

HARDWICKE'S

Science-Gossip:

AN ILLUSTRATED MEDIUM OF INTERCHANGE AND GOSSIP

FOR STUDENTS AND

LOVERS OF NATURE.

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ing clergyman (Rev. J. D. La Touche), I observed the *Astrantia* in three several spots within the wood upon the hill-side.

It must be noted, however, that some seasons are more favourable to plants than others, so that in particular years certain species may not appear at all, or in very diminished numbers. This is especially the case with certain of the *Orchidæ*. I have been in Wyre Forest, near Bewdley, when its glades were adorned with the elegant white flowers of hundreds of the *Cephalanthera ensifolia*; yet last year, when searching over the same forest ground, I could not meet with a single specimen. I have noticed the same thing in other places with regard to *Spiranthes autumnalis*, which, seen plentifully in one particular season, could not be observed the next. *Epipogium Gmelini* (or *aphyllum*), though gathered a few years since at Tedstone, Herefordshire, has not been seen since, though it may possibly reappear under favourable circumstances. In woody ground the fallage of trees and shrubs often determines the appearance of plants for a time, till the ground is shadowed over again by a dense growth of thickets and brambles. So where local plants grow about quarries, the displacement of the ground removes them, as I have noticed with regard to *Carex humilis* on Worle Hill, Somerset, where extensive quarries have been developed. Commons and waste ground, too, get inclosed, broken up, and built upon, and so local plants are extinguished, unless they can take shelter in an undisturbed corner. I noticed the uncommon *Bupleurum tenuissimum* on Ealing Common, Middlesex, some years ago, and *Myosurus minimus* at the then rural hamlet of Perivale, in the same vicinity; but such changes have since taken place there, and numerous villas erected, that probably the plants mentioned may never be seen there again.

Thus it is that advancing civilization acts upon the plants of a country; old localities are blotted out and new ones have to be observed and noted. Mr. Newman remarks, with regard to the local fern *Asplenium lunceolatum*, that "the vicinity of Barmouth (Merionethshire) seems a very favourite locality for this fern;" and it used to be quite abundant on the rocks and walls by the roadside there. But Barmouth has increased as a watering-place, and a railroad brings numerous summer visitors, among whom have been unscrupulous marauders, who have carried off the rare *Asplenium*, so that when I was at Barmouth last summer not a single plant could I see anywhere about. Nevertheless I discovered the fern on stone walls at Pant Einon, a few miles south of Barmouth, on the opposite side of the river Mawddach. I need not give further instances illustrative of the subject touched upon, as I have said enough to show the advantage of reporting recent observations on the changes of locality in the rarer plants, or their per-

manence at particular spots; and where changes have occurred they should be noticed in the new editions of general floras.

EDWIN LEES, F.L.S.

Green Hill, Worcester, March 8, 1872.

THE NEW RHINOCEROS AT THE ZOOLOGICAL GARDENS.

OF all the recent additions to the magnificent collection of the Zoological Society, few will be of more interest to the intelligent sight-seer than the Sumatran Rhinoceros. We paid a visit, a few days ago, to this animal, under the able guidance of Mr. Bartlett, and saw his surly brutishness rolled up in all the unapproachable dignity of one who has just dined, and does not care to be disturbed.

After a few probes, assisted by bribes in the shape of biscuits, we managed to get it on its legs. Its appearance, thus seen, is very remarkable. It is not so large as the Indian or African species, and seems longer in proportion to its height. Its hide resembles that of its African brother, rather than its Indian, in being freer from the huge folds into which the thick skin of the Indian species is thrown, and which adds so much to the repulsive appearance of the latter. Its head is more elongated and pig-like than either, and its lower jaw is distinguished by being squarely cut; whereas in the two former it is more tapering, and so far is conformable to the upper part. Like the African species, the new arrival is marked by having its ears fringed with a long reddish hair, which gives it a very fierce look. This hair, however, is much longer and thicker than that on the ears of the African Rhinoceros, so that the ears themselves look longer and larger in consequence. It resembles the African species more than the Indian, also, in being two-horned.

Singular as it may seem, that a rhinoceros from the Indian region (Sumatra) should in so many respects resemble the African species more than that which is so well known to us as the "Indian" Rhinoceros, yet we think that even this peculiarity is secondary to the still more striking similarity between the animal of which we are speaking and a species which has been extinct probably since the appearance of man on the earth. We allude to that known as *Rhinoceros tichorhinus*, whose remains are usually found in the same post-glacial deposits as the Mammoth (*Elephas primigenius*). The long hair on the ears of our Sumatran species has already been mentioned, and so far this feature is partly shared by the African type. There, however, the resemblance stops, for the Sumatran Rhinoceros has the whole of its body more or less covered with short, brown, woolly hair; the hair on the back is longer, and like the "hog mane" of a

horse. Indeed, so peculiar is this hirsute covering, that the species almost deserves the name of "hairy."

