy the "pilfering" of workmen. No lockout, further, shall be declared by an employer and no employé shall take part in a strike. Instead, any difference shall be referred for arbitration to any one of the three tribunals recognized in the March agreement, viz., the Committee on Production, a single arbitrator agreed upon by the parties or appointed by the Board, or, in the third place, a Court of Arbitration, composed equally of representatives of employers and of employés, its chairman appointed by the Board of Trade. The choice of tribunal shall lie with the parties or, in default of agreement, with the Board of Trade. To conciliate the miners and the cotton operatives, who objected to this provision for compulsory arbitration in the bill, an amendment was accepted, providing that, if the Minister of Munitions was satisfied that means existed in any industry for settling a dispute affecting work other than work on munitions, no proclamation should be made in reference to the dispute.

While the bill was debated in Parliament and while it seemed that the inadequate supply of labour might lead to the institution of some form of compulsion other than the bill provided for, the trade unions asked for seven days in which to act. They proposed to secure by voluntary enlistment a mobile corps of munitions workers. With each volunteer the Government was to enter into a contract providing that he be employed where needed and as needed and stipulating that there be no bad time or other slackness. Cases of violation should come before a Munitions Court consisting of an employer, a trade union representative, and a president appointed by the Government. If the volunteer could satisfy the enrolling bureau that he was a skilled engineer (for engineers were the class to be reached), he was to receive a pocket certificate which stated over the signature of the Minister of Munitions that he was "enrolled as a War Munitions Volunteer in the service of King and country." 22

The Government readily put its machinery at the service of the unions in this matter, and 180 town halls were turned into recruiting offices. During the first week 46,000 men were enrolled and eventually the number was raised to almost 100,000. In as much, however, as about four-fifths of the volunteers were already engaged on Government work, the recruits actually available for the new munitions program were scarcely adequate. 23 It would clearly be necessary to rely upon the dilution of

22 L. T., Je. 24, 1915, p. 10; Je. 25, p. 9.
labour promised by the leaders of the thirty-five unions at the Treasury Conference in March.

In two speeches, one made before the Trade Union Congress at Bristol, and one delivered in Parliament, Mr. Lloyd George summarized the situation at the end of the summer of 1915. Sixteen national factories or arsenals had been set up and, as the result of a conference with French military authorities, eleven more were to be. To secure the supply of machine tools required, especially for shells of heavy calibre, all the great machine-tool makers had agreed to come under government control. For the new arsenals 80,000 more skilled men and 200,000 more unskilled were needed. The country was not yet doing its utmost. Only 15 per cent. of the machines for turning out rifles, cannon, and shells were working at night. Trade union practices were reducing the output of munitions by 25 per cent. Although the Government had kept its promise to appropriate war profits, the unions had not carried out their part of the Treasury Conference bargain. In many arsenals and shops semi-skilled men were prevented from doing work hitherto done by skilled, the engagement of women was vetoed, and hard work was discouraged.

Although Mr. Lloyd George's charges at Bristol produced a great effect upon the Congress, he found it necessary to repeat many of them in the Commons just before the Christmas adjournment of 1915. There and

again at Glasgow, where on Christmas morning he addressed some 3,000 shop stewards and trade union officials, he dwelt upon the "imperative need of some scheme of labour dilution." Women and unskilled men ought to be employed upon many tasks which still absorbed skilled labour.\textsuperscript{25} The same note was struck throughout the first half of 1916. In March the Board of Trade appointed a Committee to devise measures to extend the employment of women in industrial occupations and to report from time to time on progress made in various localities and industries.\textsuperscript{26} In June it called the attention of employers to the possibilities of using women's labour in factories and works.\textsuperscript{27} By August, Mr. Montague, the new Minister of Munitions, could report that the number of women employed in munitions works was about 400,000, or nearly double the number employed a year before. In 1914–15 the percentage, relative to all such workers, had risen from 9 per cent. to 11 per cent., during the next year to 17 per cent.\textsuperscript{28} Five hundred munition-making processes were performed by

\textsuperscript{25} L. T., Dec. 27, 1915, p. 3.
\textsuperscript{26} B. T. J., Mar. 9, 1916, p. 697.
\textsuperscript{27} Ibid., Je. 15, 1916, p. 732.
\textsuperscript{28} In August, 1917, it was officially stated that, to the 3,298,000 women employed in the country before the war, 1,240,000 had been added and that the women who had directly replaced men were 1,256,000. Of the latter, 438,000 were employed in industry, 308,000 in commerce, 187,000 in government establishments, 32,000 in agriculture (L. T., Aug. 17, 1917, p. 3). In November, 1917, Sir Stephenson Kent stated that nearly one million women were engaged in munitions work. (N. Y. Times, Nov. 10, 1917.)
women, upon two-thirds of which no women had been engaged twelve months before.

Considering the whole situation regarding munitions, Mr. Montague pointed out that the three national factories of July, 1914, had increased to 95, that the establishments "controlled" were about 4,000, that the number of persons employed in them had increased between June, 1915, and June, 1916, from 1,635,000 to 2,250,000. Efforts to bring back skilled workmen from the army had restored 45,000; the volunteer scheme had yielded 13,500 others who had actually been transferred to war work. Men of this sort spent most of their time in setting up machines and in supervising the work of the unskilled, fifteen or twenty of the latter often being assigned to one skilled worker. To educate the unskilled, schools had been set up. Over 500 people had been trained as tool-setters to work on a special type of machine; nearly 200 plumbers had been transformed into skilled lead-burners, 130 jewelers into gauge-makers. Such were the methods and results of diluting labour.

The achievements of Mr. Lloyd George’s new department during the first twelve months of its existence were impressive. Nearly three times as many rifles, more difficult to produce than any other munition of war, were accepted as during the preceding ten months; many hundred thousand others were resighted and repaired. Nearly twice as many guns for land service were turned

29 Early in June, 1917, the number was officially stated to be 4942. M. G., Je. 7, 1917.
30 P. D. C., 1916, LXXXV, 1699, 1694.
out in a month at the end of the twelve-months as at the beginning of it. The weekly output of machine guns had increased fourteenfold. In the case of ammunition the rate of increase was 6½ for 18-pounder, 8½ for field howitzer, 7½ for medium artillery, while for heavy shells, the most difficult to produce, it was 22. Of high explosives, the output in June, 1916, was 66 times as great as at the beginning of 1915, of bombs 33 times as great as in May of that year.31

The expenditure of the Ministry in the summer of 1916 was over £1,000,000 a day. To expend this advantageously it had seldom been obliged to use its extensive powers to examine into the costs of manufacturers, but it had made alterations in costs with their concurrence. The key to the problem of financial control was provided by the cost accounting system introduced into the Government's own factories. From the knowledge so gained, the Ministry had been able to discern the extravagance or faulty administration in other factories and to check contract prices. The mere threat to examine the books of one firm had brought the price of a certain material from £30 a ton to £20, thus saving the country one-half a million sterling in a short time. Costs in the Government's own factories, high at the beginning, fell rapidly until they had become much less than the 1915 contract prices. The ensuing reduction in home contracts represented in the case of shells a saving of £20,000,000 a year. American shell contract prices had been

31 Ibid. 1679-1682.
reduced 15 per cent., Canadian 12½ per cent., while trench-warfare munitions had fallen 40-50 per cent. The cost of the large factories erected or being erected for explosives and propellants would, Mr. Montague predicted, be completely covered in less than a year by the difference between the cost of their output and the price of similar munitions if imported.32

The method of determining the margin of profit allowed a controlled establishment was outlined in the "Munitions (Limitation of Profits) Rules" of September 15, 1915. The "standard amount of profits" was defined as the average of the amount of net profits for the standard period; and the standard period was the two financial years before August 4, 1914. Auditing must be done by a chartered or incorporated accountant or by an accountant approved in any particular case by the Board of Trade. Within six weeks after being requested by the Minister of Munitions, the controlled owner was required to deliver to him such audited accounts and particulars in respect of the controlled establishment as might be required. As soon as possible thereafter, the Rules proceed, "the Minister shall deliver to the controlled owner notice of the amount at which the Minister is prepared to agree the standard amount of profits, and unless within fourteen days thereafter the controlled owner shall serve upon the Minister notice of objection, the said amount shall be deemed to have been agreed and to be the standard amount of profits. If objection shall

32 Ibid. 1696-1697.
be so served and the Minister and the controlled owner are unable to settle the standard amount of profits by agreement, the matter shall be remitted by the Minister to the Referee for determination. The amount which the Referee shall thereupon determine shall be deemed to be the standard amount of profits, whether the amount be greater or less than the amount to which the Minister was prepared to agree as aforesaid.”

To achieve the triumphant results of the Ministry of Munitions' first year, interferences with the normal course of trade were necessitated which went beyond even the control of employers' profits and the restriction of trade unions' liberties and customs. Raw materials had to be taken in hand and watched at every stage of their conversion into finished munitions of war. “The great lesson of the early months of the War,” Mr. Montague concluded in his August (1916) speech before Parliament, “was that munitions cannot be obtained merely by ordering. You have got to see that the man who takes your orders has the plant and the labour; you have got to follow up the work process by process; you have got to provide from the beginning to the end everything that is necessary. That is the cardinal principle of the Munitions Department.”

Acting upon this principle, the Government early in 1916 had turned to a consideration of the supplies and prevailing prices of iron, steel, and copper. During 1915

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34 P. D. C., 1916, LXXXV, 1702.
these metals had advanced rapidly on the market. In part this was due to conditions of the import trade. American supplies, available at the beginning of the year, became subject to the home demand created by orders for munitions and soon semi-steel could scarcely be obtained. Freight rates, too, rose from 15 s. to 65 s. per ton. In consequence, the price of bar-steel, most in demand for making shells, advanced from £7 15 s. in January, 1915, to £11 in July, and to £14 in December. American billets, which early in the war were about £5 per ton c. i. f., commanded, so far as they could be had, about £10 10 s. at the end of the year. In the British pig-iron trade warrants for hematite, which is convertible into steel, rose from 71 s. a ton in January to 115 s. in December; even warrants for Cleveland, not so convertible, advanced during the same period from 55 s. to 76 s. 11 d. The increased value of the skilled labour needed to transform forge pig into bar pig was reflected in the changed relative prices of the two. Prices were normally as 1 to 2; they had become as 1 to 3½.  

Such was the situation when, in January 1916, the Government resolved to check any further considerable rise in prices. Maximum prices for all finished iron and steel goods were fixed, prices which, as regards iron bars and angles, were revised in April and, as regards


extras, were again revised in November. The stability at once attained is shown by the following quotations, prices fluctuating little during 1916: 37

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<td>Steel ship plates, per ton</td>
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<td>Iron ship plates</td>
<td>£ 7 15 s.</td>
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<td>Steel sheets (singles)</td>
<td>£ 8 5 s.</td>
<td>£ 13 10 s.</td>
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</tr>
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<td>Common iron bars</td>
<td>£ 8</td>
<td>£ 10 10 s.</td>
<td>£ 10 15 s.</td>
</tr>
<tr>
<td>Heavy steel rails</td>
<td>£ 6 7 s. 6 d.</td>
<td>£ 11</td>
<td>£ 10 17 s. 6 d.</td>
</tr>
</tbody>
</table>

At the end of February official maximum rates, considerably below those ruling in the market, were set for pig-iron. On Tuesday, February 22, Cleveland No. 3 was sold in Glasgow for 98 s. 6 d.; on Wednesday there came rumours that the Government would insist on transactions at 82 s. 6 d. Straightway the market broke and 2500 tons were sold at 87 s. 6 d. For a month or so private transactions took place at prices above the official rate, but gradually "settlement quotations" grew meaningless and the metal exchanges in London and Glasgow became lifeless. 38

The fixing of the price of iron involved the stabilizing of that of iron ore, a commodity imported in 1916 to the extent of 6¾ million tons. The Government, accordingly, took steps to make foreign ore available at fixed prices, manipulating freights in the process. But it had to give guarantees, both in the rates of freight and in the prices of ore, to meet any differences between the fixed prices and actual costs. 39 When finally stating in April

the maximum prices for iron and steel, the Government took the precaution of remarking that they were based upon the abnormal costs and conditions then prevailing and must not be assumed to be indicative of any difference in relative values which may have obtained in the several districts before the war or may obtain again after the war.  

To assure the stability of prices the Government immediately, on February 29, 1916, forbade speculative trading. From that day dealings in iron, steel, copper, zinc, and certain other metals become unlawful unless the metal sold was in the possession of the possessor and unless the buyer made the purchase on behalf of the consumer.  

This action surprised the market as much as did the fixing of maximum prices, although the possibility of such a measure had been hinted at by the Minister of Munitions. During the two months of the year the prices of copper, lead, and iron, owing largely to speculative dealings, had reached the highest level since the outbreak of the war. Copper was higher than since 1907 and the other metals had broken previous records. In comparison with quotations of 1913 the figures were:

<table>
<thead>
<tr>
<th>Metal</th>
<th>Highest price since the war</th>
<th>Highest price in 1913</th>
<th>Lowest price in 1913</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper, per ton..</td>
<td>£108</td>
<td>£78</td>
<td>£62</td>
</tr>
<tr>
<td>Lead</td>
<td>35</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>Spelter</td>
<td>120</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>Iron</td>
<td>98 s.</td>
<td>70 s. 6 d.</td>
<td>48 s. 6 d.</td>
</tr>
</tbody>
</table>

40 B. T. J., Apr. 13, 1917, p. 86.
41 D. F. M., Regulation 30 B.
In contrast with these high levels iron was now to be sold at 82 s. 6 d. The price of copper could not of course be fixed since the supply was imported, but at least profits of home speculators were henceforth eliminated.

With prices of iron and steel fixed, the Government took its final steps to secure economy and efficiency in the use of these and other metals. In order first to insure to the empire and the Allies the entire home supply, it increased in May, 1916, the restrictions put upon the exportation of iron and steel to neutrals. As early as July, 1915, the exportation of high-speed steel except under license had been prohibited, on the suspicion that such steel was getting into Germany through neutral countries of the continent, especially Switzerland. Only a small part of the licences thenceforth asked for were granted. From the spring of 1916 neutral markets were further closed, except in so far as the Ministry of Munitions through its permits saw fit to adjust the balance of trade by allowing, for example, steel rails to go to South America.

It was, however, the Government's endeavour to regulate distribution as between home consumers that gave rise to one of the most remarkable of war-time devices. This is embodied in what are known as Priority Regula-

43 Ibid., Feb. 17, 1917, p. 332. Copper (cash standard) dropped to £96 in March as a result of the new order, but by May was back to £1.45. In June there was another decline to £88, but at the beginning of 1917 the price was £153.
tions. The extension of them to many industries and the obstructive part which they can so readily play give them a first-rate importance.

First outlined in a Memorandum of August 4, 1916, applicable to certain kinds of steel, they were more fully embodied in an Order in Council of November 20, and at the same time were extended to other materials. In the beginning they affected only controlled establishments, but by March, 1917, more than 90,000 firms had been brought within their scope. Briefly put, their purpose is to secure to industries in the order of war-time importance supplies which are essential. They provide, relative to steel and to copper wire, that no order for steel made by the Open Hearth or Bessemer Process (other than shell discard quality) or for copper wire shall be accepted by a manufacturer unless the purpose for which the steel or the copper wire is required has been approved. Approval may be evidenced by an Admiralty contract or permit (always with reference or number), a War Office contract, a Marine Department of the Board of Trade permit, a Ministry of Munitions contract, a Commission Internationale de Ravitaillement or a Commission Francaise sanction, or lastly a Ministry of Munitions permit. The sanction of the Commissions and the permit of the Ministry of Munitions require an added “Priority Classification,” emanating from the latter Ministry. A manufacturer, in determining what order of priority he

should give to the various contracts which come before him, each having some one of these endorsements (as of course it must have to get consideration), asks himself into what "Class" it falls. For there are three Classes — A, B, C — taking precedence in that order. Under Class A fall the first four contracts or permits above described, together with certain Priority ratings numbered up to 5 which the Ministry of Munitions may give to its own permit or to the sanctions of the Commissions. Class B includes merely Priority rating 6 under a Ministry of Munitions permit. Class C includes all Ministry of Munitions permits other than these. Behind this somewhat confusing classification is the simple principle that work of immediate importance for the prosecution of the war must either carry with it a contract from the Admiralty, War Office, or Ministry of Munitions, or must get for itself a permit from the Ministry of Munitions placing it in Class A; work of indirect importance for the war, or, as the phrase runs, of national importance, must get from the Ministry of Munitions a permit placing it in Class B; work not contributory to the war will, under its Ministry of Munitions permit, be rated in Class C.

A manufacturer in executing a contract must give it the priority to which its class entitles it; if it be in Class A, he must also give it the priority to which its priority rating or classification within that class entitles it. Orders for steel for guns, mortars, gun mountings, gun carriages and parts thereof, for instance, are to be executed under Priority Classification 1, which comprises most
urgent war work. Each week manufacturers must make to the Director of Steel Production full returns of all steel manufactured or delivered. They may manufacture no steel other than that of shell discard quality for any order below Class B. No steel except of this quality may, in other words, be used in work which is not either directly or indirectly of military importance.

Orders for steel of shell discard quality, if for home consumption, may be accepted without contract reference or Ministry of Munitions permit, although the purpose of the order must be ascertained and entered on the return; if the steel is for export, such orders must have a permit from the Ministry of Munitions and particulars must be given as to purpose and country of destination. If the steel is to go to European neutrals, application is best made first to the War Trade Department, which arranges with the Ministry of Munitions for the issue of a priority certificate and later grants the export licence.48

The next step in developing the principle of priority in industrial work was to extend it from the acceptance of contracts to the employment of labour. On December 19, 1916, Mr. Lloyd George, in announcing the policy of the new Government, said that the War Cabinet would put into effect the plan for universal national service already adopted by the late Government and about to be announced. There would be a new Director of National Service, Mr. Neville Chamberlain, Lord Mayor of Birmingham. By him industries and services would be

scheduled according to their essential utility in war time. Labour would at once be invited to enroll for war work and, should it not respond voluntarily, the Government would assume compulsory powers. Workers would thereupon be set free from non-essential pursuits to perform more essential services.\(^4\)

On February 28, 1917, accordingly, there was issued a Restricted Occupations Order. After calling attention to many trades and occupations which the Government had declared to be of primary importance, trades which were later designated as those to which National Service Volunteers might be transferred, the Order named other trades not thus important. Such, for example, are the making of machines, implements, and conveyances for domestic use, the working of stone and slate, house building and repairing, the manufacture of pottery, bricks, glass, paper, beer, cigars, fancy clothing, millinery, and carpets. In these trades no employer might henceforth take into his occupation, whether to fill a vacancy or otherwise, any man between the ages of 17 and 61, even if the man had been previously so employed. Exceptions were made only if the employer re-employs a soldier properly retired or if he himself is executing work of national importance. All employers in these trades must give any government contract preference and must keep the Director General of National Service informed of the nature and amount of the work done in their factories.\(^5\)

\(^4\) P. D. C., 1916, LXXXVIII, 1352-3.

Thus in the concentration of all the energies of the nation upon industries conducive to military ends, industries not so conducive were pushed to the wall.

To supervise and extend all these economies, the Minister of Munitions in November, 1916, appointed a Committee under the chairmanship of Mr. C. W. Fielding. It was instructed to "consider and suggest the action necessary to secure economies in metals and materials as regards their use in munitions of war, taking into consideration matters affecting design, methods of purchase, stocks, imports, distribution, and control," and it was empowered "to take such evidence as may be necessary both from the Departments of the Ministry and from manufacturers." 51

By the spring of 1917 the Government was therefore in pretty complete control of the vast business of manufacturing munitions, especially in control of the supply of iron and steel. Its first endeavour had been to enlist in its service private engineering and shipbuilding firms and to attempt the mobilization of labour; it had ended by fixing the price of iron and steel, by determining the allotment of these and other metals to the manufacturer, and by directing the supply of labour into essential trades. It had, in short, extended its control from producer to consumer, undertaking almost everything except the appropriation of the mines and the works. There remains only to consider the success of its ventures.

On the side of the employer there was little to complain

of, except that non-essential trades were of course prospering less and less. A more liberal export policy would have been welcomed in some quarters, since certain commodities could thus have shared in the higher prices which prevailed in the world market. But all steel, munitions, and shipbuilding works continued to be crowded with orders, chiefly from the Government, and week after week the reports are that business is active. Inasmuch as prices for iron and steel had been fixed at the relatively high figures prevailing early in 1916 and since all controlled establishments had been given a liberal margin of profit, there was little friction between the Government and the manufacturer.

Different, however, was the attitude of labour. It has been explained that the conferences of the Government with labour leaders in the spring of 1915 and the subsequent Munitions of War Act made provision for the dilution of labour, for the impossibility of the workman's leaving his employment without certificate, for his working full time, and for compulsory arbitration. Opposition to these measures led Mr. Lloyd George, it will be remembered, to charge the unions at the end of 1915 with breaking their pledge.

Open defiance of the Government developed in the strike of the "Clyde Workers Committee" late in March, 1916. The general purpose of this strike was to force the repeal of the Munitions of War Act and of the Military Service Act by holding up war supplies. Responsible trade union leaders in the Clyde district had
acquiesced in the dilution of labour, but not so all the men. A dispute arose as to whether stewards should be allowed to interrupt their own work and go into other departments to inspect arrangements for the dilution of labour. The employers objected to such interruption but offered to submit to the Clyde Commissioners and to give the men's representatives facilities for ascertaining what was being done under the dilution scheme. The men struck, but strike and strikers were repudiated by the Amalgamated Society of Engineers. The Government acted promptly. It arrested nine leaders and conveyed them to the East Coast on a charge of delaying the production of munitions in a controlled establishment. Its position was in every way stronger than when it tried to apply the Munitions of War Act to the South Wales miners in the preceding June, and within a week the strike was at an end.\footnote{A. R., 1916, pp. 94-96; P. D. C., LXXXI, 913-915.} Fourteen months later the deported men were allowed to return to their homes.\footnote{L. T., May 30, 1917, p. 7.}

In the late spring of 1917 differences arose between the Government and the Amalgamated Society of Engineers which threw much light upon the two years' working of the Munitions of War Act. Since the Clyde workers' strike there had been relatively few interruptions of industry. The workmen had, in general, manifested an excellent spirit and their grievances had been adjusted, though often with delay, by such arbitration tribunals as the Committee on Production or the new...
Ministry of Labour. By May, 1917, however, causes for complaint had developed. It had come about that employers more and more endeavoured to substitute "piece-work" schedules for time schedules, and the remuneration under these was felt to be unsatisfactory. The inability to change employers without a leaving certificate was irksome. Suspicion was growing that the introduction of labour-saving machines and the employment of unskilled operatives was for ever rendering impossible a return to pre-war conditions.

To these general causes of dissatisfaction were added two specific ones. That the execution of the Military Service Act of May, 1916, might be facilitated, the Government had introduced a trade-card system, which gave the trade unions virtual control of exemptions as among their own men. This system was now withdrawn, and distrust arose lest the War Office was planning to enlist skilled workmen. At the same time a Munitions of War (Amendment) Bill was introduced in the Commons, authorizing the dilution of labour in private works as well as in munitions establishments. Owing to the great expansion of its undertakings, the Ministry of Munitions explained, it had need of more skilled workmen than were in its service at the moment. The need could be supplied only by withdrawing trained men from private works and compensating for their withdrawal by adding unskilled workers. Although the Government had two years before promised not to extend dilution in this way, it now asked to be relieved of its promise. To the
request many unions assented, but the Amalgamated Society of Engineers did not. When the bill was about to be brought up in the Commons, the engineers began to leave off work and by the end of May a silent but formidable strike was in progress.54

At this point the Government took measures to repair the situation. The Minister of Munitions entered upon a series of conferences with the representatives of unions belonging to the Shipbuilding and Engineering Trades Federation, and the Prime Minister announced the appointment of a Commission to inquire into the causes of industrial unrest. As a result, by the middle of June, the engineers returned to work, and important changes were introduced into the proposed Munitions of War Bill.

The suggested changes in the bill were explained by Dr. Addison to some 250 delegates of the Amalgamated Society of Engineers on June 13. The Government, that it might secure the necessary skilled labour where national interest required it, would have to extend, as it had planned, the dilution of labour to certain private establishments, and would have to declare certain classes of work, such as the manufacture of agricultural machinery, munitions work. When, however, such extension was to be ordered, notice of it would be widely given in the newspapers and three weeks would be allowed for the receipt of any protest from the trade unions concerned and for action thereon. Prohibition of the right

54 M. G., May 14, 19, 26, 1917; New Statesman, May 19, Je. 9.
to strike would not be extended to workers in these private establishments. Dilution of labour in such establishments would cease at once at the close of the war and any employer seeking to continue it would be liable to a fine of £5 a day for each man affected. Not only were these concessions proposed relative to dilution of labour, but to placate the unions other changes in conditions of labour were suggested. A wage award, applicable to the employers of a single firm, might be extended by the Ministry of Munitions to all workers similarly employed upon munitions work. Arbitration tribunals should, if possible, make their award within fourteen days from the date of reference. Compulsory arbitration should not continue for twelve months after the war, as provided in the Munitions of War Act, 1915, but liberty would at once be restored to the unions. Finally, the leaving certificate would be abolished, although an employer might not take on a man leaving munitions work for private work without the consent of the Ministry of Munitions, nor might he "poach," i.e., offer to pay a skilled worker more than he was paying his own men similarly skilled. These were the Government's preliminary concessions.

Meanwhile the Commission of Inquiry into Industrial Unrest, appointed on June 12, worked so speedily that its task was finished by July 17. Upon it sat many representatives of labour and to secure expedition it subdivided itself into eight Commissions, each devoting itself to a

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Different part of England, Scotland, or Wales. Each commission met from ten to thirty times and examined from 100 to 200 witnesses.

Of its report Mr. G. N. Barnes made a useful preliminary survey, explaining the general causes of unrest as follows. All Commissions agreed that the most important cause—and one colouring subsidiary causes which alone might have brought no complaint—was the high cost of food in relation to wages, conjoined with the unequal distribution of food. Men felt that sections of the community were profiteering. The Commissioners, therefore, recommended an immediate reduction in the price of food, any loss accruing therefrom to be borne in part at least by the state. They also recommended a better system of distribution.

Much discontent arose from the working of the Munitions of War Act and the abrogation of trade union privileges. In the first place, personal freedom was restricted by workmen being tied to particular factories. Many so tied were unable to get wages commensurate with their skill, the wages of skilled men often being less than those of the unskilled. In the second place, changes regarding working conditions, especially the introduction of female labour, had been made without consulting the men. Lack of confidence in the Government was thereby generated and a feeling that promises regarding trade union customs would not be kept. Lastly, there had

56 The Report is Cd. 8662–8869; Mr. Barnes' summary is in L. T., Jy. 23, 1917, pp. 7–8.
been delay in the settlement of disputes. In some instances ten weeks had elapsed without a settlement, but a strike put the matter right in a few days. In one case, employers and men came to an agreement, but the Ministry of Munitions withheld its assent, with the result that fourteen weeks were required to get a decision from the Committee on Production, the men meanwhile stopping work. This last episode illustrated another charge brought against the Government — the lack of co-ordination between departments dealing with labour.

To obviate these occasions for dissatisfaction the Commission offered various remedies. Labour should take part in the affairs of the community as partners rather than as servants; the leaving certificate should be abolished or modified; the Government should make an authoritative statement when it introduces changes to increase output; it should also make a statement as to variation from pledges already given; there should be better administrative machinery for dealing with labour — one central authority with local boards for local disputes, or a local commissioner with technical knowledge; lastly, the principle of the Whitley Report should be adopted. This Report, made in June, 1917, recommended the formation of joint standing industrial councils in the several industries where they do not already exist, councils composed of representatives of employers and employed, in the workshops, in districts, and nationally, to strive for closer co-operation between employers and employed.

Other causes of unrest the Commission discovered.
One, quite as widespread as the cost of food and the infringement upon union privileges, was the friction occasioned by the Military Service Acts. To be sure, the irritation caused by the hasty and unheralded withdrawal of the trade-card scheme had subsided, but there was fresh anxiety over the working of the Schedule of Protected Occupations, which would need careful handling. Some causes were not general, but were none the less acute. Insufficient housing accommodations, a scanty supply of acceptable beer, inconsiderate treatment of women, whose wages were sometimes as low as 13 s., inadequacy of the £1 weekly maximum of the Workmen's Compensation Act, delays in granting pensions—all were irritants in one region or another, but for the most part they have no immediate connection with the Government's wartime control of industry. One which did have such connection the Government to some extent promptly remedied. By an Order, effective August 15, 1917, women of 18 and over were to receive an advance in wages of 2 s. 6 d. per week and girls under 18 an advance of 1 s. 3 d., provided they were employed on munitions work in controlled establishments or in uncontrolled ones to which orders of the Ministry regulating women's wages had already been applied.57

While the Commission made its investigations and formulated its report, the new Minister of Munitions, Mr. Winston Churchill, continued the negotiations with the trade unions. Upon these negotiations, and also in a

57 L. T., Aug. 3, 1917, p. 3.
measure upon the Commission's report, depended the form finally assumed by the Munitions of War (Amendment) Bill. By the end of August a part of this, but not all of it as at first formulated, became law. The clause upon which the Government had been most intent was at length omitted — the one permitting the extension to private establishments of the dilution of labour. To this provision the Amalgamated Society of Engineers maintained its opposition and refused representation upon the Trade Unions Advisory Committee, which Mr. Churchill was trying to form, so long as the clause was retained. Rather than continue the friction which Governmental insistence would have produced, the Minister of Munitions yielded, anxious though he was to extend dilution. Further legislation along these lines he postponed until the autumn session of Parliament.

On the other hand, the provision which the unions were most anxious to see included in the bill was incorporated. The Minister of Munitions was given the power to abolish leaving certificates. Why such abolition could not take place for some six weeks, Mr. Churchill explained in the House. As the Commission had pointed out, many skilled men were at the moment receiving for time-work relatively lower wages than unskilled newcomers were paid for piece work. To abolish the leaving certificate at once would encourage skilled but underpaid men to leave their employment. Arrangements for remunerating them fittingly, he remarked, were the first essential. On the passage of the bill, the readjustment in
question was undertaken and soon it was announced that after October 15, 1917, leaving certificates would be abolished.\textsuperscript{58} The readjustment involved an advance of 12 per cent. in the wages of skilled munitions and ship-yard time-workers. Eventually unskilled time-workers had to be given the same increase to keep them from going over to piece-work. Altogether 900,000 men had their wages advanced by £14,000,000 a year.\textsuperscript{59} Thus two of the most irritating grievances growing out of the Munitions of War Act, the inability of workmen to change their employment and the inadequate compensation often received by them in the shop which they could not leave, were satisfactorily remedied.

At the same time another recommendation of the Committee on Industrial Unrest received the Government's attention. As a result of Mr. Churchill's vigorous efforts, a committee of trade unionists was appointed to advise the Minister of Munitions on industrial questions. As soon as the abolition of leaving certificates was announced, this new Trade Unions Advisory Committee exerted its influence and issued an appeal to munition workers. Pointing out that, if a large number of them left their work at once, the output of essential munitions would be impaired, it urged them at least to give notice of intention to leave or, far better, to enrol as War Munitions Volunteers. The volunteer scheme had been so extended, the Committee indicated, as to insure to men

\textsuperscript{58} L. T., Aug. 16, 1917, p. 10; Aug. 27, p. 8; Sept. 26, p. 3.
\textsuperscript{59} Ibid., Nov. 29, p. 10.
working away from home a subsistence allowance if they should enrol and be assigned to the establishments in which they were then working. Railway passes, too, on public holidays would be given. Thus the persuasion which the Government wished to exert was voiced by an authoritative committee of the men themselves and the creation of a mediatory body at once proved its value.

A final step was the adoption of the recommendation of the Committee on Industrial Unrest which related to the establishment of the Joint Standing Industrial Councils proposed in the Whitley report. During the war, the Government pointed out in announcing its decision, authoritative bodies, representative of both employers and employés in a trade, could seldom be found. Frequently it had wished to confer with such bodies, but had been unable to do so. Need for them would exist after the war quite as much as during its progress. At all times they should conduce to insuring a satisfactory understanding between employers and men. The Government, therefore, proposed to create such councils and in the future regard them as official standing consultative committees. With them it would confer on questions affecting the industries which they respectively represented. Each trade should constitute its own council, the councils in turn electing their own officers and determining their own functions and procedure. Where an industry was based on district organization, this might well be reflected in district councils rather than in a national council, which

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60 Ibid., Sept. 26, 1917, p. 3.
would be appropriate to a trade organized on a national basis. Members of the councils would be representatives of existing organizations of employers and workmen, although the councils themselves might grant representation to new bodies coming into existence. All interests within a trade ought to be given opportunity to express themselves. Co-operation of all elements within an industry, the Government concluded, would do much to settle problems of reconstruction after the war.\(^6^1\)

The spirit of compromise and conciliation thus manifested by the Government in the adoption of certain recommendations of the Committee on Industrial Unrest argued well for the future. One popular grievance, however, surpassed in gravity any discontent arising from the Munitions of War Bill. This was the high cost of living and the belief that the Government had not done all in its power to prevent rising prices. As it happened, the late summer and the autumn of 1917 saw remedial measures adopted in these matters as well. Maximum prices were fixed in one commodity after another, that for bread being so favourable that a state subsidy was involved. The description of these measures belongs to another chapter, but the cumulative effect of them should not be forgotten when other action directed toward the same end is considered. The raising of the wages of underpaid munitions workers, the abolition of leaving certificates, the establishment of a Trades Union Advisory Committee, the creation of Joint Industrial Councils were,

\(^6^1\) Ibid., Oct. 25, p. 8.
quite as much as the new food regulations of 1917, directed toward the conciliation of labour. Without the co-operation of the workmen it was clear that the war could not be won, and the attitude of a large part of the Labour group toward the Stockholm conference brought home to the Government the necessity of a conciliatory policy. If there was to be a further taking of men for the army, every possible concession was desirable; for a measure of this sort would, as had been shown by the temper of the men in the summer, be most unacceptable, and the successful prosecution of the war might easily be involved.
THE COAL MINES

Whereas the Government promptly and without question took over the railways, and less promptly, though with equal decision, assumed control of plants which could make munitions, it took over the mines only after more than two years and then did so with evident reluctance. Where, too, the administration of the railways and of munitions works involved it in no insoluble difficulties, the problem of the mines was intricate and baffling. This assumed three main aspects. The first was a falling off in the output of coal, which affected one of Great Britain’s important exports and involved at a critical time the balance of trade. The second was the enhanced price of coal in the home market, creating discontent and a belief that the profits of owners or dealers were unduly large. The third was the revolt of one of the most powerful and irreconcilable groups of men in the country, the Miners’ Federation, especially the branch of it resident in South Wales. Since difficulties arose in pretty much this sequence, they may be so described.

By February, 1915, both the decreased output and the increased price of coal attracted the attention of the House of Commons and of the Ministry. Two Committees were appointed to report, one on each subject. The Committee concerned with output made its first

1 Committee on Conditions prevailing in the Coal Mining Industry due to the War. Appointed Feb. 23, 1915.
report on May 27, 1915, another report in December of that year, and a third in September, 1916.\(^2\)

Up to the end of February, 1915, according to its first findings, the net decrease in the number of persons employed in the mines was 134,186, or 13\(\frac{1}{2}\) per cent. of the number employed in July, 1914. The average decline in output from August, 1914, to February, 1915, compared with the average output of the twelve preceding months, was also 13\(\frac{1}{2}\) per cent. (3,044,329 tons monthly). The decline was easily accounted for by the enlistments, 191,170 miners having joined the colours up to the end of February. But explanation was not remedy and the falling off in output would, if continued, reduce the year's production by some 36 million tons. Even if the normal exportation of 24 million tons to Russia, Germany, Austria, and Belgium was deducted from this deficit, there would still remain a shortage of 12 million tons. The home demand was not likely to decrease since certain industries were very active.

Under the circumstances the Committee thought it questionable whether further recruiting among the miners should be encouraged — for the miners had proved energetic recruiters. Turning to the possibility of increasing the output under existing circumstances, the Committee entertained no doubt that much could be done if the will were not wanting. Absenteeism was the dominant evil. Although it had declined from 10.7 per cent. to 9.8 per

\(^2\) Cd. 7939, 8147, 8345.
cent., if the seven months of war were compared with the preceding seven months, still 4.8 per cent of that which still prevailed was avoidable. Were there no unavoidable absenteeism, the output of coal would be from 13 to 14 million tons greater during the year than it then was. The 12 million tons shortage would disappear. Among its recommendations therefore the Committee placed first a proposal that miners be urged, preferably by the executive of the Miners' Federation, to eliminate all avoidable absenteeism. Should this fortunate result be attained, the demands of the home and the existent foreign market could be met. Holidays too might be curtailed. Lord Kitchener's appeals at Easter and Whit-suntide had been not unsuccessful and 1,000,000 additional tons of coal had been raised.

Other devices for increasing output the Committee considered but with less enthusiasm. A suspension of the Eight Hours Act of 1908 would not affect the Northern coalfields, since before its passage the hewers (not the transit hands) already worked only seven hours and would not now work longer unless serious emergency could be shown. In Lancashire, Yorkshire, and South Wales, however, where men repair their working places, as the hewers farther north do not, the addition of twenty or thirty minutes to the working day would be helpful. No further employment of women or boys was recommended.3 If home needs were not being met, ex-

3 At the end of 1913, 6554 women were employed on light sur-
port should be restricted, but not in so far as the exported coal served the British mercantile marine and British allies or secured such essential return cargoes as grain from the Argentine and iron ore from Bilbao. Lastly, the Committee urged economy on the part of the public. The shortage could be met quite as effectively by a wise restriction of demand as by an increase of the supply.

Before the report was published, the Government had acted in accordance with one of its recommendations. By order-in-council, effective May 13, 1915, it assumed powers to prohibit the export of coal to neutral countries, to provide adequate supplies at reasonable prices for the British navy and for the navies, railways, and national requirements of the Allies, and, finally, to ensure a more regular supply for the home market. Thenceforth no coal might be shipped without the assent of the War Committee of the Board of Trade. The amount of coal thus bought under license regulations was large, the normal exportation of the United Kingdom being some 97 million tons, about one-third of the entire output. Of the amount exported during the war, neutrals had been getting 27 per cent. Upon them fell the brunt of the new regulation and the decrease in the June exportation face work about the mines (2933 of them in Scotland). After the beginning of the war the number of women employed in the Scottish coal-fields increased but the Committee could not indicate to what extent. As for boys, none under fourteen might be employed underground, and none under thirteen for more than 54 hours a week or 10 hours in one day.

*Cd. 7939.*
compared with that of April was 125,000 tons. Licences for sending coal to South America, Scandinavia, and Spain were refused. In the case of Spain it was for a time felt that exportation should be permitted, since the coal was used in working mines whence iron and copper were sent to Great Britain. But of late there had been reason to believe that coal reached Germany indirectly from Spain. The restrictions at least affected favourably rates for France and Italy.

The second Governmental committee, also appointed early in the spring of 1915, was instructed to concern itself with the enhanced price of coal, to discover whether there was justification for this, and if not to suggest remedies for it. The Committee was promised by Mr. Runciman, President of the Board of Trade, in response to parliamentary demand. In February, Sir A. B. Markham, supported by Messrs. Rowntree and Bathurst, had urged that the Government forbid by proclamation the sale of coal at prices exceeding those of twelve months before the war by more than from one to two shillings. Mr. Runciman replied that the rise in price was peculiar to London and would be modified by the efforts of the Executive Committee of the Railways.

