

## COMMERCE AND INDUSTRY

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**D**URING the past two decades the word "China" has almost become synonymous with civil wars and international complications. Such an overwhelming flood of material has gone forth from China to the press of the world, descriptive of China's internal squabbles and, more recently, its controversy with Japan, that very little is known outside of China about the progress of trade and industry in the country during this period. "Red Armies March onto Nanchang"—"Szechuan War Lord Collects Revenue from Opium"—"Pirates Hold Steamer Passengers for Ransom"—"Japanese Airplanes Bomb North China City"—"Nineteenth Route Army to Fight Japan"—"Concubines in Rebellion Against Ex-war Lord"—such headlines apparently make far more interesting scare heads for the American newspapers than the following: "National Economic Council Completes Plans for 15,000 Miles of Roads"—"Wusi Cotton Spinning Mills Working Full Capacity"—"1932 Registers Banner Year Cotton Imports from America"—"American Airplanes Lead in China's Aviation Progress"—"America Tops List in China's Foreign Trade for 1932."

In January of this year, the office of the American Commercial Attaché in Shanghai compiled a review of the trade and industry of China for 1932. Copies of this report were furnished to several hundred individuals and concerns in the United States particularly interested in Sino-American commerce. Some of the recipients of this annual trade summary have written back, expressing their surprise over the fact that so much constructive work is in progress in China, as evidenced by the material embraced in this report, and yet information of this character does not seem to be available elsewhere. Several suggested that something should be done to give more publicity in the United States to constructive developments in China.

It is very difficult to present to the intelligent reader in the United States a balanced picture of present-day China because the more unfavorable aspects of the situation have been relatively over-em-

phasized. Entirely too little is known in the United States about those forces which are operating toward creating a new China. It is probably not amiss to state that the majority of the intelligent public in Shanghai, the first trading and industrial center of all China, knows very little about the constructive developments in progress in other parts of the country. Probably in no other land are there poorer domestic news communication services than in China.

It is only by traveling through the interior that one is able to secure the information essential to a proper appreciation of China in reconstruction. Naturally, considerable scraps of information regarding constructive developments of varied sorts from different parts of the country do filter into Shanghai, but as yet there has not been developed any coordinating agency to assemble these data. When the Szechuan war lords are staging a battle, the chances are that Shanghai and the foreign news correspondents stationed there will secure this information in time. On the other hand, when a motor road was recently completed between Chungking, the commercial metropolis, and Chengtu, capital city of Szechuan, a province of upwards of fifty million inhabitants, this bit of information reached Shanghai by some roundabout method and then belated. The opening of this strategic motor road of about three hundred miles means volumes in connection with future transportation developments in this West China empire which still can claim the distinction of being the only section on the face of the globe without a mile of railway despite a population of four or five tens of millions. No press dispatches have, to my knowledge, even mentioned this bit of truly interesting news.

It is unfortunate for China that it must undergo its economic, political, social, and intellectual transitions concurrently. The fact that our American educated public has so little knowledge of the basic background of Chinese civilization adds materially to the difficulty in trying to understand China in transition. Kenneth S. Latourette of Yale University, in a recently published article, made the following statement: "In at least one respect our American universities are strangely provincial and antiquated in their outlook. We act as though the only civilizations in existence or at least the only ones worth studying were those which contributed to our own, from the Egyptian and the Mesopotamian to that of modern Europe. Often we completely ignore everything east of Persia. With occasional ex-

ceptions, our curriculum makers are not even as far advanced as was Columbus. He knew of, and sought, Cathay and the Indies. They have not yet discovered nearly a half of the human race." Mr. Latourette further states that in the sixteenth, seventeenth, and eighteenth centuries the Chinese empire was much more populous than, and was fully as civilized as any of the vast empires which European states were then building and that the most powerful monarch of the end of the seventeenth and the beginning of the eighteenth century was not Louis XIV but K'ang-hi, and the latter was probably much abler and better educated than was the former.

