The social organisation of the Nosu tribes is of great interest. Each tribe is divided into two groups or castes, the Black Bones and the White Bones. Each marries only within the group, but the latter are a little the more civilised, as they have adopted Chinese customs to a limited extent. The Black Bones are the influential ruling and leading class, hereditary aristocrats. They do not work and do not wash themselves. They have unlimited power of life and death over the White Bones and slaves. The White Bones are the servile and inferior class. They live under the protection of Black Bones, are comparatively clean, industrious, and carry on trade with the Chinese. They always walk instead of riding horses as do the Black Bones. A Black Bone may be degraded to the status of a White Bone for various reasons, among these being defeat and capture by Chinese. Apparently both Black and White Bones belong to the same stock.

They have a written language of which knowledge is confined to the shamans.

Dr. Kilborn, reporting on blood pressure, compares the results with those found in Western, Chinese and African determinations. The most striking fact revealed is that the blood pressure of the Nosu, besides being low, tends to fall to still lower levels as age advances, agreeing in this with results obtained among African natives, but contrary to the tendency in Western civilised peoples. The average systolic pressure is 104·5 mm., the average diastolic, 72·8 mm., and the average pulse pressure 31·7 mm.

Dr. Maxwell's report on disease directs attention to the surprising fact that there is a marked difference in incidence in some of the commonest diseases of the country as between the Chinese and the Nosu. Smallpox, for example, is rare, contrasting strikingly with conditions among the Chinese. This in part, perhaps, but not entirely, is due to the practice of vaccination carried out in certain localities by a modified arm to arm method. A form of typhus and relapsing fever is considered very fatal. Tuberculosis is strikingly absent in all its forms, again contrasting with Chinese conditions. Leprosy showed a surprising frequency. It is probably the most serious disease of the locality, affecting both Chinese and the Nosu. In the more primitive parts the leper is either burnt or buried alive. Syphilis is less common than among the Chinese, but is not rare. Malaria, absent at the higher levels, is fully in evidence in the lower valleys; but it does not seem to be severe. Infestation with round worm is the most common affection among children; but of all the fatal diseases, infantile diarrhœa is the worst. The dysenteries scarcely seem to be common. Chronic indigestion, owing to the diet, is common in adults. Some cases of gastric ulcer and pyloric obstruction were seen. Of skin diseases, few suffer from the almost universal Chinese complaint of scabies. Few external tumours were noted, but information was received of an area of goitre towards the Yunnan border.

Dr. Cunningham reports on the eyes. He notes that the Mongolian fold appears in less than half of the Nosu examined. The position and constancy of the superior lid fold corresponds closely to that of the Occidental. Another fold in the lower lid is practically always present and is particularly well-marked in the child and young adult. The irises were homogeneous, and in colour the highest percentage was found to belong to group number 14 of the Martin-Schultz scale. A number of pathological conditions were noted.

The general impressions gathered from Dr. Mullett's observation of the teeth were of well-developed, well-functioning dental organs in well-formed jaws, the third molars being well developed as contrasted with the Chinese, where impaction or crowding is very prevalent. The teeth were from medium to large, usually presenting a combination of the tapering and ovoid. There is much abrasion owing to the character of the food. 'Mottled enamel' was observed in many cases. Notwithstanding the absence of oral hygiene, caries was practically absent; but disease of the gums was almost universal.

Polyploidy in *Chrysanthemum*

PAPERS continue to appear showing the importance of polyploidy in flowering plants. A recent paper by Shimotomai (*J. Sci., Hiroshima Univ.*, Series B, Botany, Vol. 2, Article 1) summarises a considerable amount of work on the wild Japanese species of *Chrysanthemum* and the cultivated forms.

The fundamental chromosome number is 9. Two of the Japanese species are decaploid, two octoploid, three hexaploid, one tetraploid and four diploid. In geographical distribution, the high polyploids (6*n*, 8*n* and 10*n*) occur only on the sea coast, the tetraploid species (*C. indicum*) is both coastal and montane, while only one of the diploid species (*C. nipponicum*) is coastal. Most of the species overlap very little in distribution. It is concluded that the higher polyploid species have been derived from the lower ones through maritime conditions acting as a stimulus. Thus *C. Shimotomaii* (6*n*), found on a short stretch of coast, is derived from the more inland *C. indicum* (4*n*). The still higher polyploids have perhaps been derived from crossings between lower polyploid species.

Chromosome counts in garden forms throw light on their origin. A group of twenty nearly related varieties have 53, 54 or 55 chromosomes and are regarded as derived from the hexaploid wild species. In another group of forty more distinct varieties with large heads and long rays, the chromosome number ranged from 52 to 67. These are much more specialised but are regarded as derived ultimately mainly from the same wild species, *C. japonense* and *C. Shimotomaii*.

Various crosses were made between wild species of chrysanthemum with different chromosome multiples, and these gave mostly true-breeding hybrids. Thus *C. japonense* ($n = 27$) × *C. pacificum* ($n = 45$) gave a constant hybrid with $n = 36$, except that the length of the ray florets varied from plant to plant. But in certain hybrids higher multiples appeared. For example, *C. Makinoi* ($n = 9$) × *C. Decaisneanum* ($n = 36$) gave an F_1 with $2n = 72$; and *C. Makinoi* × *C. japonense* ($n = 27$) produced an F_1 with $2n = 63$. The characters of *C. Makinoi* were more strongly marked in the hybrid, and in meiosis tetravalent and trivalent chromosomes appeared. The 3*n* additional chromosomes appear therefore to have come from *C. Makinoi*. But exactly how a diploid species produced 4*n* germ cells is not yet clear.