CIHM Microfiche Series (Monographs) ICMH
Collection de
microfiches
(monographies)



Canadian Institute for Historice! Microreproductions / Institut canadian de microreproductions historiques

(C) 1994

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attered copy available for film inay be bibliographical of the images in the resignificantly change the checked below. Coloured covers Couverture de co	ning. Features of the ally unique, which neproduction, or which extends of the usual method of	nis copy which nay alter any ch may		lui ex bil rej da	a été possib emplaire qui bliographiqu produite, ou	ele do se procisiont peut-é e, qui peuven qui peuvent de normale d	neilleur exemplais curer. Les détails tre uniques du po nt modifier une in t exiger une modif le filmage sont ind	de cet int de vue nage fication
Covers damaged	1/			_	Pages da	manad/		
Couverture ende				L		dommagées		
Covers restored	and/or laminated/				Pages res	tored and/or	laminated/	
Couverture rest	aurée et/ou pelliculé	ie		L	Pages res	taurées et/ou	pelliculées	
Cover title miss	ing/				Pages dis	coloured, sta	ined or foxed/	
Le titre de couv	erture manque			~	Pages déc	colorées, tacl	hetées ou piquées	
Coloured maps	•				Pages det	ached/		
Cartes géograph	iques en couleur				Pages dét	achées		
	e. other than blue o				Showthre	_		
Encre de couleu	ır (i.e. autre que ble	ue ou noire)		Ľ.	Transpar	ence		
C C L word along		.,			→ Ouelieu e		- 1	
	and/or illustrations illustrations en coul				/	of print varie: négale de l'in		
rianches et/ou i	illustrations en coul	eur		12.	Qualite ii	regale de i in	npression	
Bound with oth	ar material/			_	☐ Continue	us paginatio	-1	
Relië avec d'aut						n continue	117	
	ires documents			_		ii continue		
Tight binding m	nay cause shadows o	r distortion			Includes	index(es)/		
along interior m	nargin/				Compren	d un (des) in	ndex	
La reliure serrée	peut causer de l'on	nbre ou de la						
distorsion le lor	ng de la marge intéri	eure			Title on I	neader taken	from:/	
					Le titre d	le l'en-tête p	rovient:	
Blank leaves add	ded during restorati	on may appear						
	Whenever possible	, these have			Title pag	e of issue/		
been omitted fr					Page de t	itre de la livr	raison	
	ertaines pages blanc	•						
	uration apparaissent	·			Caption			
	ela était possible, ces	s pages n'ont			☐ Titre de	départ de la l	livraison	
pas été filmées.				_	-			
					Masthead	•	es) de la livraison	
					□ Geuerida	e (hatiogida	es) de la livraison	
Additional com Commentaires s This item is filmed at	supplémentaires:	possible ima	ge.	by tiss	ues have b	een refilm	ed to ensure th	e best
Ce document est film	é au taux de réducti	on indiqué ci-c	dessous.					
10X	14X	18X		22 X		26 X	302	•
			1 1				; ; ;	
12X	16 X		20.X	_i	24 X		79.7	32 Y

The copy filmed here has been reproduced thanks to the generosity of:

National Library of Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol → (meaning "CONTINUED"), or the symbol ▼ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:

L'exemplaire filmé fut reproduit grâce à la générosité de:

Bibliothèque nationale du Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernlère page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole → signifie "A SUIVRE", le symbole ▼ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

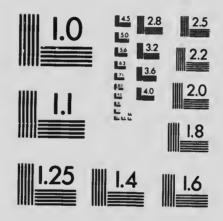
1	2	3

1
2
3

1	2	3
4	5	6

MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)





APPLIED IMAGE Inc

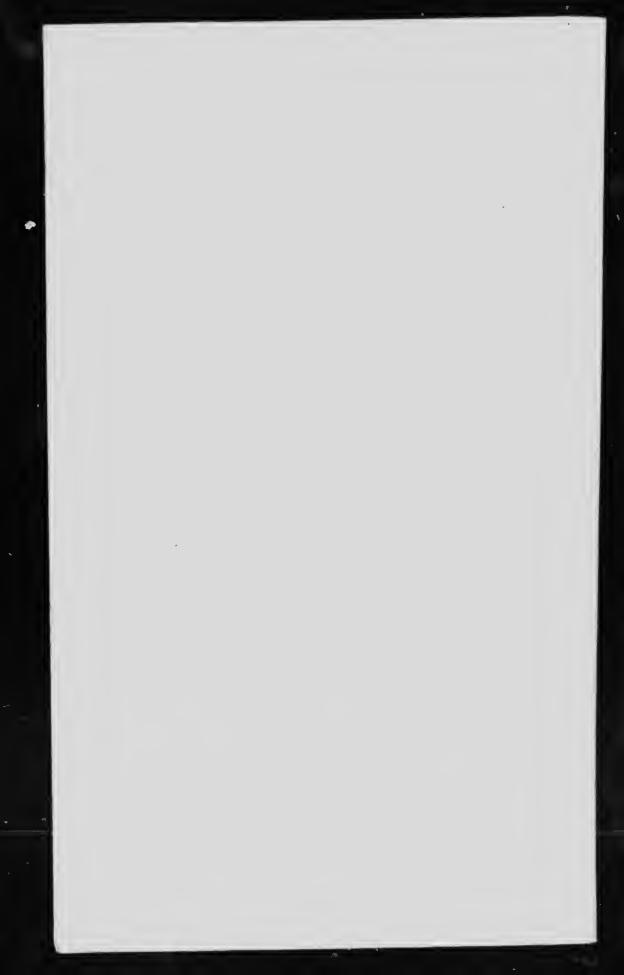
1653 East Main Street Rochester, New Yark 14609 USA (716) 482 - 0300 - Phone (716) 288 - 5989 - Fax





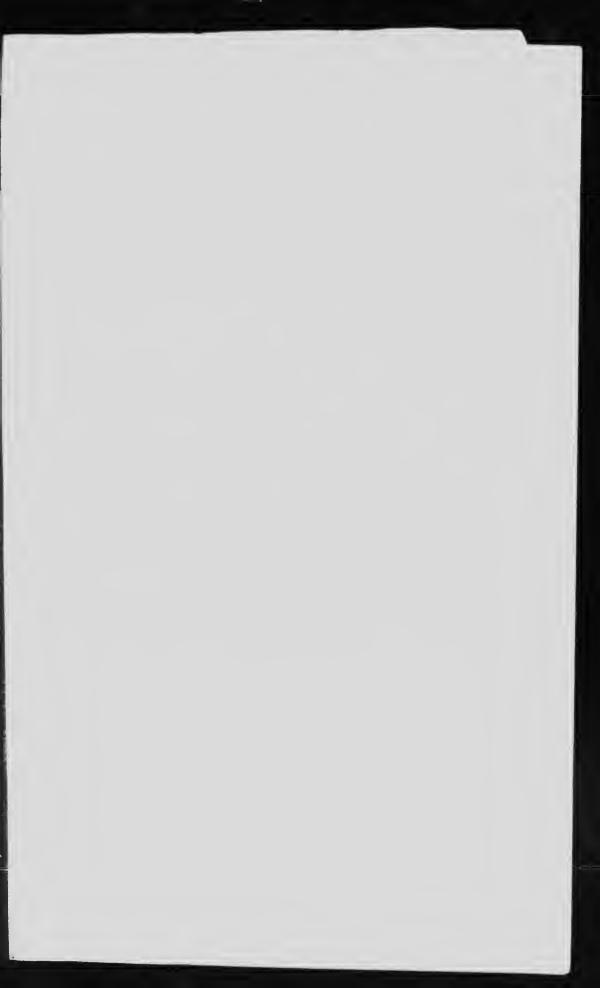
10.1...

WILD ANIMALS AND THE CAMERA





"DUKE"
THE SOUTH AFRICAN LION (Felis 160)





WILD ANIMALS AND THE CAMERA

BY

WALTER P. DANDO, F.Z.S.

AUTHOR OF "ZOOLOGICAL NOTES," ETC.

WITH 12 MOUNTED COLLOTYPE PLATES AND 58 ART REPRODUCTIONS FROM PHOTOGRAPHIC STUDIES TAKEN BY THE AUTHOR

TORONTO
BELL & COCKBURN

DEDICATED TO

DR. P. CHALMERS MITCHELL, M.A., D.Sc., F.R.S.

SECRETARY TO THE ZOOLOGICAL SOCIETY,

LONDON,

'N APPRECIATION OF THE MANY COURTESIES AND FACILITIES

ACCORDED ME DURING MY OFFICE AS

OFFICIAL PHOTOGRAPHER TO THE

ZOOLOGICAL SOCIETY,

LONDON.



PREFACE

N offering to the public for the first time in collected form this series of Wild Animal Studies, with a description of each animal illustrated, I fear there may be some of my readers who may accuse me of writing facts and details concerning animals I have never seen or hunted in their natural habitat. This is perfectly true, but I can count by thousands the shots I have successfully fired at every species of wild animal with my hand-camera, and I have the gratification of knowing that my hunting of big and small game neither hurts nor kills the animal, yet secures the most reliable and permanent souvenirs of wild Nature it is possible to obtain; and, although they do not take the form of specimens set up by the taxidermist, a collection of photographic enlargements from my principal negatives is hanging in the gallery of the British Museum.

As sport, it is one of the most fascinating, and I have learned more of the habits and characteristics of wild animals with my camera than gun-shooting could ever have taught me.

For years I was a constant, I might almost say daily, visitor to the Zoological Society's Gardens. Every addition to the wonderful collection I studied for days, and sometimes weeks, before capturing it successfully with my camera. Many readers will remember my "Illustrated Zoo Notes," published in *Animal Life*, and my contributions to "Living Animals of the World" and the chief illustrated weeklies.

As most of the public will never have the opportunity of seeing the animals illustrated and described in these pages in their native wild state, I am hoping that my labours may prove entertaining to those who take an interest in wild animals and only know them in captivity.

It was at the kind suggestion of my friend, Mr. Louis Wain, that Messrs. Jarrold & Sons invited me to add yet another book to their well-known series, which would embrace animals not already included in their publications, i.e., "Wild Animals in Captivity," which my appointment as Official Photographer to the Zoological Society gave me exceptional facilities to study and photograph. Every illustration in this publication is from a photograph taken at the Zoo, and in offering that sufficiency of description of each animal included in this selection necessary to those who are interested in animals, yet unfamiliar with the records of their habits and characteristics, I have added my own personal observations and experiences.

I have briefly given some instructions and hints on photographing wild animals in captivity, as far as the limited space at my disposal permits, and would refer those who desire detailed particulars of my methods to a paper I read to the Members and Fellows of the Royal Photographic Society.

Those who require a full and scientific description of the animals herein mentioned I advise to consult the pages of what I consider to be the finest complete Natural History in the world—"Brehms' Tierleben," which I had the honour to illustrate in part, and of which an English edition will be published in seven volumes.

W. P. DANDO.

HAYDN HOUSE, REGENT'S PARK.

CONTENTS

PART I. MAM' ALS

							PAGE
LION	S	•	•	•	•		23
TIGE	RS	•	•		•		35
THE	CLOUD	ED TIG	ER				38
THE	LEOPAI	RD	•	•			39
THE	snow	LEOPAR	D		•		44
THE	JAGUAI	R		•			46
THE	CHEET	АН	•				48
THE	LYNX				•	•	52
THE	POLAR	BEAR	•		•	•	54
THE	INDIAN	RHING	OCEROS	•	•		57
THE	HAIRY-	EARED	RHINO	CEROS	•	•	60

xii	CON	TENTS			
THE HIPPOPOTAN	ius .	•	•		PAGE 63
THE INDIAN ELE	PHANT				66
THE AFRICAN EL	EPHANT		•	•	68
GIRAFFES .					73
THE SOMALI WILI	D ASS		•	•	81
ZEBRAS .		•	•	•	18
THE MOUNTAIN Z	EBRA	•	•		83
THE GRÉVY ZEBRA	٠.	•		•	84
THE ROCKY MOUN	TAIN GO	DAT	•	•	85
THE GREAT KANGA	AROO	•	•	•	88
THE SLOTH .		•	•	•	91
THE DASYURE	•	•		•	93
CHIMPANZEES	•	•	•	•	95
ORANG-UTANS	•	•	•	•	105
THE GORILLA	•	•			I I 2
THE LAR GIBBON	•	•	•	•	117
THE BABOON	•	•			110

	CONTE	NTS			xiii
m	TARABIRON AND				PAGE
THE	JAPANESE APE .	•	•		123
THE	WANDEROO MONKEY	•	•	•	125
THE	ANGOLAN COLOBUS	•	•	•	127
	PART II.	BIRDS			
THE	GRIFFON VULTURE			•	131
THE	KING VULTURE	•	•	•	132
THE	BATELEUR EAGLE	•			133
THE	MARTIAL HAWK-EAGLE	•	•	•	134
THE	MONKEY-EATING EAGL	E	•	•	135
THE	NANKEEN NIGHT HERO	ON	•		136
THE	SACRED IBIS .	•	•		137
THE	BROWN PELICAN	•	•		138
THE	KIWI .	•	•	•	139
THE	MOREPORK .	•	•	•	141
THE	KING PENGUIN.	ta •	٠	•	142
THE	RAVEN .	•	•	•	145

xiv	CONT	ENTS			
THE DEMOI	SELLE CRANE	•			PAGE
THE JABIRU	J				147
THE GREAT	CROWNED PIC	EON			
	IA CROWNED		·		149
THE ELATE				•	77
THE TOCO T		·	•	•	150
	,	•	•	•	151
	PART III.	REPTII	LE		
CHAMELEONS	•	•	•	•	155
THE CHARLES	S ISLAND TOR	TOISE	•		162
THE CAYMAN	•	•			163
THE PYTHON			•	•	164
THEBOA CONS	STRICTOR	•			165
CONCLUSION.				•	160

LIST OF PLATES

THE SOUTH AFRICAN LION	•	•	Front	ispiece
THE INDIAN TIGER .		•		G PAGE
THE LEOPARD .			•	40
THE POLAR BEAR .	•	•	٠	54
THE HIPPOPOTAMUS .	•		•	64
THE SOMALI WILD ASS	•	•	•	82
THE GREAT KANGAROO		•	•	88
CHIMPANZEES				100
THE GRIFFON VULTURE		•		131
THE DEMOISELLE CRANE				146
CHAMELEON CAPTURING ITS I	PREY	,		156
CHAMELEON CAPTURING ITS I	PREY	•		157



LIST OF ILLUSTRATIONS

THE LIC : "CULTO	n= 22 /			FACIN	G PAGE
THE LIC . "SULTA	77A (1	HEAD IN	PROFILE)	•	24
THE LION "SULTA	AN "		•		26
THE LIONESS "NA	NCY "	•	•		28
LION CUBS .			•		32
THE TIGER "PRIN	CE "		•		
THE TIGER "PRING	CE "				
THE CLOUDED TIGH	ER .	•			38
THE SNOW LEOPAR	D,	•			44
THE JAGUAR .	•	•			48
тне снеетан	•	•	•		48
THE LYNX .	•	•			52
POLAR BEARS.					
((yyye !!				•	50
"JIM," THE INDIAN	RHIN	OCEROS 2	•	. **	

xviii LIST OF ILLUSTRATIONS

			PACING	PAGE
YOUNG RHINOCEROS .	•	•	•	60
THE HAIRY-EARED RHINOCERO	os			60
THE INDIAN ELEPHANT	•		•	66
THE AFRICAN ELEPHANT	•	•	•	68
THE GIRAFFE		•		74
GIRAFFES FEEDING ON LEAVE	S		•	78
THE MOUNTAIN ZEBRA				84
THE GRÉVY ZEBRA .		•	•	84
ROCKY MOUNTAIN GOAT	•	•	•	86
THE BLACK-HEADED LEMUR	•	•	•	92
THE TWO-TOED SLOTH	•	•	•	92
MAUGE'S DASYURE .	•	•	•	92
"JOHN," THE CHIMPANZEE	•	•	•	96
"MICKIE," THE CHIMPANZEE	•			96
A "BABY" ORANG .		•	•	106
THE ORANG-UTAN .			•	106
				* * * *

LIST OF ILLU	USTI	RATIONS	xix
THE LAR GIBBON .	•		FACING PAGE
THE JAPANESE APE .	•		. 118
THE YELLOW BABOON AND	D W 1		
MANGABEY .	•	•	. 122
THE BABOON		•	. I22
THE WANDEROO .	•		. 124
THE ANGOLAN COLOBUS.	•	•	. 126
"inquisitiveness".		•	. 126
THE MONKEY-EATING EAGLE		•	. 132
THE KING VULTURE .	•	•	. 132
THE BATELEUR EAGLE	•	•	. 134
THE MARTIAL HAWK-EAGLE		•	. 134
HE NANKEEN NIGHT HERON	r .	•	. 136
HE SACRED IBIS .			. 138
HE BROWN PELICAN .		·	. 130
	•	•	. 140
UVIER'S PODARGUS .	•	•	. 142
HE KIWI			7.40

LIST OF ILLUSTRATIONS

xx

				FACING PAGE
THE	RAVEN	•	•	. 144
THE	KING PENGUIN .	•		. 144
THE	AMERICAN JABIRU	•		, 148
THE	VICTORIA CROWNED	PIGEON	•	, 150
THE	GREAT CROWNED PIC	GEON	•	. 150
THE	TOCO TOUCAN .	•		. 152
THE	ELATE HORNBILL	•	•	. 152
THE	CHARLES ISLAND TO	RTOISE	•	. 160
THE	BROAD-SNOUTED CAY	MAN		. 162
THE	DIAMOND PYTHON	•	•	. 164
THE	BOA-CONSTRICTOR			. 166

PART I MAMMALS



PART I. MAMMALS

LIONS

THE Carnivorous, or Flesh-eating, is the name given to those mammals which have their teeth peculiarly fitted for the mastication and tearing asunder of animal matter, and it is under this common title zoologists include the feline, canine, and ursine families, not forgetting seals and walruses, which must be included in the order Carnivora. The family Felidæ, with which every one is familiar, is the most powerful and ferocious of all the placental mammals; and the ferine spring with which the domestic cat captures the mouse exhibits—and is in reality as formidable in its ability to injure within its peculiar range as-the attack of the lion or tiger when bearing away an antelope from the herd or carrying off some poor unfortunate creature upon which to make a feast.