Dr. Lewis Hodous of the Hartford Seminary Foundation makes the interesting comment that it has been stated on good authority that before the year A.D. 1750 more books were published in the Chinese language than in all other languages combined and that even so late as 1850 more books were being published in China than in any other country. Since history credits China with this wonderfully rich cultural civilization, many Americans will probably be inspired to inquire: Why is it then that present-day China is so backward commercially and industrially?

Its failure to have tuned in earlier in its national life with the scientific discoveries, inventions, and developments which have so patently characterized the nineteenth-century history of the West is due to its geographic isolation and to a self-sufficiency precluding a receptivity to influences from without. A thousand-year old stereotyped system of education, based upon the teachings of the ancient sages and perpetuated with no material changes down to the beginning of the twentieth century, stifled the nation's outlook. Until a few decades ago there was no real necessity of China's parting from its course of centuries. In fact, contact with the West or, better yet, Western contact with China forced the battering down of its walls of isolation and necessitated new political, social, and economic concepts.

The two most striking developments in the China of the past few decades are, first, a receptivity to the teachings of the Occident and, second, a growing nationalism. But China's contact with modern science and invention has been so belated that its suddenly enforced transition from a medieval to a modern economic society is fraught with stupendous difficulties deeply accentuated by the pressure of foreign aggression. On the other hand, its people are so richly endowed with the heritage of a splendid culture and are by nature so

industrious that with the store of latent resources at their command they should be able to make a very creditable transformation. In spending a day cruising about in the heavily congested canals and waterways of the very populous lower Yangtse region, one could not but be deeply impressed by the sterling qualities of these hard-working, industrious people. One could only conclude from observation that under proper leadership China might easily become one of the more advanced and more powerful nations.

What evidence have we that this great conglomerate mass, constituting the most populous of all nations, with this remarkably rich historical background, is now launched upon a course destined to progressive modernization? R. H. Tawney, in a recent article on the future of China in *The Manchester Guardian*, states, "No sane view can be formed of the future of China which ignores a positive achievement, not only of the present government but of different groups of reformers during the past twenty years." In the scope of this article I shall, however, in the main, confine my observations to economic progress.

Several years ago I had the pleasure of meeting in San Francisco Mr. Eli T. Sheppard, who had served in the early nineties as American consul at Tientsin. He had had no direct contact with that country since his return to the United States in 1896. In describing to him some of the evidences of material progress which characterized the new China, he exclaimed that they were positively incredible in the light of the knowledge he had of the Chinese people of his day. He recalled that the great Viceroy, Li Hung-chang, who was the dominant figure of his time, professed an interest in the implements of a modern economic society, but he, as well as other foreign observers, were very definitely of the opinion that these expressions were distinct evidences of Oriental politeness not to be taken seriously. Probably without exception, foreigners in China of his day considered that the Chinese were so definitely set in their ways and so rigidly regulated by the customs and traditions of the past, it would be impossible for them to make any substantial alterations in their modes of thinking or changes in their society.

As for the construction of railways or roads, the one factor irrevocably militating against any progress in this direction was, in the opinion of foreigners of that time, the deeply embedded sacred regard for the graves of the dead, scattered over the length and

breadth of the entire country. It was contended that these would effectually stand in the way of the development of economic modern means of communications in a continental country such as China.

However, in spite of this formidable obstacle the Chinese people have within the few succeeding decades so far departed from these superstitious ideas as reinforced by centuries and millenniums of rigid adherence to ancestor worship, as to serve no longer as an obstacle to progress. In fact, one of the most striking manifestations of a change of mental attitude is the almost ruthless manner in which roads are now being carved through what for centuries may have been considered sacred burial grounds. It is no longer necessary to carry on campaigns of education to convince the thinking masses of the value of good roads. The problem now is rather one of methods of financing these important accessories to a system of internal economic communication.

