

MUNITION MAKING TREMENDOUS TASK

British Resource Is Taxed to Limit to Provide Steel and Lead for Great Drives.

FEW SHELLS FROM U. S.

London, July 25—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 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 come to equip the 5,000,000 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 built for the production of munitions. Some idea of the scale upon which this organization has been carried out may be gathered from the fact that it covers an area nine miles long and from three to four miles wide.

Dr. Addison at Head.

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 some years he has devoted his attention to politics, and besides holding a seat in the House of Commons has been parliamentary secretary to the Board of Education before entering on his present duties as parliamentary secretary to the ministry of munitions. Every detail of the munitions production is known to Dr. Addison and during an interview with a representative of The Associated Press he told as much of the story of the creation of this industry as could be made public at this time.

At the outset he disposed of the statement which has been made in America to the effect that if it were not for the munitions furnished by the United States Great Britain would have to quit the war.

Not From America.

"I have heard that statement made," said Dr. Addison, "and it is preposterous, of course. The United States has furnished and is furnishing many raw materials which we are anxious to get for the manufacture of munitions, but so far as the actual production of shells goes, America has provided us with only a very small percentage of those which we have used."

Turning to the manufacture of munitions in this country, he continued:

"At the beginning of the war there were only three important munitions factories in the United Kingdom. In addition, there were a number of large private munitions and armament firms. At the start reliance was placed mainly in these national factories and experienced firms, and at that time they were full of orders."

"In the early stages of the conflict more attention was paid to field guns and their equipment than to heavy guns, but as time went on the requirements for heavy shells greatly increased. In June, 1915, we made an inventory of all the available machinery in the country, and it was evident that it was entirely inadequate to meet the demands. There were, however, a great many private firms which could be brought in to make munitions and it was decided to mobilize them for national service. In order to do this we created an organization embracing the entire country. The country was divided into districts, in each of which a working board of management was set up. By means of this scheme of local organization thousands of firms have been brought in, many of which had never seen a shell body, or a fuse, or a grenade, or a bomb, before, much less than make them. Now munition-making in some form or other has extended well-nigh to every considerable town—indeed to large numbers of villages."

Everybody Helps.

"An earnest desire to help, an adaptability and eagerness to learn have brought into munition making the most remarkable assortment imaginable of shops and factories. In one era alone shell bodies or the components of shells are being made not only by engineering works, but in confectionery works, by a music roll manufacturer, by an infant's food

maker, by a candle maker, by a flour miller, by a tobacco merchant, by an advertising agent, in several breweries, by some job masters, by a glazier, by syphon manufacturers and so on. Shells and good shells have been turned out by machines 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 good will in order to take up the manufacture of munitions. They have done it to the asking and ungrudgingly. Many of them will find themselves at the end of the war with a great part of their good will jeopardized or lost."

Single Purpose Shops.

"Coincidentally with this program 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 such as could be done with a few weeks' training by women or unskilled labor. There are now in the country fifty-three national shell factories of this kind, all of which have either been built or reconstructed by the government. Of these thirty-eight are under the management of the boards previously referred to. Others are managed for the ministry by experienced munitions firms."

"Just as the output of shells, shell bodies, etc., had to be augmented, so we had similarly to provide explosives and filling factories. As a result of this, apart from the enormous extensions of existing factories, nineteen special explosive works have been provided. This has practically doubled the whole previous output of the country. Similarly there had to be built fourteen filling factories, each of which has been provided since last August. Altogether there are now ninety national factories which have been equipped with machinery and in most cases built during the last twelve months."

"We can now produce in less than a month as many of the lighter shells as could have been turned out in the whole year of 1914-1915. In less than a fortnight we can now make more heavy shells than we could have done in the year 1914-1915. We can now turn out in a week far more shells, filled and complete, than were used in the whole battle of Loos which extended over a fortnight, and they had been saving ammunition for that battle for a month. We could have a battle of Loos every week now and it wouldn't touch the shell reserve stock."

Harder To Make Guns.

"The manufacture of guns, which did not lend itself to the process of subdivision 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 lightest 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."

Use Back Yards.

"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 as 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 of thousands 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 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 their hearty assistance throughout the distribution of skilled labor and in the dilution of skilled labor with unskilled. The introduction of unskilled labor into the field of skilled labor is a sacrifice of skilled labor to which no too high tribute be paid. Skilled men have trained and instructed unskilled workers and in thousands of cases have willingly moved from piece work to day wages with the result that they have earned smaller wages than the people they had 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 munitions work. They go where they are sent. This has given the ministry of munitions control of a large body of skilled workmen who can be moved as required."

Two Million at Work.

