

# THE ECONOMIC REVOLUTION IN FRANCE

## A NEW SPIRIT OF ENTERPRISE

BY SISLEY HUDDLESTON

ALTHOUGH a great deal has been written about the political situation in France, about French diplomacy, and even about the financial position of the country, very little attention has been paid to the extraordinary economic developments which have taken place. These economic developments will, in the end, prove to be the permanent factors. They are in reality much more important than the disputes about Reparations or even than the immediate difficulties which France experiences in balancing her budget.

When a short time ago I contrasted the financial weakness with the economic strength of France in a paper in the *Atlantic Monthly*, I received a number of letters urging me to write at greater length of the industrial and commercial enterprise of France. It is, indeed, a subject which has been insufficiently studied. The only contribution of consequence that I know of is an official report prepared by Mr. J. R. Cahill, the Commercial Counsellor at the British Embassy in Paris, and his 'Report' is naturally for private circulation only. It is, however, exceedingly useful, and I am myself indebted to it for many of the figures which I shall give.

This Report was an eye-opener to those whom it reached. Nothing can be more erroneous than to suppose that because France finds her currency falling and has not yet managed to obtain

budgetary equilibrium, the country is therefore poor. The contrary is the case. In my opinion, France is not only potentially but actually one of the richest countries in Europe, and it may well be that in a few years she will be the very richest of them all.

There has been, since the war, a trade depression which has had grave consequences in European countries, and even at one period in America. England particularly has suffered; Italy, too, has passed through deep waters. The industrial population of Germany has experienced trying times; Russia has, of course, been afflicted with famine. But in France there have been practically no labor troubles in spite of the upheaval of the war, in spite of the depreciation of money — for the simple reason that there have been no unemployed. There has been more work to do than the man power of France could accomplish. Instead of the laborer seeking work, the employer of labor has been handicapped because he could not find sufficient men; so much so that large numbers of foreign workers have been imported and, in addition, the manufacturers have been compelled to introduce more and more machinery.

This machinery, at first bought abroad, is now being made in France. France, which was regarded chiefly as an agricultural country before the war, now deserves the name of a highly industrialized country. Something like a

transformation has been effected. A remarkable impetus has been given to all branches of activity. France is equipped as never before. If in the devastated areas there are still houses to be built, the industrial reconstruction is practically completed, and the output of the coal mines which were destroyed or damaged is being rapidly increased, partly on account of improved technical equipment. The textile factories which were blown to pieces have been restored on a larger scale than before, and better and more modern machinery has been installed. This is true of the woolen and the cotton trades, and is also true of the chemical and engineering trades.

At times there have been protests, both in France and abroad, at what was described as the excessive expenditure on reconstruction. It was urged that the war victims had inflated their claims, that the French Government had paid without strict investigation, and that in consequence the demands on Germany had been swollen beyond reason.

Into these charges it is not my purpose to go at this moment. It would indeed have been surprising had not more been asked than was absolutely necessary, when the whole spirit which prevailed at the time of the Armistice was that Germany was able to pay and could be made to pay. These hopes have doubtless been falsified, and the French exchequer is too heavily burdened.

The morality of it all may be doubtful, but in the circumstances such exaggerations were inevitable. Moreover, from the national point of view, a fairly good bargain has been made. At the price of temporary financial difficulties, France has replaced old and inefficient factories by new and improved works. Eventually, even though individual firms may have profited unduly, it will

be France as a nation which will profit. Since there had to be restoration, it would have been foolish to have restored the bad as well as the good. It would have cost as much to put up buildings similar to those destroyed as it cost to put up better buildings. It would have been absurd to look for antiquated machinery when up-to-date machinery was available.

In any case, without minimizing the sufferings of France, it is fair to say that, in the long run, France will have gained; for not only has the industrial North been improved, but many factories which were erected in other parts of France as an emergency measure will continue to produce.

Nor has agricultural reconstruction been delayed. The production is already about equal to that of the pre-war days, and superior agricultural methods have been adopted. The farmer has been taught to employ machinery. In the old days the French farmer had somewhat primitive conceptions; he lagged behind the farmer in other European countries. This was doubtless partly due to the system of small holdings. But now, thanks to intensive propaganda, a coöperative spirit has been fostered even in the smallest villages, and the farmers are learning to club together for the purchase of agricultural instruments.

