

# Industry Rose to Needs of War

### Great Britain Becomes Completely Independent of German Products.

## NOW MEETS ALL DEMANDS

### Before the War Germany Had Control of Much Raw Material That Was Vital—Finds Way to Supply Potash.

London.—A remarkable story of how British industries formerly dependent for their life blood on Germany have under the stress of war's demands arisen to a state of complete independence was told by Mr. Kelloway, parliamentary secretary to the British ministry of munitions, at a recent meeting of the industrial reconstruction council. Britain is now first in the world in almost every sphere of industrial effort, he said.

Beginning with raw materials, Mr. Kelloway showed that mica, absolutely essential to the electrical industry, was so controlled by Germany, although half the world's supply came from India, that when the war began the world's market was on the point of being transferred from London to Hamburg. But Indian mica now can be exported only to London, and the British electrical industry has taken the place Germany once held and is now the first in the world.

Before the war the British empire produced 40 per cent of the wolfram ore from which tungsten (essential for high speed steel and in metallic filaments) is made, but so successfully had Germany captured the trade that no British manufacturer was able to establish the industry in this country. To this position Germany owed her great superiority in munitions production in the earlier stages of the war. All that has been changed. Britain is now able to produce all the high speed steel she needs and to export at a reasonable price to her allies.

### Controlled Australian Zinc.

Australia has practically unlimited supplies of zinc ore, but Germany obtained control of them, and 77 per cent of British pre-war supplies came from Germany, Belgium and Holland. Germany being Britain's largest supplier. But now Australia's output has been diverted, permanently, he hoped, to Great Britain.

Great Britain used to depend entirely on Germany for potash, essential for fertilizers, dyes, drugs and glass production. The war revealed that 50,000 tons of potash was going to waste here every year in the dust and fumes from blast furnace gases. That is now being collected. Germany had relied on her practical monopoly in Europe of natural deposits of potash to enable her to bargain for the recovery of her world markets. She will be disappointed. British enterprise and judicious government assistance have taken that power from her.

Machine tool production looked like an almost insoluble problem at the beginning of the war, but so greatly has production increased that before long the power of the engine will be the same as its weight in pounds, i. e., one pound per horse-power.

The British position in 1914 in regard to the production of magnetos was very grave, but, thanks to a display of grit in the face of almost insuperable difficulties, of resource and of patriotism as fine in its way as that shown by her fighting forces, the British magneto position has been established and made unassailable.

The war was nearly lost because the British were almost entirely dependent on Germany and Austria for scientific and optical glass, essential to success.

It is humiliating, Mr. Kelloway continued, but it is the fact that at the outbreak of war a considerable part of our artillery was equipped with gun sights exclusively manufactured in Germany. Two British firms started making sights, but the position was exceedingly serious when the ministry of munitions was formed. Recently these two firms were producing 250 a week. The sight is a beautiful and

delicate piece of work, and its production in such numbers and in a perfection which Germany never expected is a triumph for British skill.

Before the war the British optical and scientific instrument industry had degenerated into a collection of middlemen who mainly sold instruments completely manufactured in foreign countries. All that has been swept away by the bitter necessities of war, and Britain is now self-supporting.

Her dependence on Germany and Austria for the glass for her miners' safety lamps very nearly landed her in disaster. The position was so serious that the home office had to relax the conditions as to the quality and dimensions of lamps. Now Great Britain is producing sufficient supplies of the right quality.

Before the war three out of every four electric light bulbs in use in Great Britain came from Germany or Austria. She is now manufacturing sufficient to meet her essential needs.

## BRITAIN HAS 23,300 PLANES

### Started in the War With Only 210 Machines—Pre-eminent at Its Close.

London.—Great Britain was pre-eminent in the air at the close of the war, when the British air force was the largest in the world, according to a report made public recently. It fought on more fronts than the air service of any other nation, and its successes were proportionately greater, it is said.

In August, 1914, the British naval and military air services together mustered only 285 officers and 1,853 men of other ranks. In November, 1918, there were 30,000 officers and 264,000 men.

At the outbreak of the war Great Britain had 196 airplanes, 45 seaplanes and 7 airships, while at the close of hostilities she had 21,000 airplanes, 1,300 seaplanes and 103 airships.

Besides this there were 25,000 airplanes and seaplanes being built and 55,000 airplane engines under contract. The women's royal air force, which was not in existence in 1914, numbered at the close of hostilities 23,500.

# Spartacus Hero of German Reds

### Leader of Revolt by Slaves Is Honored by Liebknecht Followers.

## DEFIED ROMANS FOR YEARS

### Slaves, Under Leadership of Man Chosen as Godfather of German Revolution, Captured Most of Southern Italy.

New York.—Perhaps it's just as well to call them Spartans. Just when we were learning to say bolshevik, and were learning to give it about as universal an application as we used to give to camouflage before that solely tried word was officially entombed by the Society for the Decent Burial of Hackneyed Words, along came these Germans, with their Schrecklichkeit and head cheese, and sprung Spartacus on us.