The interpretation put by workmen upon the situation was expressed in a manifesto of May 27, 1915, issued by the Management Committee of the General Federation of

6 L. T., Je. 9, 1915, p. 5.
7 P. D. C., 1915, LXIX, 1189.
Trade Unions. With the warning that "a fortnight hence may see the whole of Lancashire in the throes of a gigantic industrial dispute," the document charges the Government with ineffectively handling food prices and war profits, but particularly with "the failure to deal with the coal question when the conspiracy to increase price is so obvious." Not only do high prices for coal endanger comfort and health, it is added, but they decrease the possibilities of employment, since some manufacturers talk of shutting down factories.8

The findings of the Committee, made public in March, 1915,9 tended to justify both the contention of Mr. Runciman and that of the unions. It appeared that during the winter of 1914-15 the North and the Midlands had suffered no marked rise in the price of household coal. On the other hand, the Southern counties and London (whence came most of the Committee's evidence) had witnessed an advance of between 9s. and 14s. per ton, according to quality. Behind this might lie either manipulation of the market by producers and dealers or such difficulties of traffic as would curtail the supply and send up the price. Examining the first possibility, the Committee did not discover the existence of rings of colliery owners and coal merchants, although it did find that "a few leading firms decide upon increased prices which without more ado become the public prices of the day and are advertised next day in the newspapers." In London

8 L. T., Je. 5, 1915, p. 5.
9 Cd. 7866.
the best grades of household coal are sold under a sliding scale, one-half of any advance in the retail price accruing to the colliery owner, one-half to the dealer. The Committee pronounced the system indefensible, but did not attempt to estimate the extent of its responsibility for the increased London prices.

Regarding another element of the situation the Committee was more specific. This was the hindrance to transportation arising from war conditions. The marked shortage of empty wagons worked less to the disadvantage of districts near the coal fields than it did to London. Supplies of coal were more readily furnished if the wagons could make a short journey and return quickly. In as much as London was rather far from the mines, 3 s. extra was not improperly charged for delivery there. But the consumer had been asked for much more than this. Such additional demand could in part be explained by a closer scrutiny of conditions of traffic.

In normal times London imports annually 8,000,000 tons of coal by sea from the North, paying about 3 s. per ton for carriage. At the outbreak of the war the Government had requisitioned large numbers of the coal boats, finding them exceptionally useful, and had not replaced them. Such as continued to ply from north to south found the sea abounding in dangers—buoys removed, lights extinguished, the channel covered with minefields—and with proper caution extended the time of their voyage threefold. The shortage and the slowness were reflected in an advance of freights to as much as 13 s.
6 d. at times, 7 s. still ruling in the spring of 1915.

To the Committee the outlook for the winter of 1915-16 seemed serious. Its recommendations were twofold. The Government should invite the London County Council and other public bodies to buy supplies of coal and store them during the summer. To be sure, this would enhance the summer price of coal, would require large capital and would involve difficulties of storage, but it would be in the public interest. Should the Government also control the output of the collieries during the war? Despite the magnitude of the undertaking which would involve 1,270,000 employés and an output of 287 million tons, the Committee were of the opinion that if prices did not return to a reasonable level, it should take steps to do so. Maximum prices, either "recommended" or fixed by the Government, it did not favour.\(^\text{10}\)

Soon the question of the price of coal came up in the House of Commons. Mr. Runciman was urged to do something bold and practical. After explaining in his reply, as the Committee had done, the difficulty of transporting coal to London, he admitted that merchants and producers had acted unjustifiably. With the former, who, to be sure, were hampered by loss of horses and by the general disorganization, he had held several conferences and had at length arranged that profits should be strictly limited. The producers were less tractable. They urged that rising wages had increased their costs

\(^{10}\) Cd. 7866.
to an extent which they professed to estimate at 1 s. 6 d. per ton, a figure which without doubt was "a gross exaggeration." The actual estimate would be nearer pence than shillings and the existing pit-head price of coal was far in excess of what expenses would justify. This declaration brought from the Labour members cries of "Hear, hear!" The owners of the collieries, continued Mr. Runciman, urge that their industry is speculative, making good the losses of one year from the profits of the next. To this plea he had responded that the current year should not be regarded as one which might justify the taking of compensatory profits, and he had almost reached an agreement with Midland owners. He hoped soon to announce that the companies had come a little nearer to what was expected, he might say demanded, of them. For the Government and Parliament would not tolerate exploitation.  

What lay behind this scarcely veiled threat was the Government's determination to limit the price of coal by statute if necessary, a departure from the recommendations of its Committee. At the same moment, however, a series of critical events deferred for a time such action. To the parties thus far active—the Government, the owners, and the public—was added a fourth and more determined one, the miners.

The spring of 1915 saw the first demand for war bonuses. The successful agitation of the railwaymen in February has been described. By the end of May 986,000

11 P. D. C., 1915, LXXII, 403-419.
working people of one sort or another had received war advances, from ten to twelve millions had not. It was during this same month of May that the miners got their first bonus. In April they had asked for a 20 per cent. increase in their earnings, to which the coal owners had responded by an offer of 10 per cent. Further advance, however, the owners would consider if in any case it were recommended by a local wages board. In this proviso lay embedded a principle, clearly gasped by the contending parties. The coal owners objected strongly to setting aside machinery established for dealing locally with disputes. Different economic conditions relative to the export and the home trade, they contended, made uniform treatment of the wages problem impossible. The Miners' Federation, on the other hand, demanded that wages be settled on a national basis. The increased cost of living was national, not local. Why should not the antidote be equally national, or in other words, why should not the increase be uniform? Mr. Asquith was on May 1 invited to act as arbitrator and his award inclined toward the view of the coal owners. Although a case had been made out for an immediate advance of wages, the extent of this, he ruled, should be determined by district boards and committees. Thus the first war bonus for coal miners varied from 10 per cent. to 20 per cent. according to local conditions.

12 L. T., Je. 5, 1915, p. 5.
13 Ibid., May 4, p. 10.
Meanwhile the storm gathered in another quarter. On April 1 the miners of South Wales seized the war time opportunity to hand in notices terminating on June 30 the existing five-year agreement regarding wages in that district. Their new demands were far reaching. They asked for a three-year agreement co-terminous with one already current in the Midlands. Specifically they asked that the minimum rate should be higher than was the maximum rate under the expiring arrangements; that there should no longer be a maximum rate; that the standard rates of 1879 and 1877 should be raised by 50 per cent. and 35 per cent. respectively; that all men employed on afternoon and night shifts be paid at the rate of six turns for five worked; and that every adult surface-man be paid not less than 5 s. 6 d. a day. At two special meetings of the Conciliation Board, representatives of the employers heard the men's arguments but refused their demands. Negotiations were for the time broken off.\(^{15}\)

On June 9 the men proposed among other things that there be a joint audit of the selling price of coal for each month from July, 1914, to May, 1915. Instead of this the South Wales Coal-owners' Association two weeks later issued its own audit, based on the business of 79 firms. Of the total output of these firms (33,983,829 tons) 19.8 per cent. was produced either at a loss or without profit, 49.4 per cent. at a profit of less than 1 s. per ton, only 15.4 per cent. at a profit of 2 s. 6 d. per ton.\(^{16}\)

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\(^{15}\) L. T., Je. 10, p. 5.

\(^{16}\) Ibid., Je. 11, p. 10; Je. 28, p. 3; P. D. C., 1915, LXXII, 443-448.
To such modest returns the owners could refer and could point out too that they were now obliged to give to all colliery workers a war bonus of $17\frac{1}{2}$ per cent., the equivalent of 1 s. per ton. They felt strongly the unwisdom of entering during such critical times into a three years' agreement. At the cessation of hostilities the condition of the coal trade was likely to be serious. The British Admiralty was at the moment an extensive buyer in South Wales and had accumulated large stocks. On the conclusion of peace it would no longer buy but would sell in order to set tonnage free. This situation the miners also foresaw and made it a ground for their three-year demands. Since their wages varied with the selling price of coal, how could they hope without an agreement of some duration to maintain their present income? Thus the future as well as the present furnished grounds for the approaching conflict.

By the end of June the owners had placed their case in the hands of the Government, having held long consultations with Mr. Runciman, President of the Board of Trade, and with Sir George Askwith, a permanent official of the Board. Mr. Runciman, in consequence, placed before the miners various modifications of their proposals. It was in vain. On July 12 delegates of the South Wales Miners' Lodges in conference at Cardiff summarily rejected them, refused anything short of their

17 General Meeting of the Ebbw Vale Steel, Iron, and Coal Co., Je. 29, 1915 (L. T., Je. 20, p. 15).
19 Ibid., Je. 30, p. 15.
original demands, and resolved to stop the collieries on July 15 if the concessions were not granted.\(^{20}\)

The Government, rebuffed as a conciliator, determined to use its strong arm. Within a fortnight it had achieved a triumph in the labour world and in the House of Commons by the passage of the Munitions of War Act.\(^{21}\) One of the significant features of this was its provision that all industrial disputes involving the safety of the realm during the war should be subject to compulsory arbitration. Failure to submit to such arbitration was an offence against the state punishable with a fine of £5 for each day or part of day during which work might be suspended. The provision was, however, by agreement clearly applicable only to certain trades which had accepted it. To this agreement the miners were not a party, and the Minister of Munitions, Mr. Lloyd George, was at the moment when the South Wales dispute arose, endeavouring to have them and the cotton operatives come under the Munitions of War Act. In his interview with the Executive Committee of the Miners' Federation of Great Britain, this body had shown itself unwilling, as always, to accept compulsory arbitration. Assurances it would give that everything possible would be voluntarily done to avoid strikes. Mr. Lloyd George, in turn, while saying that he strongly wished the miners to come into his scheme, explained that he would take no steps to force them into it.\(^{22}\) To this stage the negotiations had come

\(^{20}\) Ibid., Jy. 13, p. 6.
\(^{21}\) Cf., above pp. 30, 31.
\(^{22}\) L. T., Je. 26, 1915, p. 5; Je. 30, p. 15.
at the end of June, when they were suspended during the settlement of the South Wales dispute. Indeed, arrangements were at the moment in progress for holding a great meeting at London during the first fortnight of July. At this gathering, delegates, representing miners and mine-owners from every district in England, were to consider the recommendations of the Home Office Committee on Coal Supplies, and enthusiasm for co-operative action in increasing the output was expected.23

In view of the Welsh miners’ threat of July 12 to stop the collieries on July 15 if their terms were not granted, Mr. Runciman announced in the House of Commons on the 13th that the Government would apply to them by proclamation the Munitions of War Act. The dispute had now become prejudicial to the manufacture, transport, and supply of munitions of war. So far as an amendment had excluded the miners from the operation of the Act, it had made the exclusion dependent upon their possessing, in the opinion of the Minister of Munitions, other means for the settlement of disputes. The announcement of the President of the Board of Trade was received with cheers, the Labour benches offering no opposition but only requesting that the decision be made known at once to the men in the coalfield. So certain was the Government that a strike would be avoided that it did not set up a South Wales Munitions Tribunal to deal with violations of the Act. It relied rather upon the Executive Committee of the Miners’ Federation, for

23 Ibid., Je. 26, p. 5.
this body had given a pledge to Mr. Lloyd George and Mr. Arthur Henderson that there should be no strike in the coalfields during the war. Moreover, the Parliamentary Committee of the Trade Union Congress was to meet on the morrow and it was expected that organized labour would put forth every effort.\(^\text{24}\)

So far as the responsible leaders of the miners were concerned, the Government had made no miscalculation. On July 14 the Executive Committee of the South Wales Miners' Federation reported that they had advised the men to go to work on day-to-day contracts until a settlement was reached. They therefore requested Mr. Runciman to resume negotiations. What had not been correctly appreciated in London, however, was the temper of Cardiff. There neither the intimidation of the Government nor the reasonableness of their own Executive Committee impressed the men. By a vote of 180 to 113 the Conference of South Wales Delegates decided to reject their Executive’s recommendation that there be no stoppage of work, and thereby they committed themselves to the strike. This legislative body had drifted away from its eminent leaders and had come under the influence of sub-leaders and district agents, several of them apostles of Syndicalism and eager to take any opportunity to force the Government to nationalize the mines. It is possible that a ballot of the coalfield would not have approved its decision. However that be, on July 15 200,000 miners ceased work.\(^\text{25}\)

\(^{24}\) Ibid., Jy. 14, p. 8; P. D. C., LXXIII, 739, 740.

The Minister of Munitions at once set up a General Munitions Tribunal for Wales and Monmouthshire. The men felt, however, that the Government could not enforce the Act and they were angered by the Proclamation extending its provisions to them. This feeling made it more difficult for the Executive Committee, already repudiated, to negotiate to any advantage. For a time the Committee was hopeful of limiting the strike to twenty-four hours, but its conference on the 16th with Mr. Runciman was barren of result. Nor would the President of the Board of Trade summon the newly accepted leaders of the miners to London. The deadlock continued until on the 19th Mr. Runciman, Mr. Lloyd George, and Mr. Arthur Henderson went to Cardiff. Next day Mr. Lloyd George's personal appeal to his fellow countrymen availed as nothing else had done. The week's strike was ended not through the operation of the Munitions of War Act nor the leadership of the Executive Committee, but through the persuasiveness of the Minister of Munitions and the grant of concessions not unlike those demanded from the first. Until six months after the close of the war, and longer, unless three months notice be given, a new standard, 50 per cent. above the old standard of 1879, was to be set up; and this new standard plus 10 per cent. should serve as a minimum for wages. No rise in wages could, however, take place until a selling price corresponding with the new minimum should be decided. Henceforth there

26 Ibid., Jy. 15, 1915, p. 7; Jy. 16, p. 9; Jy. 17, p. 6; Jy. 21, p. 7.
was to be, as the men wished, no maximum wage. Men employed on afternoon and night shifts were to be paid at the rate of six turns for five—precisely the miners' demand. Surfacemen receiving less than 3 s. 4 d. a day were to have that sum, which, however, was less than had been asked for. No one was to be penalized for the present dispute and every effort was to be made by all concerned to maintain and increase the output of coal. The cost of the strike was estimated as about £1,500,000, the falling off in coal mined at about 1,000,000 tons. The Munitions Act had proved inapplicable to men who had not agreed to its provisions, and responsible labour leaders had been repudiated by their supporters. There was much that was ominous for constituted authority in the history of the South Wales coal strike, only the abilities of Mr. Lloyd George showing the brighter for it.

After this disconcerting fortnight the Government returned to its legislation regarding the price of coal. Mr. Runciman had introduced a Price of Coal (Limitation) Bill which on July 19 came up for second reading. Its chief provision was that coal at the pit's mouth should not be sold at prices exceeding by 4 s. per ton the prices which obtained there at corresponding dates in the twelve months preceding June 30, 1914. The Board of Trade might in special circumstances increase the 4 s. The fine for violation of this provision should not exceed £100, or three times the amount which the seller might have received in excess of the maximum. To the criticism

27 Ibid., Jy. 21, p. 7; Jy. 22, p. 7.
28 Ibid., Jy. 15, p. 8; P. D. C., 1915, LXXIII, 1674.
that the bill penalized one great industry while allowing to others high war profits, Mr. Runciman replied that without it coal producers would have the market at their mercy. As for other industries, the excess profits tax would be heavy. Only with reluctance, however, did the House accept the principle of the bill, looking upon the measure as one of expediency. At the committee stage debate arose over an amendment to include within its provisions contracts of the summer made before its passage. June was the usual month for such transactions and the contractors who had bought then would, if not protected, be undersold to the extent of 3 s. by merchants who might buy in August. Mr. Runciman, opposing the amendment, declared that it struck at the root of all commercial stability. It was unfortunate, he admitted, that the bill had been delayed, but labour troubles in the coalfields were responsible for this. When the amendment was at length withdrawn, he accepted another, providing that, if contract prices had been above those fixed by the bill, the contract should not be invalid but should be subject to a reduction in the purchase price.

Another amendment was concerned with retail prices in London, limiting them to a 15 s. advance upon the prices at the pit-head as fixed by the bill. On Mr. Runciman’s declaring that an attempt to fix a flat rate would be a disastrous failure, this too was withdrawn. He had already explained that London coal merchants were undertaking not to increase the price beyond a certain number of shillings during the summer, and were prepared
to give a similar undertaking for the coming winter. He now added that to protect the poor from hawkers two hundred of the largest coal merchants in London would open depots where coal might be bought in small quantities at the price of the day.\(^2^9\) The bill was passed by the House at the end of July and a month later the Board of Trade in a circular to the London coal merchants urged them to increase at once their stocks to the maximum. Thus the pits could be kept fully at work and demands upon transportation would later be reduced. If householders would store what they could, consumers without facilities could be supplied more easily in the winter.\(^3^0\)

Such were the preparations made by the Government in the summer of 1915 for avoiding another winter of high prices, especially in London. It had embarked upon a career of price-fixing in the trade, and the following year it was carried further by the current. Although the Price of Coal Act in large measure protected home consumers, no limit had been set to prices which might be asked of foreign buyers. The Government's policy was to provide for home needs first, for those of the Allies next, for those of neutrals last. Licenses to export coal to the Allies were for the most part easily procurable, but until May, 1916, the price at which coal was sold them was very high. South Wales at times sold abroad low grade coals for 50 s. to 55 s., although the Government by arrangement was buying better grades at

\(^2^9\) P. D. C., 1915, LXXIII, 2186, 2187.
\(^3^0\) B. T. J., Sept. 2, 1915, p. 669.
less than one-half this amount. The collieries which produced the lower grades available for export reaped the highest profits, but all collieries realized on small coals, the price of which at times was 10s. per ton more than the authorities were paying for large coals. Early in 1916 such heavy shipments of smalls were going to France that in view of the home shortage licenses were for a time held up.\(^{31}\)

Against conditions in the export trade France and Italy protested. Not only were the prices for coal very high but freights had become exorbitant. Rates to French and Italian ports compared with those of 1914 were as follows:\(^{32}\)

<table>
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<tr>
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<th>1916</th>
<th>1914</th>
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<tbody>
<tr>
<td>Genoa</td>
<td>100 s. (March)</td>
<td>8 s. 8½ d.</td>
</tr>
<tr>
<td>Marseilles</td>
<td>85 s. 6 d. (May)</td>
<td>10 f. 32 c.</td>
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<tr>
<td>Bordeaux</td>
<td>72 f. (March)</td>
<td>7 f. 30 c.</td>
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<tr>
<td>Rouen</td>
<td>41 s. 6 d. (May)</td>
<td>6 s. 3¼ d.</td>
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In May, 1916, the Board of Trade put the needs of France before coal owners and shippers. The interests concerned co-operated cordially and scales of maximum coal prices and maximum freights were drawn up to be effective June 1. Henceforth all orders from France for coal were to pass through one central office in Paris and were to be forwarded ultimately to the District Coal and Coke Committees in the various parts of the United Kingdom. The Committees in turn undertook distribution of the orders, supervision of their execution, and


\(^{32}\) Ibid.
arranging for shipments. Exporters saw their profits decrease but France was able to supply her furnaces and keep warm her homes at reasonable cost. Five months later the arrangements were extended to Italy, corresponding schedules being drawn up.\textsuperscript{33}

The passage of the Price of Coal (Limitation) Act in 1915 and the settlement of the South Wales strike did not, as it turned out, establish permanently either the price of coal for home use or the wages to be paid the miners. Since the supply of coal never kept pace with the demand for it, the Act did undoubtedly prevent abnormal prices. What might have happened is indicated by the course of the export trade. But it was felt in some quarters that the maximum fixed by the Act was too high, that the exclusion of contract coal from its provisions enhanced prices, and that middlemen were still free to increase their profits.\textsuperscript{34} The probability that middlemen were suffering little was supported by reports like that of Messrs. Lambert Brothers, coal merchants, coal exporters, and shipowners in London and Cardiff. In the year 1914-15 they were able to distribute a dividend of 20 per cent. free of tax and in 1915-16 one of 25 per cent. Since each year they put by a reserve equal to the dividends, the net profits during two years were 90 per cent.\textsuperscript{35}

\textsuperscript{34} M. G., Sept. 30, 1916, p. 10 (editorial).
\textsuperscript{35} M. G., Sept. 30, 1916, p. 10. The net profits of this firm for a series of years were as follows: 1909-10, £39,000; 1910-11, £40,000; 1911-12, £60,245; 1912-13, £106,476; 1913-14, £84,557; 1914-15, £142,548; 1915-16, £180,246.
In July, 1916, the inland prices allowed by the Board of Trade to the South Wales owners were further advanced 2 s. 6 d., a concession which seemed to some unwarranted. The miners were displeased and, although their wages had been increased 15 per cent. in June, they demanded in November a new advance under threat of strike. The Government, feeling that the output of coal should no longer be thus endangered, took an important and decisive step. As from December 1, 1916, it took possession of the South Wales mines. Other motives than a desire to control the labour situation conducd to this action. Lord Milner had already proposed that the mines be taken over as the railways had been. Neutral trade could the better be directed, since neutral ships stopping for British coal could be required to call on their return at specified ports. It was further pointed out that fixing the price at the pit-mouth was not proving efficacious in protecting the consumer. To achieve this the wholesale and retail trade ought also to be under state control.

The Government embodied its newly taken resolution in a regulation added to the Defence of the Realm Act. This provided that any designated coal mines might pass into the possession of the Board of Trade and that the owners should thenceforth comply with the directions of

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40 Ibid., Sept. 19, Dec. 20 (editorials).
the Board as to the management and use of their mines. The Board at once appointed an Interdepartmental Committee, representing the Board of Trade, the Home Office, and the Admiralty, to advise with regard to administration, and to deal with outstanding questions as to the general rate of wages in the South Wales coalfield. Within a month it was decided to increase wages there by another 15 per cent.

On December 19, 1916, Mr. Lloyd George, explaining the policy of the new Government, declared that state control would be extended to the entire mining industry. English and Scottish as well as Welsh miners favoured this extension, and were confirmed in their attitude after the premier assured a deputation from the Miners' Federation that the measures contemplated would not be to the disadvantage of the workmen. By an Order in Council, February 22, 1917, the Government took possession of the remaining coal mines of the United Kingdom as from March 1, 1917. A new department was set up by the Board of Trade to administer the vast business, and Mr. Guy Calthrop became Controller of Coal Mines.

Immediately the new Controller undertook an investigation of the elements which entered into the market price of coal. There came to his notice instances of colliery companies charging London merchants prices which exceeded the limits prescribed by the Price of Coal Act. The intervention of factors, too, enhanced the

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41 Regulation of Nov. 29, 1916, D. R. M.
price. For these reasons many small merchants had had trouble in selling to the public at prices agreed upon. The Controller, therefore, at the beginning of April issued a notice requiring colliery companies to bring their prices into accord with the Price of Coal Act. Factors were instructed to revise their charges so that these in no case should exceed a provisional maximum of 1 s. 6 d. per ton between colliery and distributor, no matter through how many factors' hands the coal might pass. Pending further investigation, arrangements were made for a reduction of 1 s. per ton in the prices advertised to the London public.44

In September the Controller took advantage of the introduction of the Coal Transport Reorganization scheme 45 to cancel all contracts for coal for inland consumption and to review colliery companies' and wholesale merchants' prices. Relative to the latter the Wholesale Coal Prices Order of September 5 was issued, specifying the maximum profit which factors and wholesale merchants would henceforth be allowed. To the pit-prices and transportation costs they might add 3 d. per ton for coal to be used for locomotives; 6 d. for that needed for other railway purposes or in national factories; 9 d. for that consumed in making gas and electric supplies in Great Britain; 1 s. for that sold to retail merchants in Great Britain for resale by them from depot or wharf or railway siding to consumers or to hawkers and small

45 Cf., above p. 12.
dealers; 1 s. 3 d. for all other coal, including that sold for consumption in Ireland, except that 2 s. might be charged if the quantity was less than thirty tons and was sold from railway wagons to a consumer who had no rail or wharf accommodations but did provide cartage. In general the provisional maximum of 1 s. 6 d. set in the spring had proved sufficient.

As to maximum retail prices, no uniform schedule could be constructed. In different localities, colliery prices, transportation charges, local merchants’ cost of distribution, all varied. Maximum retail prices should, therefore, it was ordered, be fixed by local authorities — in England and Wales by borough, urban district, and rural district councils, in Scotland by county and town councils, in Ireland by urban district councils, town commissioners, and rural district councils. Retailers’ net profits were prescribed as those of wholesalers had been. The profit for selling coal delivered by a road vehicle from depot, wharf, or siding in lots of one ton or more should not exceed 1 s. a ton, and if delivered at dealers’ shops under certain circumstances should be 6 d. less than this charge; if the lot were less than one ton, the profit should not be at a rate of more than 2 s. a ton. A general rule for the guidance of local authorities was formulated. Investigation had shown that retail prices ought not to exceed those prevailing in the twelve months prior to the war by more than 7 s. 6 d. a ton, or 6 s. 6 d. if the district be near a colliery. If increases in price

did not exceed these limits, nothing should be done. If they did, the circumstances should be reported.\footnote{Ibid., Sept. 13, p. 8.}

From prescribing the profits of wholesalers and retailers, the Government turned to the mineowners and the miners. To the South Wales owners it proposed that their profits should be those of 1913, as were the profits of the railway companies; but the owners demurred and pointed to their payment of super-taxes and their subscriptions to the war loans.\footnote{L. T., Feb. 16, 1917.} At the annual July meeting of the shareholders of the Ebbw Vale Steel Iron and Coal Co. (Limited), a meeting at which a dividend of 15 per cent. less income tax was announced on the ordinary shares, one of the directors declared that the coal trade more than any other had "unhappily come under the blighting influence of governmental control." The Coal Controller had invited representatives of the various coalfields to meet him but deliberations had been held with all the secrecy of a Star Chamber, with all the ferocity of a Council of Ten. Recently he had sent to the chairman of each coal company the outline of a scheme under which 95 per cent. of the excess profits of the coal trade would be taken either by himself or by the Government. The speaker explained the trade's reliance upon "boom years." During the past twenty years he knew of no South Wales colliery of any standing which had "been able to pay a dividend of not less than 10 per cent. per annum," i.e., return to shareholders 1 s. per
ton on the output. "Which goes to show how unfair it is to single out a particular trade for harsh treatment." 49

As the speaker said, a Committee of the Mining Association of Great Britain had entered into negotiations with the Controller. Before an agreement was announced, however, certain owners, feeling that the Committee was going too far, took obstructive measures. Asking counsel's opinion on the question whether the Government had power to take over the mines without Act of Parliament, they were advised that it had not. Though contrary counsel could be quoted, the Government decided to proceed by statute. The autumn parliament was, accordingly, asked to pass a bill legalizing the Government's action and sanctioning the agreement which had practically been reached on July 20th between the Controller and the Committee. By this Coal Mines Control Agreement (Combination) Bill every mine-owner acquires the right to make a claim upon the Coal Controller, if during any accounting period his profits are less than they were during the standard period. If, for example, a colliery with an output of 10,000 tons during a standard or pre-war period declines in output to 9,000 tons during an accounting period of the same length, the owner becomes entitled to a profit on the basis of 9,250 tons. If, on the other hand, an owner's profits during the accounting period are in excess of his profits during the standard period, he is allowed to retain one-

49 Ibid., Jy. 26, p. 11.
fourth of the 20 per cent. of excess profits to which the Finance Act entitles him. The remaining 15 per cent. of excess profits goes to the creation of a fund to meet the payments due to owners whose profits have fallen off. If the fund should prove inadequate, Parliament will be asked to make good the deficiency. Although many mineowners demurred at the surrender of the 15 per cent. excess profits, the majority of them eventually approved of the Government's proposals.\textsuperscript{50} Thus a final adjustment between mineowners and the Government was reached only three years after a similar one had been made between the Government and the owners of the railways.

In the autumn of 1917 the Government also came to terms with the miners. In July, the Miners' Federation of Great Britain had held its annual conference at Glasgow. Addressing the representatives of 750,000 workmen, Mr. Robert Smillie, President of the Federation, referred to the Government's control of the mines. Since the mineowners were, it was understood, to be secured in their pre-war profits whatever the price of coal, the miners should be entitled to similar treatment. The question was at the time before the Coal Control Rates Board and might have to be raised in an acute form. The miners, having given the Government a pledge relative to non-stoppage of work, would assist the Board, always, of course, short of compulsory arbitration. Although the miners were able to force an increase of wages they were not anxious to do so during the present

\textsuperscript{50} L. T., Oct. 11, 1917, p. 6; Nov. 9, p. 10.
crisis. It would be better that the cost of living should come down than that wages should go up. After a long discussion the Conference decided to make a "general demand for an increase of 25 per cent. on present earnings over the whole Federation area in view of the high cost of living." Acquiescence in this demand would involve, it was computed, the addition of one-half million pounds to the weekly wage bill of British collieries.

A week after the Glasgow Conference ended, some 50,000 men of Lanarkshire held an "idle day" (August 2) as a protest against profiteering and the increased price of foodstuffs and other necessaries. At noon in thirteen centres, mass meetings called for strong and speedy government action. Before the end of the month the demand for an increase in wages was presented by the Executive Committee of the Miners' Federation to the Coal Controller. In the middle of September Mr. Calthrop offered an advance of 1 s. a day to persons over 18, and 6 d. a day to those under 18. This offer being declined, the proposed advances were raised to 1 s. 3 d. and 7½ d. respectively, but conditions were now attached. If the selling price of coal at the pit-head should be raised, this should not operate to secure a further wages advance under local conciliation board agreements, unless the increase warranted an advance greater than the present offer. If the cost of living should fall, there should be a corresponding reduction in

51 Ibid., Jy. 25, p. 3.
52 L. E., Jy. 28, 1917, p. 144.
the advance now to be made. This offer too was rejected, the Federation asking that the advance be 1s. 9d. a day for persons over 16, 10½ d. for those under 16. Next day, however, a compromise was accepted. Wages for workers over 16 and for those under 16 were to be increased by 1s. 6d. and by 9d. respectively. It was estimated that this advance would involve the payment of an additional £20 million annually in miners' wages.

Having increased the miners' wages, the Government had to seek compensation by raising the price of coal at the mines, an advance eventually to be paid by the consumer. It the middle of October it was announced that, to meet the new expenditure, the pit-head price of coal would be increased by 2s. 6d. a ton. Coal sent to the Allies would not be affected. At the same time the provisions of the Price of Coal Act of 1915 were modified. The "standard amount," i.e., the amount by which the pit-head price of coal may exceed the prices which prevailed during the twelve months preceding June 30, 1914, had been fixed by the Act at 4s. It was now, in the case of the mines of South Wales, Monmouthshire and the Forest of Dean, made 9s.; elsewhere it should be 6s. 6d. or such lower sum as might be fixed by the Controller. In this way the Government demonstrated

54 Ibid., Aug. 28, p. 3; Sept. 27, p. 3.
55 Ibid., Sept. 28, p. 5.
57 Ibid., Oct. 16, p. 7.
that increased expenditure for labour is necessarily reflected in increased charges to the consumer.

That the account of the activity into which the Government was led through its attempts to limit the price of coal and satisfy the demands of the miners might be consecutive, its endeavors since the summer of 1915 to conserve and increase the output of coal have been neglected. It will be remembered that at the very time of the South Wales strike in 1915 a great meeting had been planned to rouse enthusiasm on this subject. On July 29, Mr. Lloyd George addressed more than 2,000 representatives of the coal-mining industry in the London Opera House. To repair the decline of 3,000,000 tons a month in production, the Government suggested that masters and men in the various coalfields consider jointly whether they could suspend the Eight Hours Act and other rules and customs established for the protection of labour. The Government in its turn was ready to pledge itself to restore the Act, rules, and customs when the danger was past. Mr. Robert Smillie replied that the miners might agree to a suspension of the Act, might even assent to a reduced age limit for boy workers and to the further employment of women; but he hoped that these would be last steps and taken only if the need were vital. The conference passed a resolution that every effort should be made by owners and workmen to secure the greatest possible output of coal during the war.\(^5^8\)

\(^5^8\) A. R., 1915, p. 149.
The better to organize the distribution and exportation of coal, the Board of Trade in February, 1916, on the nomination of various coalowners' associations, appointed eleven District Coal and Coke Supplies Committees. Upon them in the future lay the responsibility for seeing that the resources of their districts were utilized and that requirements for important industries and for households were met. To consider their recommendations for economy and for the distribution of coal and coke a Central Committee was set up. Upon it were placed representatives of all the government departments interested in the coal question, and from it emanated decisions relative to the adjustment of home and foreign demand.

A direct outcome of this desire to direct the supply of coal into the most important channels were the Priority Regulations of June 27, 1916. These provided that the Admiralty or the Army Council or the Minister of Munitions, after consultation with the Board of Trade, might give directions as to the priority to be given in the execution of orders or contracts for supplies of coal or coke, with a view to securing precedence for orders or contracts in accordance with their national importance. To protect the contractor who had been directed to divert his coal in the national interest, the Board of Trade announced that such diversion would not expose him to legal measures if he was thereby forced to break a contract. During the few months preceding, contractors

59 2 D under the Defence of the Realm Act; Cf., B. T. J., Je. 29, 1916, p. 878.
60 B. T. J., Jy. 6, 1916, p. 31.
on the advice of the Central Coal and Coke Supplies Committee had been inserting in their contracts a clause making the contract null and void so far as it prevented the fulfilment of government requirements. This precaution now became unnecessary.

Meanwhile the Government was carefully taking stock of its resources and on September 1, 1916, some fifteen months after its first report, the Committee on output published a third report. The aspects of the earlier situation were reviewed in the light of added experience. Until the spring of 1916 the total output of British coal mines had continued to decrease, but during the few months preceding the report improvement had set in. Up to the end of March the net decrease in the number of persons employed at the mines was 14.8 per cent., one per cent. greater than a year earlier. Measures, however, had by that time been taken and were still to be taken to check this wastage. On November 8, 1915, the Home Secretary and the Director General of Recruiting had posted notices requiring any miner who enlisted to go back to work until called upon, his readiness to enlist being indicated by an armlet. Only a limited number of volunteers were accepted for tunnelling at the front. On June 1, 1916, more vigorous measures were taken. All miners in the home service units unfit for foreign service and such others as had entered the home units after August 1, 1915, were to be sent back to the mines. It was estimated that the number so returned would be

from 15,000 to 16,000 and that their labour would increase the output of coal by 4,000,000 tons annually. At any rate the output did expand slightly, though the total for the second year of the war was again far below the normal. The production during three successive years was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>August, 1913–July, 1914</td>
<td>281,135,000 tons</td>
</tr>
<tr>
<td>1914–1915</td>
<td>250,368,000 “</td>
</tr>
<tr>
<td>1915–1916</td>
<td>250,748,000 “</td>
</tr>
</tbody>
</table>

The Committee in its first report looked with hope toward the decrease of absenteeism, estimating that, if the 4.8 per cent. which was avoidable were eliminated, the output of coal would increase by 13,000,000 tons. The third report had to admit that no improvement was perceptible. In a final effort the Committee in April, 1916, had induced the representatives of the Miners' Federation and of the Mining Association of Great Britain to institute for every pit or colliery-group or district a committee to watch over and deal with absenteeism. On each committee the owners were usually represented by three members, the workmen by an unlimited number. By the end of August "Absentee" committees existed in all districts except North Staffordshire, West Yorkshire, and some collieries of South Wales. Should the persuasive power of these new bodies prove ineffective, the situation, reflected the Committee somewhat gloomily, would have to be reviewed.

More reassuring was the miners’ relinquishment of a part of their holidays. The response during the year to
the Committee's representation regarding Christmas, New Year's, Easter, and Whitsuntide had been hearty, and normal holidays had been reduced by 50 per cent. The Committee was of the opinion that a further reduction would be unwarranted and would increase absenteeism.

Although stoppage of recruiting and curtailment of holidays had done something to check the falling output, and the control of absenteeism might do more, the Committee could not disguise the ominousness of the export statistics. In 1913 Great Britain exported 73½ million tons of coal, in 1914 59 millions, in 1915 43½ millions. The third report ends with the same note as the first, only with increased emphasis. If legitimate requirements are fully to be met, economies must above all be practised in the consumption of coal.62

At a National Conference of representatives of the coal mining industry on October 25, 1916, Mr. Asquith and Mr. Herbert Samuel embodied in their speeches the findings of this report. The diminished output, the dangerously low exportation, the persistence of avoidable absenteeism were set forth. To remedy the last the Conference passed a resolution pledging its best effort.63

At the same time the National War Savings Committee, co-operating with the Board of Trade, appealed for economy. Since coal was of supreme military value and no substantial increase in output could be expected

62 Cd. 8345.
during the coming winter, the exigency could best be met by householders restricting their purchases to the minimum. Especially could those householders help whose consumption was large and to whom one or two fires less would mean little. By a saving of one-tenth in fires and lights, the quantity of coal available could be increased by three or four million tons.\(^6^4\)

The campaign for economy was continued in 1917. To reduce the consumption of electricity, the linking-up of large electrical systems of England and Scotland was recommended by a Lancashire and Cheshire Committee. Despite the cost, coal would be saved and the price of the electricity could be reduced by the municipalities concerned.\(^6^5\) It was suggested too that central power stations could be set up near the principal collieries.\(^6^6\) That water gas be substituted for or mixed with coal gas was recommended at the annual meeting of the Institution of Gas Engineers.\(^6^7\)

In June and July measures were taken to store up supplies in urban centres for the winter. Local authorities first in London and afterward in other municipalities were permitted to acquire stocks up to 1,000 tons for distribution to the poor. That access might be easy the stocks were placed in various depots, and a provision for sales of less than one hundredweight promised employ-

\(^6^5\) American Commerce Report, May 1, 1917.
\(^6^6\) Ibid.
\(^6^7\) M. G., Je. 6, 1917.
ment to women in tending small scales. In general, however, it was felt that distribution could best be made by the merchants, and householders whose means permitted them to store coal before winter were urged to place their orders with them. The merchants in turn did their best to meet this early demand, delivering more coal than during the corresponding period of 1915. Not only were efforts of this kind made to prevent difficulties of transportation in the winter, but the elaborate plan of the Controller, already described, looked toward moving coal along direct routes from producing areas to the nearest consuming centres. During May, June, and July the coal conveyed from the pit-mouth to London exceeded by 250,000 tons the quantity usually transported during these months, and a reserve of 70,000 tons was created. It was expected that the reserve would be increased to 200,000 tons by the end of September and would be maintained above this amount during the autumn and winter.

While much was thus done to ease the task of the railways, the Coal Controller on August 10 took the final step and issued an order to limit the consumption of coal. By this Household Coal Distribution Order, 1917, effective August 17, London, the metropolitan area, and a number of districts outside were rationed. After October 1 no one might buy for a dwelling house more than

68 L. T., Je. 26, 1917, p. 3; Jy. 14, p. 3.
69 Cf., above p. 12.
70 L. T., Aug. 17, 1917, p. 3.
2 cwt. of coal a week for four rooms, more than 3 cwt. a week for five or six rooms, more than one ton monthly for seven rooms, more than 23 cwt. for eight rooms, more than 27 cwt. for nine or ten rooms, more than a ton and one-half for eleven or twelve rooms, more than two tons for thirteen or fifteen rooms, more than two and one-half tons for fifteen or more rooms. This was to be the allowance from October 1 to March 31; from April 1 to September 1, it would be reduced by one-half. Coke might be substituted for coal in the ratio of four to three; the anthracite allowance was two-thirds that of other coal. An additional allotment not exceeding 2 cwt. a week might be granted a household in which through the presence of aged or invalid persons, children, or lodgers hardship would otherwise arise.