At the same time, the State has been quietly at work and, while the politicians have been chiefly clamoring about German *récalcitrancy* and the possibility of a German *Revanche*, the authorities have been organizing the resources at the disposal of France. Ports and waterways, railways and roads have been made, and schemes of all kinds have been under consideration. Indeed in many instances, their execution has begun. There has been a systematic utilization of water power — and perhaps it is in this respect that the future

of France is most hopeful, since, if France is short of coal, she has plenty of rivers and waterfalls from which she can obtain all the electric power she needs.

The recovery of Alsace-Lorraine gave France new resources in coal and in iron ore, in potash and in oil, and increased the metallurgical, the engineering, and the textile industries of the country.

But perhaps the most striking advance that has been made in the industrialization of France is the new organization of the great basic industries on the model of this German Trust system. The large firms have concentrated and consolidated, they have even reached out beyond the frontiers and have purchased many undertakings along the Danube and in other parts of Middle-Europe. There is an interlocking of interests, especially in metallurgical groups, which is perhaps the most astonishing of the post-war phenomena.

## I

When one considers the progress that has been made in the ten *départements* which constitute the Liberated Regions, one is impressed with the resourcefulness of France. The occasional scandals of which one hears, and which have been vastly exaggerated for political purposes, are comparatively unimportant.

The chief complaint of Socialist agitators is that the big firms have received compensation, while a large proportion of the people are still living in temporary dwellings. There is an excellent demagogic appeal in revelations of this kind, and it is not to be doubted that those who were best able to look after themselves and to push their claims, received preferential treatment. That is in the nature of things. But considering the immense character

of the undertaking, considering that it was necessary to set up machinery of an altogether novel character and that the task was vast and complicated, it is absurd to speak of the blunders that have been made in administration as a new Panama scandal.

For my part, I have nothing but admiration for the successive French Governments which have encouraged the restoration of the North and, without financial means, have succeeded in a few short years in reinstating a large majority of the total pre-war population. The figures show that two million people have returned to their homes, and that the population of the North is only a few thousands less than it was in 1914. There were altogether three-and-a-quarter-million hectares of land devastated; well over three million hectares have now been cleared. There were about two million hectares of agricultural land devastated; and well over a million-and-a-half hectares are now under cultivation again. There were 3500 communes occupied by the enemy and in many cases completely annihilated; municipal organizations have been reestablished in 3250 of these communes.

Before the war there were 7298 elementary schools; there are now 7008. There are actually more post-offices open than in 1914. All the main railway-lines have long since been restored, and there remains little still to be done in the reconstruction of local lines. Practically all of the water-ways are navigable, and the roads are available for traffic. Many districts were denuded of live-stock; there is now no scarcity. Wheat and sugar, which are the principal crops, are grown on the same scale as in 1914. Out of 22,000 industrial establishments, over 20,000 have been rebuilt, and, as already stated, many of them are considerably modernized.

Generally, the industrial efficiency of the North which was the chief centre of trade, has been greatly increased. If the coal output of the Nord and the Pas-de-Calais departments is compared with the coal output of 1919, it will be found to have increased nearly fifteen-fold. It is true that the task of rebuilding dwelling houses is far from finished, but it must be remembered that the number of houses destroyed was three hundred thousand, while one hundred and fifty thousand were seriously damaged, and three hundred and fifty thousand partially damaged. Obviously it will take some years before the inhabitants can be given something more than the temporary wooden houses which were run up; but it should be noted that not only the authorities but the minor companies and other employers of labor have promoted great housing schemes. The Lens Mining Company alone has built nearly 70,000 houses, and other companies which could be mentioned have built five thousand here and three thousand there. It is estimated that altogether the expenditure of the French State, in default of Germany, on the ruined North will be about one hundred milliard francs.

Not only have the necessary funds been raised by loans through the *Crédit National*, but the municipalities and other public authorities have in many cases issued loans, while groups of manufacturers, also, — whether engaged in the mining, the metallurgical, the sugar, or the textile industries, — have raised capital for reconstruction purposes, their loans being based upon their assets, and upon their claims on the French Government. Coöperative organizations have rebuilt churches which had in some cases been razed to the ground during the war.