A few years ago it may have been said that provincial predilections stood in the way of the construction of national trunk railways or trunk highways. These are rapidly fading into the past, as evidenced by the fact that the provincial or district political units are no longer satisfied with improving transportation facilities within their own areas, but now recognize the value of extending railways and highways to adjoining regions. For instance, last year, at an interprovincial conference at Hankow in the mid-central Yangtse region, plans were drafted and adopted for trunk highways embracing a number of the central provinces. Later, this plan was adopted by the National Economic Council of Nanking with the proviso that the National Government defray a portion of the construction expenses for fifteen thousand miles of interprovincial arteries.

Kwangsi, in southern China, was, until six years ago, considered one of the poorer and more backward of provinces. Since that time, the provincial authorities have constructed upwards of a thousand miles of roads for motor transportation, and are now busy perfecting plans for connecting this area with the adjoining provinces, which in turn are working on similar highway projects.

Hunan, in mid-central China, long described as the hermit province, at present may boast of having completed more than seven hundred miles of better constructed highways than probably exist in any other province. Its present highway program calls for an additional five hundred miles, involving connections with roads in all adjoining



ing provinces. The grading, draining, and construction of these roads as well as building bridges, have been done under the supervision of Chinese engineers the majority of whom were educated in the United States. It is true that the American Red Cross some years ago in one of its famine relief programs gave a considerable impetus to road construction in China as a famine relief measure and laid out a stretch in Hunan Province, as also in certain sections in northern China, which has undoubtedly done much to encourage the whole good roads movement.

In the adjoining province of Kiangsi, which has for some years past been the center of communist activity, remarkable headway has been made in road work. The Kiangsi authorities, who must combat destructive labors of the red armies, have, in spite of these great difficulties, been able to proceed with a splendid program of provincial highways.

Progressive Chekiang built upwards of a thousand miles of highways last year and completed the construction of a two-hundred-mile light railway which promises eventually to be part of a trunk line joining Shanghai with Canton. This railway was constructed without the assistance of National Government funds or foreign loans. Thus, it is a distinctly provincial project. Its completion, at a very economical cost, is encouraging the idea of building light railways of standard gauge in other sections of the country.

Szechuan is what is commonly known as the Far West of China, and may be described as the Texas of China. Because of lack of communications, Szechuan has been almost completely cut off, all these centuries, from economic contact with the rest of China, hence with the outside world. In spite of civil wars and political disruption generally, this isolated empire province has, within the past few years, embarked upon a very ambitious road program which will probably be a preliminary to the introduction of railways. Estimates of the population of Szechuan range from forty to seventy millions. It will probably not be many years before power-propelled vehicles will replace the sedan chair, the wheelbarrow, and the carrying coolie. For those who have lived in an environment where the railway and the motor car have become commonplace, it is difficult to imagine the transformation which modern methods of transportation mean to these provinces in the great Yangtse basin and in southern China.

Although northern China has been habituated to roads for wheeled and pack animals, yet it is slower in providing highways for motor transportation than are the rice-producing regions of central and southern China. Progressive ideas took their inception in the south, gradually working northward. This is probably due to the fact that the southern Chinese, especially the Cantonese, have had contact with the outside world several centuries earlier than did those in the north. However, considerable evidence of progress in highway construction in northern China may be recorded. The camel, the mule, and the donkey, which figure so prominently on the roads there, are destined within the comparatively near future to be replaced by motor cars.

In line with improved internal communications, the most surprising developments during the past five years have been the inauguration of air passenger and mail lines. For the most part their installation and operation are under Sino-American auspices. In fact, aviation is being developed chiefly with American equipment and American personnel. By steamer it requires about two weeks to make the sixteen hundred mile trip from Shanghai to Chungking. By an air line which runs on regular schedule this trip can now be made in two days. By June first, 1933, this line will be extended from Chungking to Chengtu, capital of Szechuan—doing in two days what formerly required from three to four weeks.