To ensure this distribution, every metropolitan dealer in coal was required to take out a licence not later than September 20 registering the place where he dealt out coal. Local authorities were instructed to appoint local coal overseers who should report to the Controller on the facilities for storing and delivering coal within their respective districts and should provide for the safe custody of any reserve stocks. No person might purchase more than 2 cwt. in any week without the consent of the local overseer, nor from October 1 to March 31 might he buy more than two tons at any one time. During the same six months not more than one ton might be delivered monthly unless the registered merchant be in a position to fill all orders up to this amount during the
month or unless the customer present a priority order. Lastly, the Controller might from time to time determine the maximum price to consumers.\textsuperscript{71} The motive idea of the scheme, so cumbersome in the phrasing, was to guarantee to each household of seven rooms or more at least one ton of coal a month and to smaller households a correspondingly smaller amount. Supervision was provided for and the Controller intimated that prices should not pass a certain point without his intervention.

Immediately protest against the new scheme was made by the London Coal Merchants' Committee. At least a month beyond October 1 would be needed to fill the numerous orders now on hand — unless these were to be swept into the waste basket. If as much coal could be brought to London as the Controller indicated, the regulations were unnecessary. The scheme would involve the expenditure of additional money and labour. Tickets would require clerical work, and telephone orders, convenient as they are, would cease. The carrying of a reserve equivalent to five weeks' sales would tax merchants' docking facilities and leave them in the spring with a stock depreciated through exposure. Delivery of coal in rotation would bring difficulties of carriage. In his arrangements the Controller should have consulted the Merchants' Committee, a group of experienced men, and should have appointed them to carry out the scheme in the districts which should have been formed.\textsuperscript{72}

\textsuperscript{71} L. T., Aug. 13, 1917, p. 4.
\textsuperscript{72} L. T., Aug. 18, 1917, p. 8; Sept. 1, p. 2.
One concession the Controller made. The reserve necessarily kept was reduced to an amount three times the largest week's sales of the current year. On the other hand, it was stipulated that the reserve must be completed not later than November 30 and that, until it was assured, 25 per cent. of the coal received each week must be carried in stock.73

By these regulations the Coal Controller took a final step in completing the system of state control. In possession of the mines and of the railways which carry their product, the actual employer of all labour concerned, the supervisor of all factors and merchants, the regulator of prices at every stage from producer to consumer, the Government now, in the populous Metropolitan area, became practically a distributor, telling citizens how much coal they might buy and under what conditions they might buy it. With reluctance it had entered upon these heavy administrative tasks. From the summer of 1915, when a settlement of wages and prices first became imperative, to the autumn of 1916, when the taking over of the mines seemed advisable, it had been content with general and occasional regulations. During 1917, however, with the creation of a Coal Controller, wages, profits, prices, transportation, distribution had been closely supervised, and at the end of the year little was required to render the control as complete as a Socialist would desire.

73 Ibid., Oct. 15.
WOOL AND WOOLLENS

In its negotiations regarding the railways, the coal mines, and the production of iron, steel, and munitions, the Government could for the most part neglect the outer world. The questions involved were largely domestic and the Government was master in its own house. To each, of course, there was a foreign side. The railways carried imported products from the ports inland, and the condition of foreign trade was reflected in the congestion of the docks; the decline in the output and exportation of coal created a situation serious for Allied buyers and for the British balance of trade; and the iron ore mined in England was insufficient to meet the demand, making necessary reliance upon Spanish ores. But apart from this last dependence, the situation in foreign countries did not obtrude itself to interfere with the Government's plans.

Very different are the conditions now to be considered. For in regard to certain commodities Great Britain is dependent upon foreign sources of supply. The home output of wool and hides is of course considerable, but it is smaller than the imported product. Foodstuffs have to be imported in different proportions—meat considerably, wheat and flour extensively, sugar entirely. Cotton and tobacco are got only from abroad. Government control of any of these commodities involves, therefore, the
control of both the home and the imported supply, or of the latter in case this is the only one. If it be a question of price fixing, one source of supply may be easily dealt with, the other may give much trouble. If there be only the imported product, the Government may be able to take this readily into its own hands.

Another feature of situations of this kind is the need of maintaining the supply of the commodity in question. Since the home product is at best insufficient, the foreign supply will always be the Government's chief concern. If in the foreign supply there be for some reason a world shortage, the state may have to enter the world market as purchaser. Such crises have arisen relative to wool, hides, and many articles of food. If, on the other hand, the supply is comparatively abundant or the commodity relatively unessential, the state may safely leave importation and purchase in private hands. So it has done with cotton and tobacco, commodities which have been affected by government control only in their consumption.

From the beginning of the war the Government has been concerned to maintain in the country an adequate supply of wool. Not only was this in order that civilian needs might be met but also that the men of the army and navy might be clothed. In the spring of 1916 the latter responsibility brought the Government face to face with rising costs, and in the interests of the Exchequer it began to fix prices. The double endeavour to secure adequate supplies and to keep them at a reasonable price has led to a wide-reaching control of the woollen industry.
To maintain supplies during the first year and a half of the war was not difficult, and up to the beginning of 1916 the supply of raw wool was in general abundant. The reasons for this lay in world conditions. At the beginning of the war, the cessation of a large part of the Continental demand for wool left on the market a surplus, much of which was attracted to the United Kingdom. Nine hundred million pounds were retained in the country during 1915, although the average annual pre-war consumption had been only five hundred and fifty million pounds. It would seem that the Government need not have troubled itself to conserve supplies, but for a time extreme caution was shown.

At the outbreak of the war the woollen trade for a short time suffered from the wide-spread paralysis of industry. The September London sales, at which some 120,000 bales of wool are normally disposed of, had to be postponed for a week and then only 50,000 bales were offered. The market, however, proved unexpectedly strong; 43,000 bales were sold and prices maintained. Soon government orders began to come in and the crisis was past. In three months the demand for wool rose 20 per cent. Steadily government needs increased until in 1917 they closely approached the total pre-war consumption of the United Kingdom. In March of that

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1 Cd. 8447, p. 13. Memorandum on War Office Contracts. A paper handed in to the Committee on Public Accounts by Mr. N. F. Wintour, Director of Army Contracts, Je. 7, 1917, p. 13. From this excellent report much of the following account is drawn.

year Mr. Forster told the Commons that the army annually requires 105,000,000 yards of khaki and 115,000,000 yards of flannel—"enough to go four and a half times round the earth at the equator."  

Foreseeing its requirements, the Government, despite the large quantities of wool coming into the country in the autumn of 1914, put restrictions upon the export of certain kinds of wool and cloth. Licences from the Board of Trade were required for any exportation. If a cloth were unsuitable for army purposes, the licence was readily granted; if suitable, a licence was refused unless the cloth were for the military purposes of the Dominions. As for wool, the exportation of merino from England or the Colonies was to a considerable extent permitted, but not that of crossbred, more suitable for making army cloths, except that at times this was allowed to go to the Allies. Notwithstanding the partial embargo, the home market during the winter was ill-supplied owing in a measure to delays in railway transportation. At the same time the exportation of Australian wool to America was forbidden by the Australian Government, there being a suspicion that, thus supplied, America was managing to get a part of her own clip to Germany. With the inclusion of wool in the list of contraband in March, this situation cleared up and American buying in the Colonies was again permitted.

3 Cd. 8447, p. 13; P. D. C., 1917, XC, 2192.


5 B. T. R., Feb. 1, 1915, p. 82.

6 Ibid., Mar. 1, p. 145; Apr. 1, p. 211.
In the summer of 1915 the Government, having accumulated extensive stocks, could afford to relax restrictions upon exports. The country had even become embarrassed by its surplus supply both financially and in the matter of storage. Merinos were, therefore, exported still more freely; crossbreds, already going to France, were released for other Allies and for Norway and Denmark, an embargo on 125,000 bales of them being raised; East India wool might go to the United States. Crossbred tops were sent more liberally than before to the Allies and, under satisfactory guarantees, to neutrals. The year ended with handsome profits for home manufacturers, even the fancy houses prospering, while carpet makers shared in orders for blankets and military webbings.

Nineteen hundred sixteen brought with it a shortage in the world’s supply of wool, the effects of which were to be far-reaching. For a time the stocks carried over in England from 1915 obscured the situation, but later it became apparent that the world’s production had fallen off 20 per cent., or 300 million pounds. A serious drought in Australia during 1914-15 had reduced sheep flocks from 82 million head to 69 million; cattle raising and wheat growing were successfully competing with the production of wool in South America. To intensify the scarcity in Europe, Japanese buying increased and the

7 Ibid., Sept. 1, p. 174; Oct. 1, p. 212.
United States began to acquire wool on an unprecedented scale. Just before the war American import duties on wool had been removed and war prosperity now gave increased purchasing power. In the 1915–16 season, the United States’ purchases in Colonial wool markets were nearly ten times greater than the average purchases of the three years preceding the war, amounting to almost 20 per cent. of the world’s clip. It was estimated, too, that during 1914–15 and 1915–16, 100 million pounds of wool were purchased in South American markets on German account for post-war trade. There was a feeling in the British wool trade that, although the consuming power of the United States was great, large purchases there had been speculative, made in the hope of reselling to Germany after the war. The following table shows the changes in production, consumption, and price which occurred during three years of the war. The Australasian and Cape production is about 70 per cent. of the world’s exportable wool.

By the beginning of 1916 prices in Great Britain reflected the coming scarcity. According to the quality

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10 Cd. 8447, p. 13.
of the wool the advance was from 40 per cent. to 100 per cent. It was stimulated by the purchases of merchants and manufacturers anxious to protect themselves against the persistent rise, and by the activity of speculators outside the wool trade but attracted to it by the profits realized. British and Allied demand for the finished product contributed. The increased prosperity of the working classes made them better buyers; the War Office was placing very large orders; and for a time the Allies competed with the Government. The last factor was at length eliminated by the placing of all Allied orders through the Army Contracts Department, but the other factors remained.

The Government now became concerned for its own purchases. Restrictions were again placed upon exports. Although limited quantities of merino wool were for a time allowed to go to European neutrals,\textsuperscript{14} no licences whatever for America could be got in London. A month or two later all neutral purchases, first of crossbreds then of merinos, were barred.\textsuperscript{15}

Under normal conditions the Government had preferred to do its buying through competitive tendering; but its rivalry with the civilian and export trades was making this impossible save at exorbitant prices. Even when manufacturers were willing to forego high profits on war work, their competitors in the civil trade could offer higher wages to labour and could outbid them for

\textsuperscript{14} B. T. J., Apr. 13, 1916, p. 82.
\textsuperscript{15} L. E., Feb. 17, 1917, p. 312.
raw material. The Government’s first plan under these circumstances was to requisition the output of factories, paying the manufacturer the cost of production and a reasonable profit. An Order in Council of February 15, 1916, bestowed upon the War Office power to do this, together with authority to require manufacturers to furnish information as to output, cost of production, and profit. A census of machinery, labour, productive capacity, and stocks of raw material was accordingly taken. World movements of supplies and prices were investigated. War Office accountants examined the books of typical firms to ascertain “costings.” Committees from sections of the trade and trade experts appointed to be officers of the Army Contracts Department worked over conversion costs at the various stages of manufacture.

The results were unsatisfactory. Owing to the excited state of the raw wool market and the varying prices at which manufacturers had purchased raw material, the market prices of the day had to be taken as the basis for costings. With a rising market the advantage was always with the manufacturers, always against the Department. To attain a satisfactory system of costings, control of the raw material was essential; and the necessity of securing adequate supplies made it desirable as well.\(^{16}\)

For these reasons, the Department in May, 1916, decided to take over the clip of the United Kingdom, the wool being crossbred and in the main suitable for military purposes. On June 8 dealings in wool grown on sheep

\(^{16}\) Cd. 8447, p. 13.
in the United Kingdom during the season of 1916 were forbidden.\textsuperscript{17} The prices to be paid to British growers were, after much consideration, agreed upon as those ruling in July, 1914, increased by 35 per cent., an estimate of the increased cost of production. The Government had at first offered an increase of 30 per cent. but the farmers stood out for the higher figure.\textsuperscript{18} Throughout Great Britain the normal machinery of the trade was, as far as possible, utilized in carrying out the transaction. Merchants, authorized by the Department and paid in proportion to the weight of the wool which they handled, did the buying, supervised in each of several districts by experienced buyers who had been appointed Deputy Executive Officers. The wool thus acquired was taken to a huge clearing house at Bradford, where it was graded and finally valued. In Ireland the established dealers, who buy from farmers, store keepers, and others, were asked to make the purchase on commission, and a fixed schedule of prices was drawn up for them by the Government. The total cost of the 1916 clip was estimated at from £7,500,000 to £8,000,000.\textsuperscript{19}

Considerable dissatisfaction was expressed in Parliament in November at the methods adopted in taking over the wool. Mr. Prothero, soon to be Minister of Agriculture, declared, "You could not have had that purchase carried out in a way that would have given more dis-

\textsuperscript{17} B. T. J., Je. 15, 1916, p. 730.
\textsuperscript{18} B. T. R., Aug. 1, 1916, p. 77.
\textsuperscript{19} Cd. 8447, p. 14; B. T. J., Jy. 27, 1916, p. 233.
content to the agricultural community.” In two respects there had been a loss to the nation. The wool was left in places where it deteriorated in quality; and because it was not paid for promptly farmers had been obliged to sell their cattle before the latter were fit for the butcher. Mr. Bentham compared the dilatoriness of the Government with the promptness always shown by the private buyer, who paid on the spot. Sir John Spear asserted that the prices received would not be really 35 per cent. in advance of those of June and July, 1914. It had been understood that the wool would be taken in bulk as had always been the case; but a system of grading was introduced which made marked differences. A Devon farmer had proved that he received £14 less than the price promised by the Government.  

Whether satisfactorily or not, the clip of the United Kingdom was appropriated by the end of the year; but this clip constituted only one-ninth of the British consumption of wool in 1915. It was highly desirable, therefore, that action be taken to secure the Australasian clip, which amounted to one-half of the world’s exportable crossbred and merino. During the season of 1915–16 the Australasian Governments, at the request of the home Government, had placed an embargo on the exportation of wool to other than Allied countries. Despite this America had acquired almost 25 per cent. of their clip, the embargo proving intermittent. To assure itself of supplies, the home Government now proposed to the two

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20 P. D. C., 1916, LXXXVII, 878, 870–871; 932, 1232.
Colonial Governments the purchase of all their crossbred wool in 1916–17, about two-fifths of their clip. To this proposal they answered that it would be impracticable to discriminate between growers and users of different kinds of wool and offered to sell the entire clip. After considerable discussion, the home Government in November, 1916, accepted the offer. A proposal to purchase the South African clip also was discussed but rejected, since the quality of the wool blended less well for army purposes. As it was, the Government’s action was adversely criticized by some sections of the trade and declared unnecessary.

Before the purchase was arranged, one-fourth of the Australasian clip had been sold at public auction. So far as these sales were on British or Allied account, the wool was allowed to go forward. As for the remainder of the clip, about 500 million pounds, the Governments of Australia and New Zealand were to act as sole agents of the British Government. Wool required by local manufacturers was unaffected. The prices to be paid were 55 per cent. above the average 1913–14 prices realized by growers in Australia, and worked out at about 15½ d. per pound greasy wool. Should the home Government realize any profit on its sales, this was to be shared with the Colonial Governments. The cost was appraised at £22 millions for the balance of the Australian clip, at £13 millions for the clip of New Zealand.21 Although the South African clip was not purchased, an Order in

Council of April, 1917, announced that any imported wool must first be offered for sale to the Director of Army Contracts. Thus, in one way or another, most of the raw wool of the Empire, or about 70 per cent. of the world's exportable supply, came under state control.

The distribution of the wool acquired by the Government now became a matter of great concern to the trade. The British clip had been apportioned through selected firms of wool merchants to manufacturers who supplied the Government's military needs. Any surplus not needed by Great Britain or the Allies was sold by auction at unreported prices. Brokers had suffered somewhat, but 1916 had not been an unprofitable year for manufacturers. New trade rules, such as shorter credit periods and a standard measure (38 inches to the yard), had been adopted.\textsuperscript{22} Above all, the careful placing of Government orders, as well as large ones from Russia, in such way as to keep factories steadily running had conduced to prosperity.\textsuperscript{23} There were, to be sure, complaints from worsted manufacturers that the prices allowed them on Government purchases could be accepted only through patriotic motives; but fine worsteds were in demand from neutral countries, which were undeterred by high prices.\textsuperscript{24}

In December, 1916, however, consternation ruled among Bradford and London brokers; for it was announced that the Government would suspend the London auction sales of wool. A deputation of the trade waited

\textsuperscript{23} M. G., Nov. 22, 1916, p. 9.
\textsuperscript{24} Ibid., Dec. 13, p. 9.
Upon the Financial Secretary of the War Office to urge that the sales be continued. They were told that the Government would deliver the wool for military purposes directly to users and that the remainder would not necessarily be sold at auction. During the last twenty years wool so sold had decreased from 70 per cent. to 30 per cent. of that imported; most wool now went directly from the Colonies to the manufacturers.\(^{25}\) After consultation with experts, the Government decided to send such wool as could be easily graded directly to the contractors, and to have such as was suitable for top-making combed into tops on commission for the Department and sold in that form at fixed prices. Since it was desired to exercise priority as to the use of all wool, sale to the highest bidder at auction, regardless of the use which he might make of his purchase, was impossible. Hence, although it was arranged that distribution should in the future as in the past take place in the public auction rooms, no bidding was allowed. Wool was allotted by the London Wool Selling Brokers' Association at fixed prices to approved users in accordance with their requirements.\(^{26}\) As to priority, after the Government's own contractors, preference was given to manufacturers for the export trade. In 1916 this had been 10 per cent. of the country's total exportation of manufactured products and had rendered great service in helping pay for imports.\(^{27}\)

\(^{25}\) M. G., Nov. 28, 1916, p. 9; Dec. 29.

\(^{26}\) Cd. 8447, p. 15.

\(^{27}\) M. G., Dec. 29, 1916.
The prices at which wool was to be sold by the Government were fixed at two levels and the situation created is as follows. If a Department contract is in question, the price is based on the cost, plus a margin for administrative and other charges. The Allies, too, may buy wool for military purposes at this price on the understanding that any economy realized will accrue to the Government concerned. If the wool sold be for civilian use, the price is that of January, 1917, originally 20 per cent. above the military-issue price. The divergence arises from the fact that the Government in initiating its sales in January would have disorganized the trade had it sold at 20 per cent. below market prices. Merchants and manufacturers had already made purchases on the assumption that there would be no interference with the civilian trade. It was best for the Department to take a profit.

The determination of the prices which should be paid to manufacturers for Government work was a more complicated matter. In the spring of 1916 the prices had baffled accountants, because the cost of the raw material was unstable. Under the new conditions technical experts of the Department again set to work on conversion costs, i.e., the costs of converting wool from one stage of manufacture to the next. Difficulties in ascertaining these arise from the shrinkage or wastage of wool as it is changed into finished cloth and from the number of processes which it undergoes, the profit on each conversion being extremely small. Despite the difficulties, success
now attended the Department's efforts. In the case, for example, of serge drab-mixture cloth, conversion costs and shrinkage were arrived at which reduced a competitive price of 8 s. 3 d. per yard to 7 s. The saving was £20,000 weekly. Conversion costs and shrinkage once ascertained, the manufacturer was allowed a price based on these, on the cost of the raw wool, and on pre-war rates of profit, which averaged about 5 per cent. On this basis the Department estimated that its yearly saving on orders for cloth and hosiery would be about £3,700,000.\(^{28}\)

Other advantages secured by the Government's purchase and sale of all native and Australasian wool—at fixed prices can be less exactly stated but are unquestionable. In the first place, manufacturers in the civil trade were benefited by getting wool at a steady price for a certain period ahead and at one which has been 5 per cent. or 10 per cent. below more recent world market prices. How much the price of wool would have risen in 1917 without the Government's action is of course hypothetical. During the previous year crossbreds had gone up 30 per cent., merinos 50 per cent. If it be assumed that the further advance would have been no more than 10 per cent., the Government's saving on that part of the Colonial clip required for military purposes was £2,500,000.

Further economies have accrued to the Government and, in a measure, to the community, from the technical knowledge of expert advisors. In the spring of 1916

\(^{28}\)Cd. 8447, p. 16.
the salvage of old uniforms began, and within a year 5,000 tons of worn khaki were turned into shoddy. In November the Department, taking note of the remnants of cloths issued for the making of shirts and of dress clothing, announced that it would take possession of them henceforth. By the skilful use of wool waste, noils, and rags it appeared that cloth could be made of as great durability, warmth, and strength as similar cloths made entirely from wool and that it could be produced at a greatly reduced cost. Experts with special knowledge and experience in blending wool and wool-wastes became officers of the Department and thenceforth instructed manufacturers in the new art. Particularly happy was the application of the process to the making of greatcoating cloth. Where 10 s. or 10 s. 6 d. per yard had been paid for this material, its cost was now reduced to 9 s. Manufacturers of it were given full information of the particular blend secured and the entire trade profited by the innovation.

In the summer of 1917 there was experimenting in the use of smaller spun worsted yarns and of mungo. Drab serge, it was proposed, should be made either out of 2-21's or 2-24's with the woollen weft of 50 per cent. pure wool and 50 per cent. mungo. The cloth produced would be wearable and would be of excellent heat-retaining quality. Indeed, Bradford cords made as officers' cloths independently of the War Office already contained a far larger percentage

30 Cd. 8447, pp. 15, 16.
of mungo than the Bradford cords required by the War Office.\textsuperscript{31} Accordingly, the trade was ready to support the Government in the utilization of substitutes for wool, the more readily as such action promised a great expansion in output.

The Government's success in administering the woollen industry necessarily depends in large measure upon the Committees, representative of the trade or of the districts concerned, which have been set up to assist it. Of these there are several. In the matter of the purchase of the home clip advice is given by a Central Committee on the Purchase of British Wool and complaints from farmers come in through District Committees.\textsuperscript{32} Other District Committees, twelve in number, allocate contracts among manufacturers, and their chairmen compose a Central Advisory Committee on the Allocation of Contracts. The contracts which they apportion are first passed upon by a War Department Cloth Office, set up at Bradford and comprising a large number of business men from the trade, each a specialist in his department. The Bradford Office is in close touch with the Contracts' Department in London, and through it the latter has attempted to introduce self-government in the allocation of contracts. Beside these administrative advisory bodies there is another which may be called legislative, the Central Wool Advisory Committee. Resulting from an amalgamation of several small committees which advised the Govern-

\textsuperscript{31} L. E., Aug. 4, 1917, p. 194.
ment in December, 1916, when the purchase of the Australasian clip and the distribution of it were under consideration, this body gives advice on questions of general policy. On it are representatives of all sections of the trade from importing wool houses to exporting cloth merchants, and labour is also represented. In the spring of 1917, it made important recommendations, the adoption of which embarked the Government on a new policy leading in turn to the creation of a new board.

The new policy, and one not confined to the woollen industry, was that of very carefully conserving supplies, even to the extent of rationing manufacturers or consumers. It was induced by the serious state of the nation's shipping, and it was to reach to many commodities which are imported in large quantities. On April 19, 1917, the Central Wool Advisory Committee recommended to the Government that it be applied to the manufacture of woollens and worsteds. Owing to the existing wool situation and the heavy military needs, the Committee explained, there should be accumulated a considerable reserve of wool. To achieve this and, as far as possible, to maintain the export trade, production for home consumption should be curtailed. This could best be brought about by applying the priority scheme already worked out by a committee of manufacturers and merchants appointed by the Army Council. Substitutes for wool should, as far as possible, be used in the civil trade. As precautionary measures, no distribution of Govern-

28 Cd. 8447, pp. 15, 23.
ment wool or tops should take place until after the end of May; manufacturers and spinners should be warned that their use of present stocks would affect future allocations; and drastic action should be threatened if manufacturers and traders attempted to exploit the curtailment by increasing the prices of materials in stock.\(^{34}\)

These recommendations meant the pushing of the priority scheme until manufacturers were rationed in their production for home civilian needs. The scheme in question, first applied to munitions of war,\(^ {35}\) was extended in full measure to woollen and worsted goods by an order of the Army Council on April 14, 1917.\(^ {36}\) In this order it was provided that all manufacturers of such goods should give priority to contracts according to a rating of these as of Class A, Class B, or Class C. Class A comprised all military orders of Great Britain or the Allies; Class B, orders for goods destined for export and other orders approved by the Director of Army Contracts as being for work of national importance; Class C, orders looking toward the supply of civilian needs.\(^ {37}\)

A deferring of orders of Class C by manufacturers until orders of the other two classes were filled would have been the normal outcome of this scheme. So it had been with priority in the products of iron and steel.

\(^{34}\) B. T. J., Apr. 26, 1917.

\(^{35}\) Cf., above p. 43.

\(^{36}\) In Oct., 1916, the Army Council had ordered that in all factories, the business of which was wholly or partly the making of worsted or woollen goods, priority should be given to Government orders; B. T. J., Oct. 26, 1916, p. 269.

Actual rejection or disregard of orders of Class C might, however, be necessitated if the manufacturer were obliged to curtail the working hours of his factory or if he should have only a limited amount of raw material to work upon. In the woollen industry the Government created both these conditions.

Again it was the Central Advisory Committee that on May 17, after further consideration of the situation, recommended the measures embodied in an order of the Army Council on May 24. To avoid an almost inevitable drastic curtailment of hours of employment in the winter months, the order provided for the immediate reduction of weekly hours by 20 per cent., or from 55½ to 45. It further provided that another group of committees, six District Priority Committees with a Central Committee in London, should lay down the conditions under which crossbred wool or tops might be used after June 11 and merino wool or tops after July 2, and should in addition ration out to manufacturers, spinners, and others in their respective districts such supplies of wool as might be available for civilian consumption.38

Curtailment of supplies of raw material and limitation of production were thus decreed. The Yorkshire Post estimated that, while one-half of the machinery in the wool-using trades would be engaged in military work, two-thirds of the other half of it, devoted to the civilian trade at home or abroad, would become idle.39 No

39 U. S. Commerce Reports, Jy. 3, 1917.
fears, however, were entertained of an immediate shortage in civilian cloths, with which many of the larger houses were well stocked. But when spinners got from the District Priority Committees their June, July, and August allotments for the civilian trade, many of them found that in one month they had consumed more than the allotment gave them for three. It was pointed out that the allocation, which in general was about 60 per cent. of the amount applied for, was in many cases insufficient to enable the machinery to run the full 45 hours to which working time had been reduced. Rather than stop it spinners had used what stocks they possessed regardless of whether this was authorized or not. To appease discontent Mr. H. W. Forster, M. P., Financial Secretary to the War Office, addressed a large meeting of traders at Bradford, giving the statistics of stocks of wool on hand and of prospective imports upon which the Department had based its restrictive policy. At once the accuracy of the figures was challenged and the outcome of the discussion was the appointment of a Committee to confer with the Department regarding them.

Meanwhile the Government's administration was further criticized. A newly formed Wool Textile Association of the United Kingdom, through its executive committee, demanded that the wool-control scheme in matters of policy and administration be taken out of the hands of officials and be turned over to a board of practical men.

40 M. G., May 9, 1917, p. 7; Weekly Record, May 1.
42 L. E., Jy. 28, 1917, p. 145.
like the boards set up for the cotton and shipping trades.\(^4^3\) To this demand the Department in a measure acceded. Although it would make no change in Committees dealing with the purchase and distribution of raw wool, retaining in particular the Central Wool Advisory Committee, and although it would reserve for itself the ultimate decision regarding prices, the necessary reserve of wool, and the allocation of Government contracts, it proposed to replace the Priority Committees by a Board of Control sitting at Bradford. This Board, upon which an equal number of representatives of employers and of employés should sit beside certain representatives of the Department under the chairmanship of Mr. Charles Sykes, would deal with questions affecting the manufacture of woollens and worsteds and would have a free hand regarding civilian production. Mr. Forster claimed that the scheme embodied the essence of partnership and was an honest attempt to give the trade the fullest measure of control compatible with the ultimate responsibility of which the Government could not divest itself.\(^4^4\)

In some quarters the proposed Board was regarded with satisfaction, but the Executive Committee of the Wool Textile Association found it inadequate. At a meeting in London this Committee requested that the Board be given control of the entire industry from the raw material to the finished product, that business men representative of all branches of the trade throughout

\(^{4^3}\) Ibid.

\(^{4^4}\) Ibid., Aug. 11, p. 231.
the United Kingdom constitute not less than one-half
its membership, and that it be nominated by the trade and
elect its own chairman.\textsuperscript{45} Such proposals looked toward
a reduced representation of the Department and of la-
bour upon the Board, while they greatly increased its
functions.

For a month negotiations went on, until Mr. Forster
strongly urged a settlement on the ground that govern-
ment supplies were low and the situation serious.\textsuperscript{46} At
length in September the constitution and functions of the
new "Board of Control of the Woollen and Worsted In-
dustries" were definitely announced. The Board should
comprise not more than eleven men nominated by the
Army Council, of whom at least seven should be experts
responsible for placing orders for Government supplies,
not more than eleven representatives of employers, and
not more than eleven representatives of employés; the
chairman of the Board should be the Director of Wool
Textile Production. Certain functions were withheld.
The Army Council was still to determine the amount of
raw wool to be maintained as a reserve; the War Depart-
ment was still to make all contracts for Government sup-
plies; the Army Contracts Department was still to be
responsible for all dealings in raw wool up to and includ-
ing the making of tops. The new Board was designed
particularly to take over the work of the existing Priority
Committees. Officials of the War Department were to

\textsuperscript{45} Ibid.
\textsuperscript{46} L. T., Sept. 12, 1917, p. 3.
ask its advice in allocating Government contracts and its chairman, the Director of Wool Textile Production, was to keep it informed monthly of the total quantity of wool required for such contracts. If at any time there should be, for unavoidable reasons, a deficiency in the wool put through the machines for government purposes, the Chairman should release as an additional civilian supply a quantity sufficient to make up the deficiency. The Director of Raw Materials should from time to time furnish statistics as to stocks and information as to the exportation of wools, noils, tops, and yarn. Thus informed and fortified, the Board was henceforth to allocate to districts, trades, groups, and firms the quantity of wool and tops available for the civilian trade. In so doing it was to have particular regard to securing the most efficient execution of government orders and to employing to the greatest advantage the labour, machinery, and skill engaged in the industry, keeping in full use as much machinery as possible.\[47\] The scheme was much as at first outlined, although the provision regarding the release of additional supplies was a concession. Agreeing to give the new arrangements a trial, the trade promptly elected its representatives and the Board at once went to work. A better feeling quickly prevailed in wool manufacturing centres and there was hope that, with longer hours allowed for labour and a larger allocation of raw wool to the civilian trade, business might prosper.

An increase in hours was announced before the Board

\[47\] Ibid., Sept. 20, p. 3.
was finally constituted. In August the Central Wool Advisory Committee made known that from September 1 the weekly hours of work would be increased from 45 to 50. Such increase tended to allay discontent on the part of employés, who at a meeting of the National Association of the Unions of the Wool Textile Trade in July had considered the advisability of agitating for further advances in wages and had expressed distrust of the Commission then sitting in Leeds to inquire into industrial unrest. The longer working time, too, encouraged the belief that the Government would issue wool and tops in sufficient quantities to keep the machinery employed for the full 50 hours per week. Merino tops, it became clear, would be more plentiful, although in the case of crossbreds the demand for military purposes might still for some time restrict the supply available for civilian needs.

Meanwhile the Government continued and extended its policy of purchasing the domestic and Colonial wool clips. Before summer it had completed arrangements for the purchase of the 1917 clip of the United Kingdom, the prices being 50 per cent. above the 1914 level. Collection and payment this time were far more prompt than in 1916 and growers expressed their satisfaction. In the middle of July, the Chancellor of the Exchequer explained in Parliament that the Australasian clip of

48 L. T., Jy. 9, 1917, p. 5; Aug. 31, p. 11.
49 Ibid., Aug. 14, p. 11.
50 Ibid., Sept. 25, p. 13.
1917 had, on the authority of the War Cabinet, been bought for £40,000,000.\textsuperscript{52} This sum represented the same price as that paid in the preceding year, a 55 per cent. advance on the prices of 1913-14, the total payment being greater because the entire clip of Australia was now secured. In August it became known that the Government had offered to buy the South African clip of wool and mohair on the same terms as the Australasian clips. Considerable opposition to the purchase, however, arose in South Africa and the matter became a somewhat acrimonious political issue.

With the purchases of 1917 and with the establishment of the Board at Bradford, state control of the woollen industry assumed pretty definite shape. After imposing, during a year and a half of the war, restrictions merely upon the export trade, the Government in the spring of 1916 had been forced to protect itself against rising prices. At first it attempted in its purchases to determine a suitable price for the finished product by investigating costs. Quickly confronted with the varying price of raw wool, it saw the necessity of stabilizing this price by becoming itself the sole purchaser. Thereupon it acquired the home clip. Since, however, this was a relatively small factor in the market and there was danger that the Colonial clips might not be fully available at suitable prices in any other way, the Government took the decisive step of purchasing the Australasian output of 1916. It stipulated further that any

\textsuperscript{52} L. T., Oct. 4, 1917, p. 5.
other wool imported should first be offered for sale to the Director of Army Contracts. Thus in practical control of the supply of raw wool in the United Kingdom, the Government was faced with the problem of distribution. Nor was it loath to undertake this, since, in so doing, it could effect essential economies in consumption. Acting through various committees, it put into force a priority scheme designed to stimulate manufacture for the military and the export demand but to discourage the making of civilian products for home consumption. Practically, this involved a rationing of the trade and a limitation of the working hours of the machinery. Discontent with governmental administration and restrictions found expression in the summer of 1917, but much of this was due to a desire on the part of the trade to acquire for itself the functions which the state had assumed. Certain concessions, but not all those desired, the Government made. It persisted in retaining for itself and for labour adequate representation on the new Board which was to take charge of distribution, and it refused to yield the ultimate decision of questions of price, of the necessary reserve of wool, and of the placing of its own contracts. It continued its policy of state purchase by acquiring the 1917 clips of the United Kingdom, of Australasia, and of South Africa. Its own savings were large in view of what its expenditure might have been had the price of raw wool been unrestricted; and these economies were extended by the introduction of substitutes for wool proposed by expert
advisors. A careful investigation of the conversion costs of manufacturers enabled it further to reduce the sums which it would otherwise have paid for its purchases.

That such extensive governmental control has by no means, despite the complaints of the summer of 1917, impaired the profits of the trade may be gathered from the remarks of Mr. Charles Booth, Chairman of the Bank of Liverpool. In his annual report of July, 1917, he comments on the general prosperity in which both employer and employé have shared; and, making allowance for the reduction in working hours per week as well as for the increased cost of carrying stocks in consequence of the high price of raw material, he concludes that the conditions of the trade generally are sound and that the future is looked forward to with a good deal of confidence.\(^5\)

HIDES AND LEATHER

In respect to clothing, boots, after woollens, are the army's chief requirement. For them leather is needed, and not only for them but for harness, saddlery, and equipment. As in the case of coal, munitions, and woollens, the Government, therefore, became an extensive purchaser and had an immediate interest in the supplies available as well as in the price at which they were to be had. Although the analogy with woollens is closest, there were between the two trades differences in conditions, which became manifest in the Government's attitude toward them. In particular the United Kingdom contained within its borders a greater relative supply of hides suitable for sole leather than it did of raw wool, and, on the other hand, a smaller relative supply of hides suitable for uppers.

The distinction between these two kinds of hides was operative from the outset.¹ Heavy hides were needed not only for sole leather but for harness, saddlery, and equipment; and for such accoutrement the home supply was primarily set aside. The surplus remaining after accoutrement leather had been provided was available for sole leather. Further supplies of the latter had to be

¹ The information regarding hides and leather contained in the following pages is, where not otherwise stated, drawn from a Memorandum on War Office Contracts by N. F. Wintour, Director of Army Contracts. Cd. 8447, Je., 1917, pp. 17–20.
got by importing hides. At the beginning of the war, when the demand was unusually great, both finished leather and heavy hides were for a time imported in large quantities from Canada and the United States. As soon, however, as the tanning industry got adjusted, it assumed more and more the task of finishing all heavy supplies and the situation in this respect became analogous to that prevailing in the woollen trade.

In January, 1915, the Department of Army Supplies made its first extensive arrangement with the sole leather tanners. The United Tanners’ Federation undertook to supply the amount of heavy sole leather required by the Department, prices to be fixed throughout definite periods. The initial price was considerably below that prevailing at the moment. How much was gained by such action speedily became apparent; for the prices of equipment and saddlery leather continued to advance. Tanners could point in extenuation of their prices for leather of the latter sort to a rise in the cost of hides from 7 d. per pound before the war to 14 d. in the middle of 1915. The Government thereupon tried again the policy of arranging prices with the tanners, this time for equipment and saddlery leather, leaving them to deal with the butchers. Again the device was effective, and the price of hides immediately fell to 10½ d. per pound. A policy of attempting to control prices of finished products without similar control over the price of raw materials succeeded here as it had not with woollens and worsteds,\(^2\)

\(^2\) Cf., above, p. 108.
because the manufacturers were in a position to dominate those who brought supplies to them. British butchers had no such market for their hides in the summer of 1915 as wool producers had for their wool in the spring of 1916. The Department was obliged, therefore, to deal only with the finishers of hides and could for a time ignore the raw material.

This easy control lasted for less than a year. Early in 1916 the demands for boots greatly increased. In addition to the growing needs of the British army, Russia asked for 7,000,000 pairs of boots and 6,000 tons of sole leather, Italy, Belgium, and Serbia for 1,500,000, 150,000, and 60,000 pairs of boots respectively. Since the financial and shipping situation made it imperative that these needs be supplied in Great Britain if possible, measures were at once taken to increase the production of leather and to maintain control of prices.

Thus far only the heavier classes of sole leather had been taken for army boots, the lighter weights being sold to the civilian trade. At the end of May, 1916, ten lighter varieties were requisitioned by the Army Council and the list was extended by additional orders in June, August, September, and December, 1916, and in January, February, and March, 1917. In the middle of 1916, Australian leathers, until then barred, were admitted to military uses and rose 20 per cent. in price as a consequence.

With army demands thus increasing, the price of hides showed a strong tendency to rise. The Government, therefore, in the first half of 1916 was forced to do what it had avoided a year earlier. It entered into negotiations for fixing the market price of heavy hides and secured the advantageous one of 10 d. per pound. At practically this figure the price has since remained, although in the world market there was a marked advance during the latter half of 1916. In the Argentine hides rose to 21 d. and in an uncontrolled market native hides would probably have reached 15 d. Inasmuch as the home production is about 2,500,000 hides yearly, each weighing some 60 pounds, £3,000,000 less a year was paid for hides than would have been paid had the Government not intervened.

Now that all native hides suitable for army boots were to be at the disposal of the tanners who filled contracts for the Government or the Allies, a new fixing of the prices for leather was opportune. By the summer of 1916 the Government had learned considerable about the determination of costings, and resolved to apply its knowledge to the processes involved in tanning. The task was not simple, since the value of leather varies from tannage to tannage and prices had to be fixed for some thousands of varieties. A Committee composed of three tanners, a leather merchant, and two boot manufacturers undertook to assess the comparative value of each tannage on the basis of prices prevailing at the beginning of the period of contract. At the same time chartered ac-
countants of the Department investigated, in the case of seven representative tanners, the cost of the production of sole leather and the relation between tanners' pre-war profits and the war profits of the moment. From the knowledge thus acquired prices presumably fair for the tanner and for the country were determined. They were relatively lower than prices ruling in the civilian trade, and, when in November, 1916, leather of certain lighter weights was released, the prices commanded were in many cases a shilling a pound higher than the prices now allowed. Perhaps 6 d. a pound would represent the difference between market prices at the end of the year and the prices now arranged between the Government and the tanners. Tanners' profits were henceforth slightly above the pre-war standard, but considerably below what they had heretofore been during the war. Adjustments at quarterly intervals have since provided for fluctuation in the price of raw materials.