Altogether it would seem that,

taking all the circumstances into consideration, remembering the utter devastation that was caused in those departments in which before the war, industry was almost completely concentrated, the efforts that have been made are highly creditable, and France deserves something better than reproach for the inevitable anomalies and particular grievances that have arisen. The State may have been imprudent from the strictly business point of view in accepting full responsibility for the restoration of the North, and in pledging its own credit before it was really ascertained whether Germany would pay; but it cannot be denied that morally the State owed this reparation to the inhabitants and that, despite financial difficulties, the State will eventually reap its reward.

## II

When we examine the general industrial situation in France, we find that the attempts that are being made to develop the resources of the country are amazing. Formerly no one thought of France as an industrial country, although as matter of fact the transformation of French manufacturing equipment had begun before 1914. The war itself helped to accelerate the process. It will be remembered that when the North was overrun by Germany, it was found necessary to transplant industries to various parts of France. Paris itself saw an astonishing increase of factories; Lyons, which had the ablest of mayors, M. Edouard Herriot, became still more highly industrialized; Marseilles, Bordeaux, St.-Nazaire, Rouen, and many other centres provided new factories and workshops; and these factories and workshops were not scrapped at the Armistice.

In the Pyrenees, in the French Alps, in the Central Plateau, there was a

veritable metamorphosis. It was a metamorphosis that will have considerable influence on the future of France. Considerable in itself, it seemed to set in motion fresh forces — a hitherto unknown desire to create goods on a vast scale, to make the most of French riches, to become as far as possible self-sufficing, and even to compete with the nations that were regarded as the industrial leaders of Europe. This spirit of emulation once awakened has grown tremendously in France.

It would take many pages merely to enumerate the plans that have been prepared, often under the auspices of the Minister of Public Works, M. Le Trocquer, who, after remaining at his post under successive Governments for more than four years, recently went out with the Poincaré Cabinet.

It is not in France alone that these developments are taking place. In spite of her colonial possessions, France had never shown any particular aptitude for colonization; but since the war the newspapers have been filled with accounts of the wonders and possibilities of Indo-China, of Algeria, of Morocco, and of other places in which the French influence is felt. This is not mere idle propaganda. Substantial works have been undertaken, and France will within the next decade undoubtedly add to her overseas riches as well as to the riches of the metropolitan country.

But, for the moment, we are not so much concerned with what is happening under French guidance in Africa — where roads are being made and ports constructed — in the Near East, and in the Far East; it is the industrial organization of France at home that is probably the most notable feature to be observed.

If I may quote from the Report of Mr. Cahill, the most conscientious of officials, it will be seen that something

entirely new has come into French life.

‘As in the other principal producing countries,’ he says, ‘the keynote of France’s recent reconstitution has been a consolidation, whether along horizontal or vertical lines, and the regional developments in these directions have tended to become national, and even international, in scope. This movement has been peculiarly conspicuous in the great metallurgical and engineering industries, but its operation has been visible in a whole series of other industries, and it has been attended by enlargement and superior equipment of the units.’

Examples could be given in profusion. The great metallurgical groups are those of Schneider, the *Compagnie des Forges et Aciéries de la Marine et d’Homécourt*, the *Société des Mines de Longwy*, *La Société des Aciéries et Forges de Firminy*, and other concerns which are interested chiefly in Lorraine. Mutual interests exist between many of them. Schneider and de Wendel and the *Marine et d’Homécourt* (better known as *St.-Chamond*) have interwoven their interests and have connected up with Belgian works in Luxembourg.

These companies, for the most part, have not only secured control of the sources of their chief raw materials, but have obtained control of the concerns which utilize their products. The Schneider Company has some participation in coal and ore mines, in iron and steel works, in ship-building firms, in firms which manufacture electric machinery, guns, dredges, machine tools, boilers, optical, and scientific instruments. Schneider cannot be located in one district, the firm spreads out all over France — at Paris, Creusot, Bordeaux, Cherbourg, Caen, Havre, and so forth.

The *St.-Chamond* Company, while still existing in *St.-Étienne*, has im-



portant establishments at Bayonne, in Lorraine, at Maubeuge and Hautmond.

