THE NATURALIST.

INDIAN WILD DOGS.

THE THREE SPECIMENS OF WILD DOGS from India in the Prince of Wales's collection at the Zoological Gardens, London, possess interest in more than one particular. There has been only a single specimen, prior to the present ones, received since 1898, but altogether about seven have been deposited in the Gardens, the earliest received being as far back as 1884. To the ordinary observer these Indian dogs bear a striking resemblance to what might result from a hybrid between the dog and the fox, were such a cross possible, whilst at the same time one of the specimens has that peculiar expression of countenance seen in the hyæna. At the same time they are entirely different in every outward respect from the Cape hunting dogs, a specimen of which was in the Gardens up to about a couple of years ago. These Indian dogs, or southern dholes (*Canis dukhunensis*), little bigger than a fox, have the appearance of great activity, the shoulders being well sloped, and the hind-quarters being powerful, well turned, and of great length in proportion to the body generally; each of these dogs has a peculiar roundness or protuberance of the stomach, so often seen in an unhealthy domestic dog, which it is to be hoped is not a sign of ill-health here. A particular feature in these specimens in the Gardens is to be seen in the peculiar roundness of the tips of the ears, which is not nearly so apparent in Keuleman's illustrations in Mivart's great work on the Canidæ. Nor are the specimens which Mr Arthur Wardle has so carefully drawn nearly so bright or red in colour as Keuleman's picture, which was taken from a specimen brought from Sumatra. However, these wild dogs inhabit a wide area, and the colour and texture of coat vary accordingly.

The dhole hunts in packs, which vary in number from less than a dozen to a score or more, their prey being usually deer wild pigs, sheep, nylghai, and black bears are known to have been killed by these daring creatures. Even buffaloes and tigers are said to have succumbed to an attack of a pack of wild dogs. That they are not better known and are not destructive to domestic animals is because they avoid the haunts of man and inhabit the forests and the higher grounds away from cultivation. These animals are for the most part diurnal, and when hunting run mute; indeed, whether they bark or not is an open question, though howling at night is well known to those persons who have attempted, but unsuccessfully, to tame and rear them as pets. One that was kept in confinement was very omnivorous in its habits, in addition to eating flesh of various kinds devouring greedily "herbs, grain, and leaves of various kinds" (McMaster). These wild dogs show considerable sagacity, and it is said of them that during the time they are rearing their puppies, produced during the winter months, they drive their prey to the neighbourhood of their haunts in order that when killed there may be little trouble in conveying it to the bitch. Another peculiarity they possess is that several of the females will bring forth their young in the same place, which is usually in some cave or rocky hollow.

When the writer last saw these three dogs in the Gardens two or three days ago, they were playful amongst themselves, but shy, and when spoken to ran into the covered portion of their kennel.

Death of the Uganda Chimpanzee.—Visitors to the Zoological Gardens will miss the fine male chimpanzee (Adam) from Uganda (*Anthropopithecus schweinfurthi*), which was one of the attractions of the anthropoid house. The animal, which died on Saturday last, was, with its mate Eve, presented by Mr Stanley C. Tomkins (*Field*, Nov. 12, 1904, p. 863), in whose compound at Entebbe they had lived on the chain in the open for over three years. On their arrival they were considered to be about seven years old, but that was an under estimate, and in the last edition of the *Guide* Dr P. Chalmers Mitchell put the male at about twelve and the female at a year younger. This is probably the only instance in the history of the Gardens where a male and female chimpanzee of the same species have been exhibited together. For this reason, and still more for the disappointment of hopes entertained that they might breed, the loss is to be deplored.

JOHN DUNN'S WHITE RHINOCEROS.

HIDDEN away in a small town in the north-west corner of Essex is a museum containing some important specimens which appear to be little known, and some that have fallen entirely out of knowledge. This museum was founded about three-quarters of a century ago by the members of the Saffron Walden Natural History Society, among whom the Gibson family occupied a prominent position. The collection was at first kept in a house adjoining the cattle market, which belonged to the late Mr Jabez Gibson, who was a liberal donor. He commissioned John Dunn (who afterwards became famous in connection with the Zulu settlement effected by Sir Garnet Wolseley) to procure a collection of South African mammals, which reached England in 1834, and the upper part of the building on the Bury, or Castle Hill, now entirely devoted to museum purposes, was opened on May 12, 1835. In the preface to the catalogue, published in 1845, it is stated that just before the opening they had received "some valuable accessions, including the African elephant, the coudu, the double-horned rhinoceros, and many other of the South African animals." Reference to page 6 of the catalogue shows the "double-horned rhinoceros" to be *Rhinoceros simus* Burch, and beneath the entry is the following note:

This rhinoceros was first described by Dr Burchell. The specimen here preserved is probably the first that was ever brought into this kingdom, or, perhaps, into Europe; another has been recently introduced by Dr Smith, and is in the British Museum.