So far as the raw materials were domestic hides, there was little variation in price. But the foreign supply had to be drawn upon and here the Government did what it could to help the tanners and indirectly protect itself. Pushing aside the middleman, it imported from France and Italy all heavy hides suitable for making sole leather, which those countries could spare. Some £50,000, representing the importer's profits, were thus saved. British Meat Companies in the Argentine, which were supplying the Government with meat, were induced to grant the United Tanners' Association as favourable rates as pos-
sible. Finally, to eliminate speculation in imported hides used for military leather, an order was issued on February 2, 1917, forbidding an increase of more than 1 per cent. in the price of such hides as they pass from the importer to the tanner.\(^5\) Measures of this kind did something to modify the prices of imported hides, although in the spring of 1917 those from South America and elsewhere cost about twice as much as did English hides.\(^6\)

While sole leather for army requirements was got in this manner, the securing of upper leather presented a different problem. Of this the home supply was entirely inadequate and had before the war been much supplemented by supplies from enemy countries. Indeed, Germany and Austria in getting their raw material had captured an industry formerly belonging to Great Britain. For the reservoir upon which they drew was East India kips. At the outbreak of the war, therefore, the Department turned to the same source, buying East India kips and distributing them to manufacturers. Up to the end of 1915 army requirements were easily met and it turned out that the leather produced from the kips cost only about 12 d. per foot, whereas corresponding leather from British hides cost 21 d.

With the demands of Allied armies added to those of the British army early in 1916 the situation changed. Since the new demand revealed insufficient supplies, there

was room for speculation in an uncontrolled market. Indications of it were afforded by the rising price of kips, and it bade fair to increase. The Government thereupon acted as it was soon to act in the case of wool. To insure adequate supplies and to protect itself against speculative prices, it purchased with the assistance of the Government of India all kips suitable for its purposes. Such were East India tanned kips of 6 pounds and upwards and Bangalore tanned kips of 7 pounds and upwards. For the entire stock the price paid was that of the market of May 6–11, 1916.

Difficulties soon arose from the heavy civilian demand for those kips which the Department had rejected as unsuitable. Prices offered for them were higher than the prices which the Government was paying for its superior supplies and the tanners in India naturally preferred to work upon them. The Government, therefore, saw itself forced to purchase unsuitable as well as suitable kips, in much the same way as it had somewhat unwillingly purchased merino along with crossbred wool from Australasia. Its monopoly of the supply of the raw material for upper leather was thus practically established.

The methods employed in acquiring and allocating the kips are not unlike those which prevail in the corresponding administration of the imported wool supply. The Indian Government acts as intermediary. It buys through selected merchants, who purchase at fixed prices and sell at standard rates, in short, act as commission agents. The Admiralty furnishes requisitioned ships.
On reaching Great Britain the kips are handled by the established importing houses, which are paid a commission of $\frac{1}{2}$ per cent. on cost. The Department's inspectors select bales to be forwarded to curriers, who in turn are employed at commission rates to carry out the Department's specifications and deliver their product to War Office contractors. About 200 firms of curriers, practically all suitable ones in Great Britain, receive Government work and the number of kips coming forward on government account each month is about 200,000. They constitute about 75 per cent. of the entire supply and cost about £300,000.

British hides for upper leather, which constitute the remainder of the supply, are also controlled and utilized by the Department but on less advantageous financial terms. Before the war they sold at 15 d. per foot, kips at 10 d. The prices at which the two have been taken over work out at 21 d. and 12 d. respectively, advances of 40 per cent. and 20 per cent. The Government's saving of 9 d. per foot, applicable in 1916 to 20 million feet of upper leather, was £1,000,000. Probably, in 1917, twice as many East India kips will be in question and the saving will be twice as great.

In contrast with these economies of the War Office is the expenditure of the civilian trade. Before kip leather came under control, boot manufacturers paid 16 d. for it, so great was the demand. Since then unsuitable kips have been sold by the Government to tanners and the profit credited to Army Funds. For the Department has
the margin between the 12d. which it pays and the prevailing market price. The latter has steadily advanced and in the spring of 1917 glacé kid was at three times its pre-war price.\footnote{Amer. Commerce Reports, May 8, 1917.}

As for sole leather the price demanded for such civilian supplies as are available is uncontrolled. During 1916 miscellaneous hides advanced 50–60 per cent., South American 80–90 per cent. In part this was due to United States buying, home requirements there being large and exports having enormously increased.\footnote{L. E., Feb. 17, 1917, p. 316.} By the spring of 1917 the civilian population of the United Kingdom was being more and more neglected, while fully 90 per cent. of the output of English tanyards was controlled by the Government for military purposes.\footnote{Amer. Com. Reports, May 8, 1917.} Even repairers were at their wits' end for supplies and the price for soling boots had advanced from 6s. 6d. to 9s. 6d. Two courses were advocated as likely to bring relief. The Government was urged to release stores, which were said to be considerable in the country, and a standard boot was proposed.\footnote{L. E., Aug. 4, 1917, p. 195; Aug. 11, p. 232; L. T., Oct. 12, p. 3.}

Yielding to the first request, the Government on August 31, 1917, released for civilian use various sole and upper leathers made from imported hides. The order was a partial relaxation of an earlier one of March by which the Government had appropriated all sole or upper leathers of certain descriptions made from British or im-
ported hides then in stock in the United Kingdom. In the case of the leathers released, the Government stipu-
lated that, in as much as they had been bought below market prices, tanners should sell them to the civilian trade at not more than 2 d. in excess of prices paid by the War Department. No one might purchase more than 500 bends or the equivalent in butts. To relieve the pressing needs of repairers, half of the purchase, it was stipulated, must be used for repairs.\textsuperscript{11}

Soon after this, provision was made for the manufac-
ture of a standard boot. Makers of it were to get leather at 20 per cent. below market prices and on the other hand they were to be content with a profit of 5 per cent. Although standard boots were not likely to reach London before 1918, it was clear that their advent would be a boon to the poorer classes who were paying absurd prices for worthless footwear.\textsuperscript{12}

Since the Government during 1916 had become more and more involved in the administration of the leather industry and since at the end of the year the question of supplies had become more urgent owing to heavy de-
mands of the Allies and the shortage of shipping, a Central Leather Supplies Advisory Committee was set up. To this and to its subsidiaries the Department hence-
forth communicated all pertinent information at hand — the supplies of hides, leather, and tanning material in the United Kingdom and under Allied control on the one

\textsuperscript{11} L. T., Aug. 22, 1917, p. 3.
\textsuperscript{12} Ibid., Oct. 12, p. 3.
hand, the needs of the army, of the Allies, and of the
civil population on the other. Thus informed the Com-
mittee can give advice on questions which arise. The
Government, on its part, has tried to increase the Com-
mittee’s responsibility and in the opinion of the Director
of Army Contracts the policy has been highly successful.
“The smoothness with which the elaborate organization
of the leather trades has worked,” he remarks, “and the
ready co-operation which has rendered possible the large
changes in methods of trading and production afford
ample justification for this policy.” Certainly there has
been far less friction than arose between the Government
and the woollen trade. This may be due to the less com-
prehensive interference of the state in the leather in-
dustry. Only one branch of the raw material is under
that complete governmental control which implies pur-
chase and allocation, viz., upper leather; sole leather
is controlled only in so far as domestic and imported
hides are subject to pre-emption on the part of the Gov-
ernment. At times the Government releases certain
hides which it has held back and stipulates under what
conditions they may be sold. Other hides for civilian
use are sold in an uncontrolled market.
SHIPPING

The Government's attitude toward the shipping industry is significant not only as an essay in state control, but also as a factor in the food situation. Most consumers of food in the United Kingdom came to feel that they were paying too high prices largely because the Government did not control certain producers, middle-men, and shippers. And the greatest offenders were the shippers.

At the outbreak of war the interest of shipowners centred in two questions—what ships would the Government requisition, and what would be done for the protection of ships not requisitioned. The answer came at once. On August 3, 1914, a Royal Proclamation declared that a national emergency demanded the immediate employment of a large number of vessels for use as transports and auxiliaries. Since there could be no delay, the Lords Commissioners of the Admiralty were to requisition immediately any vessel within the waters adjacent to Great Britain. Owners might file their claims with the Admiralty; and in case the Admiralty and the owner failed to agree as to the proper compensation, the President of a Board of Arbitration was directed to choose two members of his Board as arbitrators. If the two could not agree, reference should be had to the President
SHIPPING

as a third member. This Board of Arbitration was to be constituted in seven panels, comprising Government nominees, shipowners, bankers, underwriters, marine insurance companies, insurance brokers, and average adjusters.¹ A month later its functions were increased. The President was empowered to authorize from time to time all or a part of the members of a panel to consider approximate monthly rates of hire for vessels of different classes. Arbitrators from the Board might have regard to such rates but need not be bound by them.² As a result of these arrangements there were gradually drawn up so-called "blue-book" rates for requisitioned ships, rates markedly below those soon prevailing in the market. They were revised in March, 1915, but since then have been unchanged.³ The rate in the summer of 1917 was 11 s. per gross ton per month for "tramp" steamers, somewhat more for "cargo" liners according to their speed.⁴

The number of ships speedily requisitioned by the Government was about 20 per cent. of the total mercantile tonnage of Great Britain.⁵ In June, 1914, this total for vessels of 100 tons and over was 20,523,706 gross tons, and the ships of such tonnage numbered 10,124. If only vessels of 1600 tons and over be considered, the total tonnage was 16,900,000 gross tons and

¹ B. T. J., Aug. 20, 1914, p. 481.
² Ibid., Sept. 3, 1914, p. 608.
³ Cd. 8483, p. 11.
⁵ P. D. C., 1915, LXIX, 925.
their number was 3900. The 20 per cent. requisitioned by the Government comprised about 1500 ships, many of them of the larger sort. The commandeering fell at first unequally upon firms of shippers, some being obliged to put a large proportion of their vessels at the disposal of the state while others were able to retain most of their ships free.

For vessels not requisitioned the Government at the outbreak of war prepared and put into force a scheme of war insurance. Ordinary policies had protected shipowners only against the usual perils of the sea, not against King's enemy risks. Nor had the state heretofore been willing, although urged, to undertake insurance involving risks of the latter sort. Shipowners had, therefore, been forced to protect themselves in this matter by Protecting and Indemnity Associations. The Government's new proposal, drafted by an expert sub-committee of the Imperial Defence Committee, was to assume 80 per cent. of the risk borne by the Protecting and Indemnity Associations, receiving in return 80 per cent. of the premiums paid in. The remaining 20 per cent. of the risk was to rest upon the Associations, which in consequence were to receive the corresponding 20 per cent. of the premiums. The rate henceforth was to be a flat one, administered by a state bureau for insuring cargoes and by an advisory board. Despite this seemingly favourable arrangement, so considerable were the losses suffered that within the first six months shipowners were obliged to pay in war

\[6\] B. T. J., Je. 1, 1917, p. 219.
insurance, it was estimated, 3 per cent. on ships valued at £120,000,000. One firm, managing a fleet of eighteen tramp steamers, paid £14,000 in premiums to cover King's enemy risk.\(^7\)

For a little time after the outbreak of the war freights rose only slightly, merely enough to reflect the added cost of war insurance. But by November, 1914, an increase began which continued for some four months. Several factors contributed, the greatest being the decline in available tonnage. One-fifth of the mercantile tonnage of Great Britain had been diverted to the needs of the navy and army. Many vessels were shut up in the ports of the Black Sea and the Baltic, and in enemy's harbours. A half million tons of shipping had been sunk. Of the world's tonnage, the 14 per cent. represented by German and Austrian ships was in part idle in neutral ports. The production of British shipyards, far from meeting these losses, itself decreased. Labour was hard to get and naval requirements were receiving first attention. The congestion of freight at the docks, upon the railways, and in warehouses was a telling influence, due also to scarcity of labour and to the military needs of the Government. On January 29, 1915, the London docks were so congested that forty vessels lay at Gravesend waiting to discharge their cargoes. Since French and Italian ports were in a like condition, the length of a voyage was four or five times as long as under normal conditions. One

\(^7\) W. H. Renwick, Sea Freights and the Cost of Food. *Nineteenth Century and After*, Mar., 1915.
expert estimated that the loss of effective tonnage through congestion of traffic was 10 per cent. For these reasons there arose early in 1915 a very real shortage in shipping facilities, only slightly remedied by the appropriation of German ships.

Added to the shortage was the high cost of labour at sea. Some 30,000 alien sailors, formerly employed on merchant ships, were withdrawn, while men of the Royal Naval Reserve went for service with the fleet. Whereas wages in July, 1914, were £5 10 s. a month, early in 1915 £7 10 s. was asked and paid on tramp steamers.  

Freight rates, therefore, by March, 1915, would naturally have risen to some extent; but whether the extent of the actual advance was warranted seems open to question. It is shown in the accompanying schedule which embodies later increases as well.  

The Labour party, considering the freights of early 1915 unwarranted and responsible for the higher cost of living, urged the Government to commandeer the entire mercantile marine and fix maximum rates. But the difficulties of administering twenty million gross tons of shipping, engaged to a considerable extent in neutral trade, and the possibility of having to deal with seamen's wages acted as deterrents. Mr. Asquith, on February 11, argued that the cost of wheat in the New York market, not the shipping rates, was responsible for the high price of wheat in England. Of the advance from 36 s.

8 Ibid.; Cd. 8483, p. 10.
9 Cd. 8483, p. 9.
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3 d. to 57 s. 11 d. per quarter (8 bushels) for Number 1 Manitoba (the standard), 18 s. 2 d., he said, was the increase in New York, only 3 s. 6 d. the increased freight. In the case of Argentine wheat, the shipper, he admitted, got a larger proportion of the high price, but this wheat came on the market only after the advance had taken place.10

The Committee which at the end of 1916 investigated food prices and, incidentally, shipping rates, formulated a rule to determine whether increased shipping freights were borne by producer or consumer. If the commodity transported be such that an advance in its price would have little effect on the demand, while a smaller remuneration to the producer would decrease the supply, the consumer is likely to pay any higher intermediate charges like freights. The consumer, the Committee concluded, did in this way pay from 8 s. to 10 s. per quarter on North American wheat imported during the cereal year 1915–16, when these conditions were fulfilled. If, on the other hand, the demand is more elastic than the supply, the intermediate charges are likely to be paid by the producer. Such was probably the case in general with wheat from Argentina, since this sold in England only when its price did not rise above that of North American wheat. Until its price reached such a point, the producer paid any advances in freight rates which might accrue.11 When Mr. Asquith spoke in February, 1915, freight rates were

10 P. D. C., 1915, LXIX, 764.
11 Cd. 8483, p. 10.
responsible for only one-fifth of the rise in the price of wheat which had then taken place in England. But the one-fifth was none the less paid by the consumer and was destined to increase in amount until the Government was forced to take cognizance of the situation.

What the Government did very soon give attention to were the insulated or refrigerated spaces in British steamships. Upon these depended the meat supply of the Allied forces and it was not possible to allow an unrestricted advance in freights or in the prices of meat. Happily it proved possible to make with the owners satisfactory arrangements, which avoided the exercise of compulsory powers. On April 13, 1915, accordingly, an Order in Council requisitioned all insulated spaces in British steamships trading with Australia and New Zealand. Some two weeks later a similar order was issued regarding steamers trading with the Argentine and Uruguay. On December 22 all insulated spaces in British vessels were taken over. The tonnage involved was considerable, 450,000 tons of meat coming each year from the River Plate and a still larger amount from Australasia. The scheme worked well. The ocean carriage of frozen meat from the Argentine did not henceforth cost more than 1 d. a pound, that from Australasia not more than 1¼ d.

12 Cf., below, p. 184.
14 P. D. C., 1916, LXXXVI, 499.
15 L. T., Jy. 26, 1917, p. 8 Mr. Runciman in the Commons.
At the end of 1915 the policy of requisitioning space to insure the food supply was extended. Freight rates, although changing little between April and August, rose sharply in the autumn, and the price of wheat manifested a similar tendency. The Government, therefore, appointed a Requisitioning (Carriage of Foodstuffs) Committee. It was composed of experts in shipping matters, men who were also advising the Transport Department of the Admiralty. To it was assigned the task of securing sufficient tonnage for the carriage of foodstuffs and of preventing freights on them from rising to prohibitive levels. It was empowered to divert or to requisition shipping adequate for the provision of such monthly supplies as the cabinet Committee on Food Supplies might prescribe.

At once the Committee began to requisition liners and cargo steamers, requiring them to devote from 50 to 75 per cent. of their space to the carriage of foodstuffs. Since vessels so ordered could not go into any other trade, the action was effective. The cost of bringing wheat across the Atlantic was reduced from 18 s. a quarter to 7 s. or 8 s. by the autumn of 1916. Food prices simultaneously declined and thenceforth wheat, imported for the most part by the Government, paid freights which represented only about 3/4 d. on the quartern (4 pound) loaf. Since sugar already paid a stipulated rate of 1/2 d.

16 Cf., above, p. 145; below, p. 203.
17 B. T. J., Nov. 11, 1915, pp. 373-75.
18 P. D. C., 1916, LXXXVI, 505.
a pound, it could now be said that three important articles of food were no longer exposed to the payment of excessive ocean freight rates.\textsuperscript{19}

At the same time that the Requisitioning Committee acquired its power, another Order in Council of November 10, 1915, further regulated the employment of British shipping. Although there was no intention of disturbing existing business arrangements, home needs, it was felt, had first claim. Henceforth every vessel exceeding 500 tons gross tonnage and trafficking between foreign ports must get a licence. Later the order was extended so that vessels of this tonnage had to be licenced to make any voyage whatever. More and more the movements of British steamships were being interfered with, precisely as their cargo spaces had been taken over. In February, 1916, several vessels were even released from Government service on condition that they load wheat in North America for Great Britain.\textsuperscript{20}

A final effort of November, 1915, to relieve the shipping situation referred to the docks. A Port and Transit Committee was appointed to inquire into difficulties and regulate traffic there, to co-ordinate requirements of all conflicting interests, and to decide questions which might be referred to them, giving orders in such cases to executive bodies at the harbours.\textsuperscript{21} If local authorities failed to take suitable action, the Committee might clear congested ports. To increase the supply of labour, many of

\textsuperscript{19} Cd. 8483, p. 9; L. T., Jy. 2, 1917, p. 3.
\textsuperscript{20} B. T. J., Nov. 11, 1915, p. 373; Mar. 1, 1916.
\textsuperscript{21} Ibid., Nov. 11, 1915, p. 377.
the 40,000 dockers who had joined the army were soon ordered back and it was urged that more should be.22

By February, 1916, it was estimated that of every 100 ships available for carrying merchandise before the war only 67 were still available and that of these 21 were foreign owned.23 New measures for economizing carrying space were therefore devised. Chief of these was the restriction put upon the importation of bulky commodities. In principle this was ominous. It implied that supplies of non-essentials would be cut off and no one could foresee what commodities circumstances might eventually force the Government to declare relatively non-essential. For the moment no great hardships were involved. A Royal Proclamation of February 15, 1916, prohibited, as from March 1, the importation, except under licence, of paper and all materials used in its manufacture, of periodical publications exceeding sixteen pages in length (except single copies through the post), of raw and manufactured tobacco, of furniture woods, and of stone and slate for building. A month later canned and dried fruits were added to the list, currants excepted.24 The official interpretation immediately put upon these restrictions explained that two-thirds of the usual importation would be licenced.25 The cutting off of one-third would in the case of paper alone save tonnage equivalent to that of all ships entering British ports during two or

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23 Ibid., p. 294.
three weeks. Restrictions upon other materials would bring the saving to about one month’s tonnage entries. Since the Admiralty had taken 25–30 per cent. of the mercantile tonnage, the order gave back space equivalent to one-third of this. Several commissions were appointed to administer the new order.\textsuperscript{26} At the end of March the list of imports requiring licences was increased by several commodities—baskets, cement, cotton yarn and manufactures (except hosiery and lace), cutlery, fatty acids, furniture and other manufactures of wood, hardware, oil cloth, soap, toys, games, playing cards, beech, birch, elm, and oak woods, finally woollen and worsted manufactures of all kinds, except yarns.\textsuperscript{27} In August glass was added.\textsuperscript{28} From the beginning of 1917 the allowance of paper and paper materials was still further reduced from two-thirds of the normal supply to one-half of it.\textsuperscript{29} The promise of such elaborate regulations was high, but their results were, as the sequel will show, disappointing.

Despite the requisitioning of shipping for the carriage of meat and wheat and the beneficent effect of this action in the spring of 1916, public feeling in the autumn of that year was becoming more and more incensed over the seeming profits of shipowners. To this discontent Mr. Anderson gave voice in Parliament on October 17. Quoting a recent pronouncement of Mr. John Hill, a trade

\textsuperscript{26} Ibid., Mar. 23, p. 854.
\textsuperscript{27} Ibid., Mar. 30, p. 938.
\textsuperscript{28} Ibid., Aug. 24, p. 546.
\textsuperscript{29} Ibid., Dec. 7, p. 715.
union secretary of the Boiler-makers' Society, he declared that, while wages had since July, 1914, advanced less than 15 per cent., the average increase in the cost of living was officially stated to be 45 per cent. Ships built had been sold at prices from 500 to 1000 per cent. above the cost of their production in 1914. One ship-building company, not the most prosperous one, on a capital of £360,000 had within a year made a profit of £240,000, or 70 per cent. As for shipowners, Mr. Anderson continued, the shipping journals show South American freights rising from 10 s. at the beginning of the war to 150 s. early in 1916. In view of this the workmen cannot be persuaded that profits are not excessive.30

To counteract this current of public discontent, Mr. Runciman on October 17, 1916, made an important speech in the Commons "giving details now for the first time." "I am doing so," he continued, "because I understand that outside feeling is directed against shipping. I think it about time the country knew that out of a total merchant fleet of nearly 10,000 vessels, only 1100 [elsewhere ]1118] ocean-going vessels are free to conduct their own operations." Of the remainder the large number in the service of the army and navy were, he said, under blue-book rates; others, requisitioned by the Foodstuffs Requisitioning Committee or trading on behalf of the Allies, were under fixed rates far below the open market rates. Of the 1118 vessels not controlled, 297 were permanently employed abroad between foreign ports to maintain Brit-

30 P. D. C., 1916, LXXXVI, 468.
ish interests; 588 were cargo liners or tramps chartered to liner companies to keep alive the connection with other countries, "a mere skeleton of the organization necessary"; 233, finally, were free tramps, the recipients of the high freights which occasionally figured in the press and formed the basis of questions asked in the House. If it seems to any one that such freights are taken from the flesh and blood of the people, let him reflect that the number of free vessels engaged in carrying food is about 60.

As to the actual relation between the rising prices of foodstuffs and rising freights, the figures, Mr. Runciman continued, are as follows: The price of meat up to the autumn of 1916 appears to have increased by 4 d. or 5 d. a pound, American bacon by 8 d. or 9 d., Canadian cheese by 4 d. or 5 d.; of these amounts \( \frac{3}{8} \) d., \( \frac{1}{2} \) d., \( \frac{1}{2} \) d., respectively, have been due to increased freights.\(^{31}\) It was the same with wheat.\(^{32}\) As to purchases of wheat in Australia, the Government could not make such unless it was prepared to divert vessels into that trade. The diversion was uneconomic, since a cargo vessel could make only two and one-half voyages to Australia in a wheat year, whereas tramp vessels run across the Atlantic from six to eight times a year. The Government, however, was prepared to be uneconomic in order that supplies might not depend on one market alone. To get the best dispatch from cargo vessels by inducing man-

\(^{31}\) Ibid., pp. 505-508.

\(^{32}\) No figures were given.
agers, captains, and engineers to hurry them, it had been decided to pay for wheat carriage on the basis of voyage charters. At the moment rates were being worked out, not by shipowners, but by those skilled in making such calculations.

Such was the somewhat belated explanation of the President of the Board of Trade. It was true that the Government had already done much to remedy a situation which for a time allowed to shipowners, as Mr. Lloyd George later declared, prodigious profits. Even Lord Furness, the president of a great shipping firm, admitted that for two years earnings had been "greatly in excess of an average pre-war year," and that the companies had, "like other trades been allowed to retain a margin ranging from 50 per cent. to 20 per cent. of such excess earnings." Some owners and some tramp companies after making large profits had, he added, sold their tonnage at high prices, distributing both earnings and capital.

The ill-repute which in the eyes of the public attached to such prosperity could not, however, be expected to disappear at once. The annual statements, indeed, of certain steamship companies made so late as July, 1917, continued to reflect their recent gains. The profits of the British Steamship Investment Trust (Limited) for the year ending June 30, 1917, enabled the directors to recommend a dividend on the deferred stock of 30 per

33 Ibid., p. 503.
cent. less tax. This, with a bonus of 10 per cent. less tax and an interim bonus of 10 per cent. paid in January, brought the total distribution for the year to 50 per cent. less tax. At the same time Furness, Withy & Co. (Limited) distributed 20 per cent. tax free as the year's return to shareholders.36

In his annual address, however, Lord Furness sounded a note of warning. During the commercial year, not only had the shipping industry like all others become subject to the increased excess profits tax of 80 per cent. (formerly 60 per cent.), but the Government had requisitioned at blue-book rates practically all ocean-going tonnage. It was certain that this remuneration would not leave a profit equal to the pre-war average. Tonnage, too, could now be withdrawn from any route and applied where it would best serve national needs. This was as it should be, but hardship would come with the attempt to recover the neglected routes. For foreign owners were meanwhile making huge profits from uncontrolled freights, being free as well from British competition. Their accumulated reserves would make them formidable competitors in the future. Then, at least, the reserves accumulated by British companies early in the war would be of great avail to the industry.37

In November, 1916, a month after Mr. Runciman gave his "details" in the Commons, the Committee appointed to investigate the causes of the increased price of com-

36 Ibid., Jy. 20, p. 7.
37 Ibid., Jy. 30, p. 12.
modities made its second report. Discussing the reasons for the rise in wheat, the Committee was led to give a brief account of shipping. The information contained in this is of great value and has already been quoted. At the conclusion of its investigations the Committee makes certain recommendations. If occasion should offer, Governmental control over freight rates should be extended; competition for ships should be reduced, a policy, the Committee understands, already under careful consideration; non-essential imports should be further excluded and certain other commodities should be subject to preferential treatment; lastly, the supply of tonnage should be increased, particularly by new construction.38

The end to be attained by the first two of these recommendations was soon realized through the measures taken by the new Controller of Shipping, Sir J. P. Maclay. In the winter of 1917 he applied, first to vessels in the Australasian trade and then systematically to all liners, a new organization of control. All shipowners were formed into a committee of management on which the Shipping Controller was represented; and, through the provision that all profits above those allowed by blue-book rates should go to the state, all motives inducing to competition were eliminated.39

In May, 1917, the Chancellor of the Exchequer described the existing situation and explained the Government's final policy toward shipping. After confessing

38 Cd. 8483, p. 11.
that there had been too long a delay in taking over control of shipping, that shipowners had "had a very good time," and that he himself was not devoid of responsibility for what had happened, he stated that, of all ships of 1600 tons and upwards, 90 per cent. had at length been requisitioned or had been notified that they would be. It was true, he admitted further, that even blue-book rates had at first made possible a large return. Owing to increased costs of operation, this was no longer true and, under the terms of requisitioning, ships would no longer secure so much as their pre-war profits. Where it had not been possible to requisition vessels, the Shipping Controller had control over rates of freight. In the case of the 4000 or 5000 small coasting vessels, whose masters were often their owners, the Government had not thought it wise to fix a definite scale of profit, lest enterprise be checked. The nation was too dependent upon them to incur such a risk.

In one matter the Chancellor of the Exchequer went so far as to call forth the protest of shipowners. One of the provisions of the excess profits law was that if in any year the return from a business was less than the pre-war profits, the deficiency should be made good out of the excess profits taken by the Government in preceding years. This clause Mr. Bonar Law proposed to suspend regarding shipowners in view of their excessive profits in the past. In a Memorandum of June 30 the Shipowners' Parliamentary Committee protested. In April,

40 Ibid., p. 9.
1916, when Mr. McKenna, then Chancellor of the Exchequer, had urged them to build and buy at war prices and when they had explained that they could not do so unless the cost were to be met out of their war earnings, Mr. McKenna had given them a pledge. He had promised them that, as soon as there could be ascertained the value on a peace basis of the vessels which they might build or purchase at war prices, they would be allowed out of their war earnings as a whole the difference between the price so paid and such assessed value. This pledge, the Memorandum continued, was broken by the proposal of the Chancellor of the Exchequer. Whether allowances were to be made them would now depend upon whether the profits of a current year were in excess of the pre-war profits. Since this would seldom happen, the Government was doing its utmost to prevent the redemption of Mr. McKenna's pledge. The shippers then explained that rising freights had been forced upon them by the competitive bidding of cargo owners and that rates could have been kept down only by prohibiting the importation of less essential cargoes.41 Whatever the merits of the case, the protest clearly shows that the Government's action during the last six months had borne hard upon the shippers and that the first two recommendations of the Price of Foodstuffs Committee had received ample attention.

The third recommendation of the Committee, looking to the economy of tonnage by the further reduction of

41 Ibid., Jy. 2, p. 3.
imports, concurred with the suggestion of the shipowners and was, it appears, pertinent. The policy in question had been adopted at the beginning of 1916 and had been extended. Owing to a liberal issue of licences, however, it had accomplished comparatively little. A remark became current that the way to increase the import of an article was to issue a prohibition that it should not come in. Although the importation of tobacco was prohibited, the country in September, 1916, bought £880,000 worth of it. Paper imported during the same month was valued at £652,000 (some of it cardboard boxes), manufactures of silk at £1,000,000, earthenware and glass at £188,000.\textsuperscript{42}

In December, however, as has been noted, the importation of paper was cut from two-thirds of the normal to one-half,\textsuperscript{43} and in February Mr. Lloyd George explained in the Commons that unessential articles of diet must no longer be imported. Aerated waters, apples, and tomatoes came under the ban; oranges, bananas, grapes, almonds, and nuts were restricted to 25 per cent. of the importation of 1916; canned salmon was reduced 50 per cent.; Indian tea was shut out to some extent, foreign teas altogether. Although coffee and cocoa were barred, there were large stocks of both in the country, stocks that would have gone on to Germany had they not got stuck in England.

When summer came and the submarine was rapidly reducing merchant tonnage, it became clear that staple

\textsuperscript{42} P. D. C., 1916, LXXXVII, 918.
and important imports would have to be restricted. Among these was cotton. The cotton industry in 1916 had suffered from a shortage in the year's supply of raw material which by November 20 had driven the price to 12.59 d. a pound, the highest for 50 years. Nor did it thereafter recede, but on May 25, 1917, stood at 12.9 d. At about this time demands for higher wages became insistent. Threats of strike on the part of the weavers were on May 26 met by concessions. Soon they were to receive what amounted to a 20 per cent. advance on pre-war wages, an increase already secured by the spinners. Scarcely had this been settled when the spinners joined with the card-room operatives in demanding a 10 per cent. war bonus. Since the owners threatened a lockout, the Board of Trade intervened to secure arbitration by the Committee on Production. On June 17 such arbitration was accepted by the men and a crisis averted.

It was during these critical days that the shortage of the crop was intensified by a lack of shipping facilities. Already tonnage for the conveyance of cotton to the East had been restricted and the effect of this had been felt. By the middle of June, considerable machinery was idle, the Government had warned exporters to keep down their engagements, and the trade was prepared for a compulsory limitation of the consumption of cotton. Supplies

45 L. T., May 31, 1917, p. 3; Je. 8, p. 5; Je. 13, p. 7; Je. 18, p. 12.
of raw cotton on hand were 413,530 bales as compared with 659,350 a year before; on the other hand, stocks of finished goods were accumulating. At the end of June a Board of Control, chosen almost exclusively from the leading importers, spinners, manufacturers, merchants, and trade unions was set up. Power was given it to ration raw materials, to impose short time, to limit the number of spindles in operation, and to fix prices. Thus fully endowed with authority, it first forbade the purchase of raw cotton abroad except under licence; next it ordered a census of all cotton supplies in England. On the Liverpool Cotton Market dealings in "futures" ceased and "spot" business, almost for the first time in the history of the market, was marked "sales nil." At a meeting on July 14, the Cotton Control Board decided not to recommend any immediate curtailment of production. On the other hand, it continued for the moment its policy of granting licences for the purchase of one week's supply of spot cotton at a time but these only to spinners who had less than two months' supply in stock. Before a month had passed, however, limitation of production was seen to be a necessity. On August 10 the Board of Control announced its scheme, already approved by the Board of Trade. In as much as the Shipping Controller was making a great effort to increase the tonnage available for cotton, particularly by arranging with the United States

47 M. G., May 29, 1917; Je. 23 (editorial); L. T., Jy. 25, p. 12.
48 Ibid., Je. 28, pp. 4, 5; Jy. 2, p. 5.
49 L. T., Je. 30; Jy. 14, p. 7.
Government for the provision of additional tonnage, the new regulations were to be effective for a period of only three months. Cotton-spinning firms were ordered to stop on September 3 all but 60 per cent. of their total spindlage and equivalent preparatory machinery. Licences might be got on payment of from 7/8 d. to ½ d. per spindle to run as much as 70 per cent. of the spindles and even more if Government contracts were in question. To run more than 60 per cent. of the looms, payment of from 2 s. 6 d. to 5 s. per loom was required. Money received from these sources the Board of Control would use to prevent depletion of trade union funds, to ameliorate want and distress caused by temporary unemployment, and for any other emergency brought on by the crisis. The restrictions would be administered jointly by the Board of Control, the trade unions, and the employers' associations.50

This rationing of the cotton industry illustrates perhaps better than anything else the exigencies in which British shipping found itself in the summer of 1917. The corresponding rationing of the woollen trade,51 administered with considerable friction, was due only in part to shortage of shipping. In that case the year's supply of raw material also gave concern. But when two of the most extensive of Great Britain's industries were affected as were these two, the need of increased tonnage became imperative. The fourth recommenda-

51 Cf., above, p. 118.
tion of the Committee on food prices accordingly became pertinent. This, it will be remembered, was that the available supply of tonnage should be increased, especially by new construction. The summer of 1917 saw the Government resolved upon remedial measures of this kind.

Mr. Runciman announced in November, 1916, that two and one-fourth million gross tons of shipping, or about three million tons dead weight, had been lost since the beginning of the war.\footnote{P. D. C., 1916, LXXXVII, 849.} Nor had the tonnage constructed during the same period counterbalanced this loss. It had, on the contrary, declined markedly in comparison with pre-war production. In 1913, Great Britain launched 1,977,573 gross tons; in 1914, 1,722,154 tons; in 1915, 649,336 tons; in 1916, 582,305 tons.\footnote{L. E., Aug. 4, 1917. Mr. Lloyd George on Aug. 15 told Parliament that the construction for 1915 and 1916 was 688,000 tons and 538,000 tons respectively.} Actual losses had therefore not been repaired by something like a million gross tons. The same deficiency appears in the statistics which Lord Curzon laid before the Lords in May 5, 1917:\footnote{B. T. J., Je. 1, 1917, p. 219.}

British ships of 100 tons and over

in June, 1914, were 10,124 with a tonnage of 20,523,706 gross tons, but in December, 1916, were 9757 with a tonnage of 19,765,516 gross tons;

British ships of 1600 tons and over

in June, 1914, were 3900 with a tonnage of 16,900,000
gross tons, but on March 31, 1917, were 3500 with a tonnage of 16,000,000 gross tons.

While the first half of this schedule shows the *net loss* of nearly a million tons of shipping up to the end of 1916, the second half shows the increasing destruction of larger vessels during the early months of 1917. The sinking of tonnage due to the new activity of submarines after February 1 was described by Mr. Lloyd George in Parliament on August 16. In April the loss had been greatest, amounting to 550,000 tons gross; in July it had fallen to 320,000 tons and in August it was still declining.\(^{55}\) By the end of September the total losses during eight months approximated the losses before that period,\(^ {56}\) being nearly two and one-half million tons. Only a great acceleration in construction could repair this ruin.

At the end of 1916 the Board of Trade began to take measures to provide against the recurrence of another year of slight output. A large number of engineers, fitters, and mechanics was recalled from the Colours and from yards doing Admiralty and munitions work. The Admiralty allowed some forty-five merchant vessels nearing completion to be finished while certain less necessary Admiralty work stood aside. Arrangements were made to have the companies in the shipbuilding ports pool their skilled labour, e. g., the eight or ten shipbuilding yards and the numerous engineering works on the Wear. Skilled men were to concentrate their labour on the vessels near-

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56 N. Y. Times, Sept. 29, 1917.
The shortage of steel, it was hoped, would soon disappear as the Ministry of Munitions extended its steel works. In January, 1917, the Shipping Controller took steps to buy all available tonnage in the United States and Canada, to lay down standard cargo carriers in Great Britain, and to push to completion more than two million tons of unfinished ships. By August Mr. Lloyd George could declare that 480,000 tons had been turned out during the first half of 1917 and that 1,100,000 tons would be during the second half. Some 320,000 tons would have been bought and the total addition to Great Britain's shipping during the year would therefore be 1,900,000 tons. This was very nearly the normal output of 1913. The Premier predicted that through production and purchase the acquisition of 1918 would be 3,000,000 tons. But two million tons or even three million tons added to British shipping yearly would not now repair the havoc wrought by submarines. The final exhortation of the Shipping Controller, therefore, was that the United States should build extensively enough not only to transport its troops and its munitions of war but also to create the surplus needed to counterbalance British net losses. He suggested that it set itself to construct six million tons of merchant shipping. To produce three times as much as the British at their best have done and

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six times what it itself has previously done, is not a simple task, but it is one of vital importance for the Allied cause.\textsuperscript{59}

\textsuperscript{59} N Y. Times, Sept. 29, 1917.
To the three foodstuffs which Mr. Askwith once mentioned as essential, government regulation has during the war been applied at different times and from somewhat different motives. Sugar was at once taken in hand, since the supply was highly precarious; before very long much of the meat imported into Great Britain was appropriated that the Allied armies might be adequately fed; but, although from the beginning of the war the Government undertook to regulate the supply of wheat, it did not until after two years make far-reaching regulations touching the sale and consumption of bread.

When on August 4, 1914, shops reopened after the bank holiday, in certain large provincial cities there was a rush to buy provisions. Next day the alarm spread to London, where many small shops were speedily sold out and several large ones had either to stop the sale of provisions or to refuse to customers more than the quantities usually purchased. In the West End and in some residential towns people loaded their motor cars with foodstuffs and turned their dwellings into store houses.\(^1\) The prices of certain commodities rose sharply. Comparative quotations of July 28 and of August 6 for flour were

\(^1\) A. R., 1914, p. 184; P. D. C., 1914, LXV, 2213.
1¼ d., 1½ d.; for sugar (cubes) 2 d., 4d.; for English beef 6½ d., 7½ d.; for chilled beef 6 d., 7½ d.; for frozen beef 4½ d., 6½ d.; for English mutton 8 d., 8½ d.; for Danish bacon 8¼ d., 10½ d.; for Colonial cheese 6¾ d., 8½ d.; for butter 13 d., 15 d.² Flour and English meat, it will be seen, rose comparatively little in price, imported meat, cheese, and butter somewhat more, while the rise in sugar was abnormal.

