

THE MOUNTAINEERS OF TONKIN.

FATHER PINABEL'S "Notes sur quelques peuplades sauvages dépendant du Tong King" is timely. He describes the mountaineers of the valleys of the Maa and Chou rivers, who are called Phou-Tays or Tays, but are commonly known to the Annamites as 'savages.' They reside in villages, are divided into tribes, each having a chief to whom great respect and obedience are accorded. Although, since 1834, Annamite mandarins have been appointed to each tribe, yet the Tays refer all disputes among themselves to their own chiefs, whose authority they recognize as superior to that of the mandarins. Medicine as an art is unknown: each family, however, has some recipe whose preparation is a jealously guarded secret.

The houses are made of bamboo, with roofs covered with palm-leaves; the whole raised upon piles to four feet above the ground. Below is the poultry-yard, where, if the owner is rich, pigs, oxen, and buffalo are kept with the fowl. The square fireplace is made of boards covered with earth. There is no chimney. Upon the hearth are three large stones, arranged as a tripod, on which, if nearly meal-time, rests a pot of boiling water, which supports a bamboo tube containing rice. This tube is pierced so as to permit the steam to pass through the rice, by which it is delicately cooked. The women stay about the cooking-fire, while the men resort to another fireplace at a lower level. If any one wishes to build a house, all the inhabitants of the village come to help, for no other remuneration than the customary feast when the house is finished. To celebrate this event, the head of the family kills a pig or a beef, and offers wine. The wine is made from rice and bran, and left to ferment for about a month in a jar hermetically sealed. When it is opened, water is added, and the guests seat themselves around it, and suck up the liquor through long reeds. The wine, which is sour but agreeable, contains so little alcohol that it is extremely rare to see a person stupidly drunk. After taking the wine, they gather in groups of four about little tables, and eat. This is followed by drinking tea and smoking.

Although amiable and conciliatory, these people are somewhat careless and apathetic, without solicitude for the morrow. Rising with the dawn, they smoke, fritter away some time in the house, start out fasting, and work until ten or twelve, when they return to dine. This repast over, they rest, take a *siesta* in summer, and in the afternoon return to the mountain fields for a few hours, or fish, hunt, or look for bamboos to make palisades about the fields lest the buffalo eat the newly planted rice. The evening is passed quietly in the corner of the hearth, and about eight o'clock supper is served. There are but two meals a day. The women's duties are more arduous than the men's, since, besides those within the house, it is theirs to pick, transport, and store the rice, and to fetch firewood from the mountains.

After death, they bathe the body, clothe it, and envelop it in a coverlid and a mat. Sugar-cane, rice, and salt are put into the mouth, — the sugar-cane to

request the *manes* of the dead to be favorable, the salt to beg the deceased to preserve a good heart towards his parents. A rude coffin is made by felling a tree, cutting out of the trunk a piece of sufficient length, which is split and each half hollowed out. The day and hour of placing the body in the coffin are carefully chosen, for fear of evil consequences to the survivors if an unfortunate choice should be made. Before closing the coffin, the body is uncovered, the eyes opened that he may see the heavens, and then the coffin carefully closed. If the means are not at hand to defray the expense of burial, the coffin is preserved in the house, in some cases even for months.

On the day of the final ceremony, if the family is rich, a buffalo is killed, which is offered to the parents and inhabitants of the village, so that they may make charcoal. This charcoal is intended to put into the grave to preserve the coffin from dampness. Another buffalo is killed, so that the assistants may prepare a little hut to be placed over the tomb. A third buffalo is killed for those who inter the body. The site of the tomb is chosen in the forest, where it is forbidden to cut trees, or whatever may grow there, for fear the *manes* of the dead may avenge the outrage. At the end of the ceremony the parents seek the mountain stream. There a diviner has set up two reeds to form a pointed arch, beneath which each parent should pass. They are sprinkled with the water in which the rice was washed, and, after washing their garments, return to the house. At the foot of the ladder, before entering, they tear their hair. The bereaved eat rice from a sort of basket, and leave every thing in the house in disorder to witness to their grief. To the diviner, who reproaches them, they answer, "Our father is dead, and we no more know what to say or do." The diviner then restores the house to order, and sprinkles it with various herbs to chase away evil spirits, that in the future the house may enjoy peace and happiness.

THE WORK OF THE SIGNAL-OFFICE UNDER GENERAL HAZEN.

THE recent examination by the joint commission of General Hazen and other witnesses, as to the efficiency and economy of the present administration of the signal-office, is said to have brought out several statements as to the character of the work done by the weather-bureau, and the progress made by it during the last few years. The following is a brief summary of these, and especially of Professor Abbe's statement showing the status, and work being pursued, during the present fiscal year:—

The signal-service employs one chief, fourteen second lieutenants, and five hundred enlisted men, of whom one hundred and fifty are sergeants, thirty are corporals, and two hundred and twenty are privates, but all generally known as signal-service observers. These five hundred and fifteen persons constitute the signal-corps proper: but six officers detailed from the