Air lines on regular schedule are also operating between Shanghai and Peiping, via Tsingtao and Tientsin. A Euro-Asian line, under Sino-German auspices, is operating from Nanking to Sianfu with plans for a continuation westward across Central Asia to Berlin. It is anticipated that the Sino-American lines will be extended after July first from Shanghai to Hongkong and Canton, making possible connections with British and French lines extending into Europe. Thus, by July first of this year, it is anticipated that there will be three thousand miles of air lines on regular operating schedules in China, as compared with eighteen thousand miles in the United States. There is now being operated at Hangchow a Chinese aviation school with fifteen Americans on its staff. A second school is being developed at Canton on a somewhat less ambitious basis. Plans are also under way for the installation of several plants for the manufacturing and assembling of airplanes. Considering the fact that China has but twelve thousand miles of railways and about

forty thousand miles of roads for motor transportation and has in operation only about forty thousand motor vehicles, it is patent that in a country larger in area and population than the United States a fertile field is offered for the development of aviation.

Although there is a larger floating population in China than in any other country and no other nation depends upon its waterways for transportation to such an extent, yet Chinese are very slow in building a modern merchant marine. Aside from the ships under the Chinese flag sailing between Chinese ports and the South Seas, where there are considerable Chinese populations, we see no evidence of a Chinese merchant marine in world commerce. Moreover, considerable inland water navigation and coasting trade in China are under foreign flags. Before any progress can be made in this important field of communication, the Chinese Government will be obliged to install schools for training of officers and devise ways and means of encouraging private capital to embark in a large way upon the development of a modern mercantile marine. China's backwardness in overseas navigation is in a large measure due to the fact that the Government has not been in a position to extend financial assistance as have the other large trading nations interested in overseas transportation.

Railway construction progress has been delayed by a number of causes. First, conditions in the interior have discouraged investments of foreign capital in railroad construction enterprises. Second, foreign nations have not now the capital available for overseas investments and, third, the Chinese Government itself is obliged to expend such funds as are available, to rehabilitate existing lines. In spite of these conditions certain funds from the British Boxer indemnity reimbursements have been set aside to serve as credits for the completion of the Canton-Hankow line and for the purchase of certain rolling stock. As stated above, a growing interest is being manifested in light railways of standard gauge construction.

For bulk cargo and long distance hauls China requires a considerable expansion of its present twelve thousand miles of railways. It is estimated that she will need about one hundred thousand miles of the "iron road" to take care of its trunk line requirements. During the past few years some new construction work was carried on. Prior to September, 1931, several new railways were completed under Chinese auspices in Manchuria, and a rather extensive program



for further lines was planned. The taking over of the railways in Manchuria by the Japanese has altered that situation materially.

Overland transportation in the interior, as dependent upon animal or man power, is very uneconomical, costing three to six fold more than rates which should obtain on well-managed railways and even more costly than well-operated motor trucks. Thus, industry and commerce suffer badly because of a deplorable lack of adequate means of economic overland transportation.

Following the construction of roads, it has become necessary to widen the main thoroughfares of many cities and towns, especially those in central and southern China. This response is astonishingly extensive. We may truly say that there are more cities under reconstruction at present than ever before in any other country in all of the world's history. The widening of city streets is encouraging other civic improvements, including the installation of water-works, modern lighting systems, telephones, parks, playgrounds, and public health facilities. There is also involved the construction of higher buildings. Thus, in many of these cities, three, four, and five story modern structures are replacing the old one and two story, drab, tiled roof buildings.

Probably no other city has witnessed such a marvelous transformation as has Amoy on the South China coast. Ten years ago, Amoy was one of the dirtiest, most congested, and the most sordid of Chinese cities. At present it is completely transformed with wide, well-paved, well-drained, well-lighted streets. The city is supplied with pure water taken from reservoirs in hills some distance away. Neon lights are being used for advertising purposes. The city has been provided with a beautiful public park with the additional attraction of athletic fields, play grounds, and recreation facilities. Roads radiate out from the city to all sections of Amoy Island with regular bus service. Amoy City boasts of three excellent sound motion picture theaters. Amoy University, several miles distant from the city, is a very creditable institution, affording facilities for modern education for about two thousand students.