A Committee of the Cabinet with Mr. McKenna as chairman acted promptly. It summoned prominent retail food dealers, who recommended what might serve as maximum prices for commodities like sugar, butter, cheese, and bacon, and these prices were at once officially adopted by the Board of Trade. After investigation, the Cabinet Committee announced that, including the home crop then being harvested, there was in the United Kingdom food for five months. Trade, the Committee predicted, would soon be resumed, and hoarding was deprecated. In the House of Commons a bill was passed enabling the Board of Trade to take possession at reasonable prices of foodstuffs which were being unreasonably withheld or cornered.³ Retail provision dealers undertook not to supply in the future any customer with more food than he normally required. Ships were soon bringing in large quantities of wheat, flour, meat, and fruit. The Canadian Government offered a gift of 98,000,000

³ A royal proclamation of Sept. 17 carried out this provision; B. T. J., Sept. 24, 1914, p. 808; Cf. P. D. C., 1914, LXV, 2212–2222.
lbs. of flour to meet the needs of the people and the province of Alberta undertook to deliver free in English ports 1,000,000 bushels of Alberta oats. Through its control of the railways the Government could regulate the distribution of food supplies and prevent panic prices. The Board of Education made ready to provide meals, during vacations as well as during sessions of school, both for children under school age or already out of school and for those in attendance. So effectively was the crisis met that the days of panic were soon passed.

SUGAR

The extraordinary movement in the price of sugar during the early days of August arose from the sudden severance of relations between the United Kingdom and the chief sources of its sugar supply, Germany and Austria. In 1913, 80 per cent. of the sugar consumed in the British Isles was beet sugar, and of this 68 per cent. came from the countries in question. Henceforth the product thus cut off had to be made good by increased importations from other sugar-producing countries — Cuba, Java, the United States, Mauritius, the British West Indies, and the Philippines.

To insure the getting of a supply from these sources, the Government on September 11 announced the appoint-

5 J. W. Robertson-Scott, Opportunities of the War, Nineteenth Century and After, Oct., 1914. The beet sugar consumed was 1,570,053 tons, the cane 399,834 tons; beet sugar from Germany was 938,438 tons, from Austria 359,468 tons.
ment of a Royal Commission. It was empowered to enquire into the amount of sugar in the United Kingdom, to purchase and sell sugar, to control its delivery, and to take steps to maintain the supply.  The need was imminent. Imports into the United Kingdom during August, 1914, were only 34,000 tons, compared with 184,000 tons during August, 1913. At the end of the month the stores in bonded warehouses had fallen to one-half of what they were a year before and were less than sufficient for one month's consumption. Germany meanwhile had forbidden the exportation of her beet sugar to the United Kingdom; and His Majesty's Government, replying in kind on September 30, forbade importation from any European port, that trade through Holland might not put money into the enemy's pockets.

The Commission at once and with great secrecy entered the market. Acting through a single firm, it bought all the surplus stock of Cuban sugar, although "the Americans wanted the whole lot for themselves." Other sugar was bought from Java, Mauritius, and South America before any one suspected that the Government had "gone into the grocery business." The price demanded was a pretty high one, "a world price, such as Americans would pay."

As a result of this activity, the shortage of stocks was remedied by November, 1914, and the maximum price,

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7 Cd. 8483, p. 20.
9 M. G., Sept. 29, 1916, p. 12. The phrases are Mr. Runciman's.
recommended by food dealers and adopted by the Board of Trade, could be reduced from 3½ d. to 3½ d. Lower it could not be put, since prices paid had been considerable, and the expense of transportation from distant centres with high rates of insurance and high dock charges rendered the cost even to the Royal Commission far above the peace-time price of sugar. A testimony to the efficiency of the Commission, however, was the fact that, although it bought principally in the United States and in Cuba, where American firms had powerful interests, the f. o. b. price of granulated sugar in New York in 1916 was higher than the contemporary wholesale price of sugar in bond in London. To the price which was paid, the Commission added, when it sold, only such a fraction of the cost as would meet insurance and working expenses, would create a surplus looking to the maintenance of uniformity in price, and would provide a fund to meet any possible reduction in prices at the end of the war.¹⁰

Not only did the Government become the sole importer of sugar but it assumed control of the refineries. Refiners received from it raw sugar at certain prices and sold their product at prices prescribed. Profits thus restricted were further controlled. Anything in excess of pre-war returns and an additional percentage agreed upon was henceforth recoverable by the Royal Commission. Profits of wholesale distributors were likewise limited to 1⅓ per cent. of what they paid. Such the Commission

¹⁰ Cd. 8483, pp. 20, 21.
found, on investigating pre-war profits, was a fair return. On the other hand, no attempt was made to keep retail prices entirely uniform. They were watched, however, and, if here and there traders exacted excessive prices, action was taken.\(^{11}\) In this way the Government directed the entire sugar trade, controlling all transactions from the sale by the distant foreign producer to the purchase by every household in the United Kingdom.

The prices of a commodity thus controlled should have been, it might be expected, advantageous to the consumer. On the contrary, the cost of no other staple article of food in England advanced so much. By the end of 1916 the increase was 170 per cent. The retail price of white granulated sugar in July, 1914, was 2 d. per lb., in December, 1916, it was 5½ d. Much of this advance came at once and was due to the restricted sources of supply. After the sharp August advance of about 100 per cent., the price fell back to one 75 per cent. above the normal — i.e., to 3½ d. retail. There it remained until September, 1915. In that month a duty of ¾ d. per lb. was imposed, but was counterbalanced in part by a reduction of ¼ d. in the margin allowed to wholesalers. The selling price remained at 4 d. until January, 1916. Before April, however, sugar advanced to 4¾ d. and then an additional duty of ½ d. was imposed. The rise during the remainder of the year was slight.\(^{12}\) Of the total advance of 3½ d. therefore, 1¼ d. is attributable to taxa-

\(^{11}\) Ibid., p. 21.

\(^{12}\) Ibid., pp. 19, 20.
tion, as much more to the circumstances attendant upon the outbreak of war, and half as much again to the rise of the early months of 1916.

The last increase, owing to circumstances which had arisen, was not so much deprecated by the Government as fostered by it. At the close of 1915, supplies of sugar in the country were very low and the needs of the army were increasing. To check consumption, therefore, the Royal Commission in January, 1916, advanced the price of sugar and in February issued an appeal to the public. Notwithstanding the high price prevailing since the beginning of the war, the Commission declared, the consumption of sugar had decreased but little. In 1915 it was scarcely 5 per cent. less than in 1913. Owing to shortage of tonnage a restriction of importation had at length become necessary, and the supply of sugar brought into the country might be cut down by 20–25 per cent. In view of this the public were urged to eat less sugar, less jam, less chocolate. The Commission did not add what everybody knew—that the higher wages of the working classes had enabled them to indulge, regardless of prices, in more sweets than ever before.13 Once more, at the end of February, the Government put up the price, but after that not again during 1916. The advance in the retail price of sugar from 4 d. to 4¾ d. early in the year is therefore explained by two official advances, and these were primarily due to the Government's desire to economize shipping facilities.

Such efforts were only in part successful. The 25 per cent. reduction in consumption which had been urged was not attained, but 15 per cent. less sugar was used in 1916 than in 1915 and 19 per cent. less than in 1913. At the end of the year the stock on hand was greater than a year earlier.

This restriction of the supply was not effected without arousing criticism. It was said that if dealers and manufacturers had continued to import on their own account, they would in many cases have been able to secure more abundant supplies. To which the Government replied that the question was not one of purchasing in foreign markets but of transporting the purchases to Great Britain. In this respect the Government was in a position to meet the demand better than the private importer. The latter would have to pay abnormal freight rates if he could get any tonnage at all, whereas the Government could and did import at blue-book rates. Without its control, prices would probably be much higher than those which prevailed, as, indeed, they were in New York.

Less easily answerable were the charges made relative to the distribution of sugar. In the Commons in November, 1916, Mr. Tickler declared that it was hard to persuade the public that the Sugar Commission had been a success, when thousands of families were unable to get even a moderate supply. What they cannot under-

14 L. T., Ann. Fin. and Com. Rev., Jan. 19, 1917, p. 13; L. E., Feb. 17, p. 299. In 1913 the consumption of the United Kingdom was 1,800,000 tons; in 1916, about 1,450,000 tons.
15 Cd. 8483, p. 21.
stand, he said, is that they can go into a confectioner's shop and buy as much as fifteen pounds of sweets, but at the nearest grocer's they cannot get one pound. Mr. Runciman already had lamented the situation. "We have rationed sugar, and thousands and thousands of letters have come from the poor. God forbid that we should have to ration anything else." 16 Most irritating during the autumn was the difficulty of getting sugar for making home-made jam. Quantities of fine plums rotted in Nottinghamshire orchards, but the housewife could buy freely only boiled sweets at the confectioner's. 17

A part of the difficulty was inherent in any rationing scheme. Since there was little abatement in the demand of the public, a degree of inconvenience was inevitable. But, while the Commission tried to apportion its supplies so that the shortage would be everywhere equally felt, its method detracted from its success. Refined sugar, whether that imported by the Government or that turned out by British refiners, was apportioned to wholesale dealers in proportion to the amount of their purchases in 1915. The wholesalers distributed to retail dealers on the same principle and the latter in turn were expected to sell to their customers as equitably as possible. Only to the jam manufacturers, in view of the size of the home fruit crop, was a special allotment made. 18 This principle of apportionment assumes a relative immobility of popu-

16 P. D. C., 1916, LXXXVII, 873; LXXXVI, 510.
17 M. G., Sept. 2, 1916, p. 5; Sept. 5, editorial.
18 Cd. 8483, pp. 21. 22.
lation and demand which seems not to have existed. Growing businesses were penalized in favour of those which were stationary or retrogressive. Well-to-do customers, also, in spite of the principle, succeeded in getting more than their relative share of the allowance, and others achieved the same end by purchasing in a number of shops. To avoid exhaustion of stocks some grocers required that other foodstuffs be bought with sugar—a condition that sometimes proved onerous to the small buyer. Most unfortunate, however, was the working of the principle relative to the poor on the one hand, and to the confectioners on the other. Where shortage demands sacrifice, it is better that luxuries be cut off in greater measure than daily needs; and it is more serious for the person who lives close to the margin of subsistence to get three pounds of sugar instead of four, than it is for the patron of the sweetshop. These defects in distribution were brought home to the Government by numerous complaints, and early in 1917 remedies were sought.

First of all, by orders of January 11, the manufacture of costly sweets and the use of sugar or chocolate for covering cake or pastry were prohibited. Hitherto in the West End of London chocolates costing 5 s. or more had been offered for sale. At first it was proposed to suspend entirely the sale of chocolates during the war; but the Food Controller argued that many thousands

20 L. T., Jy. 21, 1917, p. 7.
would thus be thrown out of work and that a valuable food for children would be unavailable.\textsuperscript{21} He, therefore, forbade the manufacture of such chocolate as would sell at retail for more than 3 d. per oz. (4 s. per lb.) or of any other sweetmeat which would sell at more than 2 d. per oz.\textsuperscript{22} When Mr. Lloyd George’s daughter was married in June, the prohibition relative to frostings had become effective and the bride’s cake had none of the customary icing and sugar decorations.\textsuperscript{23}

More drastic still was another order of January 11, prescribing that no manufacturer of sugar-confectionery or chocolate might use more than 50 per cent. of the sugar used by him during corresponding periods of 1915. Two months later the amount was reduced to 40 per cent. and the order was made applicable to all manufacturers of articles containing sugar, other than manufacturers of jam, marmalade, and condensed milk. After two months more had passed, the ration was reduced still further to 25 per cent. of the amounts used in 1915, and this was to become effective after June 1.\textsuperscript{24} It could scarcely be said henceforth that confectioners and their patrons were unduly favoured.

Another grievance of 1916 had been that little sugar could be had for home-made jams. In May, 1917, the Government set apart a certain amount of sugar for preserving fruit and speedily 250,000 letters asked for ap-

\textsuperscript{21} M. G., May 2, 1917.
\textsuperscript{22} D. R. M., 3rd. ed., p. 244.
\textsuperscript{23} M. G., Je. 22, 1917.
\textsuperscript{24} D. R. M., 3rd ed., pp. 244, 421; M. G., May 31, 1917.
plication blanks. Toward the end of June, the Commission made its allotments. But only fruit growers could be supplied, no balance remaining for those who wished to purchase fruit for domestic jam-making. The sinking of sugar cargoes and the overwhelming need of economizing tonnage compelled such action. To the appeals for apportionments which continued to come in the Commission replied curtly that the letters were wasted; and it was only left for the Times to insist that the Government had never understood how much jam was habitually made at home and to what extent home-made jams were preferred. What the Government actually did as a pis aller was to train and send out from the Food Production Department instructors who might teach people to preserve fruit without sugar. Instruction was free and it was hoped that the learners might pass the knowledge on. The Department even made arrangements with the Ministry of Munitions to supply bottles for preserving fruit and vegetables.  

It was at this time that the Royal Commission took action in line with its policy of early 1916. Willing to limit consumption and impelled by increasing costs, it advanced the price of wholesale sugar on May 30, 1917, by 5 s. per cwt. To the consumer this meant a rise of ½ d. a pound, and the price accordingly touched 6 d. The pre-war cost had trebled.

The last and most difficult phase of the problem of the

distribution of food, that relating to equitable apportionment of the supply among households, received in the summer of 1917 the prompt consideration of the new Food Controller, Lord Rhondda. The essence of his solution was local control. Three principles, he declared further, would guide him. Supplies of food must be conserved, they must be shared equally by rich and poor, and prices must be kept down. That the public might know the need for economy, information about supplies would from time to time be published.

His plan, as applicable to sugar, was announced early in August. Local authorities (the Common Council of the City of London, Metropolitan Borough Councils, Municipal Borough Councils, Urban and Rural District Councils) were instructed each to appoint Food Control Committees of not more than twelve members. Some of the members might be co-opted; one at least must be a woman and one a representative of labour. The expenses of the Committees would be a charge upon the Exchequer; for they would need a special staff, including inspectors to watch out for evasions of the new regulations. The penalty for evasion was a heavy fine, with imprisonment and hard labour.27

The rationing scheme which these Food Control Committees were to put into practice and which, it was hoped, would remedy faulty distribution, affected primarily retail dealers and householders. No sugar might after October 1 be sold at retail except by dealers registered

with the Local Food Control Committee. To all such there would be a reapportionment of supplies before December 30. What allotment each dealer might secure would depend upon the number of households which meanwhile declared themselves his patrons. Each household in a community, accordingly, was required to get from the local food office a sugar registration card, a portion of which must be deposited with the retail dealer. Once a week but not oftener the household might obtain its allowance. When record of this had been made on the card deposited with the retailer, the card might, it was suggested, be transferred from one box to another. Weekly allowances would vary, according to the increase or decrease in the nation's store. The customer need not, of course, buy his weekly allowance, though he could not defer taking it until another week. Caterers and others supplying food would have their allowances determined by the number of meals they served and by such other needs as they met. Only with the authority of the Local Food Control Committee could they after November 4 get supplies, and these would be apportioned for no longer than four weeks.

As soon as this scheme was put into operation, however, it was found that changes in the composition of a household and the necessary travel of many persons involved duplication of supplies. Household registration, therefore, had to give way to individual registration. Reluctantly the food ticket made its appearance, although cou-
pons were attached only for travellers. Travellers might, henceforth, buy their ration from any grocer, but permanent residents were to proceed as under household registration. Should a general scheme of compulsory rationing become unavoidable, experience would have been got, it was felt, from the sugar cards.

It thus appears that the Government’s control over the refining and distribution of sugar has from the first been more complete than its control elsewhere in the realm of industry except with regard to the railways. At the beginning of the war access to the supply of raw sugar was forbidden to private enterprise; prices were promptly fixed and have since been changed at will; taxes have incidentally been collected from all consumers; finally an imperfect scheme of distribution has been replaced by a more equitable one. The steady shrinkage of available stores has, furthermore, turned this scheme of distribution into a rationing of the population, the first imposition in Great Britain of compulsory economy.

MEAT

In certain respects the meat supply of the United Kingdom is like the wool supply. There is in each case a considerable home product but one by no means large enough to meet the demand. Ultimate reliance is upon imports, which, as it happens, come largely from the southern hemisphere. During the war, moreover, the

28 Ibid., Nov. 24, p. 3.
demands of the army for both meat and clothing have encroached upon civilian supplies, and any hardship arising from shortage falls eventually upon the civilian consumer.

Differences between the meat trade and the wool trade have also made themselves apparent during the war. Governmental interference in normal traffic became imperative sooner in the case of meat than in the case of wool; but, on the other hand, it affected first the imported supply. Not until more than a year after prices had been fixed for the domestic output of wool was similar action taken regarding domestic meat. The latter policy, too, met with more opposition than did the former, owing largely to dissatisfaction with the prices set. In meeting its own needs the Government, further, in the case of wool appropriates first the home supply, leaving a part of the imported product for the civilian trade; in the case of meat it uses first the foreign supply, leaving a large part of the home product and at times all of it for civilian consumption.

From the beginning of the war the Government has been concerned to maintain the home production of meat. In order that the large number of cattle in the country might be fed during the winter, it prohibited in September, 1914, the exportation of feeding stuffs without licence. The August rise in the price of these foods had led some farmers to sell their cattle and poultry prematurely. Assurance was, therefore, given that the supply of feeding
stuffs in the country was abundant and that, if prices did not remain normal, exportation would be entirely prohibited. Since bran was particularly abundant and cheap, farmers were urged to use it more.29

The endeavour to maintain the number of live stock at a high level was successful. Agricultural returns of June, 1916, showed 2 per cent. more cattle and sheep in the United Kingdom than a year before when the number was practically unchanged, and in the summer of 1917 there were still as many head as before the war.30

Soon after the latter date, however, farmers, for reasons to be explained later, threatened to kill off their stock.

By the spring of 1915 the Government had turned its attention to the supply of imported meat and for more than two years this was its chief concern. About 40 per cent. of the meat consumed in the United Kingdom is, in normal times, imported. This it was that could most readily be diverted to the needs of the army, and such was the policy at once adopted. Military needs proved to be very great. Not only did the men of the British army eat more meat than they did in times of peace and army cooks prove more wasteful than housewives, but the French, and eventually the Italian, Government decided to add meat to the soldier's ration. It was a departure from the usage of both countries, bringing

29 B. T. J., Sept. 10, 1914, p. 674; Sept. 17, p. 748.
them as competitors into the world market. The British Government saw that it would soon be forced to buy in markets where demand might readily outrun supply and where an alarming advance in prices might take place. Luckily, imported meat came from Australasia, and the co-operation of the Colonial Governments could be relied upon. Without hesitation these Governments took control of all beef and mutton exported, allowing producers a profit of 10 per cent. At a price, equivalent to the cost of production increased by this percentage of profit, the home Government took over these supplies. Unfortunately, however, the drought of 1915 greatly curtailed the Australasian output and it became necessary to rely upon the product of South America.

The importation of meat from the River Plate is in the hands of seven firms. Two of them are British, one is native, and the others are commonly believed to be owned or controlled by large meat packers in the United States. With these firms the Board of Trade began to treat, but found their prices excessive. The shipping companies, too, demanded very high freights, practically 2½ d. a pound from the Argentine. To curb such demands, the Government had one effective rein. The ships which carried South American meat were British-owned. To put itself in control of the situation the Ministry, accordingly, in April, 1915, requisitioned all insulated spaces in British steamships trading with Arg-
gentina and Uruguay, having already taken similar action regarding vessels trading with Australasia.\textsuperscript{33} The measure affected space for 450,000 tons of meat from the River Plate and for a still greater amount from Australasia.\textsuperscript{34}

Straightway shipowners and the "meat trust" accepted new terms. Freight rates were cut from \(2\frac{1}{2}\) d. a pound to \(\frac{3}{4}\) d.; the price of beef became nearly 2 d. a pound less than the price asked by the beef companies.\textsuperscript{35} Under its earlier contracts with the companies, the Government had paid the price ruling in the market during the week after the landing of the meat. By its new contract for the period from May 1, 1915, to June 30, 1916, the price agreed upon was only a little higher than the average of the prices previously paid and was actually lower than the price of the moment. The quantity contracted for, too, was double that of the earlier agreements. This arose from the fact that the Allies had decided to make their purchases as a unit and the British Government had been designated to act for them all.\textsuperscript{36} The actual negotiations were put into the hands of businessmen, questions of price being referred in particular to Sir Thomas Robinson, Agent-General for Queensland.\textsuperscript{37}

\begin{itemize}
  \item \textsuperscript{33} Cf. above p. 147.
  \item \textsuperscript{34} P. D. C., 1916, LXXXVI, 499.
  \item \textsuperscript{35} Ibid., 1915, LXXIV, 493.
  \item \textsuperscript{36} Cd. 8358.
  \item \textsuperscript{37} P. D. C., 1916, LXXXVI, 498. Mr. Runciman's speech of Oct. 17.
\end{itemize}
By this transaction the Government secured its supplies at a reasonable cost and, so far as there remained a surplus to put on the market, it was in a position to exercise a steadying influence upon prices in the civilian trade. For its own expenses in getting beef and mutton from Australasia it charged only 1½ d. or 1¾ d. per lb.\textsuperscript{38} Instead of allowing the surplus of imports to fall into the hands of speculators, it appointed a committee of three business men familiar with the trade to undertake distribution through retail channels. Avoiding sales to middlemen, the committee sold the surplus directly to distributors, who, in turn, were restricted as to what they might add to the price.\textsuperscript{39}

On the expiration of the fourteen months' contract, another was entered into, providing for a purchase still larger than the former one, and at prices 7 per cent. higher than had been paid. This contract will run until three months after the war, subject to three months' notice on either side. Save for a certain amount of meat imported by the companies on private account, it embraces the entire production from the flocks and herds of Argentina and Uruguay. Experts consider that on the whole the Government buying has been economical.\textsuperscript{40} So far as public access to the imported supply is concerned, the President of the Board of Trade declared in October, 1916, that no evidence of any exploitation

\textsuperscript{38} L. T., Je. 25, 1917, p. 7; Je. 26, p. 7.
\textsuperscript{39} P. D. C., 1916, LXXXVI, 498.
\textsuperscript{40} Cd. 8358.
whatever had come before the Board's investigating committee.\footnote{41}

However efficiently the Government may have bought, it could not in the end escape the problems created by the rising prices of meat. On August 8, 1914, prices of meat in England had advanced 15 per cent. but in September they fell back one-third of this amount. Since then their rise was continuous, registering advances upon pre-war prices of 35 per cent. in September, 1915, 65 per cent. in September, 1916, and about 85 per cent. in September of 1917.\footnote{42}

Behind the steady advance lay certain explicable causes. In spite of the restrictions upon the exportation of feeding stuffs, the prices of such stuffs rose, until linseed cake, for example, advanced from £8 5 s. 10 d. to £12 15 s. 9 d. in two years. Owing to the shortage of labour, the wages of agricultural labourers had to be increased. Above all, perhaps, civilian demands upon the home supply became more insistent than ever before. This was indirectly due to the large consumption of the Allied armies. One expert calculated that, whereas imported meat formerly constituted 40 per cent. of the amount consumed in the United Kingdom, after two years of war the demands of the army had reduced the percentage to 20 per cent.\footnote{43} By the summer of 1917 this figure had fallen to 10 per cent.\footnote{44} The home sup-

\footnote{41}{P. D. C., 1916, LXXXVI, 499.}
\footnote{42}{Cd. 8358. L. T., Oct. 17, 1916, p. 4.}
\footnote{43}{Cd. 8358.}
\footnote{44}{L. T., Sept. 7, 1917, p. 8. Lord Rhondda's statement.}
ply more and more had to suffice for civilian needs. Since it did not increase in amount, only economy in consumption could meet the situation.

Some economy seems to have been attained by the autumn of 1916, possibly to the extent of one-sixth of the meat formerly consumed.\(^45\) Rising prices probably lay behind this, but in April, 1917, the Food Controller decided to try the efficacy of another device. The observance of a meatless day was ordered.\(^46\) After a few weeks, however, it became clear that such economizing of meat resulted only in a greater consumption of bread. Inasmuch as there was at the time a relatively greater supply of meat in the country than of cereals, the meatless day was discontinued, and consumption was left free from direct regulation.\(^47\) Consumption, however, was indirectly dependent upon prices, and these at length received further official attention.

The rise in prices, as it happened, had been somewhat less for home-grown meat than for the imported product. From July, 1914, to September, 1916, British beef advanced in price 60 per cent. (ribs) and 80 per cent. (thin flank), chilled or frozen beef 80 per cent. (ribs) and 97 per cent. (thin flank); British mutton advanced 55 per cent. (legs) and 80 per cent. (breast), frozen mutton 84 per cent. (legs) and 117 per cent. (breast).\(^48\)

\(^{45}\) Cd. 8358.
\(^{46}\) L. T., Apr. 3, 1917.
\(^{47}\) M. G., May 1, 1917.
\(^{48}\) Cd. 8358.
Despite the smaller increase in the price of the home product, the profits of home producers and dealers were substantial and by 1917 popular criticism began to be directed against them.\footnote{L. E., Feb. 17, 1917, p. 302; L. T., Je. 26, 1917, p. 7.} Impelled by this criticism, the Government first restricted the profits of wholesalers. After May 31 they were forbidden to take a profit of more than 3 d. on the stone of 8 lbs.\footnote{L. T., Je. 1, 1917.} A little later a new official interest developed and price fixing in the domestic meat trade began.

The new interest arose from the fact that at the end of the summer of 1917 the Government for the first time found itself compelled to feed a portion of the army and navy on home-grown meat. For this purpose, it appeared, there would, in September, be need of 150,000 cattle from Great Britain and 100,000 from Ireland.\footnote{L. T., Jy. 23, 1917, p. 3.} That such demands might not disorganize the trade and dislocate prices, it was decided that domestic beef as well as imported meat should come under state control. In July the Food Controller announced that from September 1 certain maximum prices would be paid for live cattle bought for the use of the army and that these maxima would soon be applied to the entire home supply. The scale was graduated. In September the price was to be 74 s. per cwt., in October 72 s., in November and December 67 s., in and after January, 1918, 60 s. Such cautious reduction was proposed in order that the farmer
might adjust himself with as little loss as possible to the new conditions.\textsuperscript{52}

Although the September price was below market quotations, it was felt that this and the other autumn prices were tolerable. The January figure, however, was criticized, as discouraging to farmers and likely to induce them to sell their stock prematurely. In the Lords, the Earl of Kimberley said that the farming community were dumbfounded by the new prices, especially by that for January and later months. Some farmers had already ploughed up their young turnips, put in for fodder, and had sown wheat instead. Farmers did not mind a small loss, but one of £7 or £8 on a bullock after January 1 was too much. To this the Food Controller, Lord Rhondda, answered that 60 s., the price for 1918, was 63 per cent. above the price of January, 1914. Wages of agricultural labourers had increased by about 50 per cent., the cost of roots and feeding stuffs had not gone up more, the payment for wool, now under Government control, was only 50 per cent. above pre-war quotations, rents had not increased, and prices in general were only 63 per cent. above those of 1914. The farmer should therefore be content.\textsuperscript{53}

To make the farmer more content, Mr. Prothero, the President of the Board of Agriculture, explained the new regulations to a Scottish agricultural society which was voicing its disapproval. He recognized the preva-

\textsuperscript{52} Ibid., Jy. 21, p. 6. 
\textsuperscript{53} Ibid., Aug. 3, p. 8.
lent dissatisfaction of the farmers with the maximum prices and admitted that he would have liked to see them higher. Indeed, as Lord Rhondda had stated in the Lords, the Board's proposed prices were higher than those which the Food Controller himself had adopted. Mr. Prothero reminded the farmers, however, that the community at large was restive under the high price of meat and that agriculture was likely to suffer "in that they were setting up a bitter and indiscriminating current of public opinion" against themselves. It would be best to think twice before they showed such resentment as to make no further effort.

As for the seemingly premature sale of cattle, he continued, that was what the Government now desired. Cattle for the army should be like those got from the Argentine, not yet brought "to the degree of finish which in the past has reflected such credit on British graziers and has supplied our public with the finest meat in the world. Prime beef is no longer economical for the country at large. The last stages of fattening are the most expensive in food." In other words, more feeding stuff is consumed to create an additional pound of beef in the later than in the earlier stages of feeding. So reduced had shipping tonnage been by the submarine that little of it could be spared for cattle food. It would be the business of the Department of Agriculture to see that the reduction in stock was not carried to the danger point and to protect, as the most valuable element in future reconstruction, the pedigree flocks and herds.54

54 Ibid., Aug. 7, p. 3.
The recommendation that cattle and sheep should be slaughtered in a much less fat condition than had been customary was further developed in a little book by Professor T. B. Wood, head of the Cambridge School of Agriculture. In this way would feeding stuffs, he argued, best be economized, demand and supply best be equalized.\(^5^5\)

Despite explanations, protests became louder. On September 6 the Central and Associated Chambers of Agriculture declared that, though the country had an excellent President of the Board of Agriculture, the Government did not give him the consideration deserved. They pointed out that in every town whence reports had come, animals were already being put on the market weighing three hundredweight less than usual, and they passed a resolution that the price fixed for home beef ought to be 70 s. from October 1 to January 1, 1918.\(^5^6\)

On September 17 four hundred representative butchers expressed serious apprehension for the meat supply of the coming winter and spring. One dealer from Manchester reported that, whereas he ordinarily got twenty-five lambs a week, he had not been able of late to get more than two.\(^5^7\) Finally, Mr. Prothero in a speech at Darlington on October 5 professed his conviction that at current prices arable farmers who might stall, feed, or fatten cattle for winter markets would make small profits,
if they made any at all. There was, he said, no longer any point in debating the wisdom of three-fourths fattening; supplies sufficient for anything else could not be had. Whereas the live stock of the country usually consumed over eleven million tons of feeding stuffs, this year there would be available only about six million tons, and the greater part of this would have to be devoted to dairy cattle. In many parts of the country preparations for winter feeding were suspended, neither cake nor stores being purchased.  

In view of the almost universal disapproval of his prices, Lord Rhondda yielded somewhat. On October 9 he announced that the War Cabinet had responded to the appeal of the farmers. The November and December prices of 67 s. per live cwt., instead of being reduced to 60 s. on January 1, 1918, would be continued until July 1. After that the 60 s. maximum would become operative.

While the farmers were thus voicing their protests, the Government on August 29 adapted its schedule of prices for army beef to beef for civilian consumption and added regulations affecting retail prices. The new schedule maxima were for dead weight rather than live weight, but were otherwise like those already announced. Retail prices were to conform to them. No retailer might sell beef at prices higher than those which he had paid by more than 2½ d. per lb. or by more than 20 per

58 Ibid., Oct. 6, p. 8.
cent. on his fortnight's purchase, whichever increase might be the smaller. All expenses, as well as profits, were included in this permitted increase. Inasmuch as local conditions of purchase would differ, the Local Food Control Committees were empowered to fix schedules of maximum retail prices for the various points in their respective localities. If any butcher, relying upon a large turnover, was already content with a smaller margin of profit than the one announced, the Local Food Committee should fix prices on this basis. The prices fixed butchers must keep posted in their shops. For another reason retail prices in different localities might differ. If, for instance, a West End butcher in London were to sell his choice cuts at a high price, he would have to sell the other parts of the carcass at a low rate to keep within the average price prescribed by the order. In working class districts where the demand is for cheaper cuts, the better ones could be sold at a relatively moderate price. It was estimated that the average retail price for home-killed beef and mutton would work out at about 1 s. 3½ d. per lb., and during the month of September prices for domestic beef and mutton did decline by 1¼ d. and 2 d. respectively. Retailers and consumers expressed satisfaction with the Government's new measure.

60 Ibid., Sept. 3, p. 8; Oct. 22, p. 3.
61 Ibid., Sept. 1, p. 7.
63 Ibid., Oct. 16, p. 3.
The situation, however, from the national point of view remained serious enough, as Mr. Prothero pointed out. If account were taken of all two-year old cattle available on September 4 and allowance made for their reduced weight and for the usual number of cows added to them from the dairy herds, the 45,000,000 lbs. of beef normally consumed to the time when cattle again begin to come off the summer grass could, indeed, be supplied. But in May or June of 1918 beef and mutton were likely to run short. This contingency could be avoided by the slaughter of an increased number of cows, heifers, or veal calves—a dangerous proceeding; it could be forestalled by the importation of more beef, a resource which did not lie in English hands; it could be obviated, finally, by a reduction in consumption, the only remedy which was safe and within control.\(^6\) The last word here, as with other kinds of food and as with coal, wool, and leather, was an appeal to the customer. Mainly by his economy could the crisis be met and the situation saved.

At the same time that the Government exerted its control over the domestic meat supply by fixing maximum prices for beef, mutton, and pork, it turned also to the imported supply of bacon, ham, lard, and butter. Prices of these commodities were less amenable to control. The best that the Government could do was to repeat its exploits relative to sugar and wheat. It could

\(^6\) Ibid., Oct. 6, p. 8.
itself enter the market as purchaser and could so distribute the imported product that the public would pay no undue middleman's profit.

The situation regarding bacon was in the early autumn of 1917 acute, and it seemed impossible by any device to avoid temporary shortage. Supplies from Sweden and Holland had been almost cut off, while those from Denmark had been materially curtailed. In North America, which would now have to be largely relied upon, the number of hogs had been reduced, and the home demand for them had increased owing to army needs. To facilitate purchases of bacon, ham, and lard there, the Ministry of Food from September 3 began to buy through a single agency. At home a Meats and Fats Executive, modelled on the lines of the Royal Wheat Commission, was created to buy bacon, ham, lard, butter, and cheese for Great Britain, France, and Italy. At once it secured several thousand tons of bacon and soon it had a mission under way to set up in New York its permanently organized executive.

The supplies once secured, the Government prepared to distribute them through the ordinary channels, allowing suitable profits as commission. Since March, the prices of bacon, ham, lard, and butter had been determined by importers', manufacturers', and curers' prices, set every fortnight. The Government now proposed, as from August 30, to fix maximum importers' prices,

66 Ibid., Sept. 27, p. 3.
prices which would necessarily vary as foreign market conditions changed. Wholesalers and retailers, too, were called in to advise about the determination of wholesale and retail prices. In short, the regulation already formulated for the prices of domestic meat was, so far as possible, to be extended to imported meat products.

By the end of 1917, therefore, the state's control of the meat trade was as complete as it well could be. Beginning in 1915 with the purchase of imported meat for the army, the Government, by requisitioning all insulated shipping space, assumed control of most of the beef and mutton imported into the United Kingdom. When in 1917 domestic beef was also needed for the army, the Government indicated the prices which it would pay. Owing to the complaints of consumers about the high cost of meat, it extended these prices to domestic meat produced for civilian needs, and restricted carefully the profits of wholesalers and retailers. Lastly, to protect the consumer still further, it created an agency for the purchase of bacon, ham, and lard in New York, and took measures that no middleman or retailer at home should make more than commission profits on these imports. The risk run by fixing prices for domestic meat was the possible falling off of production; of this danger the Government at the end of 1917 was sensible, and on account of it gave to the prices set for beef, mutton, and pork most careful consideration. Its next step promised to be an attempt to conserve the meat supply by restricting consumption.
BREAD

Since the price of bread depends upon the cost of flour and the price of flour upon the cost of wheat, the three commodities may be treated as one subject. Increases in the price of wheat will be accurately reflected in the prices charged for flour unless there is profiteering on the part of the millers; increases in the price of flour will be accurately reflected in the prices charged for bread unless there is profiteering on the part of the bakers. If, on the other hand, the prices of bread advance less rapidly than do those of flour and the prices of flour less rapidly than do those of wheat, the explanation is that stores of wheat and flour have been bought by contract on relatively favourable terms and have been sold at prices based on those terms. This has happened in England during the war. By October, 1916, it came to pass that the price of wheat had advanced since July, 1914, by 130 per cent., the price of flour by 100 per cent., while the price of bread had advanced by only 65 per cent.67 There would seem to have been no profiteering here; and it crept in only if supplies, bought at relatively low prices, were sold at a high profit, yet one which, even so, was less than the ruling market price would have warranted.

Great Britain imports roughly four-fifths of the

67 Cd. 8483. Second and Third Reports of the Committee of the Board of Trade to Investigate the Principal Causes which have led to the Increase of the Prices of Commodities since the Beginning of the War. Nov. 15, Dec. 30, 1916.
FOOD

wheat and flour which her people consume. At the outbreak of the war the exportation of these commodities was, therefore, prohibited. Since it was known that the supply of them in the country was low, an excited demand none the less arose and quickly had its inevitable effect on prices. When, however, the Board of Trade called together men who could influence retail prices of foodstuffs, lending its own sanction to their action, prices were in turn steadied. Moving in this manner, the spot price of standard wheat (No. 1 Manitoba) rose and fell in London. From January to July, 1914, it had averaged 37 s. per quarter (8 bushels or 496 pounds); but early in September it advanced to 50 s., only to fall back by mid-October to 44 s.

From October, however, there began a rise in the price of wheat, which was not counteracted until the following May. During the intervening period wheat sold at 73 s. 6 d. the quarter, an advance of 100 per cent. over the average price of the first half of 1914. Already in February, 1915, complaint was loud and called forth a debate in Parliament. Mr. Asquith there admitted that the price of wheat had increased relatively more than that of any other necessity of life except sugar. If comparison were made with the prices of a year before, i. e., those of February, 1914, wheat would be found to have risen 72 per cent., flour 75 per cent., sugar 72 per cent., British meat 6 per cent., foreign meat 12 per cent.,

68 Cf., above p. 168.
69 Cd. 8483.
coal 15 per cent. In the case of wheat the change was due to increased demand and deficient supply. To this many factors had contributed. Men in the new armies ate more than they had eaten in civil life; Italy, Holland, and France had bought abnormally; the Australian crop was poor, Australia even becoming an importing country; parts of France and Belgium had been devastated; the Government of India had put a temporary embargo upon the exportation of wheat; bad weather conditions had delayed the arrival of the crop from Argentina; above all, the closing of the Dardanelles had cut off the Russian crop so that some 10,000,000 quarters of wheat were lying in Russian ports. Difficulties of transportation and the rise of freights, the Premier thought, were only subsidiary causes.

As to the charge that supplies had been withheld from consumption, the Board of Agriculture and Fisheries declared that periodical returns collected since the outbreak of the war showed nothing of the kind. In January stocks were almost exactly the same as a month before, and English wheat had been freely offered until the bad weather of December hindered threshing.

Before the high prices of the spring of 1915 began to recede, however, the balance sheet of a large firm of millers in South Wales, the firm of Spillers and Bakers, was published. The figures were sensational. After paying its dividends on preference and ordinary shares

70 P. D. C., 1915, LXIX, 759-765.
(preferred and common stock), the company disbursed in extra dividends £80,165, or 17½ per cent. on the ordinary shares. Yet there still remained from the year’s earnings £248,419, a sum which represented a further return of 54 per cent. on the ordinary shares. To the public temper, already exasperated by the increasing cost of living, the abnormal profits thus disclosed seemed convincing evidence that profiteering in food was no myth. Mr. Runciman could only admit the existence of these profits while he deplored them. As late as September, he reiterated his conviction that the millers as a body had behaved not improperly. Some of them had made a good deal of money owing to forward contracts of the autumn of 1914, but it was not unlikely that these same men would lose a good deal as a result of the heavy fall of prices which had already taken place when he spoke. Despite the protestations of the President of the Board of Trade, the popular mind long remembered that, while many of the poor were hard pressed to pay for food in the winter and spring of 1915, certain dealers in wheat and flour had reaped larger profits than ever before.