Further, these enterprises have extended to Belgium, Czechoslovakia, Austria, Rumania and Poland. It is sufficiently well known that the purpose of the great iron and steel manufacturers of France has been to enter into some kind of collaboration with the German magnates of the Ruhr. If their interests were joined, as without doubt they will be some day, and if the process of amalgamation continued, the French and the German coal- and ironmasters would become the most powerful force in the whole of Europe.

### III

Although the potential strength of France in metallurgy is so remarkable, it does not follow that the country has been able to avail itself immediately of the recovery of Alsace-Lorraine. Circumstances have conspired to reduce the output. The occupation of the Ruhr, whatever may have been the political interest and whatever may be the ultimate economic result, made it incumbent on the ironmasters of France to close down many of their blast furnaces for want of coal. Until some arrangement is reached with Germany, there will be considerable wastage. All that can be said at the moment is that the French industrialists are perfecting their plants and are elaborating the economic machinery, which one day will run smoothly.

In 1913 France had an output of over twenty-one million tons of iron ore, ranking third in the production of ore, following the United States and Germany. With the deposits of Lorraine, she should have doubled her output, while the German output should have been more than halved. Lorraine in 1913 yielded over twenty-one million tons, that is to say sixty per cent of the

whole German output. Yet France does not, as might have been supposed, produce over forty-two million tons to-day. The returns show that very little more than the pre-war production has been obtained. The increase is only about one-and-a-half million tons. The figures for cast-iron and for steel are very much what they were in 1913.

Germany managed to import high-grade ores from Sweden and Spain, and the lower-grade ores of Lorraine, which will hardly bear transportation on account of the cost, could not be worked on the spot. Unless France can obtain a constant supply of coal and coke, there is a sense in which the acquisition of the Lorraine mines is a handicap; for against the demand for coal and coke for the blast furnaces, there are no corresponding home supplies. It is precisely this dependence of France on foreign coke which makes it inevitable that, sooner or later, a bargain between the French and the German industrialists will be struck.

Before the war the French production of coke met only about half the French requirements. This shortage is greatly increased by the addition of the immense ore fields of Lorraine and the diminished output of French coke. But these are temporary conditions which will in time pass, unless both the French and the German industrialists, each side with its advantages over the other, attempt to obtain too much and, instead of reaching a peaceful agreement, provoke armed strife.

It is not only in the coal and iron industries that the consolidation to which we have called attention applies. Particularly in the electrical trades, which are developing enormously, there is a tendency to combination. The number of firms engaged is small, and they are all more or less interlocked. This is true not only of the producing companies, but of the distributing

companies. In dye-stuffs there is one dominant company; in what is called the heavy chemical trade there are two concerns which control most of the factories.

The movement is not so pronounced in the textile trades, though it is still to be remarked. There are, indeed, few branches of industry in which it is not true either that a small group of powerful firms predominate or that a number of companies have a working agreement. In transport this policy is particularly to be noted; the railway systems consult with each other and have unified their freight rates. Even in Paris the various services — tramways, omnibuses, and others — work together. The shipping companies have in the same way abandoned, to a large extent, competitive methods. All this is comparatively new in France and betokens a desire to imitate the example set by Germany and other industrial countries.

It would be tedious to show in detail the expansion of industries which have hitherto languished in France, such as engineering of all kinds and especially the building of motorcars; but it may be said in a phrase that the trading returns are all extremely favorable.

Among the public works which are destined to augment the economic force of France is the construction of new stretches of national road. Much money is being spent on this object as well as on the improvement of rivers and canals. On the Canal du Nord, boats of six-hundred tons can pass; there is a canal which will establish direct waterway communication between Upper Alsace, the region of Paris, and the North; the Rhône-Rhine Canal is being completed. There is a Marseilles canal scheme involving the piercing of the Rove tunnel which will cost 220 million francs, and which will connect the port with the Étang-de-Berre. It is

held that this particular improvement will not only alter shipping conditions but encourage the building of many important factories. Indeed, most French sea-ports have been, or will be enlarged, and such inland ports as Strasbourg will be entirely reorganized at considerable cost.

