

The Struggle for Iron Ore

THE development of modern industry has been such that the whole complex of peaceful production whereon civilisation depends, as well as the military and naval supply trades, demand almost unlimited reserves of minerals, more particularly of iron and coal. Since these supplies are fixed in location and can be neither cultivated nor renewed there enters into the problem an element of monopoly which necessitates their careful conservation by those whose demand upon them is indefinitely prolonged. Unhappily, the profitably workable iron-stone supplies of the European nations, now in the fore-front of industry and politics, are in grave danger of becoming almost entirely depleted within the near future. Not only so, but variety of ores is not accompanied by volume of supply of different grades and qualities. This condition of affairs gravely menaces national security as well as industrial prosperity and rallies to the defence of the metallurgical interests the whole material and sentimental support of the threatened community.

That is precisely what makes the future allocation of the Moselle Valley such a vital issue alike to France and Germany, an issue which has come, increasingly, to dominate their several policies of expansion. It is nothing short of a tragedy that France should have come to rely more and more for her native ore supplies on the district lying on her eastern frontier, and that, at the same time, German metallurgical capitalism should have, of necessity, pressed forward towards the Lorraine border.

Whilst the region of the Rhineland and the Siegen is the historic home of the steel manufacture of Germany and of her mineral and metallurgical industries, the producers of Essen, Dusseldorf, Elberfeld and neighbouring centres have, during the last generation, come to rely, for the satisfaction of their enormous demands, upon the collieries of the Saar and the ore fields of the Moselle and of Luxemburg. Similarly, the iron and steel works of Central France have found the restricted supplies of the region around St. Etienne, Firminy, Commentry, and Le Creusôt inadequate to meet their more extended requirements and have, in consequence, developed the virgin resources of Longwy and Briey. As generally happens in economic evolution, those districts which, formerly, were devoted to the treatment of the raw material have, to-day, become specialised in the working of the metal into mechanical and chemical manufactures. The iron-founding and steel-working industries of France and Germany which first developed upon the long operated coal and iron lands of the Haute-Loire and Rhenish-Westphalia have since given place to engineering works and finished manu-



Studies in Imperialism

III.—LORRAINE

Our map, which illustrates Comrade Newbold's article, shows the iron and coal fields of Lorraine—that Debateable Land which the development of modern Capitalism has once more made a vital issue between France and Germany. The coal fields of the Saar are shown; the iron fields of Longwy and Briey, situated just where the frontiers of Belgium, Luxembourg, France and Germany meet; and the iron fields of Meurthe-et-Moselle, lying but a few miles within the French border. Only a few of the principal works and mines are indicated, anything like a complete map being, of course, impossible on this small scale.

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factures, and betaken themselves to the locations where new sources of ore supply are to be found—in Luxemburg and on either side of the frontier in Lorraine.

For fully half a century the enormous mineral wealth of these areas has been known to mineralogists, and contemporary technical authorities recognised the potential gravity of the transfer of Lorraine from France to Germany in 1871.

The Journal of the Iron and Steel Institute then remarked —

The consequences of the cession of Alsace and Lorraine to the German Empire will be to diminish the iron-producing capacities of France about one-third of what they have hitherto been, since of the entire eastern iron district the Longwy basin alone is all that has remained to France About three-fourths of the iron production of the old French department of the Moselle will now be diverted to the Zollverein. . . . the new boundary line places in the latter country, with the exception of the Longwy group of iron-mines, all the rich deposits of oolitic iron-stone in the Moselle and the Meurthe (1871. Vol. II. p. 110.)

Indeed, one of the German boundary commissioners was a mining engineer who had made a special study and survey of this area a few years before.

In 1873, Schneider-Creusôt purchased great ore-mines in Algeria, whilst Henckel von Donnersmarck, the Silesian Iron-King, bought Dupont and Dreyfus' Lorraine Forges for 15,000,000 francs. The exhaustion of Germany's haematite ores and the inadequacy of her other native sources of supply drove her iron masters to develop Lorraine and the Duchy of Luxemburg, which was an integral part of the Zollverein,* although politically independent.

About 1878, the Thomas process of dephosphorising iron, and the Siemens method of treating steel, made available the heavily phosphorescent iron-stone of these regions for steel production and liberated the German industry from its dependence on British pig-iron and Spanish and Algerian ores. Between 1878 and 1882, the output of Luxemburg ores rose 75% and, in the next decade, the German production of pig-iron increased 46% and of steel, 83%. Between 1884 and 1898, the output of German pig-iron rose more than 105%. For almost the whole of its native ore, Germany relied on Lorraine and Luxemburg. Between 1895 and 1905, an enormous volume of capital flowed from the Rhineland into this region, opening up extensive ore mines and erecting blast furnaces and steel producing plants.

Driven westwards by the imperative need of obtaining new ore supplies as well as by the attractive prospect of high profits from the easily operated mines of Briey, the German steel syndicates pressed towards the frontier and, in certain cases, over-stepped it. By 1904, they were importing extensively from France as well

* The German customs union.

as from Sweden and Spain. To maintain their colossal production of steel they turned, now in this direction and now in that, in search of future sources and reserves. The formation of the Stahlwerks Verband about this time increased the power of the German producers and systematised their exploitations. The Swedish supplies, on which the Silesian interests have needed to rely in more recent times and on which the Moravian and Bohemian works of Austria-Hungary have drawn so heavily, have latterly been threatened by the developments of submarine warfare and the re-construction of the Russian Baltic Fleet. Spanish supplies were unreliable so soon as war with Britain became one of the probabilities of foreign relationships.