There is no beast in the whole of the Animal Kingdom that was better known to man in the earliest historic times than the Lion (Felis leo). It was very common in Palestine, and the Hebrews have seven words to signify the lion at various stages of its age. Biblical history records that Samson on his way to Timnath, having torn a lion to pieces with his hands (Judges xiv.), found, as he afterwards passed that way, that a swarm of bees had made its honeycomb in the skeleton, which was then dried up. This inspired him to propound a riddle at his wedding feast:—

"The greedy eater yields to others meat, And savage strength now offers luscious sweet."

His companions were lost in conjecture, the cryptic meaning of the puzzle com-



THE LION "SULTAN,"

(Felix Rev.)

(Presented to the Zoological Society by her Late Majesty Queen Victoria)



pletely perplexing them. They, however, urged the bride, successfully, to wrest the secret from her husband, and on the seventh day after the feast expounded to Samson the following:—

"What sweeter flows than honey o'er the tongue?
Whose strength exceeds the lion's, wild and young?"

Samson, knowing they could never have "unriddled the riddle" without knowledge of the circumstances, of which his wife alone was cognisant, realised that she had been false to him and on too familiar terms with his companions, so he left her.

The abundance of lions within accessible distance of Rome is conclusively shown by ancient history, which recounts that Pompey, "the Great" general of the Roman Commonwealth, provided for a single exhibition at the Roman Amphitheatre as many as six hundred lions

for public destruction. What interesting reading it would make were we given a description of the mode of capture of this "Light Brigade," and the adventures and sacrifices surrounding the transport to the arena!

Mr. F. C. Selous, the great African lion-hunter, borrowed for his lecture at the Imperial Institute some of my lantern slides from photographs of lions, herein reproduced. When the pictures of "Sultan" standing on the rockwork—the beautiful beast placed in the Zoo in 1895 by her late Majesty Queen Victoria, to whom it was presented by the Emperor Menelik of Abyssinia—followed by that of "Duke" the grand specimen presented to the Zoological Society by those famous explorers, Messrs. Gordon and Sharpe, authors of "From Cape to Cairo"—the lecturer remarked on the splendid condition of the two animals, and stated that he had seldom, if ever, seen lions in a wild state



THE LION "SULTAN,"
(Felis Ins.)

(Presented to the Zoological Society by her late Majesty Queen Victoria.)

Page 26.



equal in appearance to these specimens, and surprised his audience by asserting that lions in captivity grow fuller manes and longer hair on the belly than are found on the skins of any wild ones. This may probably be accounted for by the fact that in the wild state the lion prowls through the thick jungle, and the long hair of the mane, &c., becomes entangled and "plucked," whereas in confinement, with regular feeding and perfectly kept quarters, the king of the forest proceeds to develop almost to perfection.

Mr. Selous positively stated that the theory of the existence of several species of lions in South Africa is erroneous. The Black-maned Lion is not a distinct variety peculiar to a certain locality, but is most probably one of a litter, the others of which may have scanty yellow manes, on a parallel with a litter of bulldogs, from which I have reared dark tiger brindles, white pied, and fawns.

It is very gratifying to know, on the best authority, that at the present moment the iions and tigers at the Zoo are in better condition than they generally are when seen in the wild state. This, however, was not the case during many decades after the establishment of the Gardens, when the life of a lion was only about two years. In those days it was thought that in this variable climate of ours artificial heat was essential, and that open-air cages meant death to the tropical animals. It was not until 1845, when the mortality of the large Felidæ averaged one a month, that the cages known as the Terrace were built for the "free exposure to the open air, with no artificial heat whatever," of the lions, tigers, &c.; and during the year after the removal of the animals from their small stuffy cages, ensconced in equally stuffy buildings, to the Terrace, there was not a single death. The emaciated and sickly



THE LIONESS "NANCY."
(Fdis Ico)

Page 18



animals soon gained flesh, and those which turned their noses up at the best of food soon ate all that was put before them; in fact, a tigress, feeling hungry during the early morning, killed a tiger and partially devoured it. After this the Carnivora were allowed a "lion's share," and seeing the lions fed became the great attraction at the Zoo.

The Lion House, as we now know it, with its palatial open-air playgrounds, followed, and many of the felines live entirely outside, summer and winter, with just sufficient sleeping quarters to shelter them from extreme weather; and were the Gardens sufficiently extensive, as they may be in a few years, should the predominating policy of the present Government claim the eighty-five years' work of the Zoological Society for the people, we may see the keeping of wild animals carried out in perfection on the lines introduced by that prince of naturalists, Carl

Hagenbeck, of Hamburg. At Hamburg numbers of lions, tigers, polar bears and other animals may be seen roaming about as in their native habitat, without any bars or other indications that they are prisoners condemned to what is little better than solitary confinement for life, which is the condition in many menageries.

The roar of the lion is one of its most notable characteristics, and there are occasions at the Zoo when this most awe-inspiring sound can be heard in its full grandeur. I have heard every lion in the enclosed Lion House joining in that roar of satisfaction which generally follows a meal. The volume of sound produced is really terrible, and I have seen many people hurriedly leave the building, purely from fright.

What are the feelings of those brave men who camp out in the open wilds of South Africa when they are awakened by

that soul-stirring roar of the king of the forest, can be better imagined than described, as it is next to impossible to locate the whereabouts or distance of the beast. so penetrating is the sound re-echoed by the mountains. Should those gleaming eyes (which, unlike any other of the Cat tribe, are said by some to be open when the lion is born) pierce through the rays of the camp fires and meet those of the unfortunate explorer with a stare scintillating like liquid fire, he must be a man with the superhuman nerve and courage exhibited by Sir John Gayer, who was Lord Mayor of London,* if he can "stare out" the intruder and make him "turn tail," and with that appendage (according to legend) wipe out all traces of his footprints, thereby obliterating the track.

^{*} The "Lion Sermons" given in October every year were instituted by this knight, and are preached at St. Katharine Cree Church, Leadenhall Street, £200 having been bequeathed for relief of the poor so long as the sermons continue.

Unlike the eyes of the o.her Cats, which when contracted shape the pupils into a vertical slit, the lion's pupils take the form of a circular hole, and this fact may be remembered as one of the lion's minor characteristics, a point often missed by animal painters.

The photograph of "Sultan" on the rockwork has given many the impression of its having been taken in a more open space than the limited area of the lion enclosure at the Zoo. The alacrity with which he scrambled up this elevation and the tree-trunk placed in his den upon which to sharpen his claws, upsets the theory that lions cannot climb. His ponderous proportions make the lion very cautious before trusting to what might be an insufficient support, and as he would find poor prey in the small mammals which live in trees, Leo is rarely seen as an arboreal.

That the lion is a good climber is evi-





LION CUBS,

(Felis leo.)

(Presented to the Zoological Society by his late Majesty King Edward VII.)

Page 32.



denced by the following statement made by Sir Harry Johnston, G.C.M.G., whose vritings on lions and other mammals I have illustrated: "Mr. Alfred Sharpe, the Commissioner of British Central Africa, shot a lion which was perched up in the branches of a tree; and it is related in the Uganda Protectorate by natives, also in Nyasaland, that in parts of that country the lion attacks the natives in their villages by clinibing on to the roofs of their houses, tearing away the thatch and stick framework, and descending with a flop on some poor huddled group of husband, wife, and child."

That the lion is not without intelligence is shown by an account given by M. Hachet-Souplet, who recently founded an institute for the study and development of animal psychology. He experimented with a lion at the Jardin des Plantes, Paris. He placed a large box, closed by a heavy lid on hinges, in the

centre of a lion's cage. The animal was let in, and at first displayed signs of uneasiness on seeing the unusual-looking object. He was soon aware that meat was about, and sniffed vigorously, all the while remaining seated in the cage, but moving his head to track the scent. He soon discovered the meat was inside the box; but being somewhat nervous, to guard against any further surprises by what might be hidden in the box, he approached very cautiously, taking several turns round the unwonted square object, eyeing it closely. At last he gave the chest a quick scratch to see whether it would strike back, springing away at once, much as a kitten does when playing with a ball. Convinced that the strange object was not dangerous, the lion now tried to overturn it, to see if the meat were not underneath; but as the box had been screwed to the ground, this was impossible. Without undue force he con-



tinued to examine it patiently, and finally, struck by an idea, he took the edge of the lid deliberately between his teeth and raised it without violence until it fell back on the other side and the box remained open, thus giving him free access to its contents. As soon as he had finished eating the meat his keeper happened to scold a panther two or three cages away. At the sound of the keeper's voice it must have flashed through the animal's brain that he had eaten what in all probability was not intended for him; so in fear of punishment he shot the cover back with a quick movement of his nose, and crouched in a corner as if nothing had happened.

TIGERS

Tigers (Felis tigris) are much more ferocious than lions or any other felines. According to the Government return, one tiger alone killed in three years 108

human beings. Once it killed a father, mother, and three children in one day, and the week before it was shot it killed seven people. The tiger is heavier and larger than the lion, and far surpasses him in destructiveness. It is the only member of the Cat tribe ornamented with stripes across the body. These markings are protective, and render the animal inconspicuous when prowling among the reeds in which he generally conceals himself. Although possessed of great strength, he rarely attacks the armed Tigers have been brought up hunter. from the litter to such a degree of docility that they are led about like dogs in the streets of cities in India, and Sir Joseph Outram possessed a male which lived at large in his quarters. It must also be remembered that the tiger is the only Cat which equals the lion in size. It is purely an Asiatic animal, and much confusion is caused when the name "tiger"



THE TIGER "PRINCE,"
(Felis ligits.)

Pace 24



is given to an African Spotted Cat, as the Leopard is often called, whilst the name is also sometimes erroneously given to the Jaguar in America.

The popular notion that tigers spring upon their victims from a distance has been proved to be incorrect. Mr. Sanderson, whose authority is generally accepted, writes: "I have never seen a tiger actually seize its prey. The general method is for the tiger to slink up under cover of the bushes or long grass ahead of the cattle in the direction they are feeding, and to make a rush at the first cow or bullock. Catching the bullock's fore-quarters with his paws, one being generally over the shoulder, he seizes the throat in his jaws from underneath, and turns it upwards and over, sometimes springing to the far side in doing so, to throw the bullock over and give the wrench that dislocates its neck." The strength displayed by the tiger in carrying off its prey is enormous. Sir Samuel Baker roughly estimates the weight of the ordinary Indian cattle at from 350 lbs. to 400 lbs., and although it is erroneous to suppose that a tiger can take a carcase of that weight in his mouth and carry it without letting any portion of it drag on the ground, at least at intervals, yet it is quite certain he can carry it, even through the dense thicket, for hundreds of yards.

Hundreds of stories of hair-breadth escapes from lions and tigers could be narrated did space permit.

The Clouded Tiger (Felis nebulosa) or more appropriately Clouded Leopard, whose photograph was taken within two yards of the animal, was a beautiful creature, with a coat of the texture and softness of the finest plush. I had to enter its cage on more than one occasion to obtain a satisfactory pose, and the animal soon knew me, and allowed me to stroke it; and I am informed that this is



THE TIGER "PRINCE."
(Felis lights.)

THE CLOUDED TIGER. (Felis nebulosa.)



the first photograph ever taken of it. The cage being very shallow, a picture could only be taken by entering the cage, which few would care about doing. Very little is known of the habits of this animal, which is confined to the south-eastern parts of Asia, beyond the fact that it passes nearly the whole of its life in trees, sleeping on the branches by day and preying upon the small birds and mammals at night. One of the characteristics by which this animal can be recognised is the relative length of the upper canine teeth, which are proportionally longer than in any other living species of Cat.

THE LEOPARDS, JAGUAR, CHEETAH AND LYNX

His Majesty King George V., as H.R.H. the Prince of Wales, made a tour in India in 1905 and 1906, visiting

the Native State of Nepal, the Government of which, with His Highness Maharajah Sir Chandra Shum Shere Jung, R.B., G.C.S.I., had prepared for His Highness's acceptance a most interesting collection of the native animals of Nepal. This independent State is on the southern slopes of the Himalayas, and its 54,000 square miles of area abound in wild animals. The climate of Nepal varies arctic, temperate, from to tropical, according to the altitude, and furnishes a most varied and interesting number of animals.

The "Prince of Wales's Leopard," as the animal here illustrated was called when the collection brought over by His Royal Highness was deposited at the Zoological Society's Gardens—an unused part of which was transformed into "The Prince of Wales's Exhibition Ground"—was a magnificent specimen of the Felis pardus, and had evidently been caught wild, which,

combined with its long imprisonment in very limited quarters, established this beast as the most savage animal of the collection. This was of such dimensions and importance that a special Guide to this section of the Zoo was published, which I had the honour of exclusively illustrating with sixteen photographs.

Leopards are very variable both as to size and colour, and the opinions of zoologists on the question of Spotted Cats are undecided. The point is whether all varieties of this animal should be classed as leopards, or whether the larger and more robust kinds should be separated and be called panthers, which was the name employed by the ancients. Elizabethan and later authors referred to the leopard as "pard," a word which is now nearly obsolete:—

BYRON: "Giaour."

[&]quot;Though pierced like pard by hunter's steel, He felt not half that now I feel."

In India the natives give to both kinds (in common with the Hunting Leopard) the name "chita," meaning "spotted"; but on account of its larger size the leopard is distinguished as the "chitabagh," or spotted tiger. It may, however, be taken for granted that what is popularly called a panther is a leopard, otherwise the Zoological Society has not possessed a specimen of the former, no mention of such an animal appearing in the official list of animals exhibited in the Gardens since 1883. Cheetahs and jaguars are, however, recognised as distinct from leopards, although both may be called Spotted Cats.

Like the other large Cats (the lion and tiger), the leopard has a ferocious and bloodthirsty disposition. Out of sheer

¹ Mr. G. P. Sanderson ("Thirteen Years among the Wild Beasts of India"), from personal observation of its haunts and habits, considers the leopard of India, although its powers of offence are far inferior to those

love for slaughter it will kill many animals in a single night, leaving their carcases without any signs of having devoured any portion of them. its action it is also more active and quicker than the lion and tiger, preying on almost any animal it can overcome. It is particularly fond of devouring dogs, and instances are on record by the score where leopards have swooped down in broad daylight on the hill-stations and carried off the pet dogs of the Europeans before they have had time to realise the fact. They not infrequently attack old women and children, and sometimes beregular "man-eaters." Although come not distinctly arboreal, like the clouded tigers, they can climb high trees when hunted

of the tiger, to be in some respects a more dangerous animal, as it is roused with less provocation and is more courageous in attacking those who disturb its repose.

The Snow Leopard, or Ounce (Felis uncia), is a splendid animal, with thick long fur, the upper parts being of a pale whitish-grey, sometimes tinged with faint yellow, graduating to pure white beneath. This groundwork is ornamented by spots larger, though less distinct, than the leopard's. The magnificent tail can be seen in the photograph, which was specially taken to show this characteristic. "Jim," as this specimen was called, was considered very docile, and was thought by the keeper to be as quiet and affectionate as the lynx, whose cage I had frequently entered. I, however, had a très mauvais quart d'heure with him. On entering the cage, "Jim" was quite friendly, and allowed me to approach within a few yards of him. Something, however, upset him when I released the "instantaneous" shutter, which was evidently not noiseless to his acute hearing, for he immediately sprang up the sides of his



THE SNOW LEOPARD, OR OUNCE. (Felis uncia.)



big cage and pounced upon my shoulders, almost knocking me over. Dixon, the keeper, shouted, "Keep still! don't move!" and rattled a broom against the wires of the cage, which is the large one on the left as one passes over the canal bridge from Primrose Hill. Luckily for me, he took another bound to the other end of the enclosure, leaving me a few flesh punctures on the shoulders where his talons had pierced my clothing in order to get a hold. I was not, however, daunted, and took several pictures before leaving.

