T. rutila, 803. T.? pnoe, 819. Anas mail, 500. A. boschas, 653. A.? vitticeps, 677. Rhynchaspis clypeata, 651, 652. Dafila caudacuta, 459, 454. Mareca pœcilorhyncha, 792. Querquedula crecca, 617, 618. Q. vulgaris, 767. Fuligula vulgaris, 373. F.? cheonea, 458. F. nyroca, 648, 649. F. leucophthalmos? 650. F. caryophyllacea, 664. F. rufina, 686, 822. F. cristata, 712. Mergus serrator, 626, 627. Cygnus ferus, the wild swan, whereof, strange to say, I procured a sample in the valley of Nepal during a most unusually inclement winter.

Podicipedæ. Podiceps minor, v. pandubia, 558. P. cristatus, 834. Laridæ. Xema ridibunda, 566. X. pallida, 857. Sterna roseata, 565.

Pelecanidæ. Pelecanus gangeticus, 582. P. calirhynchus, 92. Carbo pygmæus, 552. C. raptensis, 555. C. javanica? v. raptensis, 559. C. leucocephala, 596. Plotus melanogaster, 655.

The list consists of 652 species: 89 being Raptorial; 407 Passerine; 44 Gallinaceous; 77 Wading; and 35 Natatorial Birds.

Notes on Northern Cachar.—By Lieut. R. Stewart, 22nd Regt., B. N. I.

North Cachar, including that portion of the country called Toolaram Sonapaty's, is bounded on the north by the rivers Jumoonah and Hurriahjan, which separate it from the Assam district of Nowgong. On the east the river Dhunseeree, rising among the Burrail mountains and flowing northward, is our frontier with the independent tribes of Angami and Kutcha Nagas. A huge range of mountains called the Burrail, running directly east and west forms the line of demarkation on the south, with Cachar Proper. And on the west, the Cossilee, and one of its small tributaries called the Umpung, rising in the Burrail range, and flowing northward, divide it from the Cossiah and Jynteah hill country.

The form enclosed by these boundaries is that of a rude square, of about 3000 square miles in area: all lying within the water-shed of the Birhampooter, and on its left bank, though removed from the stream toward the uplands. This tract is for the

most part mountainous, and covered with dense forest and bamboo jungle, intersected by numerous streams which find their rise in the Burrail and lower ranges, and flow towards the plains to the north.

The population, consisting in all of about 30,000 souls, is composed of no less than six different tribes, all having distinct languages, manners and customs. They are thinly scattered throughout the country in small village communities, the greater part being located towards the south, close to the high range; vast belts of forest in the north and the whole line of frontier to the east, being left unoccupied: the first on account of the intricacy and impracticability of the country, and the second from the dread of the ravages of the Kutcha and Angami Naga tribes.

North Cachar is most easily approached from the southern side, that is from Cachar Proper. There are no less than three distinct routes from Silchar to Apáloo, the sudder station of the district.

The shortest of these is that viâ Oodharbund, a village in the plains, about ten miles north of Cachar. On leaving this village, the road proceeds for some way up the bed of the Madoora river, and then, after surmounting the lower ranges of hills lying at the foot of the Burrail, boldly runs up the face of those mountains themselves, nor does it seek, by zigzaging or circumvention, any means of alleviating the toughness of the "pull" which in some places is tremendous.

Nothing can be less interesting than a journey by this route. The moment the traveller has left Oodharbund, he finds himself walking between two high walls of jungle, which it is impossible for the eye to pierce. This jungle in the lower ranges is composed of a small species of bamboo, the stalks growing exceedingly close to one another: higher up, the first striking change is that of a larger bamboo, which takes the place of the smaller kind, and grows in clumps instead of singly. Interspersed with these are gigantic bamboos growing to the height of sixty or seventy feet, and measuring eight or ten inches in diameter at their base. When half way up the Burrail range, bamboos of all kinds give place to a timber forest, where huge trees of various sorts abound. Here, indeed, some scenes of great beauty present themselves. The rich and varie-

hewn out of solid sandstone of diminutive and ill-formed proportions. A few bel fruit trees, providently planted by the would-be founders, flourish, which, as the fruit is considered an infallible remedy for many diseases, would have been very useful to the inhabitants in such an unhealthy situation.

North Cachar, considering that it is a vast tract of rough irregular and intricate mountains, is nevertheless a productive country, and crops are raised on the hill sides, with very little more labour than what is required in cutting down the jungles.

Rice of course is the staple produce—the method of cultivation, I shall afterwards describe. The rice varies in quality, and some sorts are very inferior, others again are much better than the generality of rice grown in the plains. Cotton of a very excellent quality is grown by most of the inhabitants, and is perhaps the only article exported in great quantities. Besides these, the jooms are planted with common sorts of vegetables, such as byguns, kuddoos, cucumbers, &c.; tobacco, sugar-cane, Indian corn, and the castor-oil plant all grow well, and are cultivated, but to no great extent.