The handling of cargoes has been improved out of all knowledge. Before the war, the French mercantile marine took fifth place among the fleets of the world. To-day, with its four million tons, it takes third place, coming after Great Britain and the United States. In 1914 France owned a fleet of 2,488,000 tons, of which 1,115,000 tons were lost during the war. It is extraordinary that France has managed to make up these losses so quickly. It is possible that she has somewhat overdone ship-building, and that the best is not being got out of her mercantile fleet.

In civil aviation great enterprise has been shown and there are services to every part of Europe which have their centre in Paris. In addition, there are air lines from Toulouse to Morocco, and special attention is being given to connecting up Northern Africa with Eastern and Equatorial Africa by aeroplane. The State contributes handsomely toward the expenses of the air companies.

#### IV

In nothing is the economic progress of France demonstrated so clearly as in the utilization of water power. It is believed that the available resources of France in water power amount to nine million horsepower. No less than one third of this amount will, it is hoped, be used within the next few years, and there are great schemes for the even fuller exploitation of the rivers and the waterfalls of France.

Enthusiasts see in these schemes the possibility of making up for the short-

age of coal. The electric power which can be obtained within a short space of time will be equivalent to twenty-four million tons of coal a year. Trains can be run, electric power conveyed to the most remote villages, not only for electric lighting purposes, but for the working of agricultural machinery. This means that labor, too, can be saved. A large outlay of capital is needed, but in the long run France will greatly benefit.

The programme is to be carried out through the coöperation of public authorities and of private capitalists. The public authorities have promised their assistance to four great schemes, those of the Rhône, Dordogne, the Truyère, and the Rhine.

In the case of the Rhône scheme, the various departments which will be affected are participating in the capital of 360 million francs, while Paris and Lyons are also to give their help. Sixteen stations are to be constructed, with a total of nearly a million and a half horsepower. This is the largest of the schemes, but others are extremely important.

Moreover France is experimenting in the possibility of obtaining power from the tides. In this she is a pioneer. There is being constructed at Aber-Wrack an experimental tidal-power station which it is hoped will provide a constant minimum of 1600 horsepower. At the same time, since the power stations are usually remote from the centres of consumption, a careful estimate of distribution is being gradually worked out which will enable practically every commune in France to obtain electric energy.

The French railways have seen the desirability of introducing electric traction, and three large companies — the Midi, the Paris-Orléans, and the Paris-Lyon-Méditerranée — are putting into execution a plan which affects

5625 miles of railway. In the Basque country and in the neighborhood of the Pyrenees, there are abundant evidences of the work now proceeding to install electric traction by employing the 'white coal' furnished in the Pyrenees. It is estimated that it will take fifteen years to realize the whole project, but beyond the present project there is another much vaster plan which is being prepared in association with the Ministry of Public Works.

The P.-L.-M. began to electrify its lines as long ago as 1893, but progress until recently has been extremely slow. It now hopes at an early date to electrify lines from Lyons to Geneva, from Lyons to Grenoble and from Lyons to Marseilles.

As for the Paris-Orléans Company, it is electrifying a third of its system, obtaining power largely from the Auvergne Mountains, though partly it will be generated near Paris. Next year, it is expected, an electric line from Paris to Orléans will be opened.

## V

Many other facts could be given, but these will suffice to show that France has not only recovered herself but has done much more than was necessary to get back to the starting-point of 1914. She has done this in spite of the gravest preoccupations, political and financial. About her future, as I see it, there can be no doubt if she is permitted to work in peace and obtains some kind of relief by the payment of Reparations. There are practically no social questions which are likely to shake the country. The population — unfortunately inferior to the pre-war population — is as content as any population ever is. The taxation, in spite of grumblings, is not heavy. The cost of living has increased fivefold (as expressed in francs), but wages have mounted fairly



rapidly, and the eight-hour day has been introduced.

Since the short and ill-fated railway strike of 1920, there have been no industrial disturbances. There is work for everybody who will work. There are, of course, many problems, such as the housing problem, which cannot be solved for years to come. But, on the whole, the conditions are favorable, and it seems to me impossible that the franc can fall much lower than it is at present, unless the French politician is even worse than the average politician.

