


Leaves of China.

BY NICHOLAS ROERICH

N Shantiniketan there was recently opened a Chinese Hall dedicated to Sino-O-Indian friendship. Rabindranath Tagore indeed builds way-signs on the noblest paths. Remembering China, there always comes to mind first of all Chinese wisdom, embodied in the Teachings of Lao-Tze and Confucius. One remembers the grandeur of the Great Wall and innumerable ancient Temples. But at the moment I want to recall not antiquity, but the beautiful achievements of modern China, when despite the difficult times there are being created excellent cultural centres. I want to dedicate this leaf to the Fan Memorial in Peping. May this diary leaf remind of the leaves of botany.

Confucius enjoined his followers "to study as much as possible all birds, animals, plants and trees."

In Pepin, not far from the picturesque north lake where towers a beautiful white suburgan on a hill, alongside the Pepin Library, there can be seen the new and spacious building of the Institute in memory of Fan, a Chinese leader who repeatedly occupied ministerial posts and was a patron of the sciences. Fan was always highly interested in natural history and organized a Museum of Natural History in Pepin. It is written that he took an interest in the fate



of this institution even during his illness. Therefore the society of "Chang-Shi" and the "China Foundation" have named the Institute in memory of this great Chinese savant. The Institute has been in existence since 1928 and since this time there have been carried on in it some very important works. Primarily the Institute has devoted its occupations to Chinese flora and fauna. At the formation of the Institute it had the comparatively modest annual budget of 30,000 Mexican dollars and was lodged at first in the old residence of Fan himself. Doctor Ping was named the first director, with one professor, two assistant professors, two assistants and one artist. At present its budget has grown to 66,000 local dollars; besides the director and professor, there have entered into the staff of the Institute five assistant professors, twelve assistants, three artists and two taxidermists.

The Institute proposes through its fellows to carry on the work of establishing a national herbarium and to concentrate especially on the flora and fauna of Hupeh province. Besides this province, botanical and zoological collections are being made in Szechuan, Yunnan, Kwantung and other localities. The herbarium already contains more than 38,500 items, not counting the many necessary duplicates. In the technological laboratory there are more than 3,000 dendrological forms, of which 1,826 belong to China. In the zoological section are more than 105,000 items. In addition, in the botanical section there is a collection of more than 17,000 photographs of plants.

The publications of the Institute are contained in four series of bulletins of the Institute—Chinese plants, Chinese fauna, and Chinese shrubs. In addition, there is printed a series of popular reference books in the Chinese language. The Institute works in closest co-operation with the Agricultural Institute of Kiangsi and with the botanical garden of Kuling. This botanical garden looks after the raising of an enormous number of Chinese plants of economic value, in order to cultivate for domestic use a large number of important Chinese flowers which are highly esteemed abroad but comparatively little cultivated in China itself.

This garden pays much attention to the planting of trees in order to promote in this direction the forestation of South-eastern China. There likewise enters into this work the cross-breeding of Chinese flowers—this is an enormous field for investigation with large economic significance.

Thus there enters into the immediate programme of the Fan Institute; (1) to collect the richest herbarium of China, devoted principally to the most important provinces; (2) to carry out the fullest investigation of Chinese dendrology, publishing illustrated books on the trees of China; (3) to make the Lishan botanical garden a centre of dendrological studies in China; (5) to enrich the collection of birds, fish, and molluscs; (6) to investigate the biology of sea and fresh waters and to promote fisheries.

The Fan Institute, in its brief six-year existence with its small budget and the few members of its scientific staff cannot, of course, be compared with such well-established institutions, as for example, the Royal Botanical Garden at Kew near London or the Biological Bureau in America, but it is a pleasure to see that within the few years of its existence the Fan Institute represents in itself an already large, nationally founded institution with all the elements for rapid and vigorous development.

Each institution primarily expresses in itself the ability and enthusiasm of its leader. "As is the shepherd, so is the flock." In this respect the Fan Institute has been fortunate in having as its director Hsen-Su-Khu, an outstanding Chinese scholar, who brings to the institution that genuine patriotism which is manifested as a true pledge of success.