In this respect, therefore, it at once puts us in mind of the *Rhinoceros tichorhinus*, or "Woolly-haired Rhinoceros," whose bones and teeth are found in our bone-caverns and river-gravels. The latter was found, as a frozen carcass, in the intensely frozen soils of Siberia; and described by Pallas in 1793. This was before the discovery of a contemporaneous hairy elephant. But the woolly hair of the extinct species was much longer, and was evidently an adaptation to the rigorous circumstances under which the animals provided with it had to exist. There are other features shared partly in common between the extinct type and the animal in the Zoological Gardens. The former was two-horned, like the latter, and its teeth and bones indicate a close resemblance, as far as size is concerned. We conclude, therefore, that it is not impossible the Sumatran species may be a lineal descendant of the extinct *Rhinoceros tichorhinus*. Siberia, where the latter seems last to have roamed, is more intimately connected with India than is any other part of the globe; the Indian tiger still finds its way thither, when forced by hunger; and the short woolly hair of the Sumatran Rhinoceros may be the relics of a covering which once formed no unimportant character to the northern progenitor of the species we are dwelling upon. Further, the occurrence of this species on the island of Sumatra at once shows that it must have extended thither before the separation of that island from the Indian continent, as the sea is by far too extensive for it to have crossed by swimming. Its geographical distribution, therefore, is a good proof of its antiquity; whilst its general replacement in India by the Indian species would lead us to infer that the latter and dominant species was the most recently introduced. We strongly advise all our readers who have the opportunity to pay a visit to an animal which seems, in many respects, to be one of the "missing links." J. E. TAYLOR.

A GOSSIP ABOUT BLACKCAP WARBLERS.

AFTER hearing Mr. Rudd's excellent "Gossip about Canaries" in the March number of SCIENCE-GOSSIP, I thought it might perhaps both interest and profit some of your readers to learn a little of my experience in the treatment of the above graceful and beautiful birds. As a cage bird, with proper care, I know of none which at the same time is so tame and so well repays the little trouble he gives by his wild and rich song, in which he excels every chorister of the grove as regards rapidity and clearness. Mudie says "that although the Blackcap Warbler has not the volume and variety of the

Nightingale, nor the ineffably sweet chant of the Garden Warbler, its notes take us by surprise, and the changes, and especially the trills, are finer than those of any other bird."

I have never been without several of these birds in cages. They readily take to confinement, and never seem to repine at their lot, or sulk and mope as is often the case with the Nightingale; they are also easy to manage at the moulting and migratory seasons. I have had them so tame that they would perch on the finger and take any insect offered them. Of all insects they, however, have a preference for the spider and the mealworm.

The Blackcap being both insectivorous and frugivorous, requires a blending of the two in confinement. I have always found the following the best standard food for both the Blackcap and all other warblers:—Ants' eggs, one teaspoonful; chopped cabbage, one ounce; currants (grocer's), one ounce; powdered rusks, one ounce; hempseed, one ounce; German paste, one ounce; the yolks of two hard-boiled eggs, which should be well rubbed up with the rusk and hempseed, and then all mixed together.

The best German paste is made from Mr. Adams's recipe; viz., Take 2 ounces bullock's liver boiled and grated; 6 ounces pea-meal, 4 ounces stale bread-crumbs finely rubbed; the raw yolk of one fresh egg. Mix these well together; then put into a clean frying-pan gently heated, one ounce of unsalted butter; add the above mixture; place the frying-pan on a very slow fire, stir till a little brown; when taken off the fire and still warm, mix 2 ounces coarse sugar; let the whole stand in the pan till quite cold, then add 12 ounces ground hempseed and 1 ounce of maw-seed. Mix the whole well together, and leave the compound in grains about the size of canary-seed; then put into pots well covered up. The embers of a fire answer best in making this paste, as the nourishment is destroyed if it is burnt, and if not equally and gently done it is apt to mould. A uniform and rich brown is the proper colour.

Mr. Sweet, who first kept the Blackcap successfully, always used scalded bread-crumbs and powdered hemp-seed scalded and mixed together with some finely-chopped beef or yolk of egg hard boiled. This forms an excellent change from the former food; as is likewise scalded rusk biscuit with all the superfluous water pressed out, and as much milk added as the rusk will take up. This would be good for them once or twice a week, but not oftener, as milk used too often makes the feathers fall off, and brings on consumption by relaxation of the bowels. The Blackcap is also fond of curds, which may be made in a homely way by placing in a clean pan half a pint of new milk, placing it on the fire, and, when just at the boiling point, put into it a tablespoonful of vinegar, which