History of the Sericultural Industry in China

Summary of a brief history of China's sericultural industry published by the Shanghai Bureau of Inspection and Testing of Commercial Commodities, National Government of China, Ministry of Industry, Commerce and Labor

It is well known that silk was first discovered in China in the year 2852 B. C., by Shi Lin Chi, wife of the first Chinese emperor, who also invented the hand loom for its use. From that time up to the beginning of the Christian era, China was the world's only producer of silk. Even in that country, only the imperial family and nobility were allowed to use it. But after a period of nearly 2900 years, the sericultural industry gradually extended to other countries. It was introduced into Japan in 199 A. D. by a Chinese, Koma-O, and into Rome about the middle of the sixth century by two Persian monks returning from China. The movement continued to spread until by the twelfth century, nearly all of Asia, and the European countries bordering on the Mediterranean were engaged in sericulture.

From the thirteenth to the nineteenth century, China pursued her sericultural way alone. Her commercial relations with other countries were very limited, for one reason, and for another, she was no longer the only source of supply. But between 1850 and 1860, silkworms in Europe were nearly wiped out by the disease pebrine; and as the Chinese Government had opened trade relations with foreign countries in 1842, the way was open for the export of Chinese silk, and in 1869 China was supplying half the world's supply of raw silk.

This silk was largely Tsatlee and Tussah, reeled in the native way. It was not until the latter part of the nineteenth century that the new method of reeling was introduced. In 1879 a modern steam filature was first established in Shanghai. This was followed by two others, making three steam filatures in operation in 1880. These early filatures met with great difficulties, not only in securing and training reeling girls, but also in building up a foreign trade. The work was not abandoned, however, even though it progressed slowly. In 1898 the Soy Lun, Sin Chong and Lung Wa

Steam Filatures were built in Shanghai. Others followed, in Wusih, Kiangsu, and Tong Si, Chekiang, at first, and later in a wider zone, which included the provinces of Canton, Szechuen, Hupeh, Shantung and Honan. The effect of all this work was gradual but endur-More and more attention was paid to the study of sericulture. In 1898 the West Lake Sericultural School was established in Hangchow, Chekiang. Since then these institutions have greatly increased. Five universities in China now maintain large sericultural departments. This includes Nanking University and Canton Christian College, and three which are run by the Chinese Government, the Central University in Nanking, the University of Chekiang in Hangchow, and the Sun Yat Sen University in Canton. The agricultural colleges of the provinces of Hopeh (Chili), Shensi, Shantung, Honan, Kiangsi, Szechuen, Canton and Hunan are also opening sericultural courses. In addition there are nearly thirty trade schools, one hundred and twenty trade middle schools, and ten girls' schools giving considerable time to sericulture. Beside this, the experimental stations in the various provinces are contributing greatly to sericultural improvement.

All necessary phases of improvement are being taken into consideration. Students are continually being sent to Japan, France and Italy to study methods and means of improvement. The International Committee for the Improvement of Sericulture in China was organized in 1918 by the foreign Chambers of Commerce and the Chinese and American silk merchants in Shanghai, and has greatly advanced the production of disease-free eggs and scientific rearing methods with the farmers. The International Testing House, established in Shanghai in 1921 by the Americans and the Chinese, has contributed greatly to the improvement of silk reeling and export. The

Chefoo Silk Commission has undertaken practically the same work in Shantung as the International Committee has in Central China. This Commission has been functioning since 1920, and consists of the Superintendent and Commissioner of Customs of the port, with two Chinese and two foreign representatives of the silk trade.

Work in Specific Provinces

In the Province of Chekiang, several hundred thousand dollars were appropriated in 1927 for the establishment of the Chekiang Provincial Sericultural Experimental Station. Its work includes the production of disease-free eggs, the promotion of autumn crops, the development of demonstration rearing stations and improvement in the reeling industry.

Kiangsu has also greatly improved in sericulture. In 1927 the law limiting the number of cocoon hongs in the native reeling silk districts was repealed. As in Chekiang, the sericultural zones in Kiangsu are now open to the free establishment of cocoon buying organizations. A fund of \$360,000. for a modern experimental station has been appropriated. The new station has started a mulberry station in Wusih, and the buildings are now being erected. A sericultural station already established in Yangchow is taking care of sericultural development in Northern Kiangsu.

The Province of Anhwei has appropriated \$240,000. for sericulture. Plans for the work include not only demonstration rearing stations and a model sericultural station, but also a steam filature of one hundred and twenty basins in the port of Wuhu.

In Canton, the provincial government has co-operated with Canton Christian College in establishing a provincial sericultural bureau to distribute disease-free eggs among the farmers. The government has also established a sericultural experimental station at Sun Yet Sen University. One of the experiments of interest here has been the introduction of univoltine breeds to be reared in the spring in place of the polyvoltine.

Canton's appropriation for sericultural work amounts to \$100,000. annually.

Government Testing Department

Another step in the development of the silk industry in China is the establishment of a silk testing department in Shanghai by the Bureau of Testing and Inspection of Commercial Commodities under the Minister of Industry, Commerce and Labor. The work to be done includes the establishing of conditioned weight as a merchandise basis, a study of classification, and reeling improvement.* In addition to the financial backing of the Central Government, that of the provincial governments of Kiangsu, Chekiang and Anhwei, as well as the leading silk merchants in Shanghai, has also been obtained.

It is expected that similar testing facilities will later be installed in Canton.

It will be seen from the foregoing review that the work of improving China raw silk is not confined to any one field, but is becoming thorough and exhaustive. The Hushukwan Girls' Sericultural School, first established in Shanghai as a private institution, and later moved to Hushukwan, Soochow, is one of the important centers of training. Nanking University has also done extensive improvement work among the farmers. The Chefoo Silk Improvement Commission has accomplished a great deal in the improvement of Tussah silk in Shantung. The Shanghai Steam Filatures Association has sent delegates to Japan to study reeling, and a group of reelers from Wusih have also visited Japan for the same purpose.

This interest has been reflected in an increase in white steam filature production in Central China, which has grown from 106 filatures, with 26,898 basins in 1924, to 175 filatures with 43,087 basins in 1929. These filatures are scattered over a wide area, especially in the Province of Chekiang.

Possibilities in China

China has an abundance of cheap and fertile land, and labor is plenty, in addition. With the awakening of interest and desire for improvement in the production of raw silk, six definite

^{*}The Shanghai Testing House, formerly operated by the United States Testing Company, in conjunction with the Chinese, has now been taken over by the Chinese Government, and should be a valuable factor in the work of improvement.

lines of endeavor have been laid out. They are; government supervision and encouragement, the division of the industry into modern independent egg production and silk reeling enterprises, a year-round egg production and cocoon rearing, the diversification of the reeling industry and the extension of sericulture

in the interior, the increase of steam filature production for export, and the development of direct foreign trade.

It is believed that the carrying out of this progressive program will be reflected in the near future in the commercial growth and advance of the raw silk industry in China.