The Snow Leopard lives in the mountains of Ladakh at an altitude of between 18,000 and 20,000 feet, which makes any reliable knowledge of its habits somewhat limited, as it never descends below a level of some 9,000 feet. Its beautiful and long fur is specially adapted for protection against the very severe weather of the regions it inhabits, and a good

skin was once much sought after and rare. The Viceroy of India having, however, sanctioned the use of these skins by the officers of a native regiment, they have become common, and it is to be hoped that this handsome creature will not share the fate of many over-hunted animals and become extinct.

The Jaguar (Felis onca) is the largest representative of the Cat family inhabiting North and South America and Canada, and is somewhat larger in body than the leopard, and its head measurements are proportionally greater. The ornamentation of its fur is most elegant, and it is considered the most beautiful of all the Spotted Cats. The "spots" are formed by elongated rings enclosing a rather lighter tinted patch of fur than the ground colour of the coat, and are arranged in a series of seven or eight longitudinal rows of rosettes, larger in size than the spots of the leopard.

Reference to the photograph reproduced will show that the jaguar is massively built, yet is one of the most agile and best climbers of the Felidæ, and preys upon the monkeys inhabiting the trees.

A word of warning must be given to those who would pursue the fascinating branch of photography which I call "animal portraiture." The illustration of the jaguar shows the animal in an erect, foreshortened position, which is very difficult to obtain, as the animal is directly facing you, and in this instance was at unpleasantly close quarters. I must confess it is much too risky a pursuit to be attempted by the amateur photographer, as the animal, from the position in which he was approaching, could have bounded towards me in a second.

Some individuals (and I am told I am one of them) have a mysterious—may I say hypnotic?—influence over animals, which

seems to fascinate them, be they ever so wild. The tone of voice and expression of the eyes have a power over beasts which, combined with confidence on the part of those hazarding this form of hunting, have a dominating effect upon the animal. Many hours, or even days, may be spent before a satisfactory pose is secured, during which the animals get quite used to your presence, and ultimately treat you as part of the accessories of their environment. Labor omnia vincit.

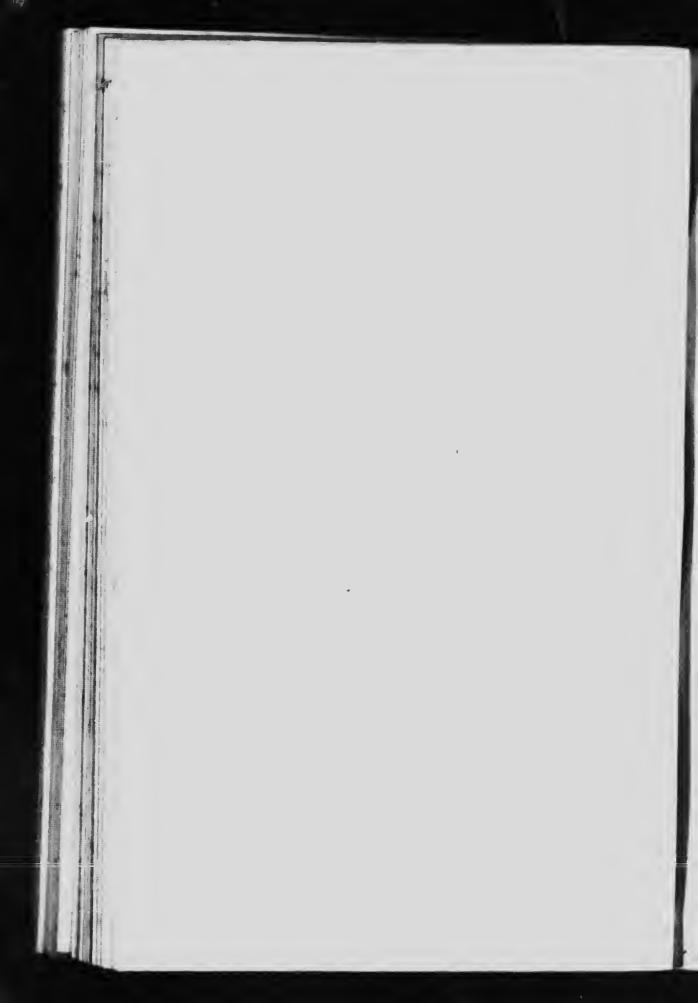
The Cheetah or Hunting Leopard (Cynælurus jubatus), as will be observed by the alteration in the first of the Latin names, does not belong to the genus Felis, like the other great cats already described, but is considered so markedly different that it has the distinction of being the only representative of its genera.

There are several characteristics which distinguish the cheetah from the other

THE FAGUAR. (belis outa.)



THE CHEETAH. (Cynwlurus jubatus.)



Spotted Cats, the most important of which is the fact that the claws always remain partially visible, as the animal cannot withdraw them entirely into their protecting sheaths. Secondly, the body is much more slender than that of other great cats, although in comparison with, say, the leopard, a feline of relative length of body, the cheetah's legs would be much longer, giving it the appearance of being "leggy." Its fleetness has made it a very useful hunting animal, and in Asia it has been trained to chase the antelope.

It is one of the prettiest of the wild Felidæ, and certainly more affectionate than any other, and those whose cages I have entered were most gentle and free from vice. They are, however, very high-strung and nervous animals. Any strange noise or sound greatly excites them, and when "upset" they will remain on the alert for days together, and seem to have lost confidence in those who attend them.

From past experience at the Zoo the cheetah, when kept in the Mammal House, had the reputation of being a very delicate animal, and difficult to keep for any length of time in captivity. Specimens which have arrived in fairly good condition, considering the long voyage in a cage, generally of small dimensions, did not seem to thrive at Regent's Park, where every care and attention was given them.

That they can be kept in captivity for a number of years is proved by the fact that I have seen magnificent specimens at the Tower, Blackpool, which look the "pink" of perfection, their coats shining like plush, and, although answering to their characteristic slenderness, have not an emaciated appearance. At the Tower all the animals are kept in a menagerie which is many floors above the main building, and is lighted by electric arc lamps, which shed

their intense rays on the animals until a very late hour of the night, making one wonder if this may act as a "light bath" and in some way account for the longevity of the Felidæ, &c., in an enclosure which does not possess a single out-door "run" for the animals. The cages are scrupulously clean, and a credit to the establishment, and quite free from that peculiar odour so unpleasantly noticeable in many menageries. The elevated position (about feet) of the Tower menagerie, which faces the open sea, may, combined with judicious ventilation, account for this satisfactory condition where animals are only kept as a "side show."

My observations and experiences in the breeding of animals have proved the absolute necessity of keeping the floors of the houses where animals are confined thoroughly dry. This rule is closely observed at the Tower, Blackpool, where the flooring of the cages is not of wood,

which should never be used unless made in sections which can be readily removed for cleaning and drying, in which case it is a good plan to have two sets. Concrete floors must be dried after scouring. Absorbent wood is to be condemned, as it retains the germs of disease; and where the flooring is allowed to become saturated by the use of animals, it must be exceedingly unhealthy. Sprinkling of the floor with one of the so-called "disinfectants" and a periodical sweep out are useless.

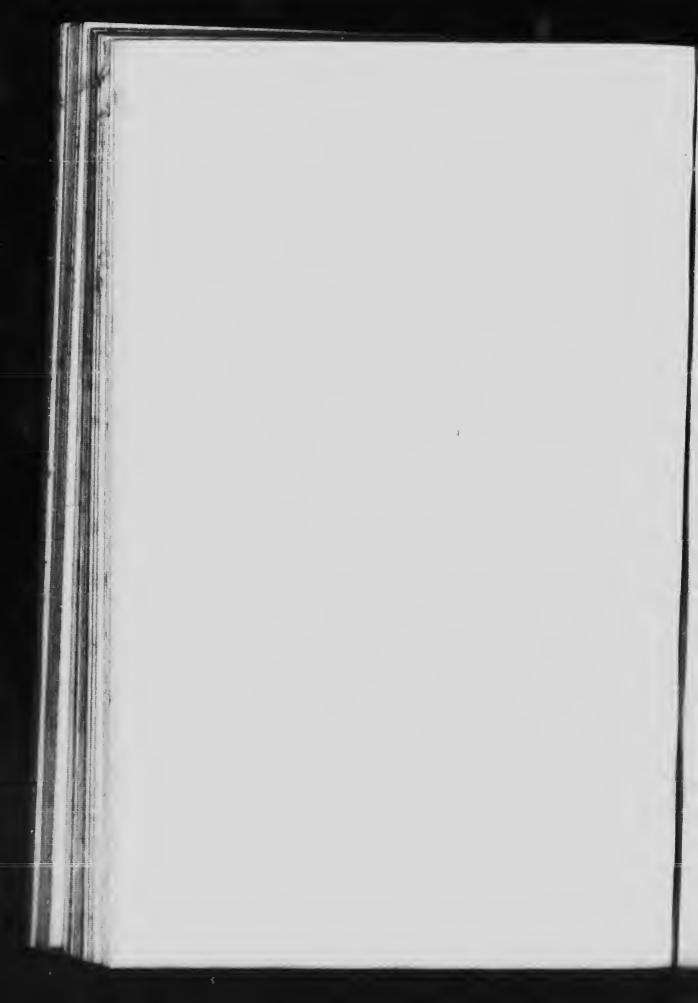
Both felines and canines are particularly susceptible to catarrh, followed by inflammation of the lungs, and in many instances fixed wooden floors are the source of the trouble, and should never be used by any one who has the least consideration for animals, demestic or otherwise.

The specimen of the Northern Lynx (Felis lynx) shown in the illustration is



THE LYNN. (Felis lynn.)

Page 52



from the Caucasus, that mountainous boundary, the highest summits of which reach to over 19,000 feet, which divides Europe from Asia. This scarce beast lives in the highest mountain forests, and, unlike the wolf, seeks its prey by day. The spots are not so vividly pronounced as in the other Spotted Cats described, and although it appears certain that the fur of the summer dress is always marked with small spots, these do not appear on the winter coat, except in rare instances with young animals. The lynx is said to be very long lived, and is a very destructive animal, relentlessly pursuing its agile prey, such as weasels, ermines, and squirrels, which are unable to escape even in the tops of the highest trees.

The lynx of modern times must be a very different animal to that described by poets as having drawn the chariot of Bacchus; for even were it possible to train these animals to the yoke, the

countries of Asia conquered by Bacchus (India, for instance) are not the habitat of the lynx. It prefers cold or temperate climates. The expression "lynx-eyed" infers that this animal has a sight which penetrates even opaque bodies. In all probability this reference to the lynx is a perversion of the name of Lynceus, who was so sharp-sighted that he could see through the earth and distinguish objects nire miles off (see Horace, Epistle I. i. 28).

POLAR BEARS

The Polar Bear (Ursus maritimus) is stated in our leading text-books to be characterised by its pure white coat, which differs from that of other white mammals in that this colour is retained at all seasons of the year, instead of being exchanged in summer for a darker tint. Captain Frederick G. Jackson (leader of the Jackson-Harmsworth Polar Expedi-

tion), who sojourned for three years in Franz Josef Land, states that the Polar bear is not white even in its native habitat, and his statement is certainly borne out by the colour of those seen in captivity, which are never pure white, but of a yellowish hue. This great authority writes as follows: "As I find there is some doubt on the matter, I may say at once he (the Polar bear) is yellowish white in colour all the year round, and does not change from a darker hue to white in the autumn. He is strictly speaking a carnivorous animal, and lives almost entirely upon seals. His coat during the winter and early spring is very long and thick; and in the late spring it is shed and replaced by one more suited to the warmer temperature."

Since the advent of the new and extensive ponds for the Polar bears at the Zoo, these animals have proved to be one of the chief attractions of the Gardens.

Crowds can be seen watching the antics of "Barbara," which are very entertaining. The dimensions and depth of the pond, with its central rockwork rising to about 15 feet above the level of the wate., give the animals scope to show off their aquatic powers. They are surprisingly animated and rapid in movement, notwithstanding the fact that a full-grown male will weigh 900 lb., and Captain Lyon records having captured one weighing 1,600 lb.

The precautions taken to guard the public against the treachery and savage nature of Polar bears impress the visitor at once. The playful gambols of "Barbara" give the idea that she could be trusted; but even the keepers who have been with the animals for years are no more free from an attack than a stranger, and my experience goes to show that the Polar bears are the most dangerous animals in captivity.

By the shape of his head the Polar





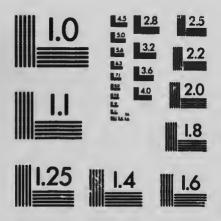
POLAR BEARS. (Crsus marthmus.)

1'4ge 56.



MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)

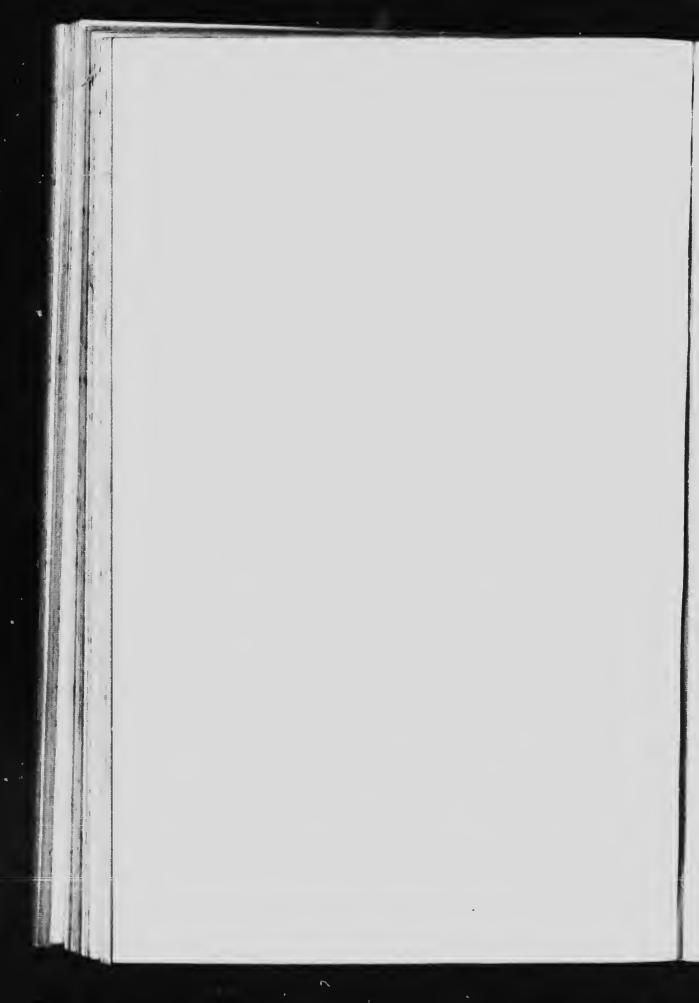




APPLIED IMAGE Inc

1653 East Main Street Rochester, New York 14609 USA (716) 482 - 0300 - Phone

(716) 288 - 5989 - Fox



bear is put down as a "bit of a fool," but he is prone to bite, and the belief that he hibernates is an erroneous one, as numbers were shot by Captain Jackson during the long arctic winter.

RHINOCEROS AND HIPPOPOTAMUS

The Indian Rhinoceros (Rhinoceros unicornis) "Tom" is the oldest mammal at the Zoo, having been presented in 1886, and although he has been at the Gardens twenty-five years, gives no indication that he may not live another fifty years, the average life of these animals being about a hundred years.

Contrary to popular belief, the skin of the rhino is quite soft, and is easily pierced by a bullet or pricked with a knife. The weight of these gigantic animals can be reckoned by tons, and for this reason precautions are taken that "Tom" (into whose enclosure not one of the keepers will venture) cannot quietly lean against any one who might be stupid enough to risk the probability of being crushed to death.

Though known to the ancients, the first specimen seen in Europe was sent from India to the King of Portugal in 1513. Although there are several species of the Asiatic rhinoceros, the "one-horned." represented in the photograph of "Jim," is the rhinoceros par excellence. They inhabit the great grass jungles which form such a large portion of the plains of India. upon which they feed, and are practically exclusively grass-eaters. enormous height and density of these grass jungles are described as follows by General Kinloch: "Year after year, in the short space of two or three months, these giant grasses shoot up to a height of from twenty to thirty feet, forming, with the wild cardamom, various other broadleaved plants, and numerous creepers, a



"JIM," THE INDIAN RHENOGEROS, (Rhinecros minoris)
(Lived forty years at the Zoo.)

Page cs



tangled cover which shelters the elephant, the rhinoceros, and the buffalo as effectually as a field of standing corn affords concealment to the partridge or the quail."

The hide of the rhinoceros is of great thickness, combined with immense folds; and this apparent armour has given rise to the impression that it is spear and bullet proof, and that the only parts free from this protection are between the joints of the armour. This belief was erroneous, as the following amusing story, also related by General Kinloch, proves:

"A soldier in India, who had heard of this legend, fired point-blank at a tame rhinoceros which had been captured by his regiment during the Mutiny, in order to obtain ocular proof of its truth. Needless to say, as the shot was well aimed the unfortunate animal fell dead, which meant a considerable loss to the regimental prize-fund."

