

## THE CAMEROONS DISTRICT OF WEST AFRICA.

At a meeting of the Geographical Society of Berlin, July 6, 1889, Capt. Kund gave a brief *résumé* of the results of the two expeditions led by him into the country lying inland from the Batanga coast, in the Cameroons district of West Africa, which is reported in the "Proceedings of the Royal Geographical Society." The opposition which the coast population offered to the entry of the expedition was only passive, but nevertheless very irritating. All kinds of stratagems, lies, deceits, and false directions as to routes—of course to no purpose—were tried by them. It was owing to the calumnious reports spread by the inhabitants of the coast, that the expedition, as it penetrated farther into the interior, encountered hostility from the natives, who, made uneasy by the reports conveyed to them by traders from the coast, became fearful, as the white men approached, for their wives and stores of ivory.

The violent attack made upon the expedition by the Bekok, on the first return to the coast in the spring of 1888, rendered it absolutely necessary, in order that the prestige of the white man in these regions should be maintained, for the party to return again as soon as possible to that part of the country; for the news had spread far and wide that the natives had succeeded in killing the white men, and in destroying the expedition. The re-appearance of the supposed dead men was consequently a great moral success, and the second advance presented hardly any difficulties. Among many tribes the expedition was even received with songs and dances, and everywhere the suspicion that the expedition had come for the purpose of taking vengeance quickly disappeared. Capt. Kund, on this occasion, announced most emphatically that nothing was further from his intentions than to take any unfair advantage of the natives, that he had left no stone unturned in order to convince them of his peaceable intentions, and that the first shot had never been fired from his side. It was continually the want of interpreters which caused the complications in which on different occasions he became involved with the natives.

Although the second journey resulted in little that is new from a geographical point of view, inasmuch as the route followed differed in unimportant points from that taken on the first occasion, still the detailed knowledge of the country was considerably increased, and a much more complete insight into the ethnographical conditions of the region was obtained. Thus the expedition became acquainted with a race of people, which, on the first journey, had remained quite unknown. The inhabitants of the primeval-forest region are of remarkably small stature, although not dwarfs, and are yellow-skinned. They roam through the forests without having any fixed abodes, and live by the chase. These people appear to represent the aborigines of the country, who were the first to make paths in the virgin forest. They call themselves the Bojaëli, but are named Baïea by the other tribes. They kill elephants with spears, and possess extraordinary skill in finding their way through the dense forest.

The ethnographical features of the southern Cameroons territory, between the Sannaga and the Campo, are, according to the present state of our knowledge, as follows. Between the Sannaga and the Njong dwell the important group of the Mvelle (Bakoko), who are very unequally distributed through the region of primeval forest as far as the coast range of mountains. The coast itself is here uninhabited. South of the Njong, the Banoko and Bapuko (the so-called Batanga people) live on the coast. They have probably come here from the north. In the rear of them dwell the Kasjua, called by the Batanga people Mabea. They belong to another race, and have probably immigrated from the south. The inhabited part of the coast is, with the exception of the banks of the Njong and Lokundje, where narrow belts of population—on the former the Bakoko, and on the latter the Kasjua and Bakoko intermingled—extend into the interior, nowhere broader than about nine miles. Then follows the uninhabited region of primeval forest, about one hundred and twenty miles broad, in which only the Bojaëli live. In the valleys of the first steep mountain-range the Ngumba live. They call themselves Mavumba, and are closely related to the Kasjua, having probably in the same way immigrated hither from the south. In the north they border at the Lokendje River, on the Batoko; in the south, on the Bulei. The latter belong to the Fang

group, and have pushed their way along the right bank of the Ntembe (Campo River) almost as far as the coast. They embitter the lives of the Ngumba people by constant attacks. East of the Ngumba territory, the country for a stretch of about forty-five miles is again uninhabited, and it is there that the second steep ascent to the great plateau of the interior of Africa commences. The plateau itself is extraordinarily densely populated, and by people closely related in their language to the Fang (Mpangwe, the Fans of Du Chaillu) on the Ogowe. Some porters belonging to the latter race accompanied the expedition, and they very quickly learned to make themselves understood by the people of the plateau. The sequence of tribes from the left bank of the Sannaga is as follows: the Jetoni, Botinga, Kollo, Jetudi, Jeundo, Bane, Tinga, Baba, Janguana, and Bulei in the south. The Jeundo and Tinga are distinguished in the most favorable manner from the peoples living farther west. They are of remarkably tall and slim stature, are well nourished, and thoroughly healthy. Their features are, in the case of both sexes, extraordinarily regular. They have a marked tendency to harmless gayety and dancing. The men wear round the loins a piece of bark cloth. It is peculiar that the women for covering their back parts use large bunches of grass threads colored red-brown, while their front parts are barely concealed by a banana-leaf. In the midst of this interesting people, at a point situated about 3° 48' north latitude and about 12° east longitude, and close on the boundary line between the Bantu and Sudan negroes, the expedition erected their station, at which Lieut. Tappenbeck is at the present time stopping alone.

SPRAYING WITH THE ARSENITES.<sup>1</sup>

NINE years ago, at the first meeting of this society, I presented a paper upon the use of Paris-green as a specific against the codling-moth. In that paper I gave the results of careful and elaborate experiments, which settled two facts which were very important in economic entomology,—first, that Paris-green was efficient as a preventive of the ravages of the codling-larva; and, second, that such use was entirely safe in respect to poisoning the fruit. To-day, less than a decade from the date of the discovery of this remedy, this method to combat the worst insect-pest of the apple-grower, is generally adopted by the more intelligent orchardists of our country. Its value is now universally conceded. Easy and cheap methods to apply the insecticide are now known and generally adopted.

For several years myself and others have been experimenting, in hopes to find that this same insecticide was equally efficient to destroy the plum curculio. For six or seven years I have sprayed plum-trees once, and even twice, with no apparent good. Test-trees close beside the trees sprayed, and that were not treated, were as free from attack as were the trees that were sprayed, and the trees treated were no more exempt from attack than the others. Thus I was convinced that this insecticide was of no value in this curculio warfare. Several of my horticultural friends, in whose ability to experiment and observe correctly I had great confidence, had tried this remedy with very satisfactory results. In 1888 I studied this matter very closely, and concluded that as the plum is a smooth fruit, with no calyx-cup, like that of the apple, in which the poison may lodge, and as the curculio lays its egg anywhere on the smooth rind, the poison would be very easily washed off, or even blown off by the wind. I thus concluded that my want of success was very likely due to a want of thoroughness. In 1888 I sprayed certain trees three times at intervals of eight days, and omitted to treat other trees close alongside. The benefit from spraying was very marked.

I also found that carbolized plaster (one pint of crude carbolic acid to fifty pounds of plaster) was quite as efficient to repel the curculio as was the arsenites. This was also applied three times. The season was very dry, and there were few or no rains to wash off the insecticides. This year I repeated the experiments both with the London-purple and with the carbolized plaster, but with no success. All the trees were severely attacked, and all the plums lost. This year we had almost daily rains, which were frequently quite severe.

<sup>1</sup> Abstract of a paper by A. J. Cook, read at Toronto, Aug. 26, before the Society for the Promotion of Agricultural Science.