That was right in line with their other unfair tactics, gas, flame throwers and gingerbread saloon-fronts.

But now that we have Spartacus with us, what are we going to do about it?

"The Spartacus group" was the name the German ultra radicals adopted when they first hung out their shingle in the blood-letting business. But that sort of name never would do. So, we have the papers, in their extremity, allying to them variously as Spartacides, Spartacians, Spartacites and Spartael. Objection is made to the first-mentioned designation be-

## FIND BIG HUN WAR STORES

### Immense Amount of Material Abandoned by Germans in Region of Coblenz.

Coblenz.—Thirty-five million rounds of small-arm ammunition were among the material abandoned by the Germans in the region of Coblenz. These were recently discovered by the Americans during an exploration of the underground stores, uses and tunnels where the German munitions were kept.

Five million rounds of this ammunition had been captured from the French. The other 30,000,000 rounds were manufactured by the Germans, who took captured British shells and loaded them with German powder and bullets taken from the French. Most of these cartridges were boxed and addressed in readiness for shipment to various units in Turkey.

Thirty-six thousand rifles captured from the British and found stored in Coblenz have been turned over to their original owners, while 10,000 French rifles have been returned to the French.

## "BABES IN THE WOOD"



The twin Misses P. and O. Jerrold, daughters of the author of "Babes in the Wood," were among the many noted English women who took off their coats and pitched in. The photo shows the two girls resting on a tree they had just felled.

# Helping the Meat and Milk Supply

(Special Information Service, United States Department of Agriculture.)

## HOW AMERICAN HOG GROWERS MET WAR'S NEED



A Coming Herd of Porkers. They Produce Profits for Their Owner and Meat and Fats for His Country.

## COUNTY AGENTS AID HOG RAISER

### Remarkable Growth of Business in Cotton States as Well as in Other Sections.

## LARGE GAIN SEEN IN 1918

### Department of Agriculture Advises Conservative Policy in Production Until High Prices of Feed Are Overcome.

There are 75,587,000 hogs in the United States, according to recent estimates of the bureau of crop estimates of the United States department of agriculture. Of this number 34,776,000 are found in the six corn belt states of Iowa, Illinois, Nebraska, Missouri, Indiana and Ohio, while 24,082,000 porkers are in the 15 Southern states and the remainder are distributed over the other 27 states of the Union. Under present conditions the South ranks second only to the corn belt as the leading pork producing section of the country. The remarkable fact that the growth of the hog business in the cotton states, as well as in many other sections of the country where the development has been rapid during the last five years, is that the progress has been the direct result of the untiring efforts of county agents to popularize pork production.

Last year at least 2,435 counties had the service of an agricultural agent and in every locality where conditions were favorable for hog raising, these agents devoted their efforts to increasing the hog population to meet the increased demand for meat and fats brought about by the war.

### County Agents' Work.

An example of the county agents' work to increase pork production is shown in 17 counties of southern Alabama. Not a single carload of hogs was shipped to market from these counties during 1912-1913. This was before the county agent got in his work. During the year ending April 1, 1918, these 17 counties marketed 2,352 carloads of hogs.

County agents in Mississippi have been getting results in their work to enlarge the swine industry. In 1914

this state exported 7,244 hogs while in 1917 it sent 88,730 fat porkers to the market, an increase of 1,224 per cent. An increase of corn production was necessary to develop the hog supply and the county agents have been boosting this source of fattening feed. In 1909 North Carolina raised 34,000,000 bushels of corn, while in 1918 it harvested 64,365,000 bushels, which enabled the state to fatten 1,599,000 hogs. In Georgia approximately 29,475,000 bushels more corn were produced in 1918 than in 1909. Other Southern states have made similar records in increasing corn and pork yields.

### Agent is Versatile Helper.

While working to increase pork production, county agents have shown how pork could be produced economically; how, by fighting disease, particularly cholera, much loss could be prevented; and how, by proper selling, producers could dispose of their animals to the best advantage.

County agents in Pennsylvania, working through farm bureaus, have conducted numerous demonstrations in the feeding of hogs, in which they showed methods worked out by experiments for making cheap gains. These demonstrations taught many hog raisers how to save at least one-half of the grain feed bill in raising hogs by providing green feed throughout the growing season.

### Saves Wheat With Hogs.

In a certain section of Montana, nearly 50 acres of choice wheat were beaten down by a hailstorm just a few weeks before harvest. It looked like a total loss, but the county agent called a meeting of the farm bureau and told the members that the wheat could be saved if hogs could be secured to clean up the fields. The county agent was then authorized to go "hog hunting" and as a result he secured 2,300 head which were put to work salvaging the damaged wheat.