The idea that the hide of the Indian

rhinoceros was bullet-proof may have arisen from the fact that the Indian princes employed the dried hide as a covering for the shields of their soldiers. The hide, when dried, is remarkably hard, but on the living animal it is quite soft.

It is a curious fact that the rhinoceros, unlike other animals, except the hippopotamus, does not fall over on its side when shot, but collapses within its own track into a position resembling that of crouching.

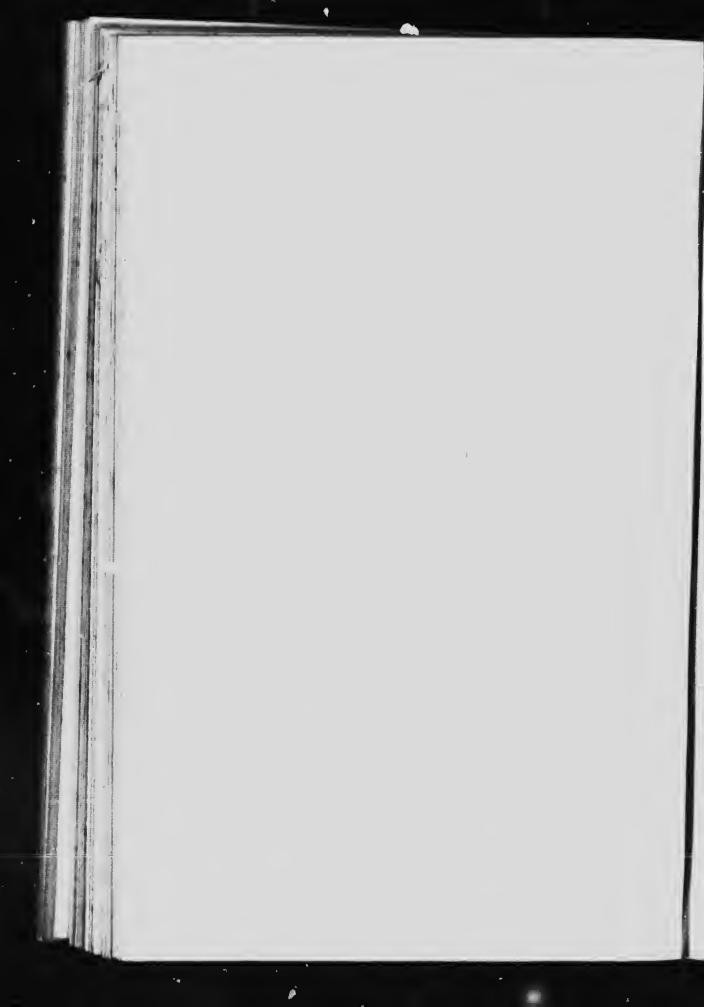
The young Indian rhinoceros, with the two native keepers who accompanied the collection of animals, was brought over from India by H.R.H. the Prince of Wales in 1906. The animal has grown tremendously since its arrival, and is perfectly tame in comparison with "Tom," who is without exception the most untrustworthy animal in the Gardens.

The Hairy-eared Rhinoceros (Rhinoceros lasiotis) hails from Chittagong, on the



THE HAIRY-FARED RHINOCEROS. (Rhino.cog lasofis)

1000



east side of the Bay of Bengal. This species has two horns and in common with all Rhinoceroidæ belongs to the Odd-toed Ungulate, having but three toes on both the fore and hind feet, each of which ends in a strong hoof. Why this quaint animal should have been named after the few hairs growing on its ears is doubtful. The specimen illustrated was the most comical animal in the Gardens. You only wanted to watch him when let out in the open-air enclosure on a wet day, when the clay soil of Regent's Park was well saturated. He loved to grovel in the clay mud, and literally tried to bury himself in it. When he arose from his Schlamm-bad covered from head to foot, he presented a most amusing appearance. He was very nervous; it was only necessary to shuffle the feet on the gravel as he passed by to start him off at a gallop, and his antics were most grotesque. Unlike the one-horned species,

this animal's hide is not thick, and does not cover it in sections like a series of armour plates. This valuable specimen, which cost the Society about £1,000, died last year.

In the Bible "Imprinted in London by Robert Barker, Printer to the King's Most Excellent Majestie" (the "Breeches" Bible, A.D. 1560), the rhinoceros is called the "unicorn," and unicorn is the word expressed in the version still used in our churches. An engraving of a coin of Domitian (Roman Emperor, A.D. 81-96) shows on the reverse the distinct form of a two-horned rhinoceros. The coin, coupled with the epigram of Martial, has greatly puzzled antiquaries and led some of them astray, as they could not be convinced that a rhinoceros with two horns ever existed. It was evidently known in Rome, and was used in the arena, and a description of a fight between a two-horned rhino and a bear

exists ("De Spectaculis Libellus," Ep. xxii), by which it appears that the rhinoceros tossed the bear with his double horn as easily as a bull tosses a bulldog.

The Hippopotamus (Hippopotamus amphibius), "Guy Fawkes," was born in the menagerie on November 5, 1872, and, although a female, was named after that notorious conspirator whose effigy was annually burned on the top of Primrose Hill, which faces the Zoo, before the hill was enclosed and turned into one of London's cultivated pleasure resorts. The name was chosen as a reminder of the date, and not on account of any revolutionary spirit exhibited by the animal, which was docile, and the press of thirty-nine years ago went into raptures over the "beautiful little thing." The hippo has never been a great favourite with the public, which is proved by the fact that very little of the food given

to the animals by the visitors, which amounts to many tons a year, ever found its way to "Guy Fawkes," who, although by nature herbivorous, was as fond as an elephant of a bun, and would open her enormous mouth at the word of command. which to my mind proves she was not so wanting in intelligence as some people would make out. I have proved she was sensitive to the sounds of music, as was a specimen deposited at the Zoo in 1854, which was brought over by an Arab snake-charmer, who was in the habit of exciting the attention of his charge by playing upon a kind of wooden whistle a gamut of tones which had the effect of making the hippo vibrate its enormous body to and fro with evident pleasure, keeping time to the measure of the weird sounds of the pipe; and whenever the band played on board the vessel which brought her over, she would raise her head in the attitude of listening.

"Guy Fawkes" died in March, 1908, of old age, and a full-grown hippo has not been seen in the Gardens since.

The hippopotamus, in contradistinction to the rhino, is an Even-toed Ungulate, and the English equivalent to its Greek name, "river-horse," in no way denotes the animal. The Egyptians gave it a name meaning "river-swine," which is etymologically more correct. Next to the elephant the hippo is the largest living terrestrial animal. A male that lived many years at the Zoological Society's Gardens measured 12 feet from the tip of the snout to the root of the tail, and weighed about 9,000 lb., and Sir Samuel Baker records having captured one that measured 14 feet 3 inches, and the freshly removed skin weighed about 5 cwt. Hippopotami are natives of Africa, and are chiefly found in the upper tributaries of the Nile, where they are very numerous. Sir S. Baker

states that during the dry season he has seen a bend of the White Nile so crowded with hippopotami that it seemed impossible that his steamer would be able to make its way without coming into collision with some of the monsters. All, however, managed to steer clear of the vessel, which passed through a perfect crowd of snorting and blowing heads.

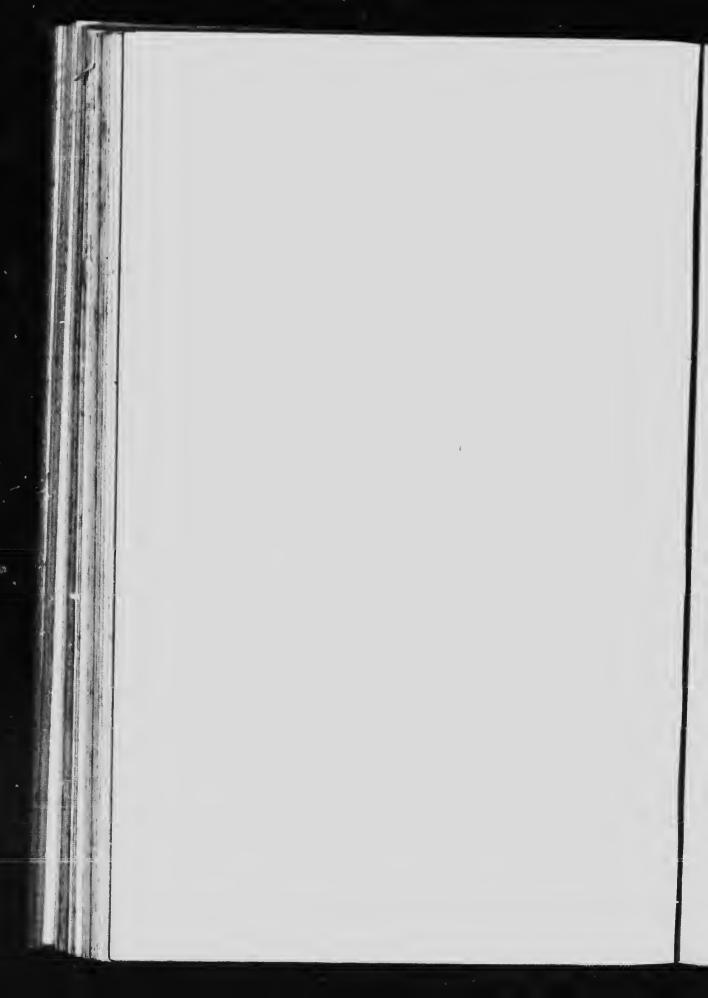
ELEPHANTS

The Indian Elephant (Elephas maximus) and the African species (Africanus) are without contradiction the most popular animals at the London or any other Zoo of the world. Tons of food are brought to or purchased in the Gardens annually, the greater portion of which is given to the elephant. Nothing seems to please visitors more than giving a morsel to the elephant, and one periodical visitor made a practice of bringing 4 lb. loaves, known



THE INDIAN ELEPHANT, (Elephas maximus.)

P. spc 66.



as quartern squares, generally used for sandwiches, and giving a whole one to the elephant. This was a sight worth seeing, and the mastication of these big loaves, which were generally many days old, required some considerable labour on the part of the beast. I have heard the Elephant House ring with laughter at this mirth-provoking feast, in which the animal joined, pleasure beaming in his small but expressive eyes.

The popularity of the elephant is proved by the fact that in 1882, the year "Jumbo" left the Zoo for America, over 200,000 more visitors passed the turnstile than during any preceding year since the Gardens were opened in 1828, with the exception of 1876, when the Indian collection of the Prince of Wales was exhibited and the number of visitors was 915,764. The total number (849,776) was not reached by an average of about 120,000 until 1906, when H.M. King

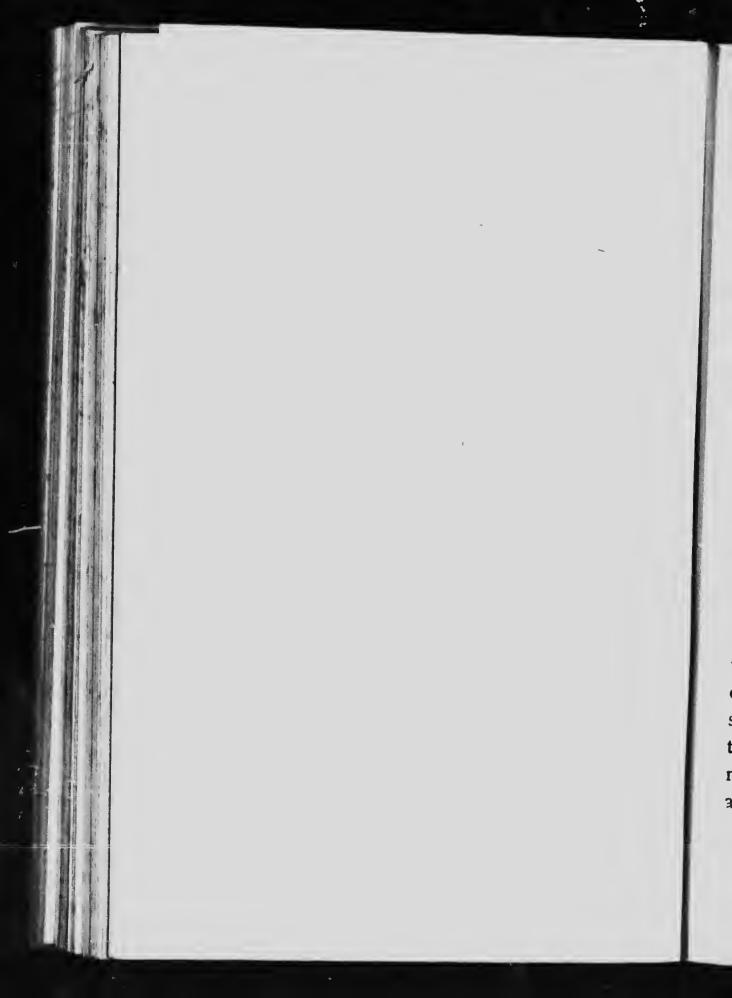
Edward VII.'s Indian collection drew 896,423 visitors, again beating all records except that already noticed.

The African Elephant can be readily recognised by any one by the observation of the following characteristics. As shown in the photograph, the large ears are an unmistakable point by which the African species can be distinguished. I particularly arranged the position of the animal to show its special points. This specimen, which arrived at the Zoo in 1901, when it was about four years old, had not been spoiled by being some poor hardworking member of a travelling circus or menagerie, but was captured in the Italian colony of Eritrea and imported from Massowah direct to the Zoo. is a most tractable animal, its happy surroundings and comfort at the Gardens having helped it to develop from the 4 feet high "baby" to the grand specimen shown in the illustration, which



THE AFRICAN FLEPHANT. (Elephus aprianns)

Page Cv.



the homeless, wandering life of a "performing" elephant would not have improved.

The trunk is another important distinction in the African elephant. It has the appearance of being composed of a number of segments, like the joints of an extending pocket telescope, in contrast to the gradually tapering trunk of the Indian species. The extremity of the trunk is furnished with two almost equal sized prehensile tips, and it has but three toes on each of the hind feet.

The tusks (which are rarely seen to perfection on the animal in captivity) may be calculated as measuring about 20 inches longer than those of the Indian, which average about 8 feet 4 inches long on the fine old "tuskers" in the wild state, whereas there is to be seen at the British Museum an African tusk measuring 10 feet 2 inches, with a girth at the base of 24 inches. This single

tusk weighs 226½ lb. Longer tusks than this have lately been exhibited in London.

The Indian Elephant (Elephas maximus), which makes up the two existing representatives of the sub-order Proboscidea of the ungulate mammals (which, by the way, is also intended to include the elephant's more immediate extinct relations), is immediately recognised by the following external signs: small ears; five nails on the fore feet. and four (sometimes five) on the hind feet, in comparison with only three on the African. The flexible proboscis (trunk) is uniformly smooth in its whole length, gradually tapers. which The margin of the end of the proboscis, which is much longer than the lower margin, is furnished with a finger-like process. The food of the Indian elephant principally consists of grass, leaves, stems and bark of certain trees, especially the fig, and

the young shoots of the bamboo; but no doubt it enjoys the varied menu offered it at the Zoo. It is gregarious in its habits in the wild state, associating in herds of ten, twenty or more individuals. It is a very nervous and timid animal, and generally inoffensive, but becomes very dangerous under certain circumstances.

In the habits of the Indian elephant there is one very noticeable feature which differentiates it from the African. The former species, which inhabits Burma, Cochin China, Ceylon, the Mar Peninsula, and Sumatra, has a great a preace to the direct rays of the sun, and will never willingly expose itself thereto. For this reason elephants are seldom or never seen in the open during the hot season in the above-mentioned places, as they will not voluntarily expose themselves in the open, but keep within the shade of the dense forests and giant grass.

That the elephant is a very nervous animal, easily excited to a state of fear and trembling, can be gathered from following touching incident which the Zoological Society's occurred at Gardens in 1855. A very tame female elephant, which was considered one of the finest specimens of its sex that had been in captivity, was being exercised in the grounds. The sky was somewhat overcast, and looked threatening, suddenly one of those sharp reverberating peals of thunder which have before now struck terror to the soul of man so affrighted the sensitive elephant that she broke loose from her keeper stampeded, fortunately without causing any accident to any one in the Gardens. When recaptured she was in a state of terror pitiable to behold, trembling and shaking in every limb, her immense body palpitating with violent spasmodic twitchings. She was with difficulty led

back to her quarters, exhibiting all the time unmistakable indications of the terrible shock that had been given to her nervous system. In a short time she laid down in her stable from sheer collapse, from which the poor beast never recovered, notwithstanding the skilled attention bestowed upon her, and after constant and anxious watching for a few days she died, much to the grief of her keeper, to whom she was very attached, and who never left her from the moment she was seized.