Canton, the great commercial metropolis of South China, has experienced even more extensive improvements, involving a construction of sixty miles of well-paved, well-drained streets, over which are now operating upwards of a thousand motor vehicles, in pleasing contrast to the sedan chairs, wheelbarrows, push-carts, and carrying

coolies of two decades ago. Scores of other cities in South China have, during the past few years, undergone almost complete transformation. This work will probably continue at an accelerated pace as conditions otherwise improve.

While transportation is probably the most important element in the future expansion of commerce and industry, the opening-up, on the other hand, of resources in the baser metals, especially coal and iron, is essential to any large industrial program. But little progress has been made in this direction during the past ten years on account of the unfavorable political conditions and because of inadequate railway transportation facilities. Thus, it is not lack of appreciation of the necessity of applying modern methods to utilizing the country's mineral resources, but a set of conditions which in course of time may so improve as to lend encouragement to the investment of capital and technical skill in big mining projects.

Factors operating against success in industrial enterprises are first, instability and uncertainty in the political outlook; second, speculative tendencies of operators who are loath to base their profits on market values for raw materials and manufacturing costs; third, a reluctance to build up cash reserves against the pressure to pay dividends (in fact, dividends are often paid from capital before plants are on an operating basis); fourth, abnormally high rates of interest for loan accommodations; fifth, embarrassing and expensive complications in securing raw material fit for manufacture; sixth, nepotism, arising from the traditional ramifications of the family system which often involves the padding of pay rolls with incompetent relatives or friends. Last, there is lack of application of the ordinary principles of scientific management in assembling raw materials, manufacturing operations, and marketing of finished products. Against these unfavorable aspects the following factors lend encouragement to industrial advancement: first, vast potentialities for the production of raw material; second, a plentiful supply of cheap and industrious labor, easily capable of being trained; third, large resources of capital, becoming increasingly more available as conditions otherwise improve; fourth, an almost inexhaustible domestic market for finished products; fifth, through the recent achievement of tariff autonomy, the assurance of protection and encouragement to domestic industry; sixth, no old machinery or ideas of a modern economic society to scrap. Hence China is in the

advantageous position of being able to take from the West the latest in improved equipment and ideas.

A leading Chinese industrialist, who has been very successful in connection with various manufacturing enterprises with which he has been associated, contends that any industrial plant in China can be made profitable, provided it is well managed. Most of the foreigners associated with manufacturing projects in China comment in eloquent terms on the high state of efficiency of Chinese labor, when properly supervised.

In manufacturing, China is gradually emerging from a domestic handicraft to a modern industrialized society. More progress has been made in installing cotton spinning and weaving mills than in any other line of manufacturing industry. At one time cotton yarn headed the list of China's imports. It is now so extensively manufactured that it has been relegated to the position of comparative insignificance in the import trade. On the other hand, raw cotton in the 1931-32 season topped the list in the country's imports. As time goes on, we may expect that China will be an exporter rather than an importer of cotton yarn and manufactured goods. As for raw cotton, while the country produces between three and four million bales, progress in improving the length of staple and the quantity produced is distressingly slow. In fact, it appears that China will continue for many years to come to be a heavy importer of raw cotton.

The electric light and power plant expansion in China is gradually curtailing the consumption of kerosene, although the high import tariff and expensive interior transportation costs are factors of serious concern to the further increase of the consumption of kerosene oil. China is rich in hydro-electric potentialities, but practically no progress has as yet been made in utilizing its water power for this purpose.

In connection with the impetus which is being given to the development of manufacturing, foreign interests find it increasingly necessary to exercise vigilance in the protection of their trade marks and patents. It is only natural that a country like China, when embarking in an initial sense upon modern manufacturing, should tend to move along the line of least resistance and copy the trade marks of commodities which have achieved a recognized position in the Chinese market through judicious advertising and enterprising sales-

manship. This is especially true as long as the quality of manufactured products remains on comparatively low levels. The Chinese Trade Marks' Bureau has been exhibiting very commendable impartiality in its attitude toward the protection of Chinese and foreign trade marks, but considerable pressure is being exerted by certain Chinese organizations on false pleas of patriotism to extend special consideration to Chinese factories which not only make products in imitation of imported commodities, but also copy the trade marks of these articles.