Apart from all questions of profiteering, however, the situation at the end of 1914 was serious enough from the national point of view. So it appeared to the Cabinet Committee which, from the beginning of the war, had given close attention to the nation’s store of wheat.

73 P. D. C., 1915, LXXIV, 488; LXXII, 420.
Now that there was still risk of an interruption of traffic across the Atlantic, the surplus could not be allowed to fall to a two- or three-weeks' supply. The Government, therefore, decided to purchase a national reserve. From November, 1914, until the following February, secretly and through the agency of a single firm, a new Grain Supplies Committee bought extensively in the United States and Argentina. All told, it purchased some 3,000,000 quarters of wheat and large quantities of flour. This method of acquisition, which involved bidding against home importers, later called forth criticism; but in defence it was urged that such large purchases were at best bound to stimulate prices, that the Government had acquired nearly all its store before its buying was realized, and that events at length fully justified the wisdom and the extent of the enterprise. Throughout the spring of 1915 the nation at least knew that its food supply was not imperilled, while the stores held by the Government could, it was felt, be at any time released to steady prices. This feeling that such release might take place had not a little to do with the easier quotations of the early summer of 1915.

What actually did most to relieve the situation at that time, however, was the arrival of part of the abundant Indian wheat crop. The price of this had been regulated by the Government of India, which in March, 1915, cooperated with the home Government to have the exportable surplus shipped to England. In England, the Gov-

\[^{74} \text{Cd. 8483; P. D. C., 1916, LXXXVI, 501.}\]
ernment turned all the firms engaged in importing Indian wheat — some half-dozen there were — into Government agents, paying them a commission but allowing them no other profit. In this way 2,500,000 quarters of wheat were acquired and distributed.\textsuperscript{75}

By the time that the cargoes reached England, the outlook had improved in still other directions. The growing American crop promised well and eventually proved to be an enormous one; there was high hope that the Dardanelles expedition might be successful in opening the Black Sea and liberating its stores. Prices reflected the optimism. From June until November wheat fell back to a range of from 56 s. to 60 s. the quarter.\textsuperscript{76} Complaints about the high cost of living were quieted, and the Government seized the opportunity to provide storage facilities in case another emergency should arise. Since England and Wales had small storage capacity, Lord Selborne devised a scheme and made arrangements with a British trade buyer whereby large quantities of wheat might be piled up. So excellent was the organization that henceforth the Government could hold on its own account extensive supplies without inconveniencing a single port or warehouse.\textsuperscript{77}

Not until the early winter of 1915–16 did the situation again become ominous. Then from December to February the price of wheat once more rose from 58 s. 6 d.

\textsuperscript{75} P. D. C., loc. cit.
\textsuperscript{76} Cd. 8483.
\textsuperscript{77} P. D. C., loc. cit., p. 502.
to 73 s. The Government perhaps to a slight degree contributed to this advance by again entering the market as a purchaser. Most of its buying, however, was done after the rise had taken place, and this time at least it did not compete in its purchases with the Allies. At the end of the year it had suggested to the French and Italian Governments that co-operative buying was preferable to competition, and a joint committee had been appointed to sit in London and make the requisite purchases. Henceforth this Committee met daily and its agent acted for the Allied Governments.\(^78\)

What pretty clearly lay behind the rising prices of wheat and flour at this time was not so much Government buying as the advance in freight charges. From August, 1915, such charges rose rapidly until the New Year.\(^79\) At once the price of wheat responded and after August was higher in London than it was in New York. In November, 1915, the Government formed its resolve to requisition shipping space. In due course the Requisitioning (Carriage of Foodstuffs) Committee made arrangements whereby liners and a considerable number of cargo steamers plying to North America were to offer from 50 per cent. to 75 per cent. of their cargo space for the carriage of wheat and flour. The new freight rates were greatly below the old ones and the price of wheat declined some 35 per cent. until in June, 1916, it stood at 48 s. 6 d. Government requisitioning of shipping had

\(^{78}\) P. D. C., 1916, LXXXVI, 19.

\(^{79}\) Cf. above p. 145.
been as effective in preventing a crisis as had Government purchasing of wheat.

Unfortunately after July, 1916, a new set of circumstances became operative. The year’s wheat crop in the United States had been overtaken by disease, that of the Argentine was suffering from drought, and the harvests of Canada, India, and the United Kingdom were relatively poor, the last having fallen off by more than one and one-half million quarters. Only in Australia was the promise good and Australia was very far away. Again the price of wheat rose until in October it stood at 86 s. per quarter. The four-pound loaf of bread, which before the war sold for about 5¾ d., by November sold at between 9 d. and 10 d. At the Trade Union Congress of September high prices were regarded as the most pressing of grievances, and a resolution was adopted urging the Government either to fix maximum prices or to assume full control over supplies.

So serious had the situation become that in October another decisive step in state control was taken. A Royal Commission was appointed “to inquire into the supply of wheat and flour in the United Kingdom, to purchase, sell, and control the delivery of wheat and flour on behalf of His Majesty’s Government, and generally to take such steps as may seem desirable for maintaining the supply.” The intermittent action of a Grain

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80 Cd. 8483.
Supplies Committee, which bought reserves in emergencies but left the regular trade in private hands, was to be superseded by the continuous control of a body which would largely if not altogether take charge of the importation of wheat. The Royal Sugar Commission was to have its counterpart.

Anticipating the creation of the Commission, the Government made a large purchase. It bought 550,000 tons of Australian wheat, paying therefor £4,000,000. During the preceding season the world's competition for tonnage had been greater than its eagerness to buy wheat, and the Commonwealth Government had purchased the whole of the native crop. From such full granaries the home Government might draw, if only it could provide shipping facilities. It was not, to be sure, economical to import grain from Australia, since the ratio of freight charges to the price of wheat was one-third, whereas in the case of North American wheat the ratio was one-fifth. Uneconomical, however, the Government was forced to be, and shipping facilities had to be found.

For nearly a year the Requisitioning (Carriage of Foodstuffs) Committee had been providing trans-Atlantic tonnage with excellent results. The new Royal Commission, accordingly, continued its policy, appropriating for the state much of what had once gone as profits to individual importers. One change it made: variable rates of freight gave way to fixed ones. Thereby state requisitioning of shipping at blue-book rates became a completely accepted policy and the consumer could be as-
sured that so far as British shippers were concerned, no undue profits in grain intervened between the producer and himself. How much was saved on transportation became apparent from payments made to certain neutral vessels, which to increase the tonnage were also chartered. Mr. Runciman designated these freights as "gigantic," and remarked that, if the Government had had to pay open market rates, the charge would have been 50 per cent. higher than what it was paying.83

To avoid the risk that the Government might not buy wheat as advantageously as private merchants, particular attention was given to the personnel of the Commission. It was not drawn haphazard from the House, but was appointed, as the staff of a great firm is selected, with an eye solely to business efficiency. To it were called not only men familiar with the Argentine and America, but others who deal with more distant regions and still others who know about the distribution of grain at home. In the early days of its existence when its tasks were urgent and burdensome, it sat daily—morning, noon, and night.84 In November the Canadian Bankers' Association offered to extend to it a six-month's credit of $20,000,000 for the purchase of Canadian grain.85 In December it signed on behalf of the Allies a contract for 3,000,000 additional tons of Australian wheat. If the

84 Ibid., LXXXVI, 501.
prices paid in the two Australian transactions, 32 s. and 38 s. per quarter free on board, are compared with the market price of wheat in London, 86 s. in October, it will be seen how advantageously the Commission was able to buy. To its low contract prices there had to be added only the blue-book freight rates of requisitioned vessels. The chairman of the large milling firm of Spillers and Bakers in July, 1917, complimented the Commission. It had, he said, "dealt with a very difficult task in a manner which could only be impugned by the most carping critic."  

Certain criticisms relative to the Commission were offered in Parliament by Mr. Barnes at the time of its creation. Besides experts, representatives of bakers and of consumers might well have been appointed to it; there should be no doubt about its right to purchase the entire imported wheat supply; particularly it ought to be able to buy home wheat at a fixed price. More than two years before, Mr. Barnes continued, a deputation of trade unionists, co-operators, and others representing labour interests had waited upon the Government and had urged not only the step just taken relative to foreign wheat but the further purchase of the home crop. Even since then food speculators, including the British farmer, had been lining their pockets with the pickings of the poor man's loaf. Inasmuch as labour was now tied up in particular workshops under the Munitions of War Act, why should

87 Ibid., Jy. 30, p. 12.
not the economic principle be extended and the farmer dealt with on similar lines?  

The question of the wheat grown by the British farmer was, however, hedged about with difficulties. To restrict the price of it might lead to a decline in the output, and a very serious decline of this sort had already taken place. In 1916 the area under wheat in the United Kingdom had fallen off by 250,000 acres and a further falling off of 500,000 acres in 1917 was predicted. Should this take place, the total decrease in output would be some 2,600,000 quarters. To import an equivalent amount from Australia would require 100 ships of 5000 tons for four and one-half months. In view of the scarcity of merchants ships at the end of 1916, it is comprehensible that the Government was not then inclined to discourage the British farmer by a limitation of his profits. Before a year had passed, it took measures, as will appear, to stimulate him to increased production.

If the Government was unable at the moment to accede to the labour demand that the price of British wheat be fixed, it did within a month adopt another policy which had found favour in the same quarter. On November 15, 1916, Mr. Runciman announced in the Commons that there would be created a Ministry of Food with a Food Controller at its head. Commissions had come into being, he explained, to deal with the sugar supply, the imported meat supply, the imported wheat supply, while

89 Ibid., 458.
branches of various departments dealt with mercantile transactions. But there was no co-ordinating hand. As the problem expanded, the Government felt more and more that some minister must be free to deal with nothing but food problems and to co-ordinate all related activities of this kind. Drastic powers, too, looking in new directions would be conferred upon the new minister. Bit by bit, added Mr. Runciman, the Government had been driven to such a policy against the will of many of its members, himself included. But the easy flow of voluntary operations could no longer be depended upon.\(^{90}\)

Next day, November 16, the new powers referred to were announced by an Order in Council, and were embodied in regulations 2F and 2G under the Defence of the Realm Act. These provide that whenever the Board of Trade are of the opinion that special measures should be taken to maintain the supply of any article important for the food or for the wants of the nation, it may apply any one of the following provisions, generally or locally. Foods of national importance may not be wasted or unnecessarily destroyed; the uses to which they shall or shall not be put may be defined; the manner of their manufacture may be prescribed; the mode of their sale and distribution throughout the country may be determined; to prevent unreasonable inflation of prices, market operations in them may be regulated; their prices may be fixed, i. e., the amount by which the price of any of them may exceed its corresponding price at a specified

\(^{90}\) Ibid., LXXXVII, 856, 858, 862.
date; supplies of them may be requisitioned by the Board of Trade; and full information as to existent stocks of them may be required. The bill creating the new ministry was not introduced and passed until a month later, when Lord Devonport became Food Controller; but in the interim several orders carrying out the new regulations were issued by the Board of Trade. Hitherto governmental interference in the food supply had been limited to the control over sugar and to the purchase of imported meat and imported wheat. Now, however, a new period opens and governmental restrictions of a varied kind begin to be imposed.

Under the new regulations, orders of three general sorts were issued. The first series looks toward economy through the introduction of cheaper constituents into food, various sorts of war bread being prescribed for all consumers. Orders of another sort urge economy in consumption and the avoidance of waste, being always likely, if poorly observed, to culminate in rationing schemes. Orders of the third sort endeavour to protect the consumer by the fixing of prices and by the prevention of speculative operations on the market. For convenience in following the intricate history of a year of food regulation, each group will be considered separately.

On November 20, 1916, the first order under the new regulations was issued, and became operative a week later. It provided that henceforth certain percentages

of flour, higher than the customary ones, must be extracted from the various grades of wheat. At the beginning of the war Sir Francis Fox had urged that from 100 tons of wheat not merely 70 tons of white flour should be milled, but 88 tons. The product, too, would, he declared, be more nutritious.\textsuperscript{92} According to the new order, English wheat must thenceforth yield a "straight-run," i.e., 76 per cent. instead of 70 per cent. of flour, for which reason this first milling order came to be known to the trade as the "76 per cent. order." On and after January 1, 1917, only flour so milled might be used for making bread or any other article of food, and the Board of Trade warned to this effect those who were said to be accumulating stores of the whiter flour for private consumption.\textsuperscript{93} This order was in accord with the recommendation of certain members of the committee which was investigating the increased prices of commodities, and which made its report relative to bread, flour, and wheat on November 15.\textsuperscript{94} The measure was the first step taken toward the creation of a war bread.

On January 29, 1917, a new order made compulsory the extraction of 81 per cent. instead of 76 per cent. from English wheat, or, barring this, the addition to the 76 per cent. of a further 5 per cent. of flour made from barley, rice, maize, semolina, oats, rye, or beans. By an order of February 24, the alternative was withdrawn. From

\textsuperscript{92} L. T., Aug. 17, 1914, p. 11.
\textsuperscript{93} B. T. J., Nov. 23, 1916, pp. 570-571.
\textsuperscript{94} Cd. 8483.
the wheat milled, 81 per cent. of flour must be extracted and 5 per cent. of the inferior grain must also be added. A further admixture of 10 per cent. was permitted.\textsuperscript{95} Again on April 10 the percentages were raised. To the 81 per cent. wheaten flour, 10 per cent. from an inferior grain must be added and 25 per cent. might be.\textsuperscript{96} Finally, on May 10 the constituents of war bread were definitely regulated. With the 81 per cent. wheaten extraction, 20 per cent. of inferior flour must be mixed and 50 per cent. might be.\textsuperscript{97} In the same month a Scotchman outdid the Government. In London he produced a bread which contained only 20 per cent. of wheaten flour, the remainder being a mixture of oaten flour and rolled oats. It was said to keep well and to improve with keeping.\textsuperscript{98}

To supervise the carrying out of the new regulations the Government at the end of April took over all the flour mills in the United Kingdom and appointed a Mills Control Committee. Particularly was the new Committee to see that millers used whatever inferior grain was most readily procurable in any district. Chinese horse-beans, for example, were at the moment abundant in London, maize more available in the North and West. The millers had been inclined to secure whatever grain was cheapest, regardless of how far they might have to transport it. If the Committee should be successful in stop-

\textsuperscript{95} B. T. J., Mar. 1, 1917, p. 612.
\textsuperscript{96} Ibid., Apr. 12.
\textsuperscript{97} L. T., Jy. 30, 1917, p. 13.
\textsuperscript{98} M. G., May 21, 1917, p. 4.
ping this practice, it was clear that a part of the burden of the railways would be lifted.\textsuperscript{99}

The new bread was far from being an immediate success. Although the millers in general observed the order for an 81 per cent. extraction and a 20 per cent admixture, their mills were unaccustomed to the inferior grains and they found it hard to reduce them to the requisite fineness. They were further not required to label their product so as to show the percentage of admixture. The bakers, in consequence, saw a flour of unknown quality coming into their hands and they quickly pronounced this quality most unsatisfactory. Owing to the presence of more coarsely-ground grains, the texture of the bread was close and moisture was unduly retained. In warm weather the loaf consequently became "ropey" and inedible. At the end of June, the London Master Bakers' Protection Society by resolution requested the Prime Minister to prevent the great waste which was being occasioned through the use of inferior flour. Thirty-three of their number complained of waste during the last fortnight, while two bakers had been compelled to destroy 1500 loaves, not being allowed to feed them to the pigs. The bread at best was too harsh for children and elderly people. To a straight run or to the separate milling of the other cereals there would be no objection. Inasmuch as dilution had varied greatly in different regions (from 20 per cent. to 50 per cent.), some standardizing was most desirable.\textsuperscript{1}

\textsuperscript{99} B. T. J., Je. 29, 1917, p. 204; L. T., May 5, 1917.
\textsuperscript{1} L. T., Je. 29, 1917, p. 3.
On July 10, Mr. Anderson speaking for the Ministry of Food defended the war bread. Although many millers had not yet well adapted themselves to making the mixed flour, most of them had. The digestibility of bread in which considerable maize is used had been investigated before the order was issued, and the tendency of bread to become ropey is not directly due to the admixture of inferior flours. "Rope" is caused by germs (bacilli maesenterici) generally present in dirt or dust and usually on the outer husk of wheat. Though almost always found in flour, these germs increase in number through closer milling and by the use of inferior grains. Normally harmless, they may under certain circumstances cause fermentation and make the bread ropey and unwholesome. The recent prevalence of rope was probably due to the warmth and moisture of exceptional weather. Admixture of inferior grains could not be dispensed with, since only by their use could the supply of flour be maintained while shipping facilities were restricted. Nor was standardization feasible. Different grains are more easily got at different places and should be utilized. During the next few months there would not be much maize, but when the pinch came later it was hoped that there would be an abundant supply from America.²

A similar answer was returned to the National Association of British and Irish millers, who on July 4 petitioned that the flour extracted from wheat be reduced from 81 per cent. to 76 per cent. The Association was assured

² Ibid., Jy. 10, p. 3.
that careful investigations were still in progress as to food values and that relatively small adjustments in milling would obviate many difficulties. The Allies would have ground for complaint if the British Government made concessions which they themselves could not afford. It would, nevertheless, happen for a time that wheat would be more extensively used. While the supply of maize was running low, stocks of wheat in the country had been increased, owing to the activity of the Royal Commission, and might safely be drawn upon.3

The milling of white flour or even "straight-run" flour was thus definitely forbidden in Great Britain. White flour was no longer to be had, and for those who wished wheaten flour only the imported product remained. Complaint arose that the supply of this was passing largely into the hands of the wealthier classes. But Mr. Clynes stated in the Commons that the Food Ministry had not found it so, but that the demand came as well from the mining and industrial districts. What imported flour there was, the Ministry was distributing impartially. The new 9 d. loaf would make it impossible for private holders of such flour to sell at a profit, and, as a matter of fact, stocks of it in private hands were very small.4 By August 1 the Food Controller announced that precautions had been taken to deal with the improper use of imported flour and that the Royal Commission had recently assumed control of all supplies arriving in the country.5

3 Ibid., Jy. 19, p. 3.
4 Ibid., Jy. 25.
5 Ibid., Jy. 30, p. 13.
Two weeks later the Premier congratulated the Commons on the success of the war-bread measures. Closer milling, he said, had saved 70,000 quarters of wheat weekly, or one-seventh of the total consumption. From this time, too, little complaint is heard of the quality of the bread. Either the nation had become accustomed to it or millers and bakers had learned to make it more satisfactorily. The Government's action had been vindicated.

Along with governmental orders prescribing the quality of bread which might be eaten, there appeared another series looking toward economies in consumption and toward the elimination of waste. Not only were official orders issued to this end from the close of 1916, but appeals for voluntary action became urgent. The orders were directed toward brewers and proprietors of public eating-places; the appeals were made to all households in the land.

Most obvious of all economies was a reduction in the brewing of beer. In 1914, 36,000,000 barrels of this beverage were brewed in the United Kingdom. Since after that time men were continually departing for the front and since little beer was exported to France, the Government early in 1916 restricted the brew for the year to 26,000,000 barrels. Again, in January, 1917, when shortage of shipping and of food was imminent, further restriction seemed desirable. It was pointed out

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6 Ibid., Aug. 17, p. 8.
in the Commons that during the first twenty months of the war 1,400,000 tons of shipping had been required to convey materials for brewing and distilling and that 300,000 tons of sugar had been used in brewing. Lord Devonport explained that the proposed measure was not one of temperance or social reform but that the issue was "bread" vs. "beer." The amount of beer which might be brewed was, accordingly, reduced by 30 per cent., and for the 36,000,000 barrels of 1914 were substituted 18,200,000 barrels. The saving from this 30 per cent. reduction, Lord Devonport explained, would be 286,000 tons of barley, 36,000 tons of sugar, 16,500 tons of grits, to say nothing of the cost of transport, labour, and fuel. The barley saved would yield 50 per cent. flour, while the farmer would get 40 per cent. instead of 25 per cent. of the barley offals. By an order of March 29 a final reduction to 10,000,000 barrels for the year was enjoined, an amount which was less than 30 per cent. of that brewed annually before the war.

This last measure sent up the retail price of beer so violently that it now exceeded the pre-war price by 100 per cent. or 150 per cent. At a public house in Clapham customers, being asked nearly double the price of the preceding week, refused to pay and walked out without touching the liquor served. During the summer the consumer's discontent grew and was reported by the Com-

8 P. D. C., 1916, LXXXVII, 911.
11 L. T., Apr. 4, 1917, p. 3.
mittee on Industrial Unrest. Mr. Ben Tillett, secretary of the Dockers' union, wrote to the Premier pointing out the danger of curtailing the workingman's supply of beer and stating that already many men in the union had refused on this account to work overtime or on other than certain days in the week. He advocated the brewing of 26,000,000 barrels of beer at a specific gravity lower than the one prevailing. There was plenty of foreign malt and barley in the country, he asserted, that could be utilized for brewing light beers.\(^\text{12}\) Thus warned, the Government gave the subject attention and soon took measures to provide more beer of light specific gravity for munitions workers and others engaged in heavy work. Already it had granted an increased allowance of beer for the hot months and now considered the extension of the privilege for three months longer.\(^\text{18}\) The two restrictive measures of the spring were thus modified and the consumers of beer conciliated.

A second method of economizing foodstuffs, enforced by the Government, had reference to public meals. Although at the beginning of the war the big hotels had cut down their menus,\(^\text{14}\) it was not until December 5, 1916, that uniform and more stringent economies were enjoined. By the Public Meals Orders of that date the Board of Trade prohibited the serving in public eating-places of meals which, between 6:00 p. m. and 9:30 p. m.,

\(^{12}\) Ibid., Aug. 3, p. 3.
\(^{13}\) Ibid., Aug. 13, p. 3.
\(^{14}\) Ibid., Aug. 19, 1914, p. 9.
consisted of more than three courses or which at any other hour consisted of more than two courses. Plain cheese was not to count as a course and hors d'œuvres, dessert, and soup were to count as half courses. The order was promptly enforced. In the Exeter police-court, for example, the landlord of the New London Hotel soon answered two summonses for having served meals of more than three courses at the dinner hour. The Bench dismissed the first charge on the payment of costs, but for the second imposed a fine of 10 s. and costs.

After three or four months' trial the order was found to produce unsatisfactory results. All lighter and "made" dishes tended to vanish, the "art of the cook disappeared." People ordered solid courses and the consumption of meat increased. In April, accordingly, Lord Devonport issued a new Public Meals Order, based on the principle of rationing hotels by bulk and restricting them to a weekly allowance. Houses frequented by the working classes, where the cost of a meal does not exceed 1 s. 3 d., were exempt. Other hotels and restaurants were required to observe one meatless day each week, Tuesday in London, Wednesday elsewhere; they might serve no potatoes except on the meatless day and on Friday; to each customer they might allow daily only 12 ounces of meat, 8 ounces of bread, 2 ounces of flour, and \( \frac{1}{2} \) ounces of sugar. By this rationing it was hoped

that the saving in meat, as compared with the consumption of November, would be 56 per cent. If comparison were made with the period since November the saving ought to be 65 per cent. in meat, 53 per cent. in bread, 63 per cent. in sugar.\textsuperscript{17}

Apart from the restriction placed upon the use of potatoes, a restriction due to a seasonal shortage of that vegetable, the new features in this scheme were the meatless day and the food ration. The meatless day had already been adopted on February 27 by several London clubs. Rationing had been introduced more than two months before, but thus far had been of a purely voluntary character. On February 2 the Food Controller had issued his appeal. If every consumer would reduce his consumption of bread by one pound a week and of meat by one-half of a pound, over one million tons of these foods would be saved annually. All heads of households were therefore strongly urged to limit \textit{per capita} consumption weekly to 4 pounds of bread (equivalent to 3 pounds of flour), 2\frac{1}{2} pounds of meat, and 3\frac{1}{4} pound of sugar.\textsuperscript{18} If so much meat could not be afforded, more bread might be used. By a further appeal of March 7 the allowance of bread was cut to 3\frac{1}{2} pounds, and in April that of sugar to \frac{1}{2} pound. Since on such a basis the United Kingdom would annually consume some 23 million sacks of flour (of 280 pounds each), whereas its normal consumption was more than 40 mil-

\textsuperscript{17} Ibid., Apr. 5.
\textsuperscript{18} Ibid., Feb. 3.
lion sacks, the saving would be above 40 per cent. If allowance were made for the 20 per cent. compulsory admixture, the consumption of wheat would be reduced by more than 50 per cent. 19

After three months, however, it became apparent that the Food Controller's rations were not being generally observed. Some industrial centres like Keighley set an excellent example of organized economy, reducing the average weekly consumption per head to 3.07 pounds of flour, 2 pounds of meat, and .71 pound of sugar. North Wales did better than any other region of the United Kingdom. But South Wales stood in contrast and colliery districts in general proved indifferent. Bread was wasted in school-children's dinner pails, which mothers filled too full, in army canteens; where the soldiers bought bread in addition to their rations, and at the Zoo, where people still fed their favourite animals. Round Chelmsford agricultural labourers consumed on the average 14 pounds a head per week. 20 The National War Savings Committee estimated that in the United Kingdom at large the consumption of bread fell off only 2 per cent. in March and 4 per cent. in April. 21

In view of the comparatively slight initial success of the scheme, new measures were taken to enlist wider cooperation. The King made a personal appeal. By Royal Proclamation of May 2, 1917, he exhorted all

19 Ibid., Jy. 30, p. 13.
20 Ibid., May 1, p. 8.
21 Ibid., Je. 27.
men and women to practise the greatest frugality in the use of every species of grain, and he charged all heads of households to reduce the consumption of bread in their respective families by at least one-fourth of the quantity consumed in ordinary times, to abstain from the use of flour in pastry, and, wherever possible, to abandon its use in other articles of food than bread. Horses, he indicated, should be fed no oats or other grain save under permit, and permits would be given only to maintain in the national interest the breed of horses.22

The other measure adopted to rouse the public was the entrusting of the campaign for voluntary rationing to a War Savings Committee and to its 1200 local Committees, similarly named. The organization of the latter was flexible and locally adaptable. Economizing schemes of many sorts were devised, the following, for instance, being tried at Swansea. The Market Superintendent was appointed "Intelligence Officer," and was instructed to keep in touch with master millers, food merchants, and fishmongers, publishing on the basis of information thus acquired a daily bulletin which would suggest substitutes for foodstuffs. A central war kitchen and eight or nine ward kitchens were equipped with electrical and gas stoves, all for use free of charge. Cooking lectures and demonstrations were given by chefs of local hotels and by qualified teachers, both afternoons and evenings. To spread broadcast the King's appeal, copies of it were distributed at every cinema show. The pledge cards,

22 M. G., May 3, 1917.
which the Central War Savings Committee was distributing through all its local Committees, were sent to all places of worship and preachers asked hearers at the close of service to sign them. For those who signed here and elsewhere the Government issued gold-coloured buttons bearing the words, "On Voluntary Rations." In London the Metropolitan Committee issued to London restaurants 10,000 placards on which were printed "Don't waste bread. If half a slice is enough for you, please cut the whole slice in half; do not break it. Everyone must help to save bread. It is a national duty. Will you help?" In Manchester a campaign for instruction in cooking substitute foods was organized. In the windows of a teaching centre were displayed some forty kinds of cereals, many unfamiliar. The School of Domestic Economy furnished teachers. One week the lectures and demonstrations were on bread-making, the use of oatmeal, maize puddings, pastry and rice dishes; next week the preserving of fruits and vegetables was demonstrated. A motor car, fitted up to give open-air demonstrations, could be secured by any local group in the city, which would advertise its coming. Portsmouth sought assistance from the postoffice, the schools, and the distributing trades. The postoffice circulars were distributed to every household, asking occupants to reduce consumption; the teachers in the schools gave lectures;

25 L. T., May 9, 1917.
26 M. G., Je. 23, 26, 1917.
even the bakers, contrary to their interest, induced people to cut down consumption. As a result, this town of 230,000 inhabitants reduced its bread consumption to an average of 3 pounds 1 ounce a head per week, nearly one-seventh less than the official allowance. In view of such an achievement a mass meeting of citizens demanded that, if compulsory bread rationing should be adopted, Portsmouth be exempt.²⁷

The possibility of compulsory rationing reacted from the first upon the voluntary scheme. At the time of the inception of the latter Lord Curzon declared it probable that the nation would be driven to compulsory rations and that for his own part he thought they ought to come.²⁸ When Lord Curzon spoke, however, it was clear that bread cards or other means could not be devised and put into operation until two or three months later. Should the public observe the King’s exhortation and reduce the consumption of bread by at least one-fourth, the need for such devices, people saw, might not arise. That voluntary action should have its reward, a strong movement was soon on foot to exempt from any compulsory system which might be adopted such towns as imposed rations of their own will.²⁹ Experiments even in retail rationing were tried. The Pendleton Co-operative Society with over 30,000 members provided each member with an order-book in which the principal

²⁷ L. T., Je. 25, 1917, p. 3.
²⁸ M. G., May 4, 1917, p. 4.
articles of food were printed in weekly columns and shopmen were instructed to limit sales where they suspected that food was being bought in excess of a family's immediate requirements. It was a premonition of the scheme later adopted for the apportionment of sugar.

Owing to these various efforts, compulsory rationing was for the time avoided. While the consumption of bread and flour during May was practically the same as during May, 1916, in June there was a reduction of 3½ per cent. and in July one of 7 per cent. over the figures of a year before. At least such was the first optimistic conclusion of the Ministry of Food based upon returns from 6000 retailers who represented from one-fourth to one-third of the consumers of the United Kingdom. These returns were confirmed by others relating to the delivery of flour from the mills. The reduction, it seems, had been more substantial in large towns than in country districts, greater in England and Scotland than in Ireland and Wales, greater in Lancashire, Yorkshire, and the North than in the Midlands and the South. There had been, too, a considerable reduction in the use of flour for industrial purposes.

These gratifying returns, however, were not borne out by later information. In September Lord Rhondda expressed his disappointment at finding how slight had been the fall in the consumption of flour during the last two months. The supply of potatoes was then abundant and

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considerable substitution had been hoped for. The fact that some persons had saved more than a pound of flour a week showed that in many cases no effort whatever had been made.\(^{32}\) It was clear, in short, that while the campaign for voluntary economy had had transient and local successes, it had achieved little more.

Two circumstances now conspired to necessitate a renewal of effort. In October, as will be explained, the Government put on the market a subsidized 9d. loaf, thereby reducing the price of bread by one-fourth. Consumption, as was expected, increased. At the same time it became matter of public information that the world's cereal harvest of the year would be inadequate. The Government had, it is true, by summer purchases acquired a larger reserve of wheat than was on hand a year earlier. Instead of 6,480,000 quarters, there were in the country in August 8,500,000 quarters.\(^{33}\) But official information came from America that the United States and Canada would have 400 million bushels of wheat less than enough for the Allies and neutrals, and that Mr. Hoover had urged Americans to reduce consumption by one pound a week.\(^{34}\) Under the circumstances a diminished consumption in England became imperative.

As earlier in the year, the Food Controller decided to try appeal before resorting to compulsion. Sir Arthur Yapp, who had done admirable work for the Y. M. C. A.,

\(^{32}\) Ibid., Sept. 12, p. 3.
\(^{33}\) Ibid., Aug. 17, p. 8.
\(^{34}\) Ibid., Sept. 12, p. 3.
was prevailed upon to become Director of Food Economy. At once he formulated a plan of campaign. In October an organization should be perfected and conferences held with various bodies whose help it was desired to enlist; in November a "flood of oratory" was to be let loose over the country and members of Parliament would be asked to address their constituents; in December the kitchen would be invaded and the campaign brought immediately into the homes of the people. Throughout the three months, effort would be directed toward the establishment of communal kitchens on a national scale, toward the collection of waste materials, toward a mobilization of the press.\textsuperscript{35} The kitchens would have no charitable aspect, but would endeavour to prepare wholesome meals at moderate prices and to teach people the use of substitutes for bread and meat.\textsuperscript{36} The Local Food Control Committees were urged to appoint each a Food Economy Committee of some twelve members representative of all classes in the community.\textsuperscript{37} Finally, a League of National Safety was to be desired. At first it might comprise only 10,000, but these first members should by house-to-house visiting bring the membership up to 100,000 and eventually to 1,000,000.\textsuperscript{38}

The new ration which was to be urged upon the consumer was made public in November. The hard and fast lines of Lord Devonport's allowance were replaced,

\textsuperscript{35} Ibid., Oct. 10, p. 8.
\textsuperscript{36} Ibid., Sept. 25, p. 5.
\textsuperscript{37} Ibid., Oct. 15, p. 3.
\textsuperscript{38} Ibid., Oct. 13, p. 3.
so far as bread was concerned, by a sliding scale, and this was based upon the severity of the manual work done by the consumer. Men engaged in heavy industrial or agricultural work were allowed 8 lbs. of bread a week, men engaged in ordinary industrial or other work 7 lbs., men unoccupied or engaged in sedentary work 4 lbs. 8 oz.; corresponding groups of women were allowed 8 lbs., 4 lbs., and 3 lbs. 8 oz. In the case of other foods which were rationed, there was no differentiation between adults, while no regulations were made touching children. Of cereals other than bread the weekly ration was 12 oz., of meat 2 lbs. (a reduction of \(\frac{1}{2}\) lb.), of sugar 8 oz. (unchanged), of butter, margarine, lard, oils, and fats 10 oz. The inclusion of the last item was, like the sliding scale, an innovation, and was probably due to the shortage in fats which had arisen.\(^{39}\)

Behind these varied aspects of voluntary endeavour lay compulsory rationing. It was now much more a possibility than it had been in the summer and Lord Rhondda declared that, if voluntary measures failed, he would have no hesitation in resorting to it. Already in October his department was working out a scientifically graded scheme. Taking into consideration the available supplies and the needs of all the Allies, the Ministry of Food was endeavouring to find out what food should be allotted to every man, woman, and child in the United Kingdom, regard being had to age, occupation, and other considerations. Sometimes definite sacrifices might be nec-

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\(^{39}\) Ibid., Nov. 13, p. 6.
essary. At the moment, for example, there was great shortage of ham and bacon. Since miners found bacon essential, other people should refrain from eating it as long as the scarcity continued.\textsuperscript{40} Such was the rationing scheme which impended in the autumn of 1917. Whether it should be enforced would depend upon the success of the last energetic appeals to voluntary restraint.

While voluntary rationing thus ran its variable course, the Government continued to formulate less comprehensive regulations. The Public Meals Order of April produced better immediate results than Lord Devonport had hoped for. Returns from eight large hotels for the week ending April 21 showed six of them using less than 2 lbs. of flour per head weekly, one using $2\frac{1}{2}$ lbs. and the Savoy using 3.39 lbs.\textsuperscript{41} Since the allowance was $3\frac{1}{2}$ lbs. and the consumption of even all of it would have resulted in a saving of 53 per cent. over the consumption of the preceding November, the order was accomplishing much. Early in May the Government forbade the sending of cereal products in parcels to the soldiers at the front. The British soldier's ration, it explained, was the best in the world and there was no present intention of reducing it. Generous gifts of cakes, puddings, and biscuits sent by friends led to undesirable waste.\textsuperscript{42} German prisoners, conversely, were not allowed to buy meat, flour, or sugar, in addition to their allowance or to re-

\textsuperscript{40} Ibid., Oct. 13, p. 3.
\textsuperscript{41} Ibid., May 9, p. 3.
\textsuperscript{42} Ibid., May 10.
ceive any article containing these ingredients. At the same time the Food Controller prohibited except under licence the manufacture of starch from cereals. Supplies of starch would henceforth be conserved for collars, shirts being starchless, and the public were asked to dispense with starch in table cloths, napkins, and blouses. In May the making of dog biscuits also was forbidden, while the feeding of grain to pheasants and other game had for four months been unlawful.

Cases concerned with the waste of food began to grace the annals of the police courts. At Chester, James Cottle, Limited, restaurant proprietors, were indicted for consigning to the waste bin two pounds of bread. In defence it was urged that the bread consisted of scraps from customers’ plates, which could not well be served again. But the sanitary inspector maintained that in the bin were crusts from the ends of loaves, and the magistrate imposed a fine of £5. Quite as severe was the judgment meted out to Louisa Heritage of Bromley. Although the Inspector had some weeks before spoken to her about bread and fat found in her dust bin, four pounds of bread in the shape of slices and crusts were again discovered there. Interviewed by the Inspector, she declared that she had intended to make a bread pudding of the fragments but had found them mildewed. “I could not even give it to the poor ducks,” she complained. When

43 M. G., May 1, 1917.
45 M. G., May 1, 1917; L. T., Jan. 12.
46 M. G., May 24, 1917.
told that the matter would be reported, she retorted, "Pooh, it is not stolen. It is bread I have paid for and I can do as I please." The Bench, remarking that, while others were doing all they could to save bread, she was wilfully throwing it away, pronounced sentence of two months' imprisonment, or £5 fine. In such ways did the new regulations come home to the recalcitrant, however obscure they might be.

The two aspects of food regulation thus far described looked toward the economizing of cereals, especially wheat. A third aspect had regard to the protection of the consumer by the establishment of maximum prices. Before November, 1916, the Government, so far as foodstuffs were concerned, controlled only the price of sugar and influenced only the prices of foreign meat and foreign wheat. Other imported products and all home products were left to the play of market influences. As Mr. Runciman pointed out in the Commons during his speech of November 15, maximum prices could be easily fixed for such imported foodstuffs as were controlled by the Government. If, however, the commodity was imported but not controlled, or if it were a home product, difficulties might arise. In the one case, maximum prices might drive the commodity from British shores; in the other, they might check its production.

The Government, he went on to say, did not for the time being intend generally to fix maximum prices for foodstuffs not under its control. But there were some

things relative to which it seemed possible to check rising prices yet not endanger the maintenance of the supply. To accomplish this, the method so often employed would be again tried; the cost of production would be ascertained and to it would be added a reasonable profit.\footnote{P. D. C., 1916, LXXXVII, 859.} Commodities, which, he explained, seemed to invite such regulation at once were milk and potatoes. Orders were, accordingly, soon issued prescribing retail prices for both. Since these experiments preceded somewhat any similar action regarding bread, it may be permissible to digress briefly and explain the procedure.

