

## GREAT BRITAIN GIVES THE WORLD ANOTHER LESSON

Mobilization of Industrial Resources for Munitions Work  
A Wonderful Achievement

### FOUR THOUSAND FACTORIES AT WORK

Two Million People, Including Thousands of Women, Employed in Making Fodder for British Guns.

London, August 5.—(Correspondence of The Associated Press).—When the British forces in France began their great offensive bombardment on June 27, and for days hurled into the German lines such an avalanche of steel and lead as the world had never known before, even the people of England expressed wonder that it should have been possible to assemble so vast a store of munitions. The story of how these supplies were created constitutes one of the most important chapters in the history of British achievement during the war.

At the outbreak of hostilities two years ago, there were only three important government munition factories in the British Isles. Today some four thousand government-controlled firms, employing more than 2,000,000 workers, are turning out virtually all of the tremendous amount of war materials which have gone to equip the five million British soldiers in the field.

The organization of this great industry has been accomplished in a little more than one year by the Ministry of Munitions, which was established in May, 1915, under the leadership of David Lloyd George. In that time every available resource of the country has been harnessed to the production of munitions. Some idea of the scale upon which this organization has been carried out may be gathered from the statement that the largest of the new plants covers an area of nine miles long and from three to four miles wide.

A staff of 5,000 people has been required to supervise the work. At the head of this staff and responsible only to the Minister of Munitions, has been a man whose organizing ability has been accorded widespread recognition. He is Dr. Christopher Addison, internationally known for his medical research work. For work of this kind, which did not lend itself to the process of sub-division like ammunition, has had to be concentrated largely in the hands of experienced firms, but new factories under the direction of these firms have been made for single purpose work.

"Regarding our present capacity for gun production as compared with the capacity in June, 1914, before the war, we are now making in the case of the lighter guns over ten times what we were then, in the case of medium weight guns over twenty times, and in the case of heavy guns more than fifty times.

"The production of trench warfare supplies has meant the creation of an industry of which there was practically no experience in this country. Now grenades are being made in back yards and in all sorts of small shops, as well as in the big factories, and hundreds of thousands are being produced weekly. In the early days of the war the trench mortar was a weapon which had received little attention and undergone little development; there was a mere handful of these weapons in existence. They are now being produced in immensely improved types in hundreds where they were previously in units. And the output of their heavy ammunition has had to keep pace. The output of bombs where it previously was reckoned in hundreds has now reached a total of scores weekly. The production of trench warfare munition in a most miscellaneous collection of workshops has, of course, necessitated the provision of many assembly and inspection stations.

"One of the earliest steps the Ministry of Munitions had to take was to acquire control of every machine-tool maker in the United Kingdom and also to bring in the manufacturers of machine-tools. Every machine-tool made during the last twelve months has been disposed of as directed by the

good shells have been turned out by machine and methods which would be horrifying to the apostles of orthodoxy.

"What all this amounts to in the aggregate you can form some conception of when I tell you that a calculation made three weeks ago showed that there were being turned out weekly by firms who a year ago had not been engaged in munition work, sixteen times as many heavy shells as were being produced a year ago by all the national plants and private armament firms put together. Of course, the big armament firms have been greatly extended since then and that figure does not apply to their present output.

"Numbers of manufacturers who have hitherto been engaged in producing quite different goods have sacrificed their business and goodwill in order to take up the manufacture of munitions. They have done it for the asking and ungrudgingly. Many of them will find themselves at the end of the war with a great part of their goods will be jeopardized or lost. "Consequently with the programme of bringing in private firms it became evident that even with their help the output would still be insufficient, so the Ministry of Munitions proceeded to provide a large number of 'single purpose' factories, that is, plants where the work could be specialized. Skilled engineers divided the work up into a number of repetition operations about two million people of whom several hundred thousand are women. It follows that there has been much labor expended in housing munition workers. Whole villages have been built and we have provided accommodation for sixty thousand people in twelve months.

