The Steel-Making Minerals and Imperialism

By Will Herberg

"The metallurgical industry . . . now plays the role of the most important leading industry in the economic life of all first class industrial countries—the role, so to speak, of the central industrial star, around which, like planets around the sun, there revolve the other important branches of the capitalist economy of the largest states

"Our century may quite rightly be called the IRON century and metallurgy must be called the queen of industry."

—Pavlovitch, Foundations of Imperialist Policy.

THAT iron is the very basis of the modern world economy is a well-known fact; it must not be forgotten, however, that our "iron age" rests not upon iron but upon **steel.** It is steel that forms the material basis of the latest stage of capitalism.

The Ferro-Alloys.

Now there is one remarkable fact about steel, which, considering the surpassing importance of the metal in modern life, it is surprising is not more widely known. To produce steel iron and carbon are not all that is needed; there are certain little-known minerals that are absolutely essential for the process. These steel-making minerals, technically known as the **ferro-alloys,** as just as essential as the iron itself. Why? Because, as Professor Howe explains (article: Iron and Steel, Encyc. Britan. XI edition):

"The general order of merit of a given variety of specimen of iron or steel may be measured by the degree to which it combines strength and hardness with ductility. These two classes of properties tend to exclude each other, for, as a general rule, whatever tends to make iron and steel hard and strong tends to make it correspondingly brittle and hence liable to break treacherously, especially under shock."

But steels made with the ferro-alloys "form an important exception to this rule in being at once very hard and strong and very ductile." These little-known minerals make it possible, in other words, to produce steels that can bear the strain of modern industry.

The Politics of the Ferro-Alloys.

The ferro-alloys—manganese, chrome, nickel, tungsten are the most prominent—are of great importance not only in world economics but also in world politics. For it must be remembered that the politics of imperialism are dictated, to a great measure, by the requirements of metallurgy, [1] and these little-known minerals are among the essential elements of modern metallurgical industry.

The Distribution of the Ferro-Alloys.

The chief significance of the ferro-alloys for imperialist politics lies in their distribution and location. "It cannot be repeated too often," as Spurr remarks, "that each of the metals and useful minerals occurs chiefly in certain spots or restricted areas of the earth's surface and, in this regard, each metal is a law unto itself." Now, it happens that the specific distributions of the various important steel-making minerals (in relation to the localtion of iron and coal as well as to political boundaries) is of such a character as to make them of primary importance in the world politics of imperialism.

Let us consider briefly the various ferro-alloys and their distribution.

Manganese. "Manganese steel . . . is of very great ductility accompanied by great hardness." "For the production of good steel in adequate quantities manganese is indispensable," and so altho less than one per cent by weight of steel is manganese over 95 per cent of all manganese is used in steel making. Manganese is pretty widely distributed over the earth's surface, but in commercially sufficient quantities is found only in certain parts of the world, particularly in **India, Brazil** and **Russia,** with the possibility of a new source in some parts of **Africa.** [2] American, British, French, German production is ordinarily negligible.

Nickel. "Nickel steel . . . combines very great tensile strength and hardness, with a very high limit of elasticity, with great ductility. Its combination of ductility with strength and hardening power has given it very extended use for armor of war vessels." Nickel is more better known than manganese, but, strangely enough, nearly 85 per cent of the world's nickel supply comes from one single loaclity—**Ontario, Canada**—and much of the rest from **Australia** and **New Caledonia.** [3] The production of the rest of the world is practically negligible.

Tungsten. Tungsten steel is used largely for magnets, but particularly for high-speed machine tools. "In 1918 92 per cent of the world's tungsten came from the countries bordering the Pacific—61 per cent from the western side: **Asia, Australia** and **Oceana,** and 31 per cent from **North** and **South America."** [4] As for the rest, the **Iberian Peninsula** produces about 4 per cent, and the rest is scattered. The single most important tungsten-producing country is **China.** "Chinese ore dominated the market during the year, both in the United States and Europe." [5]

(1) Pavlovitch, Foundations of Imperialist Policy, p. 120. "The metallurgical industry plays a colossal role in the foreign policy of the modern states."

(2) Mineral Resources of the United States, 1920. Part I—Metals. Published by the Department of the Interior, p. 277.

(3) Mineral Resources, etc., pp. 405-406.

(4) J. E. Spurr, as above.

(5) Mineral Resources, etc., p. 411.

Chrome. "Chrome steel . . . (is) made to resist great wear and violent stresses, such as those imposed upon armor plate, automobile springs and bearings, and jaws of rock crushers." Most of the so-called "stainless steel" is also chrome steel. "In 1921 **Rhodesia** furnished about 36 per cent of the world production (of chromite), **India** 28 per cent, and **New Caledonia** 23 per cent, other sources being scattered and small." [6]

Vanadium. "Vanadium . . . increases the resistance (of steel) to shock and to oft-repeated stress." "More than half of the world's vanadium supply comes from **Peru,"** [7] while the rest comes from the United States and southwest Africa.

Ferro-Alloys and Backward Countries.

IF we examine the scanty data given above as to the dsitribution of the steel-making minerals, one thing appears particularly striking: that, in general, these minerals, so absolutely essential to steel making, are not found to any appreciable degree in the chief steel-producing countries, or in those countries that have abundant and easily accessible supplies of iron and coal, the main elements in the manufacture of steel. America, Germany, Great Britain, France, Belgium—these are the chief steel-manufacturing countries of the world. "Two iron ore fields—the Lake Superior region in the United States and the Lorraine region of the Franco-German border region—have for years produced more than half of the worlds supply." [8] But the ferro-alloys, equally necessary for the manufacture of good steel, are not to be found in these great industrial countries. On the contrary, these minor minerals are to be found in the "backward," undeveloped countries, in the colonies and the semi-colonies or in countries of a similar status—India, Brazil, Canada, New Caledonia, Australia, Peru, China and Asia and Africa generally.