The case of potatoes was more abnormal than that of milk, since the demand of the army for potatoes was much greater and the potato crop of 1916 had been very poor. In September, 1916, Mr. Runciman explained that the Government had had to take possession of enormous quantities not only to feed the army but to distill spirits for the manufacture of explosives.\footnote{M. G., Sept. 29, 1916, p. 12.} In November he added that it did not help the buying for the army to have it stated in the Commons that a profit of £62 per acre had been made on potatoes in Lincolnshire. At any rate the Government would soon put a stop to undue profits; and the problem was the more urgent since the shortage would most affect Ireland and the poor.\footnote{P. D. C., loc. cit., p. 854.}

The first step toward meeting the situation was the order of November 20, requiring a return of stock from any person cultivating more than ten acres of potatoes.
in Great Britain.\textsuperscript{51} Next, as a measure of security, potatoes needed for seed, a very large percentage of the crop, were withdrawn from the consumer’s market and provision was made for their distribution throughout such villages of the United Kingdom as might require them.\textsuperscript{52} In the third place, the Government on January 9, guaranteed minimum prices for the 1917 crop. In view of the possibility of an unfavourable season, 115 s. per ton was set as a minimum price for potatoes delivered from September 15, 1917, to January 31, 1918, 120 s. for those delivered in February and March, 130 s. for those delivered during the rest of the season.\textsuperscript{53} When September, 1917, came, a new order substituted a flat rate for this graduated scale. No grower might after the middle of the month sell potatoes, other than seed potatoes, for less than 120 s. or for more than 130 s.\textsuperscript{54} The fixing of liberal minimum prices had already proved its effectiveness. Farmers had put 100,000 additional acres under potatoes, allotment gardeners had responded, and the 1917 crop was proving an abundant one.\textsuperscript{55}

On February 1, 1917, the Food Controller had also fixed the retailers’ price for potatoes. This was set at 1½ d. the lb., although on the market 2 d. or even 2½ d. was being charged. At 1½ d. the price per ton was £14, the very sum which retailers at the moment were paying

\textsuperscript{51} B. T. J., Nov. 23, 1916, p. 571.
\textsuperscript{52} Ibid., Dec. 21, pp. 861, 863.
\textsuperscript{53} L. T., Jan. 20, 1917.
\textsuperscript{54} Ibid., Sept. 14, p. 8.
\textsuperscript{55} Ibid., Oct. 9, p. 9.
for their stocks. Unless they could buy for £10 10 s. per ton they would be without profit; and at £10 10 s. wholesalers refused to sell, saying that transportation cost them from £3 to £4. The Food Controller had also fixed the price for which growers might sell, but not deliver, to wholesalers at £8, and had declared that the difference between £8 and £14 was sufficient to cover transportation charges, the profits of wholesalers, and the profits of retailers. Let wholesalers and retailers divide the £6 between them. Adjust the matter the two distributing trades would not and a potato famine impended. On February 19 the Government intervened. The grower was instructed to sell and deliver to the wholesaler potatoes at £9 per ton, the wholesaler to sell them to the retailer at £10 10 s. After March 31 these prices were to change to £10 and £11 10 s. respectively, and the consumer ultimately was to pay the advance by being charged 1¾ d. per lb.\(^5\)

It took greengrocers some time to adapt themselves to the potato orders and from February on charges and judgments against them in the courts were not infrequent.\(^5\) Farmers, too, got into trouble. At Spalding, G. H. Goose, farmer, paid two fines of £50 for selling potatoes above the maximum price,\(^5\) and at the end of the season an extremely heavy penalty was inflicted. George Thompson, a Lincolnshire farmer, pleaded guilty to 55 summonses. It appeared that he had sold 1320 tons of

\(^5\) Ibid., Feb. 17, 19.
\(^5\) Ibid., Mar. 1, p. 9; Mar. 10, p. 3.
\(^5\) M. G., May 16, 1917.
potatoes at an average of £15 a ton, whereas he should have charged £11 10s., delivering them to the retailer. His excess profit since April 1 had thus been £4620 and another £500 had to be added for earlier transactions. Although the defence urged that Mr. Thompson was a pioneer in potato growing, a self-made man now seventy-four years old, a farmer of some of the finest land in Lincolnshire, that the order made no proper distinctions as to the quality of the produce, and that foreign potatoes brought £40 a ton, the court was firm. A fine of £5500 was imposed and the heavy costs of £250 were added.59 It was a case to which members of the food administration henceforth pointed with satisfaction when discussing the charge of profiteering.

The Government had learned that it must intervene at every stage in the process of distribution. Accordingly the Potato Order of September, 1917, after assuring the grower £6 a ton provided that from October 1 the profits of wholesale dealers, including overhead charges, must not exceed an average of 7s. 6d. a ton except on seed potatoes. From the same date, retailers might not sell at more than 1d. a pound if their purchase was made at between 6s. and 7s. 6d. per cwt., or at more than 1½ d. if they had paid more than 7s. 6d. All dealers other than growers must henceforth be registered if they wished to sell.60 Thus after a few months' experience in price-fixing the Government felt itself able to act with decision;

60 Ibid., Sept. 14, p. 8.
and the abundant potato crop of 1917, together with the absence of complaint relative to the September order, seemed to indicate that an equitable scale of prices had been established.

The fixing of the price of milk was prompted by more general motives than was the fixing of the price of potatoes. A scanty crop lay immediately behind the potato situation of the end of 1916, but the slowly rising price of milk was induced by other causes than seasonal shortage. The Committee which reported in September on the high prices of meat, milk, and bacon pointed to the more urgent demand for milk and to the increased cost of production. Manufacturers of margarine, tinned milk, and milk chocolate had added their demands to those of the hospitals, while the high price of cheese reacted upon the price of milk. Of the heightened costs of production, that of labour was not least, and from sheer lack of milkers many farmers were reducing their herds.

Whereas the retail price for milk in London before the war had been 4d. a quart, the Committee continued, it had by September, 1916, risen to 5d. in North and East London, to 6d. in West London. What seemed pretty clear was that the increase had gone largely to the primary producers, not in any considerable degree to the retailers. Even before the war the retailer's margin had been falling, and now dividends were steadily declining. The Express Dairy Company's dividend, for example, had fallen from 8 per cent. in 1913 to 7 per cent. in 1914
and to 5 per cent. in 1915. On the other hand, wholesale distributors had prospered, even allowing for high costs of distribution.\(^6\)

In Parliament the charge that associations of dairymen were making the profit and manipulating the price was reiterated. The Somerset and Wiltshire Farmers' Association refused to sell its product in Bournemouth at a certain price, but encouraged its members to give the milk to the pigs. Although the Board of Trade had announced that 1 s. 4 d. per gallon was a sufficient price for milk in London and large towns, the Cheshire Farmers' Association demanded 1 s. 5 d., threatening if this were refused to convert its milk into cheese. The United Dairies Company (Limited), which supplies London with 70 per cent. of its milk, was not in the habit of allowing any one of its customers, even should he wish, to sell at a price below that ruling in the district.\(^7\) The producer, however, had his defenders. No dairyman, said Mr. Prothero, could make a profit of more than \(\frac{3}{4}\) d. a quart in producing milk at 4 d. Sir John Spear declared that both feeding stuffs and labour were 50 per cent. dearer than before the war, while milch cows for the dairy cost 35 per cent. more.\(^8\)

In view of all these circumstances the determination of the price of milk became a somewhat hazardous undertaking. The order of November 21, 1916, imposed a

\(^6\) Cd. 8358.
\(^8\) P. D. C., 1916, LXXXVII, 880, 933.
double limit. The price might not be greater than that paid on November 15, 1916, and furthermore might not exceed by more than a specified amount the price in the corresponding month before the war. For retail milk this amount was 2 d. a quart to be added to a pre-war price of 4 d., for wholesale milk from 5½ d. to 6½ d. a gallon to be added to a pre-war 12 d. or 13 d.64 A month later the first limitation was removed, and the maximum price of wholesale “accommodation” milk was raised to 1 s. 8 d. per gal.65 By March the Food Controller announced that these maximum prices might in time create difficulties for farmers and might lessen production. To prevent the latter contingency the prices for the following winter would, he declared, be fixed early and would make the production of milk profitable in comparison with other farming activities.66 A Committee appointed by the Food Controller in June recommended that the retail price of milk from June 15 to September 30 be 7 d. the quart, and a Committee of the Board of Agriculture urged the prompt fixing of prices for the winter of 1917–18.67 In July the Council of the British Dairy Farmers’ Association sent to the Government its resolution that the price of milk should from August 1 be raised for both producers and consumers, since at that time production would be reduced and farmers would be obliged to use high-priced feeding stuffs to maintain the supply.

65 Ibid., Dec. 21, p. 861.
66 Ibid., Mar. 29, 1917.
67 L. T., Je. 27, 1917, p. 7.
Both producers and distributors, the resolution continued, carried on their business with no profit during the last two winters and in many cases with serious loss. From October 1 a further rise in price for the winter would be necessary to prevent abandonment of the milk trade by many engaged in it. The Government should make announcements at once to prevent dairy herds from being depleted.\(^{68}\)

Thus reminded of its promise, the Government early in September issued its scale of prices. For London and other large cities milk would be delivered by retailers at 7 d. a quart during October, at 8 d. thereafter until the end of March; within the area of rural district councils in England and Wales and in districts other than burghs in Scotland, the corresponding prices would be 6 d. and 7 d. Wholesale prices for the producer were to be 1 s. 5 d. a gallon during October, 1 s. 7\(\frac{1}{2}\) d. during November, 1 s. 9 d. thereafter until the end of March. For any other person than the producer, the wholesale prices were 1 s. 8 d. or, for "accommodation" milk, 1 s. 10 d. a gallon during October, afterward 2 s. or 2 s. 2 d.\(^{69}\) These prices, as had been promised, were liberal for the producer, and the only misgiving to which Lord Rhondda confessed regarding them was that milk would be costly for poor families. For children he hoped to make some arrangement by which it could be had more cheaply.\(^{70}\) As in the case of potatoes, govern-

\(^{68}\) Ibid., Jy. 14.
\(^{69}\) Ibid., Sept. 10, p. 10.
\(^{70}\) Ibid., Oct. 10, p. 7.
mental price fixing had been generous to the producer, and any danger of shortage was apparently avoided.

When Mr. Runciman on November 15, 1916, told the House of Commons that the Government could probably check the increasing prices of certain commodities not under its control, he had immediate reference only to milk and potatoes. In the case of bread and home-grown wheat there was then no intention of fixing maximum prices. Against this resolve and against the dilatory action of the Government, the War Emergency Workers' National Committee soon protested. Pointing out that coal and milk were already high, it went on to demand that the Board of Trade commandeer all stocks of wheat, potatoes, and other necessary produce in the country at prices based upon the actual cost of production.

The Government, however, adhering to its plan, fixed only the prices of milk and potatoes, the former in November, 1916, the latter in February, 1917. Regarding grains it did nothing until April. Then on the 16th of that month the Food Controller yielded to the long continued popular demand and announced that henceforth the maximum prices of grains harvested in 1916 would be 78 s. per quarter for wheat, 65 s. for barley, 55 s. for oats. Since these prices were considerably below those ruling in the market, farmers, who for one reason or another had held back their wheat, suffered a loss of 8 s. or

71 P. D. C., 1916, LXXXVII, 860.
73 B. T. J., Apr. 19, 1917.
In May several maximum retail prices were set. For all forms of maize flour only 3½ d. per lb. might be asked, for oatmeal 4½ d. in Scotland, 5 d. elsewhere in the United Kingdom. The authorized prices for peas and beans were somewhat under what many retailers had paid for their stores. But grocers had for months reaped the harvest of a rising market and could afford to suffer some loss. At the end of June all orders of the Food Controller relative to prices were printed in lists which every grocer was asked to post. The commodities affected were barley, beans, cerealine (maize meal), chocolate, hominy, lentils, maize, milk, oatmeal, peas, potatoes, sugar, swedes, sweetmeats, wheat. Meat did not appear on the list, since, although certain restrictions had been placed on middlemen’s profits, no retail prices had yet been fixed.

In June, 1917, Lord Rhondda, a very able businessman, succeeded Lord Devonport as Food Controller. New authority was at once bestowed upon him and he acquired many of the powers which the Admiralty, the Army Council, and the Ministry of Munitions had long possessed. He might requisition the whole or a part of the output of any factory, paying therefor a price based on the cost of production plus a reasonable pre-war rate of profit. To determine this price he might examine the factory’s books. To a merchant he might pay what the

74 L. T., Aug. 16, 1917, p. 3.
75 M. G., May 24, 31, 1917.
76 Ibid., Je. 28, p. 2.
merchant paid, plus a pre-war rate of profit, although, if a middleman or speculator had acquired commodities otherwise than in the normal course of his business, the profit might be reduced or refused altogether. 77

Soon Lord Rhondda received the War Emergency Workers' National Committee and seemed favourably disposed toward its reiterated demands. These were now comprehensive. After commandeering all ships and controlling all transport facilities, the Government should purchase all essential imported foodstuffs; it should control all home-grown food products, such as wheat, meat, oats, barley, potatoes, and milk, determining prices for the consumer and apportioning food to families; it should sell bread during the war and for six months after at a price not exceeding 6 d. per loaf, itself meeting any loss; it should create municipal and other local authorities to exercise food control and should appoint to them representatives of labour, of co-operative societies, and of women's industrial organizations. 78

On June 26, the new Food Director announced that he would control more strictly the industries engaged in the production of foodstuffs. Later on he summarized his plans as follows: "My policy, broadly speaking, is to fix the price of those articles of prime necessity over the supply of which I can obtain effective control at all stages from the producer down to the retailer. Such prices will, as far as possible, be fixed on the principle of allow-

77 Ibid., Je. 30, p. 4.
78 Ibid., Je. 23, p. 7.
ing a reasonable profit to those engaged in the production and distribution of the particular commodity. Indeed the policy will in effect be one of determining profits at every stage, though it will take the form of fixing prices. Every effort will be made to prevent speculation and unnecessary middlemen will be eliminated. Existing agencies — I make a strong point of this — will be utilized for purposes of distribution under licence and control and under the supervision of local food controllers appointed by the local authorities. 79

In the execution of such a policy the first step was to determine the cost of production and handling. A costings department was accordingly set up in the Ministry of Food and acquired full power to examine books and other sources of information. By August arrangements had been completed. Leading firms of accountants, twelve for England, three for Scotland, and three for Ireland, were invited by the Food Controller to act in an honorary capacity as supervising accountants for their districts. All were placed under the immediate supervision of Mr. W. H. Peat, Financial Secretary of the Ministry of Food. Prices were worked out with reference to costs and normal pre-war rates of profit. 80 It was the method by which the Army Contracts Department had been purchasing essential supplies, like woollens and boots, at prices below those ruling in the market.

79 L. T., Sept. 12, 1917, p. 3.
80 Ibid., Je. 27, p. 7; Aug. 15, p. 3.
Soon this activity began to bear fruit. How maximum prices were fixed or revised for potatoes, for meat, and for milk has been described. It remains to consider the fortunes of wheat, flour, and bread.

In the Commons on July 25, Mr. Clynes, the Assistant Food Commissioner, explained what would be done relative to the price of bread. The measure, even in the days of novelties, was unusual. To quiet the complaint about the rising cost of this commodity, the price of the quartern loaf, about one shilling at the moment, would be reduced to 9 d. Since such a price was not compatible with the prevailing cost of wheat, the Government proposed itself to pay the difference between the cost and the selling price of bread. There should, in short, be a subsidized loaf. To effect this all flour from the mills, which were already under government control, would be sold to bakers at such a price as would enable them to put on the market a 9 d. loaf. The difference between the amount realized by millers from their sale of flour and the price which they would have to pay for British wheat or which the Government would have to pay for imported wheat would be met by a subsidy from the Exchequer.81 Mr. McKenna, taking up the subject, estimated this difference at some £38 millions per year, if wheat remained at recent prices. The loaf at 9 d. represents wheat at 60 s. per quarter, whereas the maximum price paid to farmers at the time was 78 s. The difference, in short,

81 Ibid., Jy. 26, p. 8.
would be the equivalent of the yield of a shilling income tax.\(^8^2\) It was a long step in socialistic policy. For the state assumed the responsibility of furnishing to all its people bread not merely at cost but below cost. The effects, too, were to be far reaching. Apart from the new item which was added to the budget, the consumption of bread was bound eventually to increase, and consideration has already been given to new measures necessitated thereby.

Because of the institution of the subsidized loaf the fixing of new maximum prices for home-grown cereals in August did not have the importance which similar action had had in April. So far as wheat was concerned, the prices indicated what the Government would have to pay the growers, not what the consumer would eventually pay. The new prices for wheat and rye ranged from 73 s. 6 d. per quarter in the autumn of 1917 to 77 s. 9 d. in and after June, 1918.\(^8^3\) Until June, therefore, the cost of subsidized bread to the Government would be somewhat less than Mr. McKenna had computed, afterward quite as much, assuming always that imported wheat could be procured at about 78 s. Since the schedule of maximum prices has greater significance for the producer of cereals than for the consumer of bread, it will demand further consideration relative to its effects upon agriculture.

Not the least among the innovations of the new Food

\(^8^2\) Ibid., Jy. 25, p. 10.
\(^8^3\) Ibid., Aug. 16, p. 3.
Controller was his enlistment of local support in the guise of Food Control Committees. The responsibility of these bodies for the distribution of sugar by means of the card register scheme has been described. At the end of August their appointment and constitution was prescribed, the order not being applicable to Ireland. Local authorities were asked to appoint to each committee not more than twelve persons. No restrictions upon choice were imposed save that one member must be a woman and one a representative of labour. As appointments throughout Great Britain began to be reported during September, it appeared that local bodies often chose as members representatives of the food-distributing trades. Protest often arose in such cases and there seemed to be danger that public confidence in the new Committees might not be so complete as was desirable. Lord Rhondda thereupon urged that appointments be representative of all classes of consumers and that, wherever a co-operative society existed, at least one representative of it be nominated. In one case where the local authority had chosen a preponderance of traders he asked for a revision of membership.\(^8^4\) Gradually more satisfactory reports began to come in and the Local Food Control Committees seemed fairly launched upon their careers. No one could underestimate their importance. In their hands lay the immediate administration of all that had thus far been attempted in food control. To secure economies of consumption through subsidiary Food Economy Commit-

\(^8^4\) Ibid., Aug. 27, p. 3; Aug. 28, p. 3; Sept. 1, p. 8.
tees was their task; to administer the one rationing scheme already determined upon, that for sugar, was their duty; to supervise the observance of maximum prices and to determine these prices more precisely in certain commodities was their responsibility. Local self-government by representatives of the community was an old English tradition, and Lord Rhondda showed insight in making it one of the decisive factors in his difficult undertaking.
AGRICULTURE

The problem of the food supply, as considered in the preceding chapter, has reference either to economy of consumption or to the protection of the consumer against high prices. The latter aspect of it has in turn revealed another phase of the situation. That prices may be kept moderate, the maintenance and even the increase of production appears to be indispensable. Early in the war the Government saw this clearly and on June 17, 1915, appointed a committee to report on the subject. The committee was instructed to suggest steps which, on the assumption that the war would be prolonged beyond the harvest of 1916, might be taken to maintain and increase by legislation or otherwise the production of food in England and Wales.¹ Lord Milner became chairman of the Committee and its two reports made in July and October of 1915 admirably describe the condition of agriculture and outline measures looking towards its improvement.² They are fundamental for an understanding of what was finally done.

Since the fall in the prices of cereals in the later seventies, the Committee pointed out, some four million acres of arable land in England and Wales have been converted to pasture. It might have added, as Mr. Lloyd George

¹ B. T. J., Je. 24, 1915.
² Cd. 8048, 8095.
did later that twenty years after the Corn Laws were abolished in 1846, twice as much wheat was still produced as was imported. Today, on the other hand, from 70 to 80 per cent. of the cereal supply is got from abroad and the area under wheat has fallen to less than two million acres. Of the 27,000,000 acres of agricultural land in England and Wales, 16,000,000 acres are in pasture, only 11,000,000 acres in tillage. In view of this situation, the Committee recommended that farmers be induced to plough up much of the land laid to grass since the seventies. Thereby not only would the grain-producing capacity of the nation be increased but its capacity to produce meat and milk would in some districts be almost doubled. Each additional million acres under wheat would mean from four to five million quarters grown at home or fully six weeks' supply for the entire United Kingdom.

If farmers were to embark upon such an undertaking, they would need persuasion. To induce them to sacrifice the comparative security of their present profits, to change methods and alter rotations, to increase their arable in the face of a shortage of labour, to run the risk of uncertain seasons and a fall in the price of wheat at the end of the war, the state should guarantee a minimum

3 L. T., Je. 28, 1917, p. 10. Of the 11 million acres in tillage in 1916, about 2 millions were in wheat, 1½ millions in barley, 2 millions in oats, 1 million in turnips, 1 million in peas, beans, potatoes, and mangold, while the remainder was in clover and other rotation grasses.

4 Cd. 8045.
price for home-grown wheat for a period of years. The Committee was unanimous in its recommendation that 45 s. a quarter ought to be assured to growers for four years.

There was danger, of course, that not much wheat might be got, while the Government might yet find itself pledged to heavy payments after the war. It had, therefore, been suggested to the Committee that the price be guaranteed only on increased output. Such a measure the Committee feared would not work in practice and thought more feasible another proposal to limit the Government’s liability. This second plan would restrict the state’s guarantee to those farmers who might increase their arable by at least one-fifth over the 1913 area and to those who had at least one-fifth of all their arable and grass land under wheat. Some members of the Committee were of the opinion further that no farmer should have the benefit of a guaranteed price unless he could show that he was paying a fair rate of wages to his labourers. The Committee as a whole, however, feared that such a proviso might defeat the main purpose of the measure and was not convinced that it was as yet necessary to apply compulsion to insure a rise of wages. Wages ought to rise automatically as a result of the scheme and of the demand for labour. Meanwhile an inquiry into the agricultural wages paid throughout the country might well be instituted to serve as a basis for legislation, if legislation should prove necessary.5

5 Ibid.
Shortly after the Committee made its report the food situation so changed that the Government did not feel called upon to adopt the new proposals. The submarine seemed to be under control, immediate shortage of the food supply was averted, cattle and sheep were abundant, the area under wheat had, owing to high prices, increased by one-half a million acres, and large crops were reported from Canada and Australia. The dearth of labour and the need of finding men for the army also restrained the Government's hand.\(^6\)

The recommendations of the Committee's second report in October, accordingly, looked to increasing production without the stimulus which would have been derived from a minimum price for wheat. Arable farming, the Committee was informed, had been remunerative on all but the wettest and heaviest soils for some years before the war. More profitable it would become by the adoption of new machinery and methods, and to such adoption the state might, under the circumstances, well contribute. Of fertilizers, England produces large quantities of sulphate of ammonia, much of it exported. The Government should arrange with producers to furnish a sufficient home supply of it at nearly pre-war prices and should impress upon farmers its value. Measures should be taken to have other fertilizers, nitrate of soda and phosphate rock, imported from Chile, and from Florida and Tennessee. New feeding stuffs, made from palm nuts, cocoanuts, and earth nuts, should be recom-

mended and the manufacture of oil-cake should be extended. Inasmuch as agricultural tractors and ploughs were essential in view of the shortage of labour, the Government might well permit manufacturers to retain their mechanics and might well declare the making of such implements on a par with Government contracts. The labour of women should be organized and directed to the farms. Economical and valuable was the raising of pigs, since they eat food otherwise largely wasted and provide the meat most widely consumed by the working classes. Plots of unused land near towns and villages should be utilized. Most immediately effective, perhaps, of all the Committee’s recommendations was its proposing the appointment of local War Agricultural Committees. Such bodies were soon instituted to urge upon the farmer the adoption of the improvements in question, and a year later Mr. Prothero complimented them on their admirable work.

A year later, as it happened, the agricultural situation had become much more serious than it was when Lord Milner’s Committee made its second report. In May, 1916, Mr. Prothero declared in the Commons that the production of food in the country was likely to fall off by 15 per cent. or 25 per cent. “I should be very glad,” he added, “if the Government would grasp this situation firmly and put us upon rations. I believe that sooner or later that will have to be done.” One cause of the impaired prospect was the bad weather of the spring of

7 Cd. 8095.
1916, which long made labour on the land impossible. By autumn further causes were apparent and were disclosed in the debate of October 17. The area under wheat was 260,000 acres smaller than in 1915 and the wheat crop stood at only 88½ per cent. of the average crop of the last ten years. In part this was due to a diminished yield per acre, since the land of England and Wales was tending to become increasingly foul. In the autumn of 1916, 112,000 acres, which a year before had been under farm crops, were lying fallow. It was predicted, too, that in 1917 500,000 more acres would cease to be under wheat. Should this happen, the loss for the two years would be some two million quarters, an amount which 100 ships of 5000 tons would require four and one-half months to fetch from Australia. And behind all this was the fact that 30 per cent. of the permanent agricultural labour had left the land. By way of contrast the Marquis of Lincolnshire pointed out in the Lords that, with worse land and worse weather, the German farmer was able to produce 50 per cent. more meat and corn per acre than the British farmer.

The seriousness of the situation impelled the Government to action and from November, 1916, various measures, for the most part recommended by Lord Milner's Committee, were put into effect. Behind them was the vigorous hand of Mr. Prothero, the new Minister of Agri-

8 P. D. C., 1916, LXXXII, 1895.
9 Ibid., LXXXVI, 451, 454, 458.
culture, a former member of the Committee, and the author of a history of British farming. The Government's first act was to order an agricultural census of Great Britain. Crops, live stock, the residents on the farm, casual labourers, male employés who had joined the army, all were to be reported.\footnote{D. R. M., 3rd ed., p. 357.} Next an ideal was proposed. If in 1872 England and Wales had tilled some 4,000,000 acres more of arable than at present, why should they not so till some of them again? Plans looking toward such an achievement were formulated. Certain measures could be taken before spring to induce the farmer to plough liberally in 1917 and during the year other measures to foster still more ploughing during 1918. In the main, four lines of action were proposed. Waste lands might be brought under tillage, fertilizers and improved agricultural machinery might be made available for the farmer, the number of farm labourers might be increased and paid a suitable wage, and a minimum price for wheat over a period of years might be guaranteed.

To the first of these measures the Government was urged by the War Emergency Workers' National Committee. In November, 1916, the Committee proposed that the Government take into its own hands 400,000 acres now fallow or in grass and provide for the tillage of them. Capital, it added, should be advanced to local authorities and to co-operative societies to induce them
to bring land under cultivation. To the spirit of this appeal the Government responded on December 5 by a new regulation under the Defence of the Realm Act. This provided that the Board of Agriculture and Fisheries might enter upon land without any one’s consent if the land was for the time unoccupied or was common land; and that in other cases it might so enter with the consent of the occupier and the person receiving the rent. Land thus taken over might be cultivated either by a contract of tenancy or in some other manner and the Board might authorize any local authority to act for it. This meant, of course, that local authorities might acquire uncultivated land and let it out in small allotments and market gardens. If a farmer should prove recalcitrant about the cultivation of his land, the Agricultural War Committees might enter upon it and take possession. The regulation was an endeavour to stimulate production through small holdings.

In taking the next step, the provision of fertilizers, the Board of Agriculture did what Lord Milner’s committee had recommended: it checked the exportation of sulphate of ammonia. Inasmuch as the supply of feeding stuffs like oil-cake was bound to be reduced, farmyard manure would lose half of its ammonia. In 1918 there ought, therefore, to be sold five times as much sulphate of ammonia as was used in 1916 and of this the Board had hope. Supplies of lime also were increased and a native

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form of phosphate which might replace the German product was introduced to the market.¹⁴

With even more comprehensive plans the Board of Agriculture turned to the provision of improved agricultural machinery. To co-operate with it and with the Food Controller, the Ministry of Munitions in January set up an Agricultural Machinery Branch. Agricultural machinery and implements were henceforth to be classed as munitions work and, in order to control the character of those manufactured, no one might henceforth make them except under permit.¹⁵ For the same reason the importation of them without licence was prohibited, the Government wishing to ensure that the machinery be of the right type and be distributed over the country where most needed.¹⁶ By February, thirty-two motor tractors had been acquired by the Board of Agriculture and 230 more had been ordered.¹⁷ Mr. Lloyd George, speaking in May, warned workmen that disaster might be brought upon the country by any refusal on their part to use these labour-saving machines.¹⁸ At the same time the Board of Agriculture requested the Ministry of Munitions to supply it with 6000 tractors. A type was selected and engineering firms were asked to tender bids for the making of the whole or of parts. So great were the demands upon the Ministry of Munitions for war material,

¹⁷ L. T., Feb. 9, 1917.
however, that the undertaking had to be abandoned. A considerable number of American tractors of approved type were purchased instead, and the entire output of British-built tractors was absorbed.\(^{19}\)

If 2,000,000 acres were to be added in 1918 to the existing arable it was estimated that at least 5000 tractors would be needed. In August, 1917, as many as 9000 had been ordered and 1000 of them had been received from the manufacturers. It was hoped that by October 2500 would be on hand, by the end of December 4500, and by the end of March the entire 9000. Of the number, 6000 had been ordered from the Ford Company, 2000 from other American firms, and 1000 from British manufacturers. The Royal Agricultural Society had recommended the Ford after a trial by five judges. It was light for its power, hence was light on the land, was easily handled, and was able to turn in a small circle. Since the Fords could not be made in England as had been at first planned, the parts were to be made in the United States and assembled after being sent over.\(^{20}\) In its furnishing of tractors the Government did not intend to relieve farmers of ploughing and of other work which they could do themselves. Farmers who could were urged to buy tractors; but to those who could not, the War Agricultural Committees, would, as far as possible, furnish assistance.\(^{21}\) The loan of expensive agricultural machinery was thus a new burden assumed by the state.


\(^{20}\) L. T., Aug. 24, 1917, p. 3.

\(^{21}\) Ibid., Aug. 2, p. 3.
The extended use of agricultural machinery was expected to repair in part the 30 per cent. depletion of agricultural labour. Efforts were also made to retain such labourers as remained and to increase the number of hands from other sources. Among possible sources of supply were German prisoners. In November, 1916, Parliament was informed that a scheme was in preparation whereby small parties of prisoners would be turned over to farmers, who in turn would be responsible for their custody, housing, and feeding. At the beginning of the new year Mr. Prothero announced that 10,000 prisoners skilled in agricultural labour would be available and would be employed under the supervision of the county War Agricultural Committees.\(^{22}\) Owing to the attitude of the prisoners themselves, however, not very much came of the project.

Women were another resource. In June, 1917, the President of the Board of Agriculture issued an appeal to farmers to employ them more extensively on the land. They were to be looked upon not as substitutes for men already employed but as additional workers, and no farmer would risk the loss of his male labour if he utilized their services. They were willing and able to work; and they had already shown themselves useful in the care of stock, in milking, in the management of horses, in all odd jobs about the farm and in such ordinary field work as weeding and hoeing. Early in the year Mr. Prothero had expressed himself as hopeful of

securing the services of 50,000 or 60,000 women, the equivalent of 35,000 men. In June Lord Milner told the Lords that 120,000 women were working on farms and that some 20,000 more might soon do so.

More difficult was the retention of male labour on the farm. Better wages could be had elsewhere, and the War Office was only too ready to enlist agricultural labourers. How unwise were some of the dispositions of this body is illustrated by an instance described in Parliament. A noble peer explained that his second gardener, a man not unskilled in agriculture, had been enlisted and that the man's wife and eight children had become recipients of an allowance amounting to 35 s. weekly. Meanwhile the gardener had for two years been employed, not at the front, but as an officer's groom somewhere in Essex. Further evidence of lack of co-ordination between the departments of War and Agriculture was abundant. When the latter told farmers to pool their labour, the former asked, "How can this man be indispensable to Farmer A when he has been lent to Farmer B?" On the other hand, the County Councils, those large landlords of small holdings, were not able to co-ordinate labour. If 100 acres in small holdings were cultivated by ten men, each could say to the War Office that he was indispensable to the cultivation of

23 M. G., Je. 1917, p. 4; L. T., Feb. 9.
24 L. T., Je. 28, 1917, p. 10.
25 P. D. C., 1916, LXXXVI, 460.
his holding, yet the County Council could till the 100 acres with three men and release seven.\textsuperscript{26} In 1917 some approach was made to better co-ordination. An agreement was reached between the two departments whereby the new army order should withdraw not more than 30,000 men from the land. In May, to be sure, there was complaint that the War Office was not keeping its agreement,\textsuperscript{27} but in the same month it did at least assist agriculture in another way. Soldiers not in Class A were given furloughs to assist in sheep-shearing. Elsewhere training schools were set up to teach soldiers the management of horses and the technique of ploughing.\textsuperscript{28} In June Lord Milner stated that from one source or another the Government had secured some 70,000 men for farm work.\textsuperscript{29} In July it was announced that the County Agricultural Executive Committees would be given some influence in retaining men on the land. If any Committee should issue a voucher that a man was employed full time in farm work and was so engaged on June 1, 1917, and further that the work was of national importance, the man would not be called up for the army. The Committees were to see to it, moreover, that agricultural labour was put to the best use and that any surplus on a farm would be moved to some other place where it was urgently required.\textsuperscript{30} Such measures tended to
allay the farmer's distrust of the War Office and to relieve somewhat his anxiety regarding labour.

The policy of largest scope, however, looking toward the encouragement of agriculture, was the guaranteeing to the farmer of minimum prices for grain and to the agricultural labourer of a minimum wage. Minimum prices for grain had, it will be remembered, been recommended by Lord Milner's Commitee, and the decision of the Government at length to adopt this recommendation was announced by Mr. Lloyd George in the Commons on February 23, 1917. A schedule of prices for six years was presented, a proviso being added that the matter was open to reconsideration after four years. As compared with the pre-war price of wheat, which was 34 s. 11 d. the quarter, and the prices of 1915 and 1916, which were respectively 52 s. 10 d. and 58 s. 5 d., the new minimum prices for wheat, it was proposed, should be 60 s. in 1917, 55 s. in 1918 and 1919, 45 s. in 1920, 1921, and 1922. The corresponding prices for oats during the six years were to be 38½ s., 32 s. and 24 s. For potatoes in 1917, £6 a ton should be guaranteed. After explaining that some four million acres had been converted from arable to grass since the sixties, the Premier stated that the farmer was hesitant, not so much through lack of labour, as through timidity. Twice since the process of conversion began he had been caught badly with too much arable—in 1880 and in 1890. That a fear of the recurrence of such disaster might not affect him now, the Government was drafting a bill along the lines indicated.
Provision for a minimum wage of 25 s. a week for agricultural labourers would be included. It was hoped that as a result some three million more acres might be brought under cereals and potatoes.

On April 11 the new measure, known as the Corn Production Bill, was introduced. At once the question which had confronted Lord Milner's Committee again arose. Should the guarantee extend to all grain raised, or merely to the added product? If to the former, the Government might find itself bound to make considerable payments, although output might thereby be little increased. If to the latter, the farmer might not maintain existing production. Mr. Prothero declared that the second risk was more serious and that the Government was not willing to confine the bonus merely to excess production. Another question which came up for discussion was whether the output in quarters or the acreage under cereals should be made the basis of the guaranteed payments. To give the measure a wider and more democratic appeal the acreage basis was adopted. As amended, the bill provides that payments, whenever called for, will be based upon every acre cultivated and producing a crop of wheat or of oats.

Most hotly debated of the provisions of the bill was that relative to the minimum wage for agricultural labourers—an inducement to keep them on the land and

32 M. G., Je. 7, 1917.
33 L. T., Apr. 12, 1917, p. 3.
34 Ibid., Jy. 11, p. 10; Jy. 12.
a means of enabling them to meet the increased cost of living. The Premier in February had promised 25 s. a week. Before the war he had started a campaign to secure 20 s., the average pre-war wage being 17 s. 10 d. Recalling the latter facts and pointing out that the figures of the Board of Trade showed an advance of 75 per cent. in the cost of living, the Labour members demanded that the minimum be fixed at 30 s. The Government, however, stood firm. It maintained that the 25 s. minimum would mean in many districts an acceptable advance over prevailing rates, that this sum could be increased where desirable by Wages Boards for which the bill provided, that the 25 s. would continue after the war and was independent of a fall of prices, and that, should a fall to pre-war levels take place in the price of wheat during five years, the farmer would get from the state only £68 millions but would have to pay in wages £59 millions above pre-war wages. Should the minimum wage be fixed at 30 s. the latter payment would be increased to £100 millions. Such a provision would take from the bill its effective force as a stimulus to production and upon the Premier's February promise the Government would stand or fall. It would gladly fix no minimum whatever, as in the case of the miners, but agricultural labour was unorganized and helpless.  

Thus defended, the Bill was passed on August 21 and five weeks later an Agricultural Wages Board was set up. Upon it sat sixteen representatives of employers

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and sixteen representatives of workmen, together with seven impartial appointees of the Board of Agriculture. Similarly constituted local wages committees might be established by the Central Board, their chief duty being to recommend wages applicable in their districts. In determining minimum wages the Board was instructed by the President of the Board of Agriculture to have in mind an amount which would enable a man to keep himself efficient and maintain his family "in accordance with such standard of comfort as may be reasonable in relation to the nature of his occupation." It was a statement that would many times have to be interpreted.

While the Government was carrying out its policy of encouraging agriculture by guaranteeing minimum wages for an indefinite time and minimum prices of grain for a period of years, it displeased the farmer by its action in a closely related matter. In August, 1917, the scale of maximum prices for grain, set up in the spring to protect the consumer, was revised. So far as wheat was concerned, the new scale would no longer affect the consumer. Since bread was henceforth to be supplied at the uniform price of 9 d. the quartern loaf, a price corresponding with one of 60 s. the quarter for wheat, the maximum price to be set for wheat reflected only what the Government would in the future have to pay as its subsidy for bread so far as this was made from home-grown wheat. To the farmer the new scale seemed

36 Ibid., Sept. 29, p. 7; Sept. 15, p. 3.
38 Cf. above.
illiberal. Not only were the spring maximum prices reduced, but the weight of the quarter was increased. Instead of the spring maximum of 78 s. a quarter for wheat, the nominal maximum until December 1 now became 73 s. 6 d. and the real maximum (allowing for the increased size of the quarter) 72 s. The maximum for oats was correspondingly reduced from 55 s. nominally to 44 s. 3 d., actually to 43 s., the maximum for barley from 65 s. nominally to 62 s. 9 d., actually to 56 s.

 Provision was made, to be sure, for a progressive increase in prices during the next six months, except in the case of barley. On and after June 1 wheat would at length command 77 s. 9 d. and oats 48 s. The price of wheat in the summer of 1918, therefore, was to be practically what it had been in the summer of 1917. But farmers grumbled about the reduction during the later months of 1917 and the earlier months of 1918. When the crops of 1917 were sown, they said, no intimation had been given that market prices would not prevail; there was being transferred to the consumer most of the advantages arising from their redoubled efforts; the success of the Corn Production Bill was being compromised by a loss of confidence in the Government. More astute observers saw in the new prices an endeavour to make them reflect the seasonal abundance of autumn and winter compared with the scantier supplies of spring and early summer. Looked at impartially, they were high in comparison with pre-war prices and even in comparison with

39 L. T., Aug. 16, 1917, p. 3; Aug. 20, p. 3.
the minimum prices of the Corn Production Bill. Complaint, however, was not likely to be long continued nor was the success of the new measure likely to be seriously imperilled.

By the autumn of 1917 the Government could review the agricultural achievements of the year and state accurately its program for 1918. Whereas at the end of 1916 the arable under cultivation in England and Wales was 260,000 acres less than in 1915, the spring sowing of 1917 had restored the situation and had improved it by the addition of 380,000 acres. To these 640,000 acres should be added a considerable acreage in Scotland and 700,000 acres in Ireland.⁴⁰ In view of the unexpected increase in Ireland, the Government could afford to reduce its program for England and Wales. The 3,000,000 acres at first asked for in 1918 were changed to 2,600,000, of which some 380,000 had already been ploughed.⁴¹ Not all of the remaining amount need be got, Mr. Prothero pointed out, by ploughing up pastures. A part could come from bare fallow, of which there was still 350,000 acres, a part from the 2,500,000 acres under clover and rotation grasses, a part by taking two crops in succession, if the land could be kept clean. Not more than 2,000,000 acres of grass land would have to be ploughed. To effect the ploughing of this amount facilities in the shape of tractors had been provided or would be; government credit for the purchase of seeds,

⁴⁰ Ibid., Oct. 12, p. 4.
⁴¹ Ibid., Aug. 6, p. 3; Aug. 24, p. 3.
fertilizers, implements, and horses would be extended; horses and ploughmen would be lent to farmers on reasonable terms, the services of women and soldiers would be made available.\textsuperscript{42} Behind these immediate methods of assistance were the guarantees of the Corn Production Bill. The outcome would for the rest depend upon the patriotism and skill of the British farmer.