In the "Natural History Bulletin," Doctor Hsen-Su-Khu, writes: "Living in a country which is rich in flora and fauna, we Chinese are manifested as innate naturalists; our forefathers, long before Confucius, had already studied and put into usage the vegetation and animals of our country. Besides the legendary sage, the Emperor Shen-Nung, the father of the Chinese Pharmacopoeia, who in his extraordinary talents tested a hundred remedies, we find among the thirteen classics of the pre-Confucian vocabulary "Erkh-la", a great number of names of plants and animals

written down and explained. Confucius himself enjoined his followers—"to study as much as possible the kinds of birds, animals, plants, and trees." The great lexicographer Khan-Shu-Shen, in his great dictionary, "Svekh-Ven," included many names of plants and animals. The first herbal, "Pen-Tzao" refers to the Tao-Khun-Chin—Taoist scholarly dynasty of Ts' in. Since that time many editions of herbals have been written, together with treatises on the mountain peonies, oranges, teas, the plants and trees of South China, including funguses and mosses. The great research worker on plants in the Ming dynasty, Li-Shi-Tzin, went over the old herbals and compiled from them his famous book, "Pen-Tzao-Khung—Mu." Finally the scholarly statesman, the governor Bu-Chin-Chun, living in the early period of the Manchu dynasty, completed his great work, "Chi-Bu-Ming-Shikh-Tu-Kogo," the first purely botanical treatise, in which he described several thousand kinds of plants, accompanied by many finely executed illustrations. These illustrations were so beautifully done that many of them can be fully used for the identification of species and even in the case of such technically difficult types as orchids. Thus, thanks to the assiduous labours of our illustrious forefathers, we Chinese are more amply provided with botanical sources than any other people in the entire world".

"The progress of the botanical sciences in China, being based on the brilliant attainments of our ancestors, inspires bright hopes. As you know, biological science as understood at present has only recently been established in China. Botanical researches even up to fifteen years ago were almost unknown. But now we have twenty-three universities and higher schools throughout China, both governmental and private. Each of them has a biological department with trained personnel, adequate budget and completely equipped laboratories. In addition, there are six institutes for investigations in which the study of botany is conducted excellently". Then follows a description of the problems and attainments of the previously mentioned scientific institutions, in which you see a genuine optimism

based on the contemporary patriotic feelings being manifested in present-day China. At the end of the report the author tells about the botanical society organized last year. In the society participate some seventy experienced botanists, wellknown for their investigations in various branches of this science. A popular journal is to be published. In each issue of the journal there is proposed a botanico-horticultural article acquainting the readers with the priceless treasure of the beautiful ormental plants of China, so highly esteemed everywhere, yet, strange to say, so little cultivated by the Chinese themselves. The activity of this society ought to propagate botanical information between amateurs of this subject throughout the country.

"Looking at the latest progress of botany in the country, I rejoice at the excellent progress of the attainments of professors of this science; to a certain extent I am dissatisfied with the comparatively small cooperation of the amateurs. We must understand that in Europe progress in the botanical and Zoological sciences is supported to a noteworthy degree by the endeavours of amateurs."

"Chinese scholars are celebrated for their researches in archaeology; indeed, they can also attain as much in natural history if their hearts turn to it. I believe that the progress of the botanical and zoological sciences in this country will be incomparably more rapid if it be not alone supported by the professors of biology."

One must fully agree with the conclusions of the venerable author. Science must indeed invite all amateurs into its reserved fields of science. Precisely love and hearty solicitude create those brilliant sanctuaries which move future generations along the path of culture. The deduction of the true scholar shows how much one can rejoice at the latest strivings of the Chinese Societies. In place of a cold seclusion, we see in his words a broad benevolent summons to cooperation. It is pleasing to see how the ancient temples and the beautiful, most refined structures of creativeness are not torn away as something remote, but serve as the basis of a new and living cooperation.