The country is sound and prosperous and, moreover, it is much more consciously organized than before. Its industrialization does not mean that agriculture is being neglected; on the contrary, industry and agriculture are being encouraged together, and France in respect of wheat and vegetables, and indeed most commodities, is practically self-supporting. All this is in spite of the fact that every young Frenchman is compelled to serve in the Army and is thus unable to render productive service to his country for eighteen months. The maintenance of such a conscript army is undoubtedly a handicap, but France does not yet feel herself free from danger. It is precisely this danger, or fear of danger, that may upset the prophecy that, within a few years, France will be recognized as in a material sense perhaps the strongest country of Europe.

If wise counsels prevail on both sides of the Rhine, the outlook will be bright for France, for the financial difficulties can be conjured; but if a foolish policy is pursued, either on the part of France or on the part of Germany, and war again becomes a possibility, no man can foretell the dreadful consequences.

But, as I see it, subject to this warning, no anxiety should be felt about a country in which there is no

social agitation, in which there is practically no misery, in which there is an undoubted forward movement in industry and in commerce.

France has sloughed her old conservative methods. She has come into closer contact with the world and has been fired by the spirit of progress. A few years ago French business men were content to vegetate; they rarely thought of developing their enterprises; they preferred to carry on in the old safe manner. As far as possible, they kept their business in the family. The interlocking of companies frightened them. They had little conception of industry and commerce on the grand modern scale; they declined to accept more responsibility than they could properly carry; and were even opposed to natural expansion. They liked to retire from active life as early as might be.

But all this seems to be changed. Citroën, who has adopted the methods of manufacture of Henry Ford, may be taken to be in some respects the most representative of the new generation of Frenchmen. But the Schneiders and the de Wendels, who have modeled themselves upon the Stinnes and the Krupp families, are thoroughly representative, though one hears so little of them.

This at least the war has done for France, though whether it be altogether good or altogether bad is debatable; it has given Frenchmen a greater spirit of daring and of enterprise; it has made Frenchmen look beyond their own frontiers; life has become more intense, and France is determined to keep up in the race. In some literary and artistic manifestations of recent days there is much which one deploras, but the keynote of these manifestations is not a fiercer nationalism, as is sometimes pretended, but a cosmopolitanism.

Cosmopolitanism is, when one comes to think of it, the outstanding feature of French art and literature, and, curiously enough, it is the outstanding feature of French economic life. France has suddenly begun to borrow ideas from the business men of other countries; she is imitating them, striving to enter into accord with them, and reaching out beyond her borders to

attain economic control and to enjoy economic influence in many lands.

It may well be that France, which tended to become narrowly nationalistic and to shut herself up in a watertight compartment will, in spite of certain superficial, and chiefly political, signs be led by the war to take a fuller part in the common economic activities of the world.

## OUR NATURAL RESOURCE PROBLEM

BY GEORGE H. CUSHING

### I

THE proper disposition of our natural resources raises one of the largest public questions which has been discussed in a half century. One might as well try to describe the course of a sailing ship as to write a connected history of the debate. It seems to have gone on a different tack with each shift of the political wind. And yet, although our discussion has pursued an erratic course and has been fitful and indifferently sustained, it remains true that it seems to have been headed toward a known goal. That fact justifies a present discussion which strives at impartiality, even though the whole subject may be embroiled in national politics long before this article can possibly reach its reader. The fact that this paper is written a considerable time before any platform declaration on the subject should serve to lift it out of the zone of politics and place it upon the higher plane it is designed to occupy.

I hope we may avoid any possibility

of confusion by agreeing at the outset upon a definition of what shall be included in a proper classification of natural resources. I do not recommend my definition to the lexicographers but I trust it will serve admirably the purpose of this article while leaving others at liberty to expand its scope to serve their own purposes in their own discussions. What I mean by a natural resource is: 'A product extracted from beneath the surface of the earth; something which is not reproductive in character — our extractive industries, so-called.' Thus, my definition embraces all minerals, coal, and oil. It excludes water power, which is the resultant of persistent creation, and timber, which over long periods is reproductive. It excludes, obviously, all farm and animal products as they are essentially reproductive in character.

Confessedly, my definition will prove far too narrow to suit many. Even so, I believe it safe to draw my line between those things which afford but one