The British Museum specimen here referred to is mentioned in the *English Cyclopædia*, and is, no doubt, now in the Natural History Museum in Cromwell-road. But besides the mounted specimen the Saffron Walden Museum also possesses a skeleton, which, according to the catalogue, was "the only one of this rare animal as yet in England."

When Mr Coryndon's specimens were mounted by Mr Rowland Ward and ready for delivery, a note appeared in *Nature* (April 19, 1894) stating that, beyond these two, there were authentic records of only two others—one in Cape Town Museum, shot by Mr F. C. Selous, and one shot by the late Mr J. S. Jameson, while hunting with Mr Selous. This brought a reply from Dr Jentink, stating that there were two in the Leyden Museum, and they had been there for forty years.

Strange to say, there was no mention of the skeleton and mounted skin at Saffron Walden, though the fact must have been known to at least one person, for when the news of John Dunn's death arrived, an article "A Zulnised Englishman," appeared in the *Pall Mall Gazette* (Aug. 6, 1895), from which the following is a quotation:

John Dunn, whose death is announced this morning, was rather a notable person in his way. The facts of his early life are rather obscure. We believe, however, that he was the son of a linen draper at Saffron Walden, in Essex. Either the good people of Saffron Walden would not buy linen at all, or they would not purchase it from John Dunn's father. At any rate, the unfortunate tradesman went bankrupt, and emigrated to South Africa with his family. John turned hunter, and was employed by a banker at Saffron Walden in forming a collection of skins for the museum of that town. It includes specimens of the white rhinoceros and the mountain zebra.

The zebra, however, was not one of John Dunn's specimens, for it is entered in the catalogue as having been presented by Mr G. Wombwell, who also sent to the museum the carcases of many other animals. A tradition exists in the town that the great showman was helped financially by Mr Jabez Gibson, and that his first travelling waggon was built in Saffron Walden.

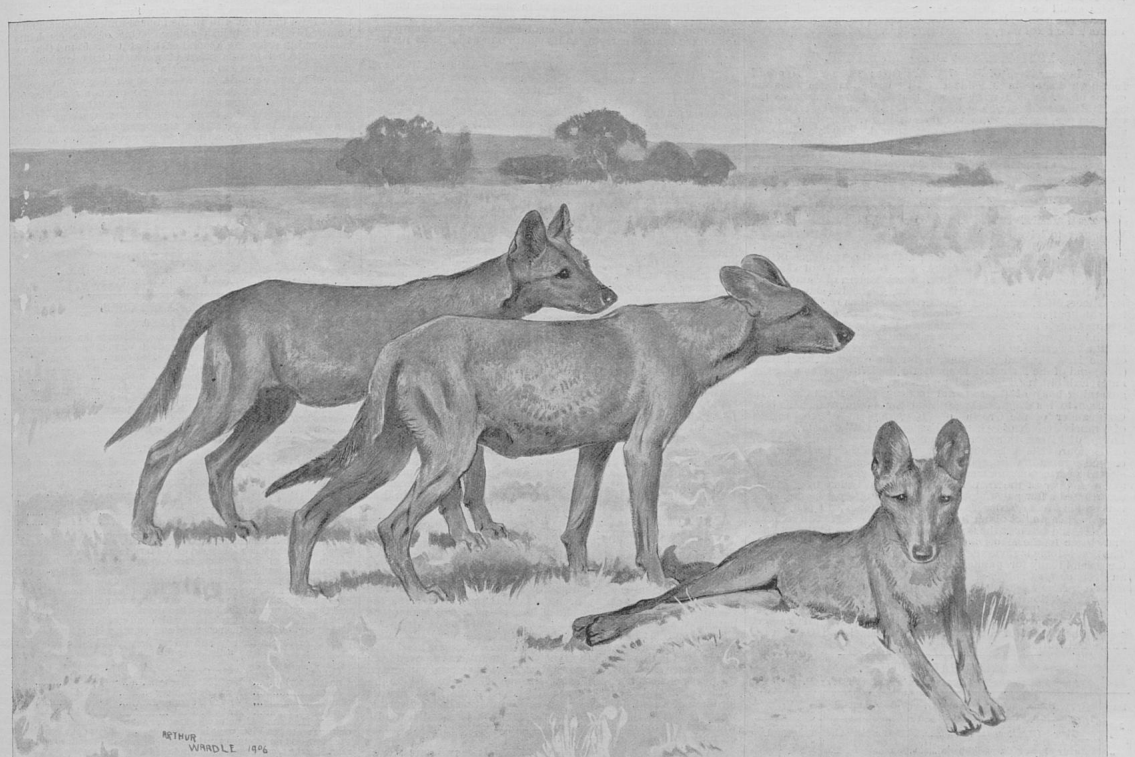
The mounted skin and skeleton of the African elephant in the museum are undoubtedly part of the collection sent home by John Dunn. A note to the entry of the former states that the species "has hitherto been scarcely domesticated, and is now become rare in the neighbourhood of the Cape Colonies. This specimen is believed to be the only one at present in this country." The skeleton was described as "the only mounted specimen at present in the kingdom."