Mineral Problems Are World Problems.

This is of profound significance—the fact that the great modern imperialist steel-producing nations can only get their ferro-alloys from the "backward," undeveloped parts of the earth! It brings out more clearly than ever the oft-repeated fact that "mineral problems are world problems."

The Basic Contradiction of Imperialism.

Considered from the viewpoint of rational economy, it is apparent from the above facts that, at the present stage of economic development, the whole world forms a single economic unity—not simply a commercial unity bound together by the world market, but an actual producing unit united by the demands of modern industrial technique. Were, therefore, the world economy organized on a conscious, planned, rational basis the disparity of distribution of the various mineral components of steel would be no more than an interesting and important technical fact. But, under the rule of capitalism, world economy is not organized on a conscious, rational basis; the capitalist economy is an anarchistic economy and is "organized" thru the fierce and frequently bloody competition of national trust monopolies and international groupments. The "backward," undeveloped territories, so important industrially, can under capitalism be integrated into the scheme of world economy only thru the made race for colonies that is so characteristic of imperialism—and then, of course, integrated imperfectly and at a great loss of productive forces. Thus capitalism stands most grossly in the way of the development of the forces of production, in the way of the unification and consolidation of the entire world as a producing mechanism.

(6) J. E. Spurr, as above.

(7) Mineral Resources, etc., p. 415.

(8) J. E. Spurr, as above.

Bourgeois Solutions—"Anglo-American Understandings."

This basic contradiction of imperialism—the unity of the world from the point of view of the organization of the productive forces as opposed to the fierce competition of national monopolistic groups for spheres of capital investment and sources of raw material—manifests itself under a thousand forms every day, but nowhere is it clearer than in the question of the production of steel, as we have analyzed it above. The bourgeois specialists have recognized this and has attempted to solve the contradiction within the limits of capitalism. Here is what Joseph Edward Spurr, editor of the **Engineering and Mining Journal-Press,** writes in **Foreign Affairs** (July, 1926):

"There is a tendency, when steel making nationals do not find a supply of the necessary ferro-alloy minerals in their own country, to acquire mines abroad, and thus insure a fixed and steady supply, which will be interrupted only in case of war so violent as to disrupt ocean traffic. Thus the vanadium deposits of Peru, the manganese deposits of Russia, the nickel deposits of Canada, and chrome deposits of Cuba have become controlled by American companies. In its importance to national industry, this form of commercial control is secondary only to that of political control; but peaceful relations not only with the foreign countries directly involved, but with those patrolling the seas, are necessary for its permanent efficacy.

"The great desideratum of universal peace finds here one of its most practical arguments. But in the meanwhile, it is of interest to note that the mining conducted by the Anglo-Saxon nations—the United States and the British Empire—produces the bulk of the world's mineral supplies . . . These two Anglo-Saxon nations also have the power to keep open the lanes of ocean commerce.

"Here is one of the strong practical arguments in favor of an Anglo-American understanding, at least as to the free development and trade movement of mineral supplies thruout all the earth; and it might form the beginning of a much stronger economic league embracing other nations . . . . Only arrangements based upon common economic interest and mutual material helpfulness will prove stable."

It is obvious, however, that any such solution is a mere utopia. Mr. Spurr seems to realize it himself, for he successively contracts his field of international peace under imperialist capitalism, first, from "universal peace" to "in the meanwhile . . . an Anglo-American understanding," and then again to "an Anglo-American understanding, **at least** as to the free development and trade movement of mineral supplies thruout all the earth." Even supposing this "Anglo-American understanding" were possible, what would it be but the erection of a super-bloc of monopolies for the struggle against other

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5. BACK INTO THE TRADE UNIONS! IN DEFENSE OF THE ECONOMIC AND SOCIAL DEMANDS OF THE WORKING CLASS!

In the trade unions—**bitter struggle against any distortion of their class character.**

Only by following in the glorious tradition of the First International whose teachings have already lead to the victory of the Russian proletariat and will lead to the triumph of the world proletariat when will the international trade union movement realize these slogans.

The Steel-Making Minerals

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imperialist powers and for the exploitation and oppression of the toiling masses of the "backward" countries. But even this limited "Anglo-American understanding" is too preposterous for words. The rubber situation ought to show Mr. Spurr the possibilities of such an "understanding." What will the understanding be about? About the control of the nickel resources of Canada, tungsten resources of China, the vanadium supply of Peru, or the chrome deposits of Cuba? These are precisely the battlefields of British and American capital and to talk of an "understanding," even temporary and insecure, in the present international situation, is absurd. Imperialism permits of no understandings; imperialism means bitter competitive struggle, and war is but the continuation of the same struggle with other weapons.

The Proletarian Revolution.

The basic contradiction of imperialism can only be solved thru the destruction of imperialism, thru the supplanting of capitalist anarchy by a consciously planned and rational economy on a world scale, thru the proletarian revolution. Then and then only will it be possible to integrate the undeveloped regions of the earth into the unified system of world economy without the destruction of productive forces without the exploitation and oppression of the masses, without the butchery of millions. Then only will a really unified world economy be possible. This is the moral of the story of the steel-making minerals.

