

Among the larger structures are the new Testing Laboratory of the Institute of Chinese Engineers, the National Headquarters for the Aeronautic Association. In short, new Conservatory of Music, the new Telephone Exchange, and greater Shanghai in the making!

## Public Utilities in Greater Shanghai

By YIH CHANG-MENG (易常孟)

THE public utilities of Greater Shanghai may be divided into two kinds: those that are managed by the municipality itself and those that are managed by private concerns. Of the former category, such things as wharves, buses, water-supply stations and broadcasting stations may be mentioned. The latter category consists of electricity, buses, trams and water-supply. As to future plans, one may mention the godowns which are under construction by the city government, and the tramways which will be laid down in the Civic Centre. The following is a detailed account of all the above-mentioned enterprises:

### MUNICIPAL-MANAGED PUBLIC UTILITIES

(a) *Wharves*:—Along the Whangpoo River from the East Gate Road (東門路) southward to Tung Chia Tu (董家渡), most of the wharves belonging to the municipality are to be found. Originally these wharves were managed by private firms. Since 1930 the Bureau of Public Utilities has taken over their control. From that time on, much progress has already been made in widening the banks, repairing the wharves and dredging the river. Five wharves have since been added to the ones which were already in existence, so that all together there are at present eighteen wharves. Much dredging work has also been done, and the money that has been spent on it has already exceeded \$126,000. Building all these additional wharves has made it possible for many of the bigger steamers to dock there. During the fiscal year of 1933-34 the steamers that docked alongside these wharves, numbered 4,193, with a total tonnage of 3,257,383, as against 3,085 steamers with a total tonnage of 2,373,328 during the 1931-32 fiscal year.

(b) *Public Buses*:—Buses that are under the management of the Bureau of Public Utilities are at present eighteen in number. They started in operation in April, 1934. Originally, it was planned to have only three bus lines. Aside from the No. 2 line, which is no longer in operation, there still exist line No. 1, which is between the Old West Gate (老西門) and Lunghua (龍華), and line No. 3, which is a circle line around the site of the Old City Wall. All together these three lines are 13.5 kilometres in length. Since the winter of 1934, two more lines have been added. Line No. 4 is a circle line with Tarpu Bridge (打浦橋) as the starting point, and its length is 12.2 kilometres. Line No. 5 is also a circle line starting from St. Catherine Bridge and its length is 8.3 kilometres. Also, the Bureau of Public Utilities is planning to have additional lines in Pootung. Since April, 1935, one line has in fact been started and the number of buses running is five.

(c) *Water-supply Stations*:—In view of the fact that, besides Chapei and Nantao, people in the other districts are unable to get water-supply, the Bureau of Public Utilities has since 1934 established a water-supply station for

Siccawei and the districts around the wharves in Nantao. The main pipes of the water-supply are all together 1,663 metres in length.

(d) *Broadcasting Stations*:—Plans have already been made to establish a broadcasting station in the Civic Centre. When it is completed, the station will have an electric power of 500 watts and a wavelength of 900 kilocycles.

### PRIVATELY-MANAGED PUBLIC UTILITIES

(a) *Water-supply in Shanghai*:—There are all together four water-supply companies. Aside from the one in the International Settlement and another in the French Concession, there are two managed by Chinese. They are the Chapei Water Supply Co. and the Water Supply Company for the Western District. The water furnished by these two companies is examined regularly by the Bureau of Public Health and its quality has been found to be most satisfactory.

(b) *Electricity*:—The electric power companies that are under Chinese management are all together five in number: the Chapei Power Co. (開北水電公司), the China Merchants Power Co. (華商電氣公司), the Pootung Power Co. (浦東電氣公司), the Hsianghua Power Co. (翔華電氣公司), and the Chenju Power Co. (真茹電氣公司). In order to unify the electrical supply of the municipality, the Bureau of Public Utilities has effected the following plans of reforms:

1. Improvements have been ordered to be made in the generating stations of Chapei and the China Merchants Power Co.

2. The small generating stations have been forbidden to generate electricity and may only buy it from above two companies and supply it to consumers.

3. Better co-ordination will be established between the Chapei Company and the China Merchants Power Co.

Aside from these power companies, there is another one under the joint control of Chinese and foreigners, namely, the power company in the Western District. This company supplies electricity in the extra-settlement roads area. Originally the electric supply in this district came from the Shanghai Power Co., but since January, 1935, from the new company.

(c) *Tramways*:—The China Merchants Tramway Co., at present operates four lines: first, between the Kiangnan Arsenal (高昌廟) and the Small East Gate (小東門); second, number 2 circle line; third, No. 3 circle line; fourth, between the Arsenal and the Old West Gate (老西門). There are all together fifty-two tramcars and twenty-five trolleys. The total length of these lines is 23.5 kilometres. Under the direction of the Bureau of Public Utilities, many improvements have already been made by the tramway company, and many of the rail-lines have been repaired since 1934.