GIRAFFES

The importance as a "show" animal of the Giraffe (Giraffe camelopardalis), combined with the fact that it is the sole existing representative of the family Giraffidæ, to which it belongs, inspired the Council of the Zoological Society in 1833 to make special efforts to obtain a specimen for the Zoo. The

following extract from the Report of the Council of the Zoological Society (1836) describes the methods followed for securing a specimen: "The Council is now looking forward with interest to the completion of an attempt in which the Society is engaged for the importation of several giraffes. In the early days of the Society's existence, the acquisition of this singular and rare animal was among the most important objects to which the Council was directed, and they made many inquiries as to the probable means of effecting it. In 1833 arrangements were made with M. Thibaut to proceed to Nubia for the purpose of procuring giraffe; on the Society's behalf. In the spring of 1834 the caravan left the Nile near Dongola, and then passed on to the desert of Kordofan."

Being perfectly acquainted with the locality, and on friendly terms with the Arab sword-hunters, whose remarkable



THE GIRAFFE, (Girara camelofardalis)



skill and courage were notorious, M. Thibaut attracted them still more by the offer of a share of the profit on the expedition. Up to that time they had hunted the giraffes solely for the sake of their flesh, which they ate, and the skin, of which they made bucklers and sandals. The party proceeded to the south-west of Kordofan, and in August were rewarded by the sight of two beautiful giraffes. A rapid chase of three hours, on horses accustomed to the fatigue of the desert, put them in possession of the largest of these noble animals; unable to take her alive, the Arabs killed her with blows of the sabre, and cutting her to pieces, carried the meat to their headquarters and covered the live embers with slices of the meat, which M. Thibaut pronounces to be excellent. They deferred till the following day the pursuit of the motherless young one, knowing they would have no difficulty in again discovering it. The party started at daybreak and in a very short time were on the track of the object of their pursuit, and after a chase of several hours through brambles and thorny trees they succeeded in capturing the coveted prize.

It was now necessary to rest for three or four days in order to render the giraffe sufficiently tame, during which period an Arab constantly held a rope to which the animal had been secured; by degrees it became accustomed to the presence of men, and was induced to take nourishment, but it was necessary to insert a finger into its mouth to deceive it into the idea that it was with its dam; it then sucked freely. On the fifth day it was perfectly tame, and trotted after the caravan with the female camels brought to supply it with milk. Many others were caught, some of which died from the cold of the desert.

On November 21, 1834, M. Thibaut reached Malta in safety and landed three males and a female, and the stipulated sum of £700 was paid him; but it cost the Zoological Society over £1,000 for the conveyance of the animals to England. The necessary fitting, &c., for the accommodation of the giraffes at Malta made up the total cost to the Society to no less than £2,386 3s. id., to be exact. Such was the interest in these animals that the Lords of the Admiralty sent special orders to the authorities at Malta that Her Majesty's dockyard was to be placed at M. Thibaut's disposal for the safe housing of his valuable specimens.

It was not until May 24, 1836, that all four were safely lodged in the house which had been specially built to receive them, and the complete success of the expedition from start to finish was justly claimed by the Society as highly creditable to its resources. No less than

seventeen fawns were born from this team in the Zoo, many of which became fulladults. grown The stock gradually decreased until in 1867 two were burnt death in their stable. the becoming ignited during the night. A female and her fawn were mercifully asphyxiated, another one dying shortly afterwards from shock. Sad to relate, the two remaining giraffes perished from cold during the severe winter of 1892, leaving the Gardens without a specimen.

The relief of Mafeking by that gallant soldier, Colonel Mahon, C.B., D.S.O., was commemorated by a gift from the world-renowned reliever of General Baden-Powell of a pair of young adult giraffes from Kordofan. This princely gift saved the Society about £2,000. The Colonel gave the name "Fatima" to the female giraffe, which seems most appropriate, as the heroine of "Bluebeard" could not have shown more curiosity than this fine



GIRAFFES FEEDING ON LEAVES.



specimen, who is always on the alert and most inquisitive. The male is named "Selim," after one of the Sultans of Turkey, but as the giraffe is becoming more scarce every day, I am afraid "Selim" will have to be content with one wife.

The giraffe exhibits absolute affection to those who attend to it, and M. Thibaut recorded that in Egypt, when in charge of the team he was bringing over, he noticed that they would shed to its if they were parted from their companions or missed their usual attendants.

There is no city in the world like Paris to create a craze. Anything that is novel is immediately taken up, and it is no exaggeration to state that the Parisians lost their heads over the giraffe sent as a present to the French in 1827 by the Pasha of Egypt. The giraffe arrived at Marseilles with a number of cows sent with it by the

Pasha to ensure its having fresh milk during the journey from Egypt, and as it was thriving well, it was wintered at the southern seaport. The Prefect of Marseilles ordered the arms of France to be embroidered on its coverings, and when it left for Paris the Prefect of Marseilles himself accompanied the animal through the capital. The giraffe entered Paris escorted by a retinue of attendants, both white and coloured, and a professor from the Jardin des Plantes and an interpreter. Troops lined the route to keep back the Paris crowd, and men and women wore gloves, gowns, and waistcoats of the colour of the animal's spots. There is no parallel to the above interest in an animal by the general public except in the case of the departure of "Jumbo" through the streets of London en route to America.

Although it has been proved beyond all doubt that there is only a difference

of about an inch in the length of the fore and hind legs of the giraffe, there are countless visitors to the Zoo who remark on the great length of the front legs, whereas the hind legs are the longest. The two illustrations are of the animals presented by Colonel Mahon.

ZEBRAS AND SOMALI WILD ASS

The Zebras and the Somali Wild Ass are closely allied to the horse, for which England justly holds the reputation of breeding the finest in the world. The Wild Ass from Somaliland (Equus Somalicus)—see illustration—shows to perfection the muscular shapeliness of this African equine, which, although more closely allied to the zebra than to the horse, gives the impression of being more of the character represented by a "cob" in its external appearance. Its mane is always erect, and its ears are

larger than those of its Asiatic cousin; its tail is more scantily haired at the tip, and, like all asses and zebras, the root of the tail is hairless, in contradistinction to the horse. It has very distinct stripes on all four legs, but the dorsal stripe seen on domestic asses is very indistinct and the shoulder stripes are wanting, and there are no callosities ("chestnuts") on the hind or fore legs, though they are usually present on the legs of the domesticated horse. Chalmers Mitchell, F.R.S., the Secretary of the Zoological Society, states that these bare warty patches or callosities probably the remains of recognition or scent glands, such as are found on the limbs of some other quadrupeds.

The animal photographed has sired several hybrids at the Zoo, and being a very wild and savage animal, gave the writer considerable trouble before a successful photograph was obtained.

The Mountain Zebra (Equus zebra), erroneously called the Common Zebra, is the scarcest of all the species of zebras, and it was rumoured, when the female mountain zebra died through a chill, that in all probability a mate for the remaining male would never be secured by the Society. His Majesty King George V., whose Coronation collection is now safely housed at the Zoo, has fortunately secured a mountain zebra mare and foal in his African collection, and with the male already in the possession of the Society, it can boast of having the only pair in captivity.

The type of this species is more asinine than equine, the muscular build of the animal standing out in beautiful symmetry. They were once described as being found in small troops in South Africa, but are now seldom seen except in the most rugged and inaccessible mountain ranges; but His Majesty's gift to the Zoo

proves that they still exist and are breeding.

The Grévy Zebra (Equus grevyi) is unquestionably the most handsome of all the Equidæ. It is readily distinguished by its size, which is greater than that of all other varieties. Its habitat is the mountains of Victoria Nyanza, and from thence towards the highlands of Shoa and Somaliland. It is slimmer than the mountain zebra, but agrees with it in having all four legs striped or ringed right down to the hoofs; it is not, however, striped on the under part of the body.

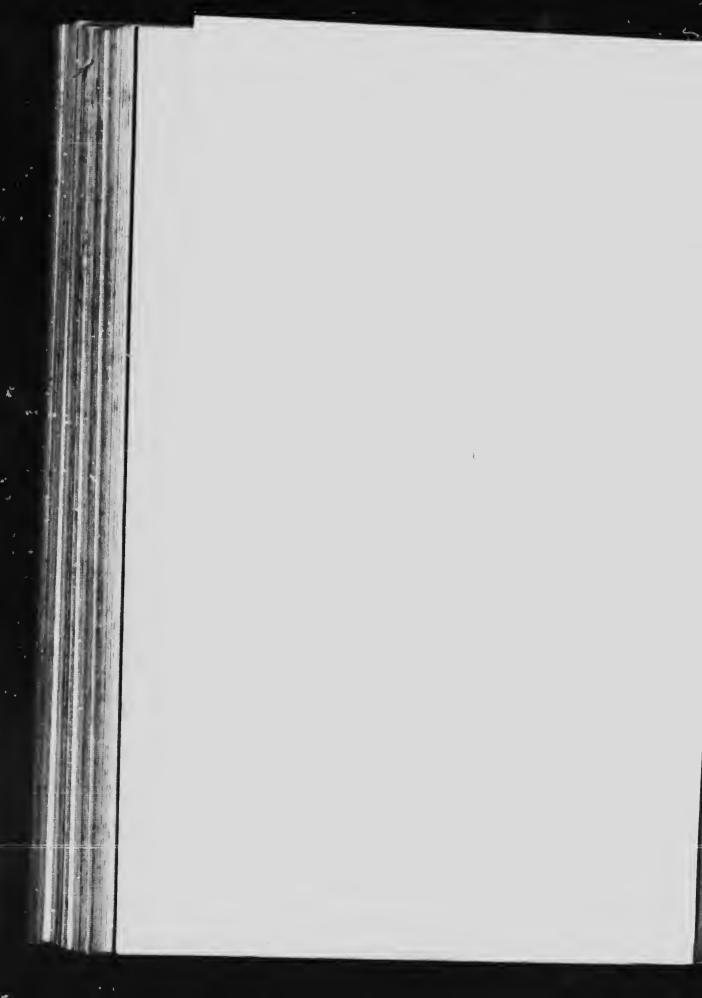
This species is named after the late President Grévy, of the French Republic, who was presented with the first specimen that ever left Africa. The photograph is of one of a pair sent over to the late Queen Victoria by the Emperor Menelik. This beautiful pair, which were kept at Windsor, were deposited



THE GRÉVY ZEBRA. (Equity Queyt)

THE MOUNTAIN ZEBRA. (Equus zebra.)

Page 34



in the Zoo by the late King Edward VII. in 1901.

It will interest many readers to know that the prehistoric ancestors of the Equidæ possessed both fingers and toes. They gradually came to walk upon the tip of the longest or middle finger, which became greatly enlarged. In the course of ages the nail gradually developed in size, taking the form of the present hoof. The other digits gradually disappeared, being of no further service.

THE GOAT, KANGAROO, SLOTH, DASYURE, AND LEMUR

The Rocky Mountain Goat (Organnos montanus) is about the size of a large sheep, and one of the scarcest animals ever exhibited at the Zoo, only two specimens ever having been on exhibition, one in Regent's Park and the other in Philadelphia. This animal's range

extends through the Rocky Mountains in California to as far as the mountains reach. It is really only by name a goat, being more closely allied to the antelopes.

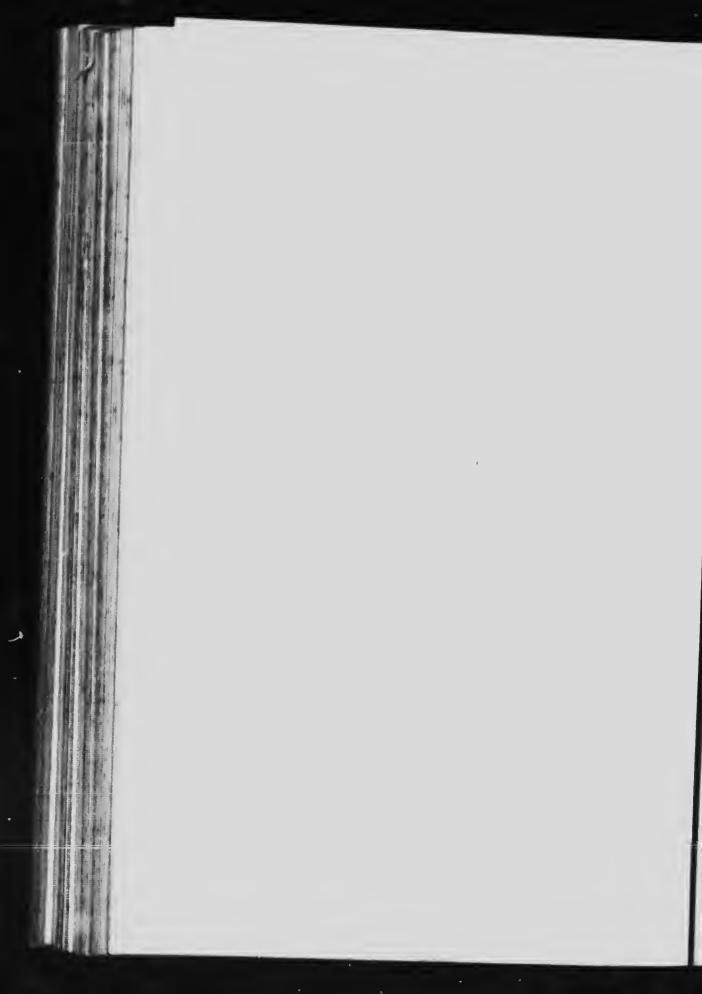
"Billy," as the Zoo animal was named, was a very stupid beast; his years of captivity at the Zoo made no impression on his dullness, and but for the fact that the seekers for scarce things inquired after him, he would have attracted little notice.

Mr. J. Fannin, who is a great authority on this animal, very poetically remarks: "Amid Nature's wildest scenes, amid storm-swept cañons and beetling crags, amid steel-blue glaciers and snowy peaks, where the silence is seldom broken save by the rush of mountain torrents, the howling of the storm, or the crashing of the treacherous avalanche—here, far removed from the trail of the ordinary hunter, the mountain goat, solitary in



ROCKY MOUNTAIN GOAT, (Oreannes mendanus.)

N SEPT



its hapits and contented with its chaotic and gloomy surroundings, increases and multiplies." It is no wonder that few hunters ever reach its haunts.

Little difficulty would be experienced in capturing these animals, which are easily approached, in those parts of their habitat where they are seldom turbed. Apart from man they have very few enemies, which may account for their being less alert than other wild animals, being natural-born rock-climbers, and such clumsy animals as the "grizzly," which inhabits the Southern range of the Rocky Mountains, and the heavy brown bears of Alaska in the North, have little chance of making prey of this stupid animal, which, however, often gets cornered in some place where there is no possibility of escape.

Reference to the photograph, which was taken when the animal was in full winter coat, shows the wiry white fur

bristling out from the body. Its gait is very stiff and slow, and the animal shows little animation in captivity, although reputed to be very agile in its native mountains.

The Great Kangaroo (Macropus gigan-teus), the "Old Man" or "Forester" of the colonists, is the largest of the marsupials, or pouched mammals, of Australia. The male or "Boomer" has been known to attain the length of about $9\frac{1}{2}$ feet from nose to tip of tail and a weight of about 200 lb.

The enormous power and length of the hind limbs as compared with the fore, and the immensity and strength of its tapering tail, which measures about 4 feet 6 inches in length, are characteristics by which the great kangaroo of the antipodes can be recognised.

There is still a mystery surrounding the breeding habits of marsupials. No authentic record has been taken of the actual transference of the embryo to the pouch. That the offspring of the great kangaroo is scarcely more than an inch long when so transferred is established beyond doubt, sucklings of this diminutive size having been found attached to one of the four teats concealed within the pouch. Here it remains attached until sufficiently developed to move about freely, and when strong enough to run by the side of its mother it leaves the pouch, but the manner by which the transference of this lilliputian offspring to the pouch is accomplished is conjectural.

The young kangaroo is very devoted to its mother, rarely quitting her side. Even then, says "Old Bushman," when danger is near, it tumbles head-over-heels into the pouch for protection; and it is wonderful how quickly the old doe can pick up the "Joey" when going at full speed, and push it into the pouch, its

pretty little head always outside. There she carries it until hard-pressed, when the love of life overcomes the love of the mother and she casts it away to save herself.

The kangaroo is one of the few animals which has forsaken the usual mode of progression followed by most mammals. Its greatly elongated legs are peculiarly adapted to the hopping gait which is its only mode of locomotion. It is a remarkable fact that man, the apes, and a few monkeys and lemurs which assume the upright position are the only mammals using the hind limbs for progression by walking or running, the other two-legged mammals having taken to hopping as the invariable mode travelling. All mammals which habitually use all four feet for progression run or walk, not having yet taken to hopping. Had the "hobble skirt" continued to decrease in width, "ladies of fashion"

would have had to resort to the kangaroo's mode of advancing. Even with the
present dimensions of the "hobble" I
have seen ladies who "shuffled along"
most ungracefully. It could not be called
walking!