In many localities the limiting factor in hog raising is easy access to market. County agents are solving this question by inducing farmers to market hogs co-operatively, thus greatly reducing the expense to each farmer. In Utah recently more than 100 farmers supplied 18 carloads of hogs from sections 35 to 90 miles from a market shipping point. The hogs were brought in wagons and even automobiles to the shipping point and were there handled under the supervision of county agents. Similar work is being done by county agents or through farmers' organizations in many parts of the country.

## THE HOG SITUATION

A conservative policy with respect to increasing the number of swine until the relative shortage and high price of feed are overcome is the recommendation of the United States department of agriculture, recently made in a statement on American agricultural production in 1919. In summarizing the hog situation the department reports that the number of swine fell from 65,920,000, the high point in 1911, to 58,933,000, the low point in 1914; and under the stimulus of war demand and a record corn crop in 1917 the number increased to 70,978,000 on January 1, 1918. Reports indicate that the number on farms on January 1, 1919, was 75,587,000, or an increase of 6.5 per cent.

The number of swine per capita of population in 1911 was 0.679 of one animal. On the same basis there should be 72,474,000 on farms in 1919.

Exports of pork products fell from 1,638,000,000 pounds in the fiscal year 1899 to 707,000,000 in 1910, and rose 1,692,000,000 in 1918. Although definite data are lacking, reports indicate a considerable reduction in the number of swine in Europe. A representative of the food administration reports a reduction of 25 per cent in the United Kingdom, 12½ per cent in Italy and 49 per cent in France. However, in estimating probable demand in Europe for American pork products certain factors must be borne in mind; namely, (1) large stocks now on hand in the United States, and (2) the rapidity with which the number of swine can be increased in Europe. Another factor of importance is the relatively large proportion of lard in the exports of this country, amounting to about 50 per cent of all pork products exported in the five-year period from 1910 to 1914, and about 200 per cent more than the total quantity of beef exported. Exports of lard amounted to 481,000,000 pounds in 1914, 476,000,000 pounds in 1915, 427,000,000 pounds in 1916, 445,000,000 pounds in 1917, and 392,000,000 in 1918. All reports emphasize the shortage of fats and oils in Europe at the present time. No shipments to Germany and Austria have been included in the exports of lard from the United States since 1914. However, prior to the war, Germany was our second largest customer, taking 146,000,000 pounds in 1914, or about 30 per cent of our total lard exports. The foreign demand for lard is likely to be heavy during the present year.

## Every Little Task a Burden?

To the women worn-out with weak kidneys, household is a heavy burden. Backache, sick headaches, nervousness, dizziness, "blue" spells and a weak, tired condition, make the simplest tasks difficult and the everyday duties give the weakened kidneys no time to recover. Use Doan's Kidney Pills. They have brought relief and comfort to thousands of weak, suffering women.

## A North Carolina Case

Mrs. W. A. Morley, 68, Penland St., Asheville, N. C., says: "I was very nervous and had dizzy headaches. My kidneys didn't act as they should. I had severe backaches and couldn't straighten after stooping. I began taking Doan's Kidney Pills and they soon stopped all the pains and my kidneys became normal. All the other symptoms were relieved, too. I consider Doan's Kidney Pills a wonderful kidney medicine."

Get Doan's at Any Store, 60c a Box  
**DOAN'S KIDNEY PILLS**  
FOSTER-MILBURN CO., BUFFALO, N. Y.



## THE WOMAN'S REMEDY

### 30 years on the market

### Send for FREE 10 Days' Trial Treatment and Booklet

Manufactured by Olive Branch Co., P. O. Box 153, South Bend, Ind.



## YAGER'S LINIMENT RELIEVES PAIN

GILBERT BROS. & CO., Baltimore, Md.

## DIPLOMA GEORGIA MEANS ALABAMA LIFE BUSINESS COLLEGE

MACON, GA. WRITE FOR CATALOG

## DRIVE MALARIA OUT OF THE SYSTEM



A GOOD TONIC AND APPETIZER

## Make \$10 Every Day

selling Rawleigh's Products, with rig in country. Few good territories now open. Give age, occupation, references W. T. Rawleigh Co., 130 Illinois St., Memphis, Tenn.

## Clipped Army Horses

Veterinarians of the Allied Armies ordered regular clipping of the horses and mules in all branches of the service. They were clipped with the Stewart No. 1 Machine. YOUR horses also will do best at work if clipped. Get a Stewart No. 1 Ball Bearing Clipping Machine, \$9.75; \$2.00 down, balance when received. Or write for 1919 catalog.

CHICAGO FLEXIBLE SHAFY COMPANY  
Dept. A 172, 12th Street and Central Ave., Chicago, Ill.