"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 2,000,000 people, of whom several hundred thousand are women. It follows that there has been much labor expended in housing munitions workers. Whole villages have been built and we have provided accommodations for 60,000 people in twelve months."

"People from all classes of society have joined in the manufacture of munitions. There is, for example, on the staff of the ministry of munitions the daughter of an earl, who worked for nine months as a lathe hand in a munitions factory. Large numbers of the best known families have devoted themselves to work in the vaults and to other work in connection with the factories. There is a department in the ministry which is solely concerned with the provision of canteens for munitions workers, and these canteens provide meals for 500,000 people daily. This enables them to get their food under decent conditions, and charges are made to cover the cost."

Dr. Addison pointed out that it has been necessary to interfere arbitrarily in private industry in order to carry on the munitions work. Private and public buildings have been stopped in many cases in order to remove the labor elsewhere or to reconsume material. What applies to the building trade holds good with many others. However, this interference has been chiefly *bona fide*, he declared.

He stated that as a result of the demands 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, aerate 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 relations in shell contract prices which saved the government 400,000 pounds a week.

Mother Whips Boy Because He Does Not Salute Right

When a six-year-old Arnold Timms of Millard, Neb., came down to his breakfast and neglected to say "Good morning, mother," a sound thrashing with a willow switch awaited him, according to the admissions of his mother, Mrs. Carl Timms, when she appeared before Judge Sears in juvenile court on complaint of neighbors that she was unmercifully beating the adopted child. She admitted whipping the little lad when he forgot his manners, slapping him on the head and

ears and striving to inject a gentle disposition in her own manner. Neighbors and automobilists who have passed the Timms home while the child was hysterical, following whippings, brought about the hearing. The child was returned to the mother with the warning that he would be taken away by the juvenile authorities and the parents punished should further complaints arise.

Concert at Fontenelle Park This Afternoon

The Omaha Bohemian band will play at Fontenelle park this afternoon, beginning at 2:30 o'clock. Frank Janda will be the leader. The program will be under municipal auspices.

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That statement led to the purchase of Chandler Type 17 Sixes within the past three weeks by hundreds of men who had been attracted, by extravagant advertising or otherwise, to some one of the several "marked up" cars in the medium priced field.

If you read this statement by the President of the Chandler Company, as you probably did, you know what we mean by "marked up." You know that in recent months sums ranging from \$80 to \$200 have been quietly tacked on to the selling prices of these Chandler competitors.

The explanation of the marked up prices has been the abnormal conditions, said to exist and really existing in a degree, in the motor car material market.

But you know, too, that the Chandler car has not been marked up.

And so you can still buy this great car—greatest of all the Sixes—at the same price established eighteen months ago, long before the war had made any effect on the material markets. And bear this in mind, that every change made in the Chandler car in all these past months has been a refinement and an improvement. Every addition to it has represented increased manufacturing cost. Not a single thing has been cut out of the car.

Bear in mind that today, while others are asking you to add eighty, a hundred, a hundred and fifty or two hundred dollars to your check, \$1295 plus freight buys you this big luxurious highly refined Chandler—this Chandler with the marvelous motor, the exclusive Chandler motor which has been developed and perfected through four years of intelligent manufacturing and four years on the road in the service of thousands of Chandler drivers.

Bear in mind that the Chandler is still featured by its Bosch Magneto ignition—which others leave off, even the marked up cars, because it costs so much more; still featured by its solid cast aluminum motor base extending from frame to frame—where others use cast iron; still featured by the sturdiest, simplest chassis; still featured by ball bearings in rear wheels, differential, transmission and elsewhere, which helps make it the lightest running car on the road.

Bear in mind that in this Type 17 Chandler you get the exclusive Chandler full floating rear axle with its silent spiral bevel gear differential. And that you get the highest standard of carburetion that the market affords; Gray & Davis separate lighting and starting system; big double external and internal brakes, which stop the car at the instant of command and hold it safe on any grade.

Bear in mind that you get all of these highest grade, high priced features and scores of others which, together with Chandler workmanship, go to make up a car the superior quality of which cannot be questioned in comparison with the quality of any one of the many "marked up" cars.

And remember, too, that in the Type 17 Chandler you are offered the beautiful tombeau cowl bodies which preceded the mid-summer "new models" of other makes by seven months time.

In the Chandler you get mechanical excellence, luxury of body design, trim and finish, at the minimum of purchase price.

If we asked you to pay \$100 more or \$200 more that wouldn't make the car a bit better.

In considering your purchase of a new car, think for yourself.

Measure what Chandler offers you along side of what any other car in the medium priced field offers you, regardless of price, and we think we know what your decision will be. Measure it along side of what any other car offers, keeping the marked up price in mind, and we know what your decision will be.

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