It is difficult to account for this specimen of the white rhinoceros having been generally lost sight of. In the early days of the museum both mounted skin and skeleton must have been known to a good many people. Lord Braybrooke was in many ways a great benefactor to the institution and one of the trustees. There was a good deal of correspondence with the Zoological Society (from which specimens, notably a giraffe, were received), Gould, Doubleday, and Yarrell, and copies of the catalogue are not very rare. Moreover, in the last few years the mounted rhinoceros has formed the principal object in a picture postcard showing the interior of the museum.

CENTRAL ASIAN IBEX.

SPORTSMEN should be interested in an illustrated memoir by Dr L. Lorenz von Liburnau on the ibex of Central Asia (*Der Steinböcke Inneasiens*), recently published in the *Denkschriften* of the Royal Vienna Academy of Sciences. There has hitherto been some degree of uncertainty among naturalists as to which was the typical form of the Asiatic ibex, the *Capra sibirica typica* of von Meyer. This animal, Dr von Liburnau shows, was obtained by Pallas in the Sayavik range, which forms the boundary between Eastern Siberia and Mongolia, in about longitude 100° E., the exact site of Pallas's specimens being between the river Uda and Biryussa. The author gives an excellent coloured plate (by the three-colour process) of another ibex of this race, obtained near Munka-Sardyk, in another part of the same range, which will serve in the future as a standard example of the typical form of the widely spread and therefore variable species.

Of the various other races recognised by the author, the first is *C. sibirica altaica*, of the central or Irtish Altai, in the neighbourhood of Katunga, the Sair Mountains, and Tarbagatai, which is nearly allied to the last, but has differently shaped horns. A skull from Tarbagatai and a skeleton from the Sair Mountains in the British Museum are referred to this form. The ibex from the Karakul and Kulja district is named *Capra sibirica alma-ata*, and is represented in the British Museum by a ten-year-old buck from Teke, presented by Mr Van der Byl, and a mounted head from Teke, and a skull from Kulja given by Mr St. George Littledale. The ibex of the Trans-Alai, lying between Bokhara and Eastern Turkistan, is *Capra sibirica trans-alaiana*. The race from the Katuta range of the Irtish-Altai were named *C. s. lydekkeri* by Mr Rothschild in 1900, and is represented by a skull in the British Museum. To the Kobdo, or Ektag race, the name of *C. s. hagenbecki* has been given. The ibex of the Issik-kul district of the Tian Shan is nearly allied to the typical race, and is accordingly known as *C. s. affinis*, while the new pair, the Central Tian Shan, has been named *C. s. merzbcheri*. Finally we have the well-known *C. s. sacin* of the Himalayas, *C. s. wardi* of Ballistein, and the somewhat doubtful *C. s. dawergnei* of Western Kashmir, all of which are represented by specimens in the national collection.



THREE INDIAN WILD DOGS.

ADVANCES IN OYSTER CULTURE.

SIR,—Another spatting season has passed away, and it would probably interest other readers beside myself to know whether any, and if so what, advance may have been achieved in our knowledge of the breeding of these bivalves, whether we are any nearer the solution of the question of a certainty regarding successful propagation, either by strictly artificial or assisted natural process. In fact, the question is whether the oyster has been brought any further into the zone of human control. With respect to the Salmonidæ we know that satisfactory results have been achieved, we know where we are in their case, have firm ground beneath us; are we any nearer a like result as regards oysters? Years ago my old friend Frank Buckland, Henry Lee, W. A. Lloyd, and others, all now deceased, took great interest in this matter, and much was written and said on the subject. Are we any nearer a practical solution of the oyster problem? Have any new facts been ascertained as to the possibility of bringing human aid and influence to bear on the question of rendering the oyster liable to human influence in its reproduction?

There are swarms of eager microscopists waiting for fresh ground of investigation, plenty of idle people by the seashore in various parts of our island, willing workers by the score or hundred. The expense of the needful outfit for research need not be ruinous. During the next spatting season we want an army of willing workers, with good instruments and ample outfit, to exert themselves to the utmost in seeking a solution of this pressing question. There are many difficulties attending the really practical solution of the problem, but with the present army of eager microscopists and eminent men of science in co-operation surely some tangible and adequate result must eventually reward their organised and combined efforts. Some few words of encouragement as to our present knowledge and prospects of increase thereof might be very welcome to many of your readers as well as to

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