(d) *Public Buses*:—Buses in the Chapei district are owned and managed by the China Merchants Public Bus Co. There are at present four lines: the first line between the North Station (北車站) and Kiangwan (江灣); the third line between the North Station and the Wireless Station in Chenju (真茹); the fourth line between the North Station and the Civic Centre, the fifth line between the North Station and the dormitory of the staff of the City Government. The second line, which used to run between North Szechuen Road and Heng Feng Chiao (恆豐橋), is no longer in operation, due to the scarcity of passengers. During the undeclared war in Shanghai, the company suffered heavy losses, but since then, new buses have been added and business has been gradually improving. According to the statistics of the company in the year 1934, the total number of passengers was 3,488,500.

#### FUTURE PLANS

(a) *New Godowns*:—Since the building of the wharves on the Nantao waterfront many of the steamship companies have seen the wisdom of docking their ships there. Unfortunately there are no godowns around the wharf dis-

trict, and accordingly the Bureau of Public Utilities has decided to build them in the near future.

(b) *Tramways in the Civic Centre*:—For the development of the Civic Centre, it is imperative to facilitate means of communication with other sections of the city. A plan has already been drawn whereby the building of tramways for the Civic Centre will be completed in three periods. It is planned to have all together nine lines. During the first period the following three lines will be built: line No. 1 from North Szechuen Road (北四川路) to Heng Feng Chiao (恆豐橋), line No. 2 from North Szechuen Road (北四川路) to Hsiang Yin Road (翔殷路), and line No. 3 the Civic Centre circle line. During the second period the following lines will be built: line No. 4 from Sung Hu Road (淞滬路) to Kiangwan (江灣), line No. 5 from San Min Road (三民路) to Woosung (吳淞), and line No. 6 from Hsiang Yin Road (翔殷路) to Ning Kuo Road (寧國路). Line No. 7 from the planned railway station in the Civic Centre to the River bank, line No. 8 from Chayin Road (閘殷路) to Pingliang Road (平涼路) and line No. 9 from New Republic Road (共和新路) to Lunghwa will be built during the third period.

## Reforms Of Shanghai's Taxation System

BY YANG HSIN (楊信)

THE chief problems of the financial administration of the Municipal Government of Greater Shanghai are two: the archaic system it inherits from the past, and the financial stringency caused chiefly by the undeclared war of Shanghai. In this article I shall try to show, from facts furnished by the Bureaux of Finance and Land Administration, how they have dealt with these two problems in the past.

The first is, in reality, a set of problems which demand immediate reforms. Chief among them is the farm tax. The old process of collecting this tax was that after the designated time in the year for its payment, receipts the unpaid taxes were entrusted to the *tipao*<sup>(1)</sup> for collection. This is what is known as the *kuenpao* (捆保).

This system was not without drawbacks in actual operation. For the various *tipao* were entrusted with this unenviable work by rotation, and there was no "handing over" of the uncollected tax bills between the *tipao*. There was also a rule that no tax for the current year can be paid, unless the taxes of the preceeding years have all been paid. These two practices produced the consequence that if a landowner, after failure to pay his taxes for some years, should one day become able to pay them, before he could pay his rates for the current year, he had to pay his taxes in arrears to the different *tipao* who had charge of the collection during the previous years. And to make the matter worse, the *tipao* did not maintain any office, and sometimes even had no fixed residence. Thus the system of collection must be held responsible for at least part of the unpaid taxes. From 1928 to 1933, inclusive, the total of Greater Shanghai farm taxes entrusted to the

*tipao* for collection, but remaining unpaid, amounted to over half a million dollars.

Both to remedy such a situation and to comply with the Second National Economic Conference's resolution that the government should not send out collectors with receipts to collect the farm tax, it was decided by the city government that beginning from 1934 all the landowner must go to the municipal government's tax collection offices with the receipts of the previous year to pay the tax of the current year. The *tipao* is now responsible only for urging the land owners to pay their taxes.

To collect the farm tax in arrears two steps were taken: first, to require the *tipao* to hand in all the payments and the unpaid receipts; and second, to require the land owners to pay their taxes in arrears to the collection offices within a stated period. If they do so, not only no fine would be imposed, but also, as a matter of inducement, a ten per cent reduction of the unpaid rates would be allowed. If, on the other hand, they delayed the payment after the stated period, in addition to the payment in full, a fine would be imposed upon them.

Another heritage to the Municipal Government of Greater Shanghai from the past was the chaos in boundary lines, which necessitated a new land survey and, connected with it, the issue of ownership certificates—these formed the most important work of the Land Administration Bureau in the past few years. The necessity of the survey may be seen from the fact that the last survey of the land in this part of the country was conducted in 1855, or eight decades ago. Many of the boundary signs were lost, the maps became inaccurate, and some of the lots divided among different owners. So a new survey was started, and at present a survey of 75 per cent of the land within the municipal boundary has been completed. The regions surveyed include Chenju, Woosung, Kaochiao,

(1) *Tipao* is a sort of constable, whose duty is, like the precinct captains of the American political parties, to know all that is worth knowing about every one in their precincts—Y. H.