## Cabbage Plants

Genuine Frost proof, all varieties, immediate and future shipment. By express—500, \$1.25; 1000, \$2.00; 5000, \$8.75. Parcel Post Prepaid—100, 35c; 500, \$1.50; 1000, \$2.50.

Enterprise Co. Inc., Sumter, S. C.

## WINTERSMITH'S CHILL TONIC

Sold for 50 Years. FOR MALARIA, CHILLS AND FEVER. Also a Fine General Strengthening Tonic. At All Drug Stores.

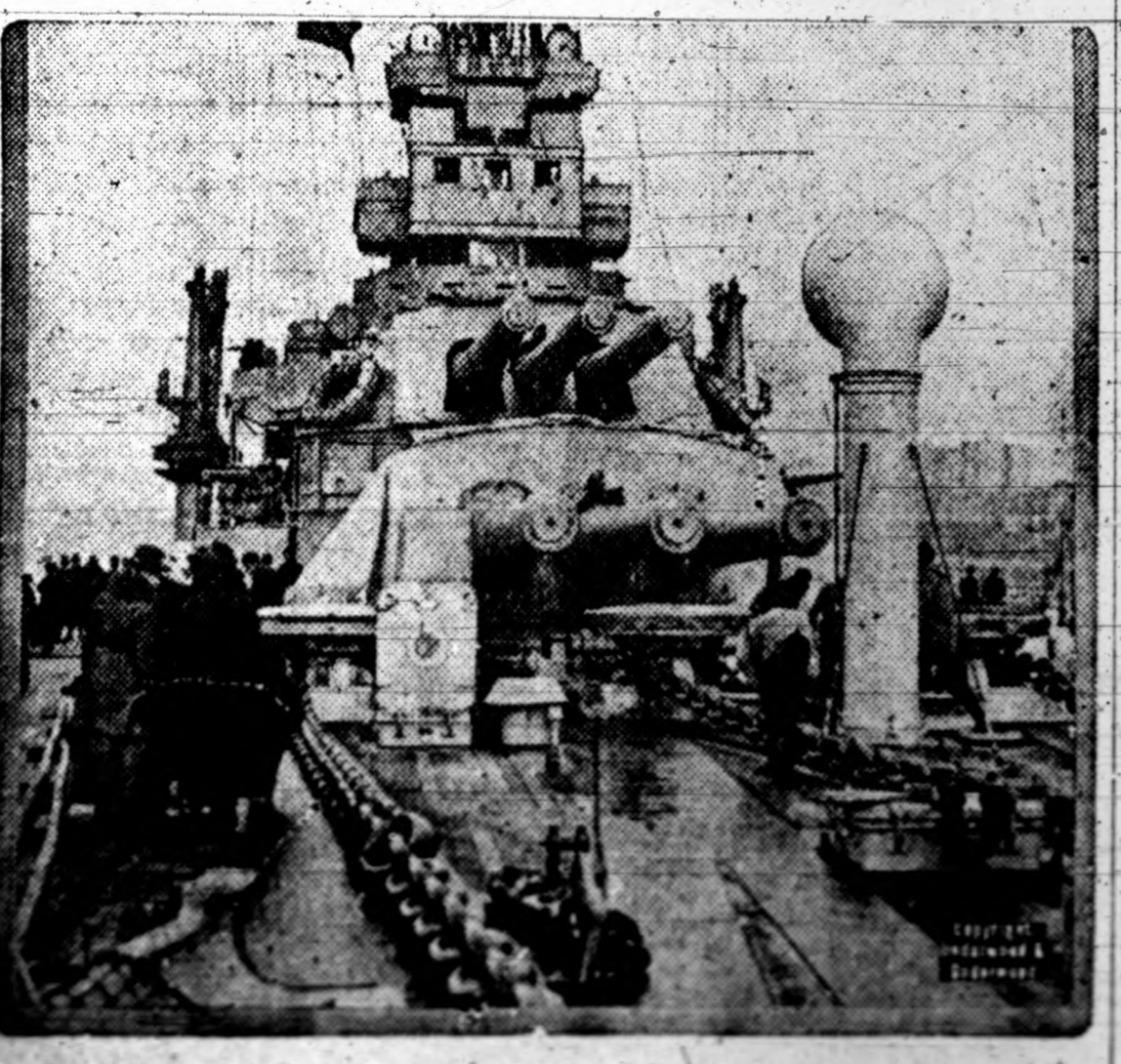
## AGENTS WANTED

We manufacture an accessory to Ford cars which interests every Ford owner upon five minutes' demonstration. It sells readily. No Competition. Agents handling our Devices as side line are earning around \$150 per month. Those devoting entire time make better than \$300 per month.

MOTOR PRODUCTS COMPANY  
445 Mass. Avenue Indianapolis, Ind.



## ON ONE OF OUR DREADNAUGHTS



Interesting view on board the American dreadnaught Pennsylvania.