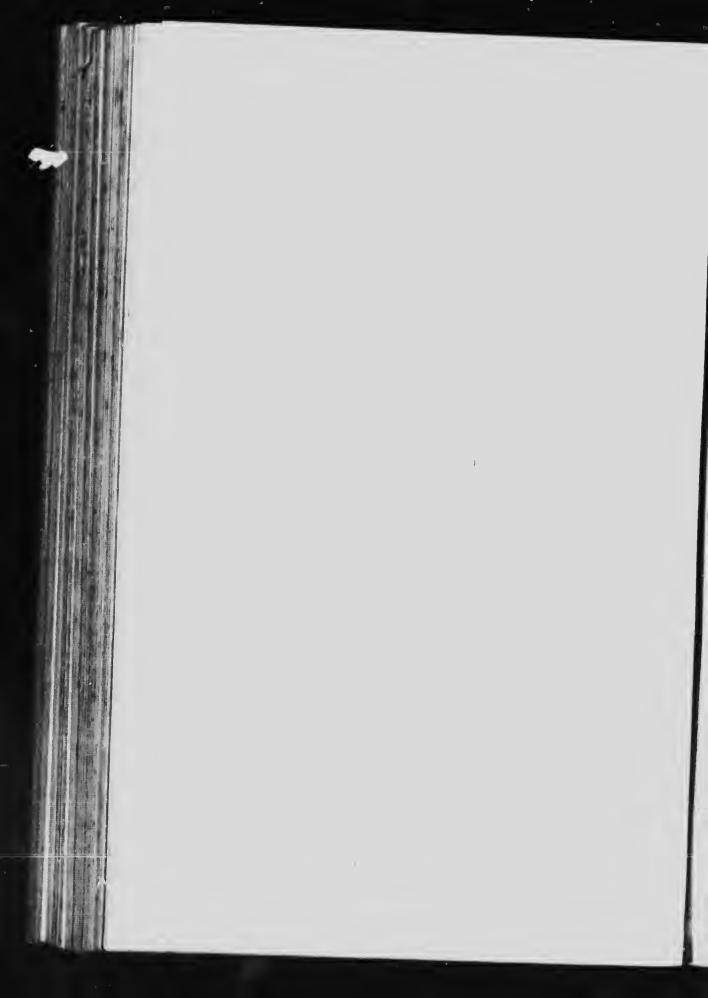
The Sloth (Cholopus hoffmanni) is of all animals the most inactive, and from outward appearances gives the impression of being a most wretched and helpless creature, which hunger alone excites into motion. The sloth is, however, very strong, remarkably tenacious of life, and capable of abstinence from food for a considerable space of time. In its wild state it spends its whole life in the trees of South America, not upon the branches, like the monkey or squirrel, but suspended in the position shown in the illustration. It moves suspended from the branch, rests suspended from the branch, and sleeps and dies suspended from the branch. The sloths are known to bring forth their

young in the trees and suckle them like ordinary mammal quadrupeds. The young sloth, from the moment of its birth, clings to the body of its parent till it has strength to "hang on" to the trees and shift for itself. The coat of the sloth is thick, and is naturally of a lightish brown colour, but assumes a greenish tinge, which is produced by the growth of a microscopical vegetable, similar to that which colours stagnant rain-water. On the fluted surface of each individual hair this vegetable—a species of algæ grows most luxuriantly in the moist atmosphere of the South American forests, blending the pelage of the sloth with the colour of the foliage of the branches to which it is hanging, and rendering the animal practically invisible. This is undoubtedly one of the most remarkable of Nature's protections, which could not have occurred by any kind of "natural selection."

THE BLACK-HEADED LEMPR. Comm branners.

THE TWO-TOED SLOTH. (Chelafus didestylus)

WAUGË'S DASYURE, (Dasyurus viterrinus.) Page 92.



Dasyure (Dasyurus viverrinus) has been included in this selection from over two thousand negatives of animals as an example of what can be done photographically under conditions which would seem absolutely averse to a good result. In the first place, the animal was housed in a cage not 3 feet deep from back to front. This cage was in the old Squirrel House, which, being badly lighted, made a quick exposure impossible. The above adverse factors were rendered doubly disadvantageous to the photographer by the fact that the animal was remarkably quick in its movements and never still for a second; and when I first approached the bars with my camera, the dasyure rushed all over the cage. I had, however, tackled similar difficulties, and, setting my shutter at one-tenth of a second, exposed a plate with the lens pointing through the bars of the cage at a side angle of about forty degrees. Knowing the plate was very

much under-exposed, development alone could help me. I therefore hardened the gelatine of the plate in a bath of formalin, which permitted me to use a hot developer kept at a uniform heat by laying the developing dish on an indiarubber bottle of hot water, which also acted as a "rocker." By using a weak developer and the gradual addition of the accelerator, with plenty of patience, I was able to secure a negative in about forty minutes free from fog, giving the result shown. The dasyure is one of the marsupials of the antipodes, where it takes the place of the cat, civet, and weasel of other parts of the world. It is nocturnal in its habits, preying on small mammals and birds.

The close relation of the Lemur (Lemur brunneus) to the monkey has not influenced the animal-loving public to take to it as a pet to the same extent as it has the commoner varieties of monkeys.

The lemur has, however, several advantages over the monkey as an indoor pet—it is, in comparison, much slower and more gentle in its actions, is not mischievous or wilfully destructive, and soon becomes very affectionate to its owner. This animal is sometimes known as the Madagascar Cat, and one was exhibited at a Cat Show at the Crystal Palace a few years ago under this name and excited considerable curiosity.

CHIMPANZEES

The Chimpanzee (Anthropopithecus troglodytes), several illustrations of which are given, both in the adult and "baby" stage of life, is best represented by the photograph of "Mickie" when at his best. This anthropoid (= man-like) ape is possessed, like man, of thirty-two teeth, which, but for the abnormal size of the canines, or tusks, are very similar in

structure to the human ones. The face is without hair, as is also the forehead, but down the side of the face the hair is The palms of the hands and soles of the feet are also hairless, offering an interesting study to any enterprising palmist, who would find " Mickie's " hand well marked, the spiral lines seen on the tips of the fingers of man being particularly well defined. It will be noticed in the photograph that the toes are as long as the fingers, and the palms of the hands are as long as the soles of the feet-in fact, the whole foot differs from that of the human. The formation of the feet being like that of hands gives to the chimpanzees the advantage of being able to use them to hold on to anything. "Mickie" invariably grasps his bowl of bread and milk with his feet, feeding himself with both hands, one after the other. His keeper has, however, taught him to very gracefully handle a spoon,





"JOHN" AND "MICKIE," THE CHIMPANZEES.
(Anthropopitheens freefedyles.)



with which he carries the food to his mouth in a most rational manner. When his keeper says "Give us a bit!" he very inquiringly looks into the bowl, and slowly spoons out a dainty morsel, which he raises to the keeper's mouth, and is quite upset if the keeper does not eat it. have also seen the keeper cut an apple up into pieces and put the morsels into the palm of "Mickie's" hand, saying: "Now, Mickie, give this gentleman a piece." In response the animal picked out a small piece and gave it to me. When asked to "Give a nice piece to the lady," "Mickie" will pick out the largest piece and offer it as quietly as any boarding-school miss. Other examples of intelligence are exhibited by "Mickie," such, for example, as the following: Mansbridge, the keeper, carries the key of the padlock that fastens the gate leading into "Mickie's" quarters. He will say: "Do you want to come out?" and the animal will pout is a expressive lips and look into the eyes of the keeper, almost speaking the word "Yes." "Well, you'll have to find the key," the keeper will add, getting within reach of the hand of the ape, and "Mickie" searches each pocket until he finds the bunch of keys, and never fails to select the one which opens the padlock. The keeper will then say: "Put the key in the hole"; this "Mickie" does slowly and deliberately, and never tries to put the key in the hole the wrong way up.

Jealousy was included as one of the Seven Sins by M. Eugène Sue, of "Wandering Jew" fame, and "Mickie" has it badly. If Mansbridge feeds the occupants of the adjoining cage before giving "Mickie" his meal, the trouble commences. From a quiet, slow-moving, docile animal, he becomes filled with rage, and expresses it to a marked degree. It is only by such expressions as "I've got the best for you, 'Mickie'" that the

keeper pacifies him. Any other words uttered in the same endearing manner might have the same effect.

King Edward VII. sent a litter of lion cubs to the Zoo, and there being no accommodation for them in the Lion House at the moment, they were deposited temporarily in the spacious cage next to "Mickie." This beautiful litter of lion cubs drew crowds of visitors, whose chief attention an admiration were given to the new-comers. This was enough for "Mickie." He would remain in the furthest corner of his cage and sulk, and it was with the greatest difficulty that he could be made to eat; in fact, the food had to be literally put into his mouth. "Mickie's" disposition was entirely changed during the time the lion cubs were run as favourites. These beautiful specimens, which were included in the impedimenta of Ras Makonnen, who was plenipotentiary of Abyssinia's dusky

monarch, Menelik, at Edward VII.'s Coronation, fully deserved the admiration they received.

The best age at which to adopt a chimpanzee as one of the household is when the animal is in the "baby" stage, when it will take to its captors and make itself quite at home in a week, and soon become deeply attached to its master. The great drawback to the chimpanzee (or any of its near relations) is its uncleanly habits, which I have never known any one to check. This is really remarkable, considering that it can be very quickly taught almost everything connected with civilisation and good manners, except cleanliness. The chimpanzee does not walk quite so erect as the orang or gorilla and many monkeys, but mostly uses its hands as an assistance to progression, although it would be wrong to class it as an animal that walks on all-The photograph of "Mickie," fours.

showing the right arm outstretched with the knuckles resting on the trunk of a tree, gives the exact position of the hands in relation to the ground when the animal is walking.

The pair of "baby" chimpanzees "Jimmy" and "Susan," were the best comic "turn" ever put on at the Zoo. "Susan" would actually laugh at the pranks of her partner, and at the time the photograph was taken was the only lady of the troupe. The immortal "Sally," who lived so many years in the Ant-eaters' House, which stood on the ground now occupied by the Zoological Society's unique library, was considered the most intelligent chimpanzee in the world. She lived at the Zoo no less than seven years and ten months, during which time she was in constant intercourse with her keepers and visitors, which in my opinion accounts for her developing such an extraordinary degree

of intelligence. The advent of the costly new Ape House, which entirely screens off the public from any direct contact with the apes, has put a stop to any exhibitions of trained intelligence by the chimpanzees, which were so delightful in the days of "Sally," whose celebrated "receptions" are, I am pleased to say, recorded by Professor Romanes in the official publication of the Society (see *Proc. Zool. Soc.*, 1899, p. 316).

"Susan" showed as a "baby" remarkable intelligence and was very obedient and affectionate; and as to "Jimmy," he was most devoted to her. Both these chimpanzees were of the light-skinned variety, with hairy heads. "Sally" was of the black variety and bald. The same keeper (Mansbridge) who looked after and taught "Sally" has the care to this day of the apes, and he brought "Mickie" to a very highly trained state during the time he occupied

"Sally's" quarters; but chimpanzees, like actors and music-hall performers, cannot "work" without an audience, and the few tricks that are now performed by the chimpanzees are "behind the scenes," to which the general public is not admitted.

In comparing man with the apes, we find in both a body, organic matter, senses, flesh and blood, movement, and an infinite number of things very similar. All these resemblances are but corporeal or external, and not sufficient to warrant any one in positively pronouncing that the nature or creation of man resembles that of the highest development of the animal world.

That the scientific minds of the universe have been turned towards apes and monkeys in respect to the theory of man's descent from these animals is without doubt on account of their outward resemblance to man. In the anthropoids the whole external machine is strongly im-

pressed with the human likeness. Apes walk erect; have fleshy posteriors, calves to their legs, hands and feet furnished with nails; their ears, eyes, eyelids, lips, and breasts resemble those of mankind, and they are all tailless. Their internal conformation also bears some distinct likeness to that of man, the whole offering a picture that may mortify the pride of any human who makes his person the main object of his thought and admiration.

So alike are some of the parts of man and of the apes that the wonder is that they are of such small advantage to the latter. The appearance of the tongue and vocal organs is the same, yet the animal is dumb; the brain is formed of similar matter, yet these creatures lack reason—an evident proof (as Buffon observes so grandly) that "No disposition of matter will give mird, and the body, however nicely formed, is formed in vain

where there is not a soul infused into it to direct its operations."

ORANG-UTANS

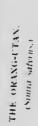
All the specimens of the Orang-utan (Simia satyrus) that I have seen in captivity in Europe-and I have visited the principal Zoos of the great capitalsgive the impression that they are suffering from chronic ennui. They are slow and deliberate in all their actions, and I have rarely seen one put any life or animation into its movement, as witnessed in the habits of all other apes and monkeys. Sad and quiet as they appear, cunning and devilment are in their nature, and there is a savage expression in their eyes which, combined with a cruel mouth, gives them a most alarming appearance, that has stricken many a person with terror, although outside the cage in which the aggressive orangs are enclosed.

This is not to be wondered at, when we consider the fear and trembling with which I have known people shrink from a harmless caterpillar, and absolutely shriek if a beetle has crawled upon them.

As a rule, orangs are generally caught young and are brought to a state of perfect subjection by their captors, if kept any length of time before they are shipped to Europe. The object of keeping them until they are big specimens is the considerably enhanced value of the animal. Such an one is illustrated, and, as he arrived with a good character, he was considered one of those docile, steady-going old things that take no interest in their surroundings and are sullen through the want of something to occupy the brain. This fine specimen of the red-haired ape from Borneo had to be photographed, and as I never take a picture of an animal showing the



A " BABY " ORANG,



Page 150.



bars of his prison, I entered the orang's cage as I had entered scores of others. I had not exposed many plates before I perceived that the animal was evidently intent on mischief, and I reglised that I was in for un mauvais mart d'heure. The sly manner in which he had grade ally worked himself round to the entrance to his cage had slipped my observation, but I soon realised he was blocking my egress.

I was there alone with him inside the cage, and had to get out safely; and past experience had taught me that any sign of fear on my part would have engendered a very rough time for me, with consequences that I might not now be able to relate.

When focusing the animal on the ground-glass, I had noticed that he did not like the camera, with its large-aperture Zeiss lens staring point-blank at him, which, combined with the "noiseless"

click of the shutter-release, had evidently upset him. Being a powerful beast, I should have stood a poor chance had he attacked his formidable canines me: were enough to strike terror in the breast of any one, though his iron grip alone would have required a Sandow to combat Feeling I was in for it, I had but one resource—to use the object of which he was afraid as the only weapon I had for effecting my safe exit. Making a facial sign to the keeper to remain quite silent, with a determined stare I fixed the dull eyes of the orang, riveting him to the spot with my gaze. At the same time I pointed my hand-camera full at him, and with slow and measured tread stealthily approached him, halting at each step. The keeper was outside the door, ready to open it; but neither of us uttered a sound, and being early morning, there were no visitors in the Ape House. Knowing that absolute silence combined

with my manner of approach and my fixed stare had had a hypnotic-or should I say scaring?—effect upon a really ferocious animal on a previous occasion, I was relieved at seeing the orang gradually recede, at the same time slowly rising from the crouched menacing position he had taken up, and glide along the side of the cage, his eyes fixed upon mine all the time. I followed him up slowly and mysteriously, at the same pace at which he was moving, working my way towards the door, but without once looking in its direction, fearing he would realise my object. Once he was on the move, I knew I had my chance if I only kept up my threatening attitude. I had succeeded in working him round to the corner farthest from the door, which I had then reached, and which had been silently and almost imperceptibly opened by the keeper. Still pointing my camera at him, with eyes fixed on him all the time, I very very

slowly backed out of the cage, and when quite clear the door was slammed to with a bang and I was safe. Even when I was partly through the door opening, any quick movement on my part would have been a fatal mistake. The animal could have reached me with lightning rapidity. He was only waiting for me to turn tail, and I should have been in his grip. As it was, I was bathed in perspiration, more from excitement than heat, and had to retire to a seat for several minutes. I shall always have a vivid recollection of my adventure with this orang-utan.

I have already mentioned the dull and languid demeanour, combined with melancholy, shown by orangs kept in captivity in this country. It is stated in "Mammals Living and Extinct," by W. H. Flower, F.R.S., late Director of the Natural History Department, British Museum, and Richard Lydekker, F.Z.S., that this is far from being the case with those

shown in the more congenial climate of the Zoological Gardens, Calcutta. I have known Mr. Frank Finn, B.A., F.Z.S., for many years, and supplied him with a series of expression studies of the orangutan for his "Ornithological and Other Oddities," but do not see any mention of the above statement in his work, although he devotes many pages orangs. On the contrary, in writing of the Calcutta Zoological Gardens, of which he had eight years' practical experience, being a member of the committee of management, he says: "The orang is well known to the natives of Bengal as the showman's animal, and is called 'bun manus' (jungle man), just the signification of its Malay name. And as Hanno the Carthaginian called the gorillas he discovered "hairy people," hundreds of years ago, so the Indian natives appear to doubt whether the orang is not human; at any rate, I have

been asked in the Calcutta Zoo by a native whether an orang on view there was not a man. . . . I may mention that we did not succeed in getting orangs to thrive in this Garden, until an outdoor extension was added to their cage." This was written many years after "Mammals Living and Extinct" was published, and Mr. Finn can be taken as a most reliable authority. He adds: "The strange wistful look of the orang's face is borne out by its character. It is less merry and monkeyish than the chimpanzee. It is also more sluggish than its African relative, and hence more difficult to keep in health."