During the last ten or fifteen years one great steel producer after another purchased mines or mining concessions in Lorraine and the Meurthe-et-Moselle, acquired shares in blast furnaces and works on both sides of the frontier, and threatened France and French interests with financial expropriation and the possibility of political pressure to achieve economic ambitions.

Meanwhile the French engineering and armament firms had discovered the riches of Briey and the neighbourhood, and were hastening to supplement their worked-out native mines and their Algerian supplies by these, apparently, inexhaustible reserves. Schneider-Creusôt, apart from their over-sea mines, latterly obtained the whole of their ores from Lorraine. The Chatillon-Commentry Co. had erected mighty steel works at Neuves-Maisons, near Nancy in 1900, and acquired mines at Maron-Val-de-Fer. The St. Chamond Steel Co. (La Société de la Marine et de Chemins de Fer) owned the great Homécourt Mines, on the frontier to the south-east of Briey, producing 1,841,000 tons of ore per annum.

The exhaustion of other workings elsewhere in France and the exposed situation of their chief native supplies practically determined the attitude of the three largest armament corporations of the Republic towards the Moroccan policy of the Government. Neither France nor her firms could regard with equanimity a state of affairs so menacing to national security and economic prosperity. They could not remain content to draw their reserves from Spanish or Italian territory, either at Bilbao or in Sardinia or Elba. If Algeria could not assure adequate supplies of ore, then they must stake out a more or less exclusive claim to the rich lodes of South Morocco. It is a remarkable fact that the French effort to secure Morocco was so largely bound up with the question of Moroccan mining rights, and that the armament firms of France and Germany played so conspicuous a part in the long struggle. Also, that the more German metallurgical capital poured into Lorraine the more the French imperialists laboured to keep alive the idea of the Revenge and to fasten their hold upon Morocco.

In 1912, the Krupp and Gelsenkirchen Iron and Coke Co. as well as the Guttchoffnungshütte and Thyssen were erecting new works and acquiring new sites in the neighbourhood of the frontier. At the time, "nothing was known as to their intended use" in the case of those of Krupp and the Guttchoffnungshütte, whilst the Gelsenkirchen Co. stated of their Adolf-Emil Steel Works at Esch (four miles from the frontier) that they were intended "to obviate the inconveniences arising from the distance hitherto separating the blast furnaces from the steel works." This new works was in the Duchy of Luxemburg and was built on a 500 acre site "which affords ample space for extension." This company had another works only a mile away from the frontier whilst the Deutsche-Luxemburg had an enormous plant within three miles, and Thyssen spent £4,000,000 on a steel plant twelve miles from the frontier, close to Metz.

When war broke out the Germans hurriedly seized Luxemburg, occupied Longwy and Briey, and turned the whole capacity of this enormously productive area on to the manufacture of munitions. The fact that the Gelsenkirchen Co. had a production of steel three times that of Schneider, and that Briey could supply 30,000,000 tons of ore a year gives some idea of the munition strength of Germany in war-time, when she holds in her possession the coal fields of Belgium and Northern France, and the engineering works of Liège, Antwerp, Charleroi, Maubeuge and Lille.

Since the war broke out the German annexationists, who include the Central Union of German Manufacturers, and the Union of the Middle Classes of the Empire, have issued a confidential memorandum, published in *l'Humanité* and re-produced in the *Manchester Guardian* demanding :—

the annexation of the mining area of the Meurthe-et-Moselle, as well as the French coal areas in the departments of the Nord and the Pas-de-Calais.

The memorandum went on to state :—

The monthly output of pig-iron in Germany has risen since August 1914, to a million tons—i.e., it has almost doubled. The monthly output of steel is more than a million tons. And yet there is no superfluity of iron or steel, rather a deficit. . . . For shells of grey metal alone, the superior substitutes for rifled shells and shells of cast steel, at least 4,000 tons per day of pig-iron have been used . . . If the production of cast iron since last August (1914) it would have been impossible to continue the war. Oolitic iron-ore, the primary element for the manufacture of iron and steel, is assuming increasing importance for only this mineral is being found in Germany in increasing quantity. The production of the other home areas is extremely limited, and importation from overseas, even from Sweden, is rendered so difficult that in many districts, even apart from Luxemburg and Lorraine, oolitic iron represents 60 per cent. or so of the production of pig-iron and steel. . . the security of the German Empire in a future war demands the possession of all the deposits of oolitic iron ore, including the fortresses of Longwy and Verdun, without which these deposits could not be defended.

The future security of the German Empire, and of an industrial community whose prosperity reposes on iron and steel, explains the furious intensity of the German onslaught upon Verdun, and the vigorous offensive at the beginning of the war. At the same time the possession of these coalitic ore fields, and the gigantic productive capacity of the steel works which they supply, makes evident the source of German munitions strength.

To understand this war and many of its immediate and contributory causes it is necessary to know something of the struggle for minerals which has set the German metallurgical syndicates, and the War Machine which relies thereon, marching West and East.

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