and the semiferal pigs of New Granada have resumed this aboriginal character, and produce longitudinally striped young ; these must of course be the descendants of do­mestic animals introduced from Europe since the Spanish conquest, as before that time there were no true pigs in the New World. Another character by which the Euro­pean domestic pig differs from any of the wild species is the concave outline of the frontal region of the skull, a form still retained by the feral pigs in New Zealand.@@1

B. The diminutive pig of Nepal, the Terai, and Bhutan, *Sus salvamus,* has been separated from the rest by Hodgson under the generic name of *Porcula,* but all the alleged distinctive characters prove on more careful investigation to have little real value. Owing to its retired habits, and power of concealment under bushes and long grass in the depths of the great Saul Forest, which is its principal home, very little has been known of this curious little animal, scarcely larger than a hare. The recent acquisition of living specimens in the London Zoological Gardens has, however, afforded opportunities for careful anatomical observation.@@2

C. Two well-marked species of African swine have been with more reason separated under the name of *Potamochοerus.* The dentition differs from that of true *Sus,* inasmuch as the anterior premolars have a tendency to disappear; sometimes in adult specimens the first upper premolar is retained, but it is usually absent, as well as the first and often the second lower premolars. The molar teeth are also less complex ; the last especially has a much less developed heel. There are also characteristic cranial differences. The two species are very distinct in outward appearance and coloration. One is *P. africanus,* the South African River-Hog, or Bosch-Vark, of a grey colour, and the other *P. porcus* or *penicillatus,* the West African Red River-Hog, remarkable for its vivid colouring and long pencilled ears. It should be noted that the young of both these species, as well as of the pigmy *S*. *salvanius,* present the striped character of true *Sus,* a strong indication of close affinities, whereas in all the following forms this is -absent.

*Babirussa.—*Dentition: *i*2/3, *c*1/1, *p*2/2*, m3/3*; total 34. The total number of teeth is therefore considerably reduced, the outer upper incisor and the two anterior premolars of both jaws being absent. The molars, especially the last, are smaller and simpler than in *Sus,* but the great peculiarity of this genus is the extraordinary development of the canines of the male. These teeth are ever-growing, long, slender, and curved, and entirely without enamel covering. Those of the upper jaw are directed upwards from their base, so that they never enter the mouth, but pierce the skin of the face, resembling horns rather than teeth, and curve backwards, downwards, and finally often forwards again, almost or quite touching the skin of the forehead. There is but one species, *B. alfurus,* found only in the islands of Celebes and Buru. Its external surface is almost entirely devoid of hair. With regard to the curiously modified dentition, Wallace (*Malay Archipelago,* i. p. 435) makes the following observations. “ It is difficult to understand what can be the use of these horn-like teeth. Some of the old writers supposed that they served as hooks by which the creature could rest its head on a branch.

But the way in which they usually diverge just over and in front of the eye has suggested the more probable idea, that they serve to guard these organs from thorns and spines while hunting for fallen fruits among the tangled thickets of rattans and other spiny plants. Even this, however, is not satisfactory, for the female, who must seek her food in the same way, does not possess them.

I should be inclined to believe rather that these tusks were once useful, and were then worn down as fast as they grew, but that changed conditions of life have rendered them unnecessary, and they now develop into a monstrous form, just as the incisors of the beaver and rabbit will go on growing if the opposite teeth do not wear them away. In old animals they reach an enormous size, and are generally broken off as if by fighting.”

*Phacochcerus.—*The Wart-Hogs, so called from the large cutaneous lobes projecting from each side of the face, have the teeth still more remarkably modified than in *Babirussa.* The milk dentition, and even the early con­dition of the permanent dentition, is formed on the same general type as that of *Sus,* except that certain of the typical teeth are absent, the formula being *i1/3*, *c*1/1, *p*3/2*, m*3/3, total 34 ; but as age advances all the teeth have a tendency to disappear, except the canines and the posterior molars, but these, which in some cases are the only teeth left in the jaws, attain an extraordinary development. The upper canines especially are of great size, and curve outwards, forwards, and upwards. Their enamel covering is confined to the apex, and soon wears away. The lower canines are much more slender, but follow the same curve ; except on the posterior surface, their crowns are covered with enamel. Unlike those of the babirussa, the canines of the wart-hog are large in both sexes. The third molar tooth of both jaws is of great size, and pre­sents a structure at first sight unlike that of any other mammal, being composed of numerous (22-25) parallel cylinders or columns, each with pulp cavity, dentine, and enamel covering, and packed together with cement. Care­ful examination will, however, show that a similar modi­fication to that which has transformed the comparatively simple molar tooth of the mastodon into the extremely complex grinder of the Indian elephant has served to change the tooth of the common pig into that of *Phaco- choerus.* The tubercles which cluster over the surface of the crown of the common pig are elongated and drawn out into the columns of the wart-hog, as the low trans­verse ridges of the mastodon’s tooth become the leaf-like plates of the elephant’s.

Two species of this genus are distinguished :—*P. africanus,* Ælian’s Wart-Hog, widely distributed over the continent ; and *P. æthiopicus,* Pallas’s Wart-Hog, confined to south-eastern Africa. In the latter species the dentition

@@@1 The breeding of pigs has of late years been practised with more care and skill than formerly, especially in the United States, where the "hog product ” ranks with wheat and cotton as one of the leading agricultural exports. Several volumes have been published of the pedigrees of two breeds—the Berkshire and the Poland-China. The Official estimate of the number of swine in the United States in 1886 is 46,000,000, and about the same number is assigned unofficially to Europe, where Servia takes the lead in proportion to population and Norway stands lowest.

@@@2 See Garson, *Proc. Zool. Soc. Lond.,* 1883, p. 413.