\textsuperscript{42} Ibid., Oct. 6, p. 8.
CONCLUSIONS AND COMPARISONS

Broadly speaking the state may be said to exert influence upon production, distribution, and consumption in three ways. It may persuade the producer, distributor, or consumer to enter voluntarily upon some course of action contributory to the public advantage. So persuaded the producer may put his product on the market at a price which will yield him only a moderate return. The consumer, whether the state itself or the public, will have the benefit of the renunciation of profits which conditions of scarcity might put within reach. The distributor in the same way may be induced to renounce the excess charges which conditions of transportation and distribution might warrant his asking. The consumer, again, may be urged to economize in the use of such necessities as coal and food. Any nation which in time of war or in time of peace can bring itself to a state of efficiency by measures like these may boast of a population animated by a high degree of public spirit. So far as such methods are efficacious they are obviously wisest and are most creditable to the Government and people concerned. Wherever possible, they should have first trial.

The state, however, failing in its appeal to voluntary effort, may find it necessary to resort to sterner measures
than persuasion. It may have to impose regulations upon the processes of production, distribution, and consumption. Inasmuch as such restraints are sometimes necessary in time of peace, their imposition in time of war would not be unexpected or unwarranted. They tend usually to assume the form of making obligatory such action as would preferably be induced by persuasion. The producer is required to put his product on the market at a fixed maximum price, regardless of his concurrence; the distributor is restricted in what he may charge for his services; the consumer, although not rationed, finds that food is procurable only in certain quantities dependant upon the quota allowed to his district or firm. Regulations like these indicate that the state cannot rely upon voluntary renunciation but hopes that, by the least possible interference on its part, satisfactory conditions may be made to prevail.

In certain cases the state may find that even such measures are inadequate. At this juncture it steps in and assumes entire control. While the immediate administration of the industry in question may be left with the owners, the Government henceforth determines all larger issues. It fixes the wages to be paid the workers, it arrives at a cost price by an investigation of the costs of the successive stages of production, it adds to this the profit which is deemed just for the producer, and it specifies how the commodity in question may be put upon the market. Wholesalers' and retailers' transactions are supervised and their charges closely restricted. In this way
the commodity is procurable by the consumer at what he may properly consider the cost price. The consumer, although the ultimate beneficiary of a system like this, does not escape its compelling power. Economy of consumption may be enjoined upon him and a system of rationing, more or less elaborate, may be imposed. Such imposition occurs only when the supply of a commodity is considerably below the normal demand. Then it is that the state interposes to see that equal sacrifices are exacted from all its citizens.

Naturally a country is likely to experience transitions from one of these stages of state interference to another as the conditions of war grow more exacting. The transitions, too, are more rapid in the case of certain industries than in the case of others. In general a Government, plunged into war, at once assumes control of whatever industries it feels essential to the prosecution of the war or the maintenance of its civil population in war time. Other industries it leaves free, relying if need be upon persuasion and exhortation. Only when inducements of this kind are disregarded does it resort to regulation and ultimately to control. A comparison of English and American experience in these matters is not un-instructive.

Striking differences in the situation in which each nation finds itself at the end of 1917 at once appear. One country has been at war for more than three years, the other for less than three-fourths of a year. In the one case a vast expenditure of resources, a large part of
the population under arms, heavy casualties, and the long strain of steady application demanded of the labouring classes have created a temper very different from that prevailing in a country which until recently has profited from the war and has as yet felt scarcely any of the sacrifices which it entails. In the second place, geographical conditions and the resulting industrial specialization have placed the two countries in a different attitude toward certain of the necessaries of life. Great Britain depends upon foreign countries for a large part of her foodstuffs and for such commodities as wool and hides. The United States is an exporter of food-stuffs and produces most other commodities in considerable measure. Whenever, as has happened during the war, shipping facilities are restricted, Great Britain is much more sensitive to the danger of diminished imports than is the United States. Hence a different attitude of the state toward the food supply. Where in one case there is security against anything worse than shortage, in the other there is always the possibility of famine conditions. In the matter of food, as of ships, England can afford to run no risks, and in the case of certain other imported commodities it is not at all to her advantage to do so.

Great Britain's long experience of war and her peculiar geographical situation thus conduce to impel her farther in the direction of state control over industry than the United States has thus far gone. It might be pertinent at this point to inquire which nation had the greater predilection for such control. The answer cannot be far to
seek. England since the eighteenth century has become the classic land of *laissez faire*. Until recently her later-day statesmen have done little to fetter the free play of competition in industry and commerce, except where competition has been clearly detrimental to the welfare of her people. Most unreservedly committed to the doctrine is the Liberal party, in whose hands lay the conduct of the war for more than two years. So late as October, 1916, Mr. Barnes could charge this party in the House with secret loyalty to its long-professed principles. "I cannot help thinking," said he, "that the Government have had at the back of their minds a mournful, lingering feeling of regret for the demise of an antiquated system or principle, which, as soon as the war began, was promptly thrown overboard as useless and dangerous for the purpose of fighting the war. It has, however, been allowed to do its worst in regard to the civil population. The policy of *laissez faire* is no more good in regard to social economics than it is in regard to fighting the war. I submit to the President of the Board of Trade that it is as dead as Queen Anne."¹ Whatever be the truth in this charge — and Mr. Runciman freely professed his reluctance to exert control until it was necessary — the Government can scarcely be accused of precipitate action. Only in respect to the railways and the sugar supply was the state put in immediate charge. Energetic measures in other directions date largely from the end of 1916.

If it be true that the Liberal Government abandoned

¹ P. D. C., 1916, lxxxvi, 436.
its *laissez faire* principles only reluctantly, what may be said about the attitude of the United States toward the same doctrine? Governmental tradition here was somewhat different. Whereas throughout the second half of the nineteenth century England was a free trade country, during the same period industry in the United States was fostered by high protective tariffs. To Americans who had pointed out that capital was largely benefited thereby, it was answered that only thus could the wages of the industrial labourer be maintained at a level which raised him above his European fellow. Thus there was built up the tradition that state interference to prevent the unfettered course of trade was legitimate when it conduced to the advantage of certain classes in the community. To be sure the political party in power when the United States entered the war had not subscribed to this doctrine; but just before 1917 it had twice given its sanction to state interference in the free play of industrial forces. By the Child Labour Act, the Democratic party assumed for the central Government authority hitherto exercised by the several states, the power, namely, of insuring to young persons in factories humane conditions of employment; and by the Adamson Act it guaranteed to certain classes of railway employés an eight hour day. Thus tradition and sentiment favourable to governmental regulation of industry, after being fostered by the Republican party during its long tenure of office, had been reinforced by the action of the Democratic party on the eve of the country's entry into the war.
If, then, at the end of 1917 any one were to give an *a priori* answer to the question whether Great Britain or the United States was likely to have gone farther in the direction of state control over industry, the reply could scarcely be an unqualified statement. Predilection and tradition, it would be answered, might incline the United States more than Great Britain toward regulation or control; on the other hand, Great Britain's peculiar geographical and industrial position and her reaction toward the vicissitudes of a long war would probably have persuaded her to adopt the more energetic measures. In temperament Great Britain would be the more hesitant, yet circumstances would have conspired to induce her to more radical action.

If now the respective attitudes of the two governments toward industry at the end of 1917 be considered, it will appear that this diagnosis is correct. The United States was still to a considerable extent reliant upon the voluntary co-operation of its citizens. A certain number of official regulations had been imposed, two industries had been taken over, and a third was likely to be. Great Britain, on the other hand, was waiting to find whether her last appeal to voluntary effort would meet with a satisfactory response; if it should not, regulation or complete control would henceforth prevail wherever the industry was one of war-time importance or where the food supply of the population was in question.

In the United States the appeal for voluntary co-operation from business men, workers, and the public elicited
for the most part a hearty response. Most publicity was
given, perhaps, to the campaign for economy in the con-
sumption of food. The avoidance of waste, the use of
substitutes for scarce and exportable foods like sugar,
meat, butter, and wheaten flour, the preference for whole-
wheat bread or corn bread over white bread, all these
economics were urged upon consumers. They were
enforced by lectures and demonstrations until people who
had never heard of calories began to draw up their menus
in terms of that abstruse unit. Housewives were asked
to pledge themselves to adopt all recommendations made
by the Food Administrator. Various flours were com-
pounded by mixing inferior grains with wheat and their
general use was recommended. Relative to the consump-
tion of only one food did the Government at first
make any approach toward compulsion. It authorized
retailers to require, if they so desired, the purchase of
two pounds of corn meal along with every pound of sugar.
Apart from this the consumer was not, in 1917, ham-
pered, save by the force of public opinion, in procuring
what foods he liked and in using them as he liked. In
Great Britain, on the other hand, the waste of food had
become a criminal offence, the use of a war-bread made
from whole-wheat flour mixed with inferior flours was
obligatory, sugar had long been rationed, and other food-
stuffs were henceforth to be, if the second energetic cam-
paign for voluntary rationing should prove ineffective.
In the use of food, compulsion had become the rule while
co-operation still remained the privilege of American consumers.

Voluntary co-operation also proved feasible between the United States Government and its industrial leaders in respect to the acquisition of certain important commodities. In the summer of 1917 contracts had to be placed for enormous quantities of steel and copper for munitions and ships, and these metals were commanding very high prices in a war market. The Government, accordingly, approached the producers to see whether an arrangement could be made advantageous to itself and to the Allied powers, henceforth its fellow-purchasers. Behind the invitation lay, of course, the intimation that concessions would be necessary. Conscription of factories as well as conscription of men was always possible. No threats, however, were needed, and the producers of steel and copper readily accepted the prices which the Government, acting on the advice of the Federal Trade Commission, offered. This achievement in voluntary co-operation left a large sphere of essential war industry free from governmental control. Here again English experience has differed and has carried His Majesty's Government much farther. Anxious to increase the output of munitions at the beginning of the war, the Ministry, by the Defence of the Realm Act, assumed power to turn into munitions-making establishments all plants suitable therefor. To still the complaint of labour about proprietors' profits, the Munitions of War Act next imposed a limit, restricting
profits to the average return of the two years before the war. The situation thus created differs somewhat from that prevailing in America. Profits allowed to munitions-makers in Great Britain are less than those accruing to the steel and copper producers in the United States; for pre-war profits were smaller than are those of 1917 even though the latter have been reduced by rising costs. The American Government, however, reasoned that a considerable part of the profits still accruing to producers would be swallowed up by the excess profits tax and felt further that essential industries should not be left without stimulus. English establishments, again, found themselves "controlled" in other respects. Not only were they required to submit to the Ministry of Munitions all their rules affecting employés but they likewise were subjected to elaborate priority regulations. Priority, of course, is to be given in the United States to Government needs; but the procuring of a permit or the showing of a contract for warwork is not yet a pre-requisite for the getting of any steel or copper by a private buyer, as it is in Great Britain.

Closely associated with the British control of munitions plants is the control over labour. Both were established by the Munitions of War Act, 1915. In the United States labour is still free. Certain unions about to strike have, indeed, been asked by President Wilson to submit their request for wages to arbitration and in the case of other labour demands there undoubtedly will be urged similar resort to an arbitration tribunal. America,
however, has not yet enacted a law providing for compulsory arbitration. The assent of many of the unions affected would first have to be got as it was in England, nor is it certain that such assent could be secured. Yet, if continual readjustments accompanied by threats of strike are to be avoided, either such a law or the unswerving co-operation of the unions with the Government seems essential. The problem is undoubtedly the most difficult of all those created by the war. The United States has as yet scarcely faced it. Great Britain in the Munitions of War Act and in the measures by which it has been amended may have found as satisfactory a solution as is possible. Arbitration has with her become to a considerable degree compulsory and where it was not accepted, as it was not by the miners, state control eventually became necessary. The policy of fettering labour by the requirement of leaving certificates will scarcely recommend itself to American legislators, the more in that it has proved a failure in England. The dilution of labour, on the other hand, by the employment of unskilled men and women is likely to become necessary in the United States, as it has become in England. Unless in their attitude toward war-work the trade unions remain heartily co-operative, it is not improbable that measures resembling the Munitions of War Act may have to be resorted to in America. In its attitude toward labour as in that toward the producers of steel and copper the United States government is still relying upon voluntary co-operation. 'Great Britain found such reliance in-
adequate, and for two and one-half years has resorted, not, to be sure, to complete control, but to very stringent regulation.

Extensively as the United States has trusted to the voluntary co-operation of its citizens in the fields of production and consumption, it has in certain instances resorted to governmental regulation. Most noteworthy is the determination of the selling price of wheat, the regulation of the distribution and sale of other important food-stuffs, and the supervision of the apportionment of imported wool and hides.

On August 30 the United States Government announced what it thought should be the maximum price for the wheat crop of 1917. In the Food Control Act, which had become law on August 10, the farmer was guaranteed a minimum price of $2.00 a bushel for the wheat harvest of 1918. The Act contained no provision for either a maximum or a minimum price for the 1917 crop. The Government was, however, empowered to purchase wheat for itself and the Allies, and at once appointed a committee, representative of all interests and sections, to determine a fair price. The price reported and adopted was $2.20 per bushel at Chicago for the basic grade. The Government intimated that it would not be content with limited purchases but was prepared to buy the entire crop of the country if such action should be necessary to stabilize prices. The Food Administrator had already announced that all elevators and all large mills would be brought under a licencing system.
Hoarding and speculation would thereby be eliminated. By this device the price of wheat, although not technically fixed for the community at large, was practically determined. When the Government, through a newly established Grain Corporation, began to buy wheat as it came in at the elevators, there was no friction. The farmer was, of course, under no compulsion to sell his grain at the Government’s price and many producers did hold back their stores. So far, however, as the transactions of middlemen were concerned profiteering was eliminated.

The action of England relative to the wheat supply was at first more hesitant, but in the end somewhat more comprehensive. At intervals from the beginning of the war His Majesty’s Government purchased large stores of imported wheat, anxious to maintain a food reserve for the nation. The sale of these stores at opportune times served to quiet an excited and rising market. Apart from making purchases and sales, the Government after 1915 tried to modify the price of imported wheat by exerting control over ocean tonnage. It was not, however, until the spring of 1917 that maximum prices for domestic wheat, oats, and barley were established. In the summer the policy was continued by the announcement of maximum prices for the cereal harvest of 1918. Meanwhile the Government was planning to fix a selling price for bread, lower than one warranted by its own maximum prices for wheat and flour. The loss incurred would, it was stated, be met by the Exchequer. In this way English regulations have shown themselves even more favour-
able to the consumer than have those of the United States.

To the producer, also, greater guarantees have been offered. Whereas the United States in the Food Act assures the farmer a minimum price for his wheat in 1918, Great Britain guarantees liberal prices over a period of six years. Owing to the submarine menace it was necessary for her to stimulate the domestic production of cereals. Even a minimum wage for agricultural labourers has become statutory, in the hope that adequate labour will be available on the farms. Geographical isolation and laggard agricultural wages have thus prompted the provisions of the Corn Production Bill, circumstances neither of which are characteristic of the United States. On the other hand, so far as both countries have felt the need of regulations favourable to the consumer and to the producer of cereals, but restrictive toward the middleman, they have acted similarly. One has been more prompt, the other more thorough-going.

The form of regulation adopted in the United States to control the price of wheat readily lent itself to extension. Since no power had been conferred upon the Executive to fix prices for foodstuffs, all that could be done was to check profiteering on the part of middlemen. To this end the system of licencing was admirably adapted. At the end of 1917 it had been applied not only to the sale of wheat, but to the distribution of many other foodstuffs.

First to claim attention after wheat was sugar. The world shortage in this commodity made itself acutely felt
in the United States late in the summer of 1917. Holders of the remainder of the Cuban crop were asking exorbitant sums for their sugar and retail prices in August rapidly advanced 2 or 2½ cents a pound. The new Cuban crop would not be available until the end of the year. After September, however, the 800,000 tons which constitute the beet sugar crop of the United States, would come upon the market. Mr. Hoover, accordingly, approaching the beet sugar producers, asked for their cooperation. This was readily granted and it was agreed that their product should be sold at a price which would reduce the prevailing market price by 1½ cents a pound and save the public some $30,000,000 before the end of the year.

The Food Administrator next turned to the distributors. In view of the terms conceded by the beet sugar growers, refined sugar, it was computed, ought to sell for $8.35 a hundred weight and for less toward the end of the year. The wholesaler should be entitled to add a charge of 25 cents a hundred weight and upon this basis it was found that sugar could be sold to the consumer at 9½ cents in the South and in the Atlantic seaboard states, and for somewhat less north of the Ohio and west of the Mississippi. To insure that wholesalers and retailers should keep very nearly within these limits the Government introduced its licencing scheme. All dealers were required to secure a federal licence in order to carry on business, and the Government was prepared to withhold licences and supplies from any firms which might
attempt to realize undue profits. Refiners and wholesalers were instructed not to supply retailers who charged exorbitant prices, and Federal Food Administrators were detailed to different districts both to inform the public of proper prices and to report delinquencies on the part of dealers. To conserve the supply, confectioners were put on rations, and to increase it a $13,000,000 purchase was made in Louisiana. Stores acquired by the British Government were released for the American market. Although instances of excessive charges and of the hoarding of sugar were for a time reported, the adaptation of the sugar trade to the new regulations was reasonably prompt and a stability of prices like that attained in the wheat trade soon resulted.

Before the end of the year further steps were taken looking toward the future. On investigation by the Food Administration it was found that the cost of refining cane sugar was $1.30 a hundred weight. After prolonged negotiations the refiners were persuaded to reduce their charges from about $1.84 to this amount and it was estimated that the saving to American consumers in 1918 would be $25,000,000. To apportion all imported sugar fairly among American refiners, a committee representative of cane sugar refiners was appointed; and to arrange for the transportation of foreign sugar and its distribution among the Allies, representatives of the English, French, Italian, and American Governments were to meet. The Cuban crop was bought by the Allied Governments at about $4.60 a hundred weight (or $6.00 delivered in
New York), a price which should put sugar into the hands of the American consumer in 1918 at from 8½ to 9 cents a pound. Mr. Hoover declared that speculation in sugar and the taking of excessive profits had been eliminated.²

At the same time that licencing was applied to the sugar trade, it was extended to many other foodstuffs. In the middle of October it was announced that on and after November 1 licences would be required for dealing in all foods which form "the prime basis of life." Eggs, poultry, milk, meat, vegetables, sugar, flour, bread, wheat and other cereals, fish, and canned goods were designated. All persons engaged in the import, manufacture, storage, and distribution of such foodstuffs were required to secure a licence from the Food Administrator and among the middlemen in question were specified meat packers, cold storage warehousemen, millers, canners, grain dealers, wholesale distributors, and retailers doing a business of more than $100,000 a year. Since small grocers would scarcely be able to charge more than the large retailers, it was expected that the system would tend to stabilize the entire retail market. So flexible and adaptable was the licencing system proving that the ends attainable by it were practically the ends aimed at by a system of direct price fixing.

The United States, therefore, within eight months after its entrance into the war had taken action to restrain a rise in the price of essential foodstuffs such as England had in general resorted to only in the third year of the

conflict. Mr. Hoover put the issue clearly before a war convention of business men held at Atlantic City on September 19. "If we are to have ascending prices we must have ascending wages. But as the wage level rises with inequality it . . . [leads] to strikes, disorder, riots, and defeat of national efficiency. The verdict of the world's experience is in favour of price control as the lesser evil." This was the conclusion to which England had been forced at the beginning of 1917. Once convinced, she adopted out-and-out methods of price fixing. Prices were based upon the formula which alone has stood the test of experience. At every stage in its manufacture the price of a commodity should represent the cost of its production increased by a reasonable profit for the producer. When the United States' scheme of licencing dealers in foodstuffs went into effect, England had already fixed maximum prices for most articles of food. The control was more direct, since violation of a price order became a criminal offence, punishable in the courts. In America the indirect control, which would take from a dealer his licence or in the case of a small retailer subject him to the competition of large concerns, is less precise but will probably prove no less efficacious. Both schemes are alike in principle, aiming to protect the consumer against undue profit-taking on the part of all dealers in foodstuffs.

In two respects England has gone farther in an endeavour to protect the consumer. Sugar is not merely sold at a price fixed by the Government—a regulation
which dates from the beginning of the war — but it has also since the autumn of 1917 been impartially distributed in limited amounts to consumers. This action followed upon long-continued complaints about unfair distribution both to communities and to individuals. The American scheme scarcely provides against such contingencies but the degree of scarcity which makes them possible may not come to prevail in the United States. The other regulation relative to foodstuffs in which Great Britain has been more radical than America is the selling of bread at a price lower than the market — even a controlled market — warrants. This subsidizing of bread is an expedient to which a Government has recourse only as a last resort. It is not impossible that, had the British Cabinet striven from the beginning of the war to eliminate middlemen's profits in foodstuffs, it would have avoided the growth of popular distrust and criticism which made the step necessary. Even the poor do not rebel against hardships which they feel are created by the circumstances of the war and which are shared by all classes alike. Nothing, on the other hand, makes the worker angrier than to see the well-to-do profiting by the nation's disaster and profiting in part at his expense. Great Britain is paying the penalty for allowing this temper to develop by being obliged to subsidize bread. It will be the triumph of American regulation if charges like those which have been made in England since the early months of the war can be avoided. English experience relative to essential foodstuffs seems to be that state control of
prices is necessary, if the great mass of consumers are not to be antagonized, and that the sooner such control is assumed the wiser and more economical it is for the Government concerned.

Government regulation in the United States has taken the form not only of fixing prices for wheat and of supervising the sale of important foodstuffs, but at the end of 1917 it was invoked relative to imports of wool, leather, rubber, and a few other commodities. In an official announcement of December 14, the War Trade Board explains why in the case of wool the step became necessary. Although at the time the price of this commodity in England was only 55 per cent, in excess of its pre-war price, the advance in the United States had been 200 per cent. Nor was the rise in any considerable degree due to the new military demands. The supply of wool in the country was ample for the needs of the present and the immediate future. Inasmuch as the clip in most wool-producing countries had increased and might reasonably be expected not to decrease, there was no prospective shortage in the world's supply. Consumption in the United States during 1918 would be little if at all greater than in 1917. Through the influence of the Commercial Economy Board, substitutes, too, were being introduced and wool itself was being diverted from less essential to more essential products. The excessive advance in price was in reality due to speculation and to hoarding. Importers had speculated in an hysterical market; cloth manufac-

3 Ibid., Dec. 15, 1917, p. 2.
turers in distrust were carrying abnormal stocks of wool and were contracting with importers for unusual quantities for far forward delivery; manufacturers of clothing were purchasing cloth in excess of their reasonable needs.

Deprecating such action, the War Trade Board attempted to check it by two regulations. Applicants for import licences were henceforth required to agree not to sell to any person other than a manufacturer without the consent of the Board, and the United States Government reserved to itself the right to purchase within ten days after Custom House entry any imported wool at a price 5 per cent. less than the basis price of similar wool in the Boston market on July 30, 1917. The first regulation was designed to prevent speculation, the second to check the rise of prices by setting a Government valuation. That the Board might be assisted in carrying out these measures and in procuring an equitable distribution of wool to the most essential industries, committees from the wool trade and the other trades concerned were appointed. It became the duty of these committees to gather for the Government information in the various trades, to act as consignees of imported wool and other commodities, keeping record of the extent of the imports and releasing them to importers under the required guarantee, and, finally, to observe the disposition of the imports and the observance by the importers of their pledges.

In the case of wool this scheme of regulation stands
in contrast with the more complete control developed in England during the course of the war. In the United States the home clip is still unaffected; foreign wool may still be bought by private importers subject to the Government's right of pre-emption and the Government's licence for resale. If importers refrain from speculation they may still sell much of their wool to manufacturers at a favourable price. How far the Government's option may be exercised to keep prices below the level of July 30, 1917, will probably depend upon circumstances. Wool will certainly be diverted to essential industries; but if the supply continues liberal, as is hoped, and if substitutes are developed, there is no reason why less essential industries need suffer. In England, on the other hand, the home clip has twice been commandeered by the Government, the Australasian clip twice bought, and the distribution of all has been strictly controlled. Indeed, the method of control, especially the rationing which became necessary in the summer of 1917, brought sharp criticism from the trade. Only by the establishment of a Board representative of the trade and by the resumption of somewhat more liberal apportionments was the dissatisfaction at all allayed. The motives which induced the English and American Governments to assume control over wool differed somewhat and in this lay the reason for different procedure. England was concerned about both the supply and the rise in price; the United States professes assurance regarding supplies, but great concern about high prices. Since English complaints arose from
rationing rather than from the closing of a free market, American manufacturers need not expect from the new regulations hardships like those experienced in England, but pronounced benefits instead. The American scheme is a simple one to check rising prices. Unless the supply of wool diminishes or unless hoarding and speculation continue, there would seem to be no reason why the United States Government should purchase either the home or a foreign wool clip. The same reasoning applies to hides and leather, commodities which the English Government itself does not control to the extent that it controls wool. What England has demonstrated in the case of wool is that government action can keep prices within bounds, and this for America has become a matter of some concern.

In only two fields of industry had the United States Government by the close of 1917 assumed complete control, although in a third it seemed about to do so. The two were shipping and railway transportation, the third was the working of the coal mines. In the case of shipping, the action had been most prompt. On October 15, 1917, all merchant ships above 2500 tons gross were requisitioned, practically blue-book rates were fixed, and the movement of the vessels in question was henceforth at the Government’s will. Such decisive action on the part of the state is in marked contrast with British policy, although the latter is at length in accord.

Nothing probably provoked more bitter charges of profiteering in England and caused more popular discon-
tent than did the liberty long granted to a part of the British mercantile marine to charge high freights. The annual reports of steamship companies confirmed the suspicion harbouried by the indignant British consumer. The legislation demanded relative to the cost of food was closely connected with the cry that the Government should control shipping rates. Slowly the Government yielded. At first it acted to secure the army's supply of meat from the Argentine at reasonable prices; next it deflected tonnage to the North Atlantic to insure the grain supply; lastly, it substituted for the agreement by which these grain boats were bringing their cargoes its own blue-book rates. Public opinion was slowly won over and by the autumn of 1917 the subsidized loaf at length convinced it that the Government preferred to pay for bread rather than attempt further to reduce shipping rates. The United States was not of course in a position to suffer in the same way as England from high oceanic freights, nor was its mercantile marine comparable in size with that of Great Britain. Although, therefore, the problem in America was a simpler one, the promptitude with which it was handled, embodies, whether consciously or not, the wisdom got by Great Britain through bitter experience.

In another respect the United States took more decisive action than did Great Britain in the matter of merchant shipping. By appropriation of Congress in 1917 and 1918 nearly $2,000,000,000 will be devoted to the building of a large merchant marine to supplement the
small one already existing. The need for ships to carry troops and supplies to Europe, is, of course, imperative. Since private firms, even if subsidized, could not be trusted to build the requisite tonnage, the Government was forced to become the builder and owner of a mercantile fleet. Great Britain had different and more encouraging traditions. Annually her shipbuilders had turned out some 2,000,000 tons of merchant shipping, the Government at most advancing a subsidy to steamship lines which carried mails or would put their ships at the Government's disposal in time of war. When the submarine ravages of 1917 made necessary the increased building of merchant ships, the old methods could be relied upon. Only labour and skill had to be put at the disposal of the shipbuilding firms. The Government thus avoided the direct responsibility thrust upon the United States, that of becoming a merchant shipper on its own account. The administrator of an enormous amount of requisitioned tonnage Great Britain has temporarily become; but she has at least escaped this last venture in industrial initiative. The United States, in general more reliant upon the voluntary action of its citizens, has in this matter been obliged to take the more radical step.

The second great industry of which the United States has taken complete control is railway transportation. For a time after the outbreak of the war it seemed as if reliance upon the voluntary action of railway men might prove efficacious. The fifty leading railway presidents of the country declared themselves ready to eliminate
competition and to co-operate in problems of transportation. Independent companies resigned for the time their freedom of action, and entrusted to a commission of five experienced men chosen by the President of the United States the determination of important policies. This Railroads' War Board at once devoted itself to co-ordinating the railway resources of the country. Through its efforts needless passenger trains were taken off, freight congestion was often averted by the skilful handling of empty cars, large quantities of supplies and many thousands of men were expeditiously transported for military purposes. "It was thought to be in the spirit of American institutions," said President Wilson in December, "to attempt to do everything that was necessary through private management, and if zeal and ability and patriotic motive could have accomplished the necessary unification of administration, it would certainly have been accomplished; but no zeal or ability could overcome insuperable obstacles. . . ." 4

The obstacles in question had become only too apparent at the time when he spoke. Increasing costs of operation, due largely to advancing wages and the high price of commodities, diminished the net returns of nearly all roads, and demands for still higher wages were in the air. Although the appeal of the Eastern roads to the Interstate Commerce Commission for an increase in freight rates seemed assured of a cordial reception, it quickly became apparent that this remedy would not meet

all difficulties. Greater sums of money than higher freights would promptly yield were essential and could be obtained in the market only at ruinous rates of interest. Several roads which with public spirit had responded to the desires of the Railroads' War Board had, owing to circumstances, suffered peculiarly from so doing. At the same time transportation demands became so great that congestion of traffic ensued. The issue of priority orders—orders which were sometimes in conflict—only increased the confusion and delay. At this point the Interstate Commerce Commission recommended one of two remedies. Either the Government should take over the administration of the railways during the war, rendering therefor suitable compensation and providing adequate maintenance, or, if the roads were left in the hands of the companies, there should be granted an increase in freights and a loan from the Government, while legislative hindrances to combination should be suspended.

Of the alternatives the Government chose the first. "It has become unmistakably plain," declared President Wilson, "that only under Government administration can the entire equipment of the several systems of transportation be fully and unreservedly thrown into a common service without injurious discrimination against particular properties. Only under Government administration can an absolutely unrestricted and unembarrassed common use be made of all tracks, terminals, terminal facilities, and equipment of every kind. Only under that authority can new terminals be constructed and developed
without regard to the requirements or limitations of particular roads."  

By proclamation of December 26, 1917, the President, therefore, announced that on December 28 he would take possession of all railway systems in the United States. Appointing the Secretary of the Treasury, Mr. W. G. McAdoo, Director General of Railroads, he recommended to Congress provisions for the maintenance of the equipment of the roads during the period of Federal control and for the payment of net operating income equal in each case to the average net income of the three years preceding June 30, 1917. Mr. McAdoo's first instructions to railway presidents directed them to continue the operation of their roads and to use every effort to increase efficiency, particularly in moving traffic by the most convenient and expeditious routes. The existing Railroads' War Board was continued, as well as the various co-operating committees that it had formed.

The measure which came before Congress embodied the President's recommendations as to maintenance of the roads and remuneration of the companies. It added provisions for the creation of a "revolving fund" of $500,000,000 to meet the expenses of Federal control, for the issue with the President's sanction of new securities by the roads, for the optional purchase of such securities by the Government, and for the continuance of control "during the period of the war and until Congress shall there-

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5 Ibid., Jan. 5, 1918.
6 Ibid., Dec. 27, 29, 1917.
after order otherwise." At the same time Mr. McAdoo came to an understanding with the heads of the four important railway brotherhoods. A committee of four representative men, he announced, would be appointed to investigate the relation of employés to the railways during the period of Governmental control and to inquire into the demands recently presented to the companies. The findings of the committee as to wages would be operative from January 1, 1918. This fair and even generous attitude of the Government toward the companies and toward their employés called forth many expressions of approval and assurances of co-operation.

The assumption of Federal control over railways in the United States was not uninfluenced by English precedent. The prompt action of England in taking similar steps at the outbreak of the war and the satisfactory working of government control there were often referred to in America. The motive in both countries was the same, the imperative war-time need of an efficient transportation system, unhampered by the rivalries or restrictions that might arise under a system of competing roads. The measures adopted were not dissimilar. In England the immediate management of the roads is left with the heads of the various systems sitting as a Board, but the final decision of important policies resides with the President of the Board of Trade. In America the presidents of the roads continue their individual administration, subject to the direction of a central Board of selected railway

\footnote{Ibid., Jan. 5, 1918.}
executives, already experienced, and to the final ruling of a Director who is already Secretary of the Treasury. Financially, too, England and America have acted on the same principle. Both Governments guarantee to the roads maintenance of equipment and remuneration of stockholders. In England the remuneration is the net profit during the year preceding the war, in America the average net profit during the first three years of the war. In England, however, the Government makes no payments for services rendered to itself, such being looked upon as a return for profits guaranteed. In America, book-keeping is likely to be continued in the usual manner, the expenditures of the Government and the services rendered it being accurately recorded. In America, as in England, provision is made for the investigation of demands for higher wages, and the former Government stands ready, as the latter has for three years stood ready, to meet the reasonable requests of employés. In all essentials the English scheme has been adopted, and this step of the United States Government is perhaps more closely imitative of England than any other which has thus far been taken.

At the end of 1917, however, there was considerable likelihood that English experience with the coal mines might become a precedent and that the mines of the United States might soon pass more completely under government control. As in the case of the railways, the mines of the latter country were at first left under private operation. Soon, nevertheless, a measure of control was
introduced and took the form of price-fixing. Acting under the Food Control Law, which conferred upon the Executive power to control the fuel supply of the country, President Wilson in August issued price schedules applicable to the sale of bituminous and anthracite coal at the mines. The prices were the outcome of investigations carried on by the Federal Trade Commission. They purported to be based upon the actual cost of production and were deemed to be, the President remarked, "not only fair and just but liberal as well." Concurrently with their publication a Fuel Administrator was appointed. Not merely was he to enforce the price schedules but he was to supervise the distribution of coal and the operations of middlemen and retailers. Very soon there was enough to occupy his attention. Producers complained that the price of bituminous coal had been fixed too low and would compel the closing of the smaller mines. Consumers complained that they were being charged by the retailers more than the pit-head prices would warrant. Retailers complained that supplies from the mines were not forthcoming. The miners, finally, complained that their wages were inadequate and demanded higher ones, threatening a strike. How the price for bituminous coal was advanced, how retailers were restrained, how supplies were hurried forward to various consuming centres, and how the miners were given higher wages constitutes a tale of considerable length. Its instructiveness lies in the demonstration that an attempt to regulate an industry at one point is likely
to involve the regulation of every part of it. Pit-head prices involve the cost of the miner's labour, and when this has to be advanced under threat of a strike, pit-head prices must be revised. On the other hand, a close watch has to be kept upon the middleman and the retailer to see that no profiteering creeps in between the pit-head and the consumer's furnace.

At the end of the year the Fuel Administrator, Mr. Garfield, told a Senate Committee that more extended control of the coal mines would be inevitable if the war continued, and that he himself would have put into effect such control as soon as he took office, had there not been danger that the sudden change would defeat the end at which he aimed, the supplying of coal to those who needed it most. Lack of transportation facilities increasingly complicated the situation. It was responsible for a shortage in available coal of 20,166,442 tons between August 28 and November 24. Some immediate relief was got through priority orders, although in some instances conflicting priority orders seem to have aggravated the difficulties. In December a coal famine prevailed in many regions and the first task taken in hand by the new Director of Railroads was the hurrying of coal to critical points. That such a situation might not again arise, Mr. Garfield formulated a plan closely modelled upon the English one of September, 1917. The United States he proposed to divide into twenty districts, each containing a coal producing area and each presided over by an agent

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of the Fuel Administration. Between districts no "cross-hauling" should be allowed and each agent should see to it that coal for his district came from the mines situated therein. Long hauls, it was hoped, would thus no more tie up cars, and the reduced freights would lessen prices for consumers. Only a few months before, the Controller of Coal Mines in England had, in order to forestall similar difficulties of transportation, mapped out that country into producing and distributing areas. That such a plan might be introduced into the United States it was necessary that contracts involving transportation of coal between points in different districts be no longer drawn. On December 27, accordingly, the Fuel Administrator issued an order which prohibited contracts that might involve "cross hauling," and in addition provided that no contract should be for a longer period than one year, that the prices stipulated should not exceed prices fixed by the Government, and that, at the request of the Fuel Administrator, the contract itself should be forthwith cancelled. Investigation had shown that practically all existing contracts would expire by April 1, 1918. As a result, the new ruling would by that date bring the distribution of coal pretty completely under the Fuel Administration. The running of the mines, to be sure, would still be left with the owners; but on this point Mr. Garfield told the Senate Committee that the big coal operators had assured him of their readiness to deliver their properties the moment the Government asked for them. At the end of the year, therefore, govern-
ment control of the coal mines had already passed beyond the stage of price fixing to that of control over distribution, with a prospect that complete Federal administration was not far in the future.

England's experience with coal mines and miners has been more grievous than that of the United States, has been distributed over a longer period of time, and has at length reached its logical conclusion. Complaints from consumers about the high prices of coal led, in the summer of 1915, to the introduction of the Price of Coal (Limitation) Bill. Before it could be passed the miners of South Wales, demanding a new and liberal wage-schedule, precipitated the most disastrous strike of the war, and after the passage of the bill difficulties did not cease. The maximum prices established had to be increased, retailers had to be controlled, and miners had to be further propitiated. At length the miners' demands rendered the situation intolerable and early in 1917 the state assumed control of all mines. It would probably have been better had this step been taken long before it was. Once in control, the Government proceeded to regulate the distribution of coal with a view to the relief of the transportation system, and this measure was followed by a virtual rationing of the metropolitan area.

In the United States a readiness has been shown to profit by English experience in fixing maximum prices for coal and in establishing production and consumption areas. Without doubt the American Government will not allow a disturbing labour situation to arise. Wages in certain
mines have already been once advanced under Government persuasion and with Government assistance. The complete control of the mines which England has found essential would forestall any difficulty of the kind and such control is probably foreshadowed. Whereas the prompt action of England relative to the railways has been a happy precedent for the United States, her tardy action and resultant misfortunes relative to shipping and the coal mines may well serve as warnings. In the case of shipping the warning has not been without effect, in the case of the mines it is not likely to be.

At this point the comparison between the war-time experience of the two countries relative to the control of industry may be concluded. Despite the somewhat different circumstances under which Great Britain has often been forced to act, the United States may in a general way learn much from her. The control of many foodstuffs, of wool, and of hides has in England been precipitated by dependence upon foreign sources of supply. America seldom has to face this difficulty in an acute form. If, however, for various reasons a shortage in the supply of foodstuffs, wool, or hides should arise, the experiment of stringent governmental control has been made and the workings of it are observable. Of more immediate value, perhaps, is English experience in the management of railways, coal mines, munitions works, and organized labour. By the prompt taking over of her railways, the tardy taking over of her mines, the efficient control over her munition shops, and the statutory co-
operation of labour, England has brought great essential industries to a stage of efficiency which America may well be proud to attain. It was at first hoped that voluntary co-operation in the United States might achieve what in England has required state control. This hope is no longer entertained in regard to merchant shipping or the railways. It is fading in the case of the coal mines. Its brightness has been dimmed by the introduction of various restrictions upon trading in foodstuffs and in wool. It persists still relative only to the production of munitions, the conciliation of labour, and the consumption of food. Always, however, as the hope wanes, the experiences recorded in the preceding chapters are turned to, and the wisdom taught by them is carefully pondered.
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