GORILLA AND GIBBON

"Chloe," as the young female Gorilla (Anthropopithecus gorilla) illustrated was named, arrived at the Zoological Gardens, Regent's Park, on August 19, 1904,



a e

n

r

S

n

S

THE GORILLA.
(Anthropopithicus gorilla)

 $\mathrm{Pa_{sol}}_{-112_{\star}}$



with another female "baby" specimen. "Chloe" was captured at Fernan Vaz, Ogome River, and her companion in another part of Equatorial West Africa.

The fact that a real live gorilla was to be on view at the Zoo caused quite a sensation. The press heralded the event long before the arrival of these scarce specimens, and on the eventful day quite an army of reporters besieged the Ape House. But for the fact of my having been appointed Official Photographer to the Society, which position carried with it certain privileges, I should not have known the exact time these rare creatures were to be liberated from the travelling dens in which they had been prisoners during their long journey from the wilds of West Africa. I was therefore fortunate in being able to secure some fine studies of "Chloe" before she was on view to the press, but for which my task would have been more difficult.

Much disappointment was evidently felt by many who had travelled miles to secure a report of the coming of the "wild man of the woods." Visions of a pongo standing about 6 feet high and weighing twenty-five stone had evidently haunted some of the visitors, which the sight of the small dark heap huddled up in the straw in a corner of the compartment allotted to the newcomers in the new Ape House soon dispelled. "Chloe" and her companion gave the impression that the named specimen was the mother of the "baby" gorilla. She was cuddling the young one so tightly to her chest, with her abnormally long arms completely enveloping it, that she concealed its entire body. In this position the two gorillas would remain for hours without moving, and, very rightly, orders had been given that these valuable and unique animals were not to be disturbed. A very poor impression was therefore made upon those who were familiar with the gorilla by illustrations in natural history books.

S

f

h

d

r e

e

e

e h

S

o

d

d

It was not really until 1851 that anyone in Europe was accredited with having seen the complete skeleton of an adult gorilla, as it was only during the Great Exhibition year that a complete set of bones was sent to England by Captain Harris and forwarded to the Royal College of Surgeons, where they were set up. The British Museum seven years later received from that celebrated African traveller, Du Chaillu, an entire gorilla captured at Gaboon, in the French Congo. It arrived preserved in spirit, and in due course the public were enabled to see the stuffed specimen.

In 1863 an English traveller startled natural history students by asserting that neither Du Chaillu nor any other European had ever seen a living gorilla

in its native haunts (see "Savage Africa." by Mr. Winwood Reade). This remarkable assertion was supported by members of the German Loang Expedition, 1873-6. In "Living Animals of he World" (Hutchinson & Co.), to which I contributed a considerable number of photographic studies, a reproduction from a photograph by Herr Umlaiff is published, showing a full-grown gorilla that had just been shot being held in position by three natives. It is stated in a note under the illustration that this specimen weighed 400 lb., and the animal certainly appears to be more massive than the combined bulk of the three humans supporting the dead carcase of this enormous gorilla.

It is asserted that the gorilla cannot be tamed, but I have never heard of any private individual or Zoological Society having been in possession of a living specimen long enough to prove

a,"

k-

rs

6.

1 "

ri-

0-

a d,

ad

Эy

te

en

ly

ne

p-

15

ot

of

al

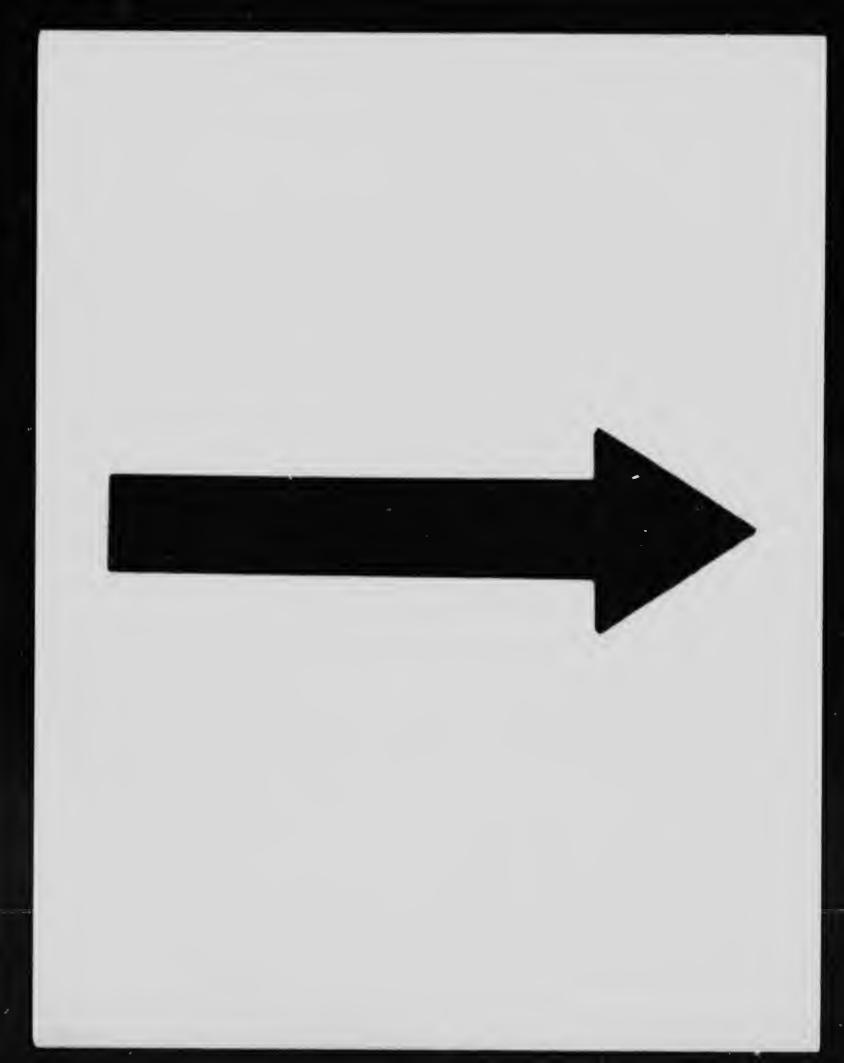
a

*r*e

the statement. The two specimens at the Zoo did not live long; the "baby" died soon after its arrival, and "Chloe" joined her in a few weeks.

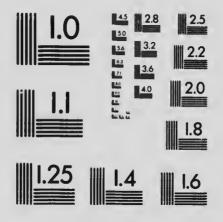
The Lar Gibbon (Hylobatis lar), whose Greek name signifies a wood-walker, or one that goes through woods, is one of the anthropoids. The reason the gibbons were classed with the man-like apes is not because of any external resemblance to man, to whom they are very unlike, though agreeing in dentition so far as numbers are concerned; and they also have the advantage (?) of being possessed, like all the anthropoids, of a vermiform appendix, and, like man, may be subject to appendicitis.

The length of the arms and hands of the gibbons is such that when they stand in the erect position their upper extremities reach the ground. The gibbon is the smallest of all the man-like apes, and is found in Southern China, Siam, and all



MICROCOPY RESOLUTION TEST CHART

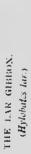
(ANSI and ISO TEST CHART No. 2)





APPLIED IMAGE Inc

1655 East Main Street Rochester, New York 14609 USA (716) 482 - 0300 - Phone (716) 288 - 5989 - Fax over India and its islands. The forests are the haunts of these creatures, and they seldom venture a distance from them, being Their remarkable by habit arboreal. length of arm, and the formation of their hands and feet, the digits of which are exceedingly long, enables them to hang on to the branches of trees and spring great distances from one branch to another with a rapidity that is really extraordinary. Although living in flocks and herds, they are very timid and shy, and keep up a howling concert which can be heard at a great distance, resembling in this respect the Howling Monkeys of America. Their remarkable dexterity and velocity in getting from tree to tree cannot even be judged by the lightning movements they exhibit in the limited space of the compartment they occupy in the Ape House. In confinement they are very docile, and become greatly attached to those who are attentive to them. The Lar gibbons do



THE JAPANESE APE. (Malacus speciosus)

Page 118.

re ey ng ole eir are on eat ith ry. ney a a tect eir getned are do are do



not walk or run in so erect a position as the silvery or agile variety, and being altogether helpless on the ground, would fall easy victims to the hunter if surprised in the open plain; but as soon as the forest is reached, pursuit is set at defiance: they leap, swing, and throw themselves from tree to tree in a marvellously rapid manner, literally vanishing in a few seconds.

APES, BABOON, WANDEROO, AND COLUBUS

The Baboon (Cynocephalus neumanni), an Abyssinian brute, is without doubt one of the most repulsive-looking and hideous of all the primates, a character which is heightened and made even more repulsive by the ferocity and untamable disposition of most of the group which are seen in cages. The one illustrated may be classed as such; not one redeeming

trait in either his disposition or appearance could be put to his credit. His small sunken eyes, deeply set beneath his projecting eyebrows, the diminutive size of his cranium and low contracted forehead compared with the enormous development of the face and jaws, give this African brute a terrible expression, which is further accentuated by the appearance of its enormous discoloured teeth, which it never fails to display upon the slightest provocation. If ever the physiognomy expressed the brutality and fierceness of an animal's character, we have the finest example in the baboon, especially the male. This animal is thrown into strong agitation when approached by women, and as an extra precaution additional wirework had to be fixed to this ugly brute's cage, his fits of passion, of love or jealousy, carrying him to the most furious and brutal excess. an old trick of itinerant showmen to

A

ar-

Iis

ıth

ve

ed

us

ve

n, he

ed

ay

er

ty

er,

n,

n

by

n

to

n, 1e

is

to

excite the natural jealousy of their baboons by caressing, or pretending to caress, the young women who resort to their exhibitions, an action which never fails to excite in these animals a degree of rage bordering upon frenzy.

A large baboon escaped from his place of confinement in the Jardin des Plantes, Paris, and, far from showing any disposition to return to his cage, severely wounded several of the keepers who attempted to recapture him. After many ineffectual attempts to induce him to return quietly, a plan was hit upon which proved successful. There was a small grated window at the back part of his den, at which one of the keepers appeared in company with the daughter of the superintendent, whom he appeared to kiss and caress within view of the No sooner did the baboon witness this familiarity than he flew into the cage with the greatest fury, and

endeavoured to break away the grating of the window which separated him from the object of his wrath. Whilst employed in this vain attempt, the keeper took the opportunity of fastening the door and securing him once more in his place of confinement.

It is recorded that baboons have been most effectually tamed and led to more than ordinary obedience by the hands of women, whose attentions they appear to repay with gratitude and affection, although generally intractable and incorrigible whilst under the management of men. Travellers speak of the danger which women run who reside in the vicinity of these animals, and affirm that negresses on the coast of Guinea are carried off to their fastnesses; and we are assured that certain of these women have lived among the baboons for many years, and that they were prevented from escaping by being shut up in caves in the mountains,

THE YELLOW BABOON AND WHITE-CROWNED MANGABEY.
(Cynocefhalus babourn) (Cercocebus athiops.)

A

ing om

m-

per the

in

een ore

of

re-

gh ble

en.
ich
of

ses to

nat

ng nat

by

ns,





THE BABOON. (Cynocephalus neumanni)



where, however, they were plentifully fed, and in other respects treated with great kindness. Be this true or exaggerated, one thing is certain: the frenzy of these animals at the sight of women I have witnessed to an extent beyond description, and personally I do not think they should be exhibited to, and exasperated, as they sometimes are, by, fashionably dressed young women, who delight in watching their frenzied passion. We know they exist, and, except for scientific purposes, such animals would be better out of an exhibition where young ladies are constant visitors.

The Japanese Ape (Macacus speciosus) is to all appearance a thickly-coated Rhesus or Macaque Monkey, and is a member of the same family (Cercopithecidæ). The specimen in the Gardens, being of a hardy constitution, was caged outside near the Western Aviary from the time of his arrival, and there he

has enjoyed the best of health both summer and winter, with his "wife and child," as the fellow-occupants of his quarters are often called by visitors. As monkeys go, this trio are certainly the most respectable family in the Gardens. The little one was born in the Zoo in winter of 1906, and when first brought out in the open by its parents was about the size of a squirrel. It was a very nervous little thing at first, its instinct evidently having given it the impression that onlookers must be enemies, so it would not leave its hold on its mother's fur, and she, with maternal affection, clutched it tightly to her breast. After a week or two, more confidence was displayed by the parents and their thinly furred offspring, which was often seen on the ground, but always within an arm's length of its mother, who would clutch the wee one and drag it to her on the slightest provocation.

RAooth and his ors. the ens. in first ents was its the ies, its rnal ast. ence heir ften hin who it

ion.



THE WANDEROO, OR LION-TAILED MONKEY.
(Macaens silenus.)

Page 124,



The "old man" kept guard all the time, and on the least show of undue familiarity, such as my approaching the cage with my camera, the lens of which I wanted to get between the bars, Mr. Ape would make a dash for the front wires, gripping them with his hands, and shaking most vigorously. This trio, to my mind, was the most entertaining in the Gardens, showing to perfection the habits of this monkey in bringing up its young.

The Wanderoo Monkey (Macacus silenus) is another of the Macaque species, but of quite a different appearance to the Jap. It is more often called the Lion-tailed Monkey, and hails from Western India. Some authorities state that the Wanderoo monkey is not the lion-tailed one shown in the illustration, and that the latter name should only be applied to the langurs of Ceylon. Whichever is the correct name, one thing is certain: it is a very handsome monkey.

long fur is jet black, with Its enormous bushy grey beard surrounding the black face, except the middle of the forehead. Its tail is three-quarters the entire length of its head and body, tufted at the end similar to a lion's, and this peculiarity is its chief characteristic, from which it is named. The pair which arrived at the Zoo were in splendid condition, and were trapped at Malabar. They are very shy, docile animals, but object to be photographed, and I was forced to pay several visits securing a good pose showing the liontail and other points. Although reputed to be savage in captivity, I was able to do almost anything with it; in fact, it was the anxiety of the monkey to be near me that made it difficult to obtain the result shown. Its colour necessitated a time exposure, otherwise there would have been no details in the shadows.

"HYQUISITIVENESS," B

A

THE ANGOLAN COLOBUS, (Colobus angolensis.)

Page 126



The Angolan Colobus (Colobus angolensis) is a grotesque creature, and is one of the Thumbless Monkeys, whose abode is in Abyssinia. Very little is known of their habits in their native habitat. All the species, with one or two exceptions in the dozen known, are remarkable for the length and beauty of the silky hair with which they are clothed, some on the body, others on the head, as was the one photographed. The fur of the species that have the long hair is imported into Europe, and is principally manufactured into ladies' muffs. This specimen was caged in one of those shallow enclosures fixed to the walls of the Monkey House, which made it very difficult work for the photographer. It was only owing to the fact that this particular monkey was very docile, and remained perfectly quiet when I introduced my lens into his cage, during a period when he was at the farthest end

128 WILD ANIMALS AND THE CAMERA

of it, that the result shown was secured. The species is very delicate in confinement, and this specimen died about a week after I photographed it.

RA

red.

ent, veek

> PART II BIRDS





PART II. BIRDS

VULTURES AND EAGLES

HE Griffon Vulture (Gyps fulvus) is a European bird of prey. Its head and neck are down-covered, by which strong contrast the griffon vulture can readily be distinguished from the "king" Pondicherry and sacred vultures of India and Africa. The griffon vulture invariably builds its nest on rocks, composing it entirely of sticks, and in the South of Europe probably lays its unique egg in February, as young ones have commonly been found in nests early in April. These vultures are known to have the power of enduring long fasts; but when the griffon can obtain sufficient food it becomes a perfect glutton, devouring everything that comes before it. Canon Tristram mentions that he has seen a griffon which was too gorged to stand continue its feast while lying on its side. It is not recorded that the Canon captured the bird, which could have shown very little resistance.

The King Vulture (Gypagus papa) of tropical America confines its habitat to the mountain ranges from Brazil to Mexico, Texas and Florida, or the primeval forests and wooded plains, but is never seen on barren mountains or in dry districts. It is smaller than the condor. The bare parts of its head are brilliantly coloured, the combination being orange, purple, and crimson, giving the bird a gaudy appearance. It may be classed as a rare bird, and but little is known of its habits. In many respects this New World vulture is similar to the Old World vultures; for instance, in the bareness of its head. In structure it differs in many important ERA

e it. has ed to g on the could

a) of o the exico, orests n on s. It bare ured, , and pear-

bird, In re is ; for In rtant





THE KING VULLURE

THE MONKEY-SATING EAGLE. (Pathecoflasa fefferys.)

Girtachus fafa)



points, such as the absence of any voice muscles, which accounts for the serpentlike hissing sound it emits instead of screaming.