The chief natural productions of the country are bamboos and timber. Both of these are abundant, but can be turned to little or no use, owing to the difficulties of conveyance. Coal and limestone are known to exist in different parts of the district, but for the same reason are unavailable beyond their immediate neighbourhood. Salt wells are found in many places throughout North Cachar, but chiefly in the neighbourhood of a Cachari village called Semkur. Two gallons of the brine yield about a pound of salt, which is of tolerable quality, but prized only by the hillpeople. Bees-wax is found in abundance among the rocky hills and in the forests, and is taken down for sale to the plains. Iron in small quantities is obtained from clay, and is manufactured by the inhabitants into spears and daos. Elephants abound in the jungles of Toolaram's country, and ivory might be procured in any quantity; but there are few hunters in those parts, consequently only a very little finds its way to the markets. Lac-dye of a good quality is found, and used by the inhabitants in dying, as is also wild indigo. A strong coarse silk cloth is made by

Cacharies from the silk of the eria-worm; but the manufacture is not general among the tribes.

Edible fruits of different kinds are found in the jungles, but none are cultivated; among them is the mango which grows to the size of a turkey's egg, possesses a fine flavour, and is free from the grubs, which make such attacks on that fruit in the plains. The peach also grows in a wild state, but never reaches maturity; and wild plantains are common, but the inhabitants prefer eating the flower and the pith of the trunk to the mature fruit.

The Natural History of North Cachar is most diversified, and I am confident that the researches of any scientific zoologist would be attended with some important discoveries. I shall merely, without attention to classification, name some of the animals which are known to exist in the country.

I have seen the hoolook, or black ape, and their cry resounds through the forests; there is another ape of a white colour, and two or three kinds of monkeys. I have also met with the "gherminda billi," a sort of sloth.

The elephant, rhinoceros, and wild buffalo are common in the jungles and jheels to the north. The methin, or wild cow, is also indigenous and frequents the hilly jungles in the district, as do the sámbre, spotted-deer, hog-deer, ravine-deer, and barking-deer. The antelope even is sometimes seen. Wild hogs and porcupines are common. Tigers, bears, leopards, and jungle-cats prevail throughout the whole country, and it is considered unsafe to go out at night by reason of them. The hyæna, wolf, jackal, fox, and wild dog, are to be met with in different localities—the jackal is, however, seldom seen in the hills. Civets and many kinds of ferrets and weasles abound. Flying squirrels and squirrels of several sorts inhabit the forests; of the latter I have seen four distinct kinds, black, gray, brown and green. Bamboo or lion-rats, moles, muskrats, common rats and mice, are pestilently numerous, especially the three latter.

Alligators frequent the rivers, where they are large enough, to the north, and fish of numerous kinds, from those 80 or 100lbs. in weight down to the smallest minnow, are caught in all the rivers. The roboo and mahaseer, are the only kinds that I can distin-

guish. Prawns and crabs, also exist, as well as turtles and tortoises. some of very large size, and otters. I have seen frogs of many kinds including the flying-frog and the tree-frog. The gósámp, the armadillo, the chamelion and lizards of great variety both in size and colour are to be found in most parts.

Snakes of an infinite number of kinds, from the huge boa to those not larger than a small earth-worm, are found in the jungles—some of these possess great beauty, and I am certain many are not classified. Scorpions exist, but are scarce; centipedes are plentiful. Earth-worms, leeches, snails, slugs of several varieties, and caterpillars of every size and colour, are common.

Of birds, the vulture and kite are but rarely seen, nor are ravens and crows common. But eagles build their nests on the crags, and there are many species of hawks. I have seen no less than three kinds of toucans, and they are numerous. and wild cocks crow throughout the country, and there are several kinds of pheasants, and partridges, pigeons and doves. Wild fowl, geese and ducks, teel and snipe, water-hens, &c. frequent the jheels to the north in their season, but are not found on the higher levels at any time. Jays and king-crows, parrots, parroquets and lutkuns are common, and their feathers are much prized as ornaments by the rude inhabitants; mangoe-birds, and many other kinds which I cannot distinguish, are to be met with in the woods; yet.this is the department in Natural History in which North Cachar is most deficient. A day's journey may be travelled in the forests, without once hearing a note or seeing a bird.

Butterflies and moths of every colour and size abound, likewise insects of all sorts. Wasps, bees, beetles, bugs, fleas and lice are more than common. The blue-beetle, whose wings are considered so ornamental, is very plentiful. Flies, from the large wood-fly that makes a noise like a frog, including the dragon-fly, and the elephant-fly which draws blood by a bite, to the smallest gnat, are inconveniently abundant, as are mosquitoes and sand-flies—also pipsás.

The animals domesticated by the inhabitants are methins, buffaloes, cows, goats, and pigs, together with the common domestic fowl. Other animals have been brought up from the plains how-