"People from all classes of society have joined in the manufacture of munitions. There is, for example, on the streets of the Ministry of Munitions, there are now employed between Frederick and Rural Route No. 3, from the first day of October

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Inspector. N. R. COLTER, Post Office Inspector's Office, St. John, N. B., August 4, 1916.

MAILED CONTRACT.

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Ministry of Munitions. The tools have been sent where they were most needed for the making of munitions.

"One of our most anxious problems has been the supply and the distribution of skilled labor. There was not enough skilled labor to go round. This fact was recognized by the trades unions and the government has received the hearty assistance throughout in the distribution of skilled labor and in the diffusion of skilled labor with unskilled. The introduction of unskilled labor into the field of munition work is a sacrifice of skilled labor which no too high tribute can be paid. Skilled men have trained and instructed unskilled workers and in thousands of cases have willingly been moved from piece work to day wages with the result that they have earned small wages than the people they have trained have received at piece work.

"This position was rendered more difficult by the fact that many skilled workmen crowded into the army. More than 43,000 highly skilled workmen have since been withdrawn for munition work. They go where they are sent. This has given the Ministry of Munitions control of a very large body of skilled workmen who can be moved as required.

"Apart from the manufacture of ships, aeroplanes, etc., which do not fall under the charge of the Ministry of Munitions, there are now employed about two million people of whom several hundred thousand are women. It follows that there has been much labor expended in housing munition workers. Whole villages have been built and we have provided accommodation for sixty thousand people in twelve months.

"People from all classes of society have joined in the manufacture of munitions. There is, for example, on the streets of the Ministry of Munitions, there are now employed between Fredericton and Rural Route No. 3, from the first day of October

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made upon the Ministry of Munitions the formulae for many chemicals and instruments which formerly had been made by the Germans had been discovered by English scientists, and that these things were now being manufactured here. In conclusion he said:

"When the Ministry of Munitions is no more, the equipment of the factories and works extensions all over the country with power and plant on up-to-date systems, accurate and modern machine tools will add enormously to our industrial strength in the markets of the world."

It is stated that the heads of the different departments of the Ministry of Munitions are largely directors and managers of great industries who have volunteered their services and have given up the whole of their private work to labor for the country without remuneration. As one has put it, "the Ministry of Munitions is, in fact, the general staff of British industry, organized for war." To an American who has volunteered his services is given credit for affecting reductions in shell contract prices which saved the government 400,000 pounds a week.

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## Classified Advertising

One cent per word each insertion. Discount of 33 1-3 per cent on advertisements running one week or longer if paid in advance. Minimum charge 25 cents.

### TO LEASE BY TENDER

The St. John Opera House with accessories as now running for a term of five years for legitimate, respectable show purposes. To highest acceptable bidder with bond for due performance. Tenders close September 15, 1916. Present lease expires February 1, 1917. Address: Marked Tender, St. John Opera House Co.

### NOTICE TO CONTRACTORS.

Sealed bids or proposals marked "Proposal for Marsh Road Improvement" will be received at the Department of Public Works, Fredericton, N. B., until Tuesday, the 8th day of August, 1916, at noon for re-building and improving the Marsh Road, Parish of Simonds, Saint John County, N. B., according to plans and specifications to be seen at the Public Works Department, Fredericton, N. B., and at the Provincial Government Offices, Prince William Street, St. John, N. B. Each bid must be accompanied by a Certified Bank Cheque or cash for the sum of Five Thousand Dollars (\$5,000) which will be forfeited if the party bidding declines to enter into contract when called upon. Such certified bank cheque or cash will be immediately returned to the parties whose bids are not accepted, but the cheque of the party to whom the contract is awarded shall be retained as a security for faithful performance until the final completion of the contract and its acceptance by the Department. The lowest or any tender not necessarily accepted.

P. G. MAHONEY, Minister of Public Works, Fredericton, N. B., August 1st, 1916.

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