Along certain lines, China offers a promising field for foreign capital in the installation of branch factories. While there are obstacles in the way of the establishment of foreign factories in China, yet there is a very noticeable tendency on the part of enlightened Chinese to encourage foreign capital and technical skill in the program for the industrialization of the country. It is difficult to conceive of a more practical method of encouraging in China education in the manual arts than through facilities accorded by the branch factories of successful foreign manufacturing plants.

The intelligent Chinese public is becoming increasingly appreciative of the benefits which the country will derive from a campaign calculated to conserve and expand domestic industries in the village, which is in reality the basic unit in the social life of China. The fact that China is essentially agricultural and the great mass of the population depends upon the soil for sustenance has led to the organization quite recently of a large and representative commission on rural rehabilitation. Much interest is being displayed throughout the country in plans for improving conditions among the agricultural population. A mass education movement, as inaugurated by James Yen, devoted its first years of experimental work to activities among the city populations, but within recent years it has transferred its labors to the country, and is now working on plans concerned almost entirely with rural improvements.

The food-stuff problem has become serious in that imports have in recent decades mounted very considerably, amounting now on the average of from three to four hundred million dollars Chinese currency annually. At present Hunan Province is carrying a heavy surplus from a bumper rice crop of last year and finds itself unable to market it profitably, in spite of the fact that Canton is a heavy importer of foreign rice and Shanghai of foreign wheat. This is not a

healthy situation. In this connection it is interesting to note that China's flour mills appear to be depending in an increasingly large way upon imports of foreign wheat. They are now consuming between fifteen and twenty million bushels a year. Gradually the Chinese people are becoming heavier consumers of wheat products and eating less rice. As for domestic grain, Shanghai mills can better afford to buy Argentine or Australian wheat at the present ruling market prices and deliver it cheaper in Shanghai mills than could wheat be delivered from many parts of the interior of China, even though the farmers were to make the Shanghai mills a present of this wheat, provided they would transport it to their mills. This fact emphasizes the great need in China for economic transportation, improved conditions in the interior tax situation, and more efficient methods in collecting good-quality raw materials.

A perusal of the long and varied lists of imports and exports at the present time, as compared with the very few items which figured in its foreign trade fifty years ago, is the most eloquent testimonial to the country's economic progress. Not only have imports increased manifold in volume and value during this period, but of still greater significance to the future is the increasingly larger import of such items as mechanical equipment, lubricating oil, scientific instruments, laboratory apparatus, newsprint, raw cotton, and other articles. If a person had had no previous intellectual contact with China and were presented with a set of China's Returns of Foreign Trade, he could, after a careful perusal of the statistical tables, write a very comprehensive and dispassionate dissertation on wonderful progress during the past half century.

Commercially, the modern corporate company is gradually assuming a position of importance in the economic life. Banking and retail merchandizing have made further strides in this direction than have other lines of commercial activity. It is a remarkable tribute to the sane and sound methods of the modern-type Chinese bankers that, during this past decade, in the midst of turbulence, turmoil, and a world economic depression, the numbers of failures among modern type banks have been almost negligible. The Ministry of Finance last year achieved the remarkable record of balancing the budget of the National Government for the year 1932, in so far as having to do with finances under the direction of the Ministry. In other words, this statement indicates that the Government is meet-



ing its expenses from its revenues without having to resort to further borrowing.

Up to the present, comparatively few Chinese concerns feature among the import and export houses of this country. This business is for the most part in the hands of foreign concerns and will probably continue so for some years to come. Reasons for this are obvious. However, any very considerable further expansion in China's foreign commerce is dependent upon improvements in domestic trade and industry. In the process of raising the economic levels of the masses, vast opportunities for world-trade expansion must follow. Concerted action by western nations in an intelligently devised program for the encouragement of China's transition into a modern economic society will go a long way toward relieving the present deplorable world depression. What any one nation may do toward enhancing China's trade will, if predicated upon the principle of the open door of equal opportunity, redound to the advantage of all other trading peoples.

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