The beautiful Bateleur Eagle (Helotarsus ecaudatus) inhabits the whole of South Africa right up to the Sahara Desert. It differs from all other members of the family, including the sea eagles, by the feathers of the head forming a voluminous crest. Its tail is extremely short, being much inferior in length to the wings. The colour of the bird as seen in captivity gives but a poor idea of the beauty and brilliancy of its tints in its natural habitat, where it prefers the open country rather than forests, and is often seen soaring over the mountains at a great height. Levaillant states that these eagles prey upon young antelopes, lambs, and sick sheep, and that they also eat carrion. Their chief food is said to consist of various

snakes and lizards, of which they consume a larger number than the Secretary vulture. Snakes of all kinds and sizes, whether venomous or harmless, attacked by the bateleur, and speedily disabled by rapid blows from its powerful The frequent jungle fires afford beak. the bateleur good sport: like other serpent-eating birds of Africa, the bateleur beats along the crest of the flame, seizing the snakes and other reptiles as they are driven out by the heat, and has been seen to dash into the very dense smoke to secure its prey.

The Martial Hawk-eagle (Spizaëtus bellicosus) is a denizen of Basutoland, South Africa. This bird of prey, as distinct from the true eagle, is characterised by being crestless, and its wings are proportionately shorter, as a rule. It cannot be described as a particularly cruel-looking bird, and its plumage gives it a somewhat striking appearance.

THE BATELEUR FAGLE. (Helotaisus ecandalus)

ERA

con-

etary

sizes,

edily verful

fford

other eleur

izing

y are been

moke

aëtus

land,

arac-

rule.

larly

nage

ance.

as

are





THE MARTIAL HAWK-EAGLE, (Spizactus bellicosus.)



Monkey-eating Eagle (Pithecophaga jefferyi), from Luzon, one of the largest of the Philippine Islands, created a little boom in the press and drew quite a number of people. Whether some of the visitors expected to see this eagle fed on monkey-flesh I cannot say, but the keepers were continually asked where and at what time the monkeyeater was fed. When it arrived it was in splendid condition and perfect plumage. I was first in the field to get a collection of studies of the animal, which have been reproduced largely, at home and abroad, it being a very scarce bird. Unfortunately it did not do well at the Zoo, refusing to eat after a few weeks, and was removed to other quartersstrange say, nearly opposite the to Monkey House. It soon went out of condition and died without tasting any of its natural food, which it could no doubt scent, being in such close proximity.

THE HERON, IBIS, PELICAN, KIWI, AND MOREPORK

The Nankeen Night Heron (Nycticorax caledonicus) illustrated is a beautiful specimen of this rare Australian nocturnal bird. In their natural habitat these birds very rarely disturb themselves from their slumbers during the day, and the one in captivity shows a similar disposition, remaining immobile for hours at a time, generally perched upon one leg. Being in an upright position he might be a stuffed specimen, so still and rigid is he. Now and then a sign of life is evidenced by the blinking of his beautiful eyes, which are always wide open. There he remains, heedless of the movement of the other birds that are caged with him. He is one of the easiest birds to photograph when you find him in a pleasing pose and are not worried by the other birds in the

ERA

IWI,

*tico-*tiful nocbitat nemthe s a hed ight nen, hen ing ays less that the

are the



THE NANKEEN NIGHT HERON, (Ny fivotax saledomors.)

Page 175.



cage crossing between you and your object. Some of the inmates of this cage are most inquisitive, and annoy me considerably by their familiarity during the process of focusing.

The Sacred Ibis (Ibis strictipennis) of Australia is congeneric with Ibis æthiopica of the ancient Egyptians, who held the ibis of their country in great reverence because devoured it the serpents which otherwise would have overrun the country. It was a capital crime to kill ibis, though inan advertently. Sambyses, King of Persia, being acquainted with this, placed some of them before his army while he besieged Damietta. The Egyptians, not daring to shoot their arrows against them, suffered the town to be taken. Such was the veneration for this bird that nany were kept in the courts and temples of the Egyptians, who frequently embalmed their bodies after death.

138 WILD ANIMALS AND THE CAMERA

The sacred ibis is about the size of an ordinary hen fowl. The plumage is white, with the end of the wing feathers black; the last coverts, with elongated loose barbs, black with violet reflections. The naked part of the head and neck is black, as are the bill and feet. All ibises may be distinguished by the possession of a well-developed hind toe, which curlews, with which the ibises are often confused, have not.

The Brown Pelican (Pelecanus fuscus), a large fish-eating water-fowl, is a native of the West Indies, and, with the other varieties in the Pelican's Enclosure, is a pleasing attraction at the Zoo. These birds give the impression of having a very formidable bill, but it is in reality very weak in structure. The remarkable part of the lower section is the enormous pouch formed by the extensible skin, reaching the whole length of the bill to the neck, and hanging like a bag, which

RA

se of ge is thers gated ions. ck is bises ssion

hich

often

ative other is a These

eality kable nous skin,

ll to



THE SACRED IBIS. (this strictifennis.)



is said to be capable of holding fifteen quarts of water, and the bird has the power of wrinkling it up into the underchap. This bag, when empty, is not noticeable, but should the bird fish with success, the extent to which it will stretch without rending is incredible; yet when emptied it goes back to its original shape, as if made from a piece of Hancock's "A" quality indiarubber.

These birds are the most cleanly animals in the Zoo. They bathe once or more a day, irrespective of the times they enter the pond for fish. Every feather is carefully dressed, and attending to their toilet seems to be their chief occupation. Pelicans live a considerable number of years, and until lately one of their number was the oldest inhabitant of the Zoo.

The Kiwi (Apteryx australis), a practically wingless bird of New Zealand, is about the size of a Brahma fowl,

and was unknown to the world until Shaw described and figured it in 1813 and brought a specimen from Zealand, which at his death in the same year passed into the possession of Lord Stanley, who, when he became Lord Derby, exhibited it at the Zoological Society. This extraordinary bird is possessed of a particularly well developed organ of scent. Sir William Buller, in his "Birds of New Zealand," states that when hunting for food the apteryx keeps up a continual sniffing sound, as the bill is darted forward and travels over the surface of the ground, giving the impression that scent more than sight is employed in the search for food. This was evident when I was photographing the bird, which, although flightless, is compensated by its swiftness of foot. Being of nocturnal habits, the kiwi is very shy in daylight, and I was fortunate in finding the bird apparently

RAntil 813 lew me ord ord cal is oed in tes yx as els ng an d. :Ogh SS he

as

ly



THE BROWN PELICAN.
(Pelecanus fuscus.)



hungry. It darted about in a jerky manner, stopping suddenly as if scenting something, in the position shown. Scent evidently attracts it to the worm hidden in the soil; when it is tracked, the bird jerks its long flexible bill into the earth, seizing its prey and coaxing it by degrees out of the mould without breaking it. When the worm is quite free, the bird jerks its head back and gulps it down whole. Like the dodo and the solitaire, this wingless bird seems doomed to extinction, destined as it is to live on the earth without any protection except fleetness of foot.

The Morepork (Podargus cuvieri) is another curious bird of New Zealand, named after its cry, which has been twisted into resembling the compound word of its name. These birds are not swift in flight, and their protection is their colouring. This resembles the trunk of a tree, and, combined with their power

of facial contortion, renders them able to take up a pose resembling a stumpy branch of the tree in which they live and build their nests. They have such mobility of expression that a photograph taken one day would not identify the bird a day after.

THE KING PENGUIN, RAVEN, CRANE, AND JABIRU

l have not observed any one who could resist a smile, including their Majesties King George V. and Queen Mary, on seeing that comical resident at the Zoo, the King Penguin (Aptenodytes pennanti). H.R.H. the Prince of Wales and Princess Mary, with our King and Queen, visited the Gardens of the Society on Whit Sunday, June 1911, principally to view the South African collection graciously deposited by His Majesty; but the animal that seemed

RA npy live uch oto-tify

νE,

tho leir at tes les and the 4, ath by led



THE KIWL.
Aftern ausbalis)



was the king penguin. A more docile or affectionate creature does not exist in the Gardens, and as one of the remaining examples of the flightless birds, the king penguin is the scarcest and largest of the family (Spheniscidæ).

Natives of the Southern Ocean, these birds are entirely devoid of quills in their wings or "flippers," and are therefore incapable of escaping from the ravages of man, whose account of the habits of these defenceless creatures is spoilt by the disgusting details or their wholesale murder. The "pin-wing" was the name given to these flightless sea birds, meaning a bird had undergone the operation of pinioning, and "penguin" is a corruption thereof. There is a remarkable process which occurs in the moulting of their wing-feathers. Mr. Bartlett has observed (Proc. Zool. Soc., 1879, pp. 6-9) that instead of moulting in the way that birds

ordinarily do, penguins, at least in passing from the immature to the adult dress cast off the short scale-like feathers from their wings in a manner which he describes as like "the shedding of the skin of a serpent."

The name of the king penguin now a the Zoo is "Hobble Skirt," and is mos appropriate, the gait of the bird being very like the shuffle of those of the fai sex who prefer to be in the fashion rathe than appear graceful in their movements This reminds me of those poor dum beasts, the "friends of man," which ar trained to walk erect. These unfortunat dogs have the same movement of th hind legs as the penguins, necessitating the ungraceful swinging of the body from side to side when progressing. Whe hatched, the young penguins are covere with a soft down; but, unlike other birds they are quite helpless for a long period The king penguin-or should I sa ERA

dress,
from
h he
of the

ow at most being e fair rather nents. dumb ch are tunate of the itating y from When overed birds, period. I say



THE KING PENGUN, Ciffendales formantes

;



queen?—lays two eggs, although other species lay but one.

Mr. G. Bennett, who made special observation of the habits of the king penguin, gives some interesting details of the intelligence and discipline displayed by these curious birds: "They are arranged, when on shore, in as compact a manner and in as regular ranks as a regiment of soldiers, and are classed with the greatest order, the young birds being in one situation, the moulting birds in another, the sitting hens in a third, and the clean birds in a fourth, &c.; and so strictly do birds in similar condition congregate, that should a bird that is moulting intrude itself among those that are clean, it is immediately ejected from among them."

That exceedingly intelligent bird, the Raven (Corvus corax), once common in England, has become one of the rare birds of Britain, but is sometimes captured in

Scotland and Ireland. The raven has been made immortal by Charles Dickens, whose "Grip" in "Barnaby Rudge" will ever be remembered; and, strange to relate, the bird illustrated was presented to the Zoo by that great actor and delineator of Dickens's characters, Mr. Bransby Williams. That the raven is a good talking bird was also appreciated by that weird and wonderfully realistic writer, Edgar Allan Poe. The thievish propensities of the raven and other Corvidæ are well-known. Either tame or wild. they exhibit a disposition for carrying off shining metallic bodies and other articles totally unfit either for food or for use in the construction of their nests. This intuitive kleptomania in a bird has been employed as the foundation for the plot of a grand opera ("Gazza Ladra," by Rossini), dramas, and many an oldfashioned Christmas pantomime. raven is the first bird mentioned in the



Old Testament (Gen. viii. 7), and has played an important part in mythology and folk-lore. It was the bird of Odin, and in classical writings was of ill omen. Shakespeare repeatedly refers to the belief that its appearance foreboded misfortune.

The Demoiselle Crane (Anthropoides virgo) is in my opinion the most beautiful of all the Gruidæ. It stands about 3 feet 6 inches high, and its graceful outline and carriage evidently inspired the French to give such a fanciful name to this migratory bird, whose headquarters are in North Africa. It was a great favourite in the country that named it in the days of the Empire, when the Trianon was at its full glory at Versailles. Specimens were kept there to add to the grace of the surroundings, and one which was bred and hatched there lived twenty-four years. The Numidian Crane, as the "demoiselle" is otherwise called, is migratory in its habits, and has strayed

148 WILD ANIMALS AND THE CAMERA

into Germany. One was shot in Orkney in 1863.

The Jabiru (Mycteria americana) is one of the largest of the Stork family (Ci coniidæ), whose habitat ranges from the Argentine Republic to as far north as Mexico. In contrast with the "demoiselle" it is a hideous bird, standing about 4 feet 6 inches to 5 feet high to the top of its head, which, with the entire neck is naked in the American species. There are two similar birds in New Guinea and Australia, commonly called jabiru, but these have feathers on the head and neck. One of the characteristics by which the jabiru can be readily recognised is the enormous length of the beak, which is jet black and slightly retrousse; the neck is also black to within a third of where the feathers commence, and this lower part of the neck is a brilliant red. It is a wading bird of a very spiteful nature -one of the keepers had to keep guard ERA

rkney

is one y (Cin the th as lemoiabout e top neck, There uinea abiru, and which is the ch is neck where lower It is ature

guard



THE AMERICAN JABIRU. (Mycleria americana.)

Page 448,



with a broom while I secured the picture—and the noise it makes when it clashes its beak is quite alarming.

CROWNED PIGEONS, HORNBILL, AND TOUCAN

The Great Crowned Pigeon (Goura coronata) and its ally, the Victoria Crowned Pigeon (Goura victoriæ), both of which are illustrated, are inhabitants of New Guinea and other islands of the great Indian Archipelago. They live in the forests and spend much of their time on the ground, and in captivity are rarely seen upon the perch. They exceed in size all the other Columbine species, and are characterised by the elevated semicircular crest which crowns the head. This compressed fan-like adornment is composed of narrow, straight feathers, furnished with disconnected silky barbules, somewhat resembling a Blechnum spicant fern leaf.

150 WILD ANIMALS AND THE CAMERA

The crest appears to be rigid and incapabl of being raised or lowered at the will of the bird. I have never seen the crest is other than an erect position, like the com of a cock Leghorn fowl. The chief characteristics teristic difference between the coronate and victoriæ is that the crest of the latte differs in shape at the tips of the feathers which are spatulate or club-shaped. The are quite tame in captivity, and are fre quently kept like poultry. I am sorry to see that their crests are plentifully used for trimming some of the eccentric shapes in millinery, which indicates that these beautiful and magnificent birds are being slaughtered wholesale.

The Elate Hornbill (Ceratogymna elata is another of the South American ornithological oddities which derives its name from the brobdingnagian proportions of its bill, which is furnished with a casque of greater or less significance. The bird at the Zoo is one of the most

elata) erican es its roporwith cance.

most



THE VICTORIA CROWNED PIGEON, (Goura victoriae)



intelligent animals of the entire collection; as a bird, there is nothing there approaching it. It certainly does not talk, but speech is not always a sign of intelligence, even in the human. utterance of a few words by the hornbill would make it the most uncanny pet imaginable. The one at the Zoo follows its keeper like a dog, and seems to understand what is said to it. I have caressed the quaint bird, which is most affectionate, and, as its name implies, is quite elated when taken notice of, and the gentle manner with which it fondles one with its enormous bill is quite interesting. When I said good-bye it emitted a kind of bark very much like a terrier's; it then struck me that the elate hornbill would be a novel pet, and, by what I have seen of it with strangers who show fear and nervousness, a good guard.

The Toco Toucan (Rhampastus toco),

with its enormous beak, comes from the north-east part of South America and its name is of Brazilian origin record of this remarkable bird was published as far back as 1527 at Toledo. Its gaudy plumage and strange appearance no doubt attracted the attention of the European invaders of America, since its brilliant feathers decorated the weapons and persons of the natives. The bird illustrated can be taken as the type of the genus and the largest of the family. Its huge beak, measuring over 8 inches in length, encloses a feather-like tongue. Its food is principally fruits, though it will eat small reptiles, grubs, and birds with great As a grotesque pet it is most amusing and gentle, notwithstanding its formidable beak, and gives little trouble in captivity.

MERA

from nerica, origin. rkable ck as ımage racted aders athers ns of can and huge ngth, food eat great most g its ouble



THE ELATE HORNBILL.
Geodogymna data)

Page 1



PART III
REPTILES



PART III. REPTILES CHAMELEONS

THAT entertaining and perfectly harmless reptile, the Chameleon (Chameleon vulgaris), is so markedly different
to the ordinary lizards that scientists
regard it as belonging to a distinct suborder, which they have appropriately
named Rhiptoglossa (rhiptas = to throw
out, and glossa = the tongue).

The externally recognisable characteristics which I am desirous of impressing upon my readers as essential for the appreciation of the series of photographs reproduced, are, first, the remarkable length and extraordinary development of the tongue of the chameleon, which is cylindrical, extensile, and retrac-

tile, terminating in a dilated club or spatula-shaped tip, covered with a glutinous secretion, by means of which the reptile captures its food, consisting of insects, flies, &c.

I shall have occasion to refer later to the lightning rapidity with which the chameleon can shoot out its tongue to a distance of from 4½ to 6½ inches—in other words, to about the length of its head and body—and draw it back with an equal velocity, the combined extensile and retractile action only occupying a fraction of a second, which I have estimated at one-hundredth.

Another most remarkable feature is its power of commanding an independent movement of both eyes, which are quite unlike those of any other lizard. Each eye works as if mounted on a ball-and-socket joint; that is to say, moves independently in every conceivable direction at the will of the chameleon. It

can therefore look forward and backward at one and the same time. The optic itself is safely enclosed in an acute domeshaped casing, constructed of similar substance to the general covering of the animal; a small circular opening no larger than the head of a small pin is the only unprotected part of the optical turret. The pupil of the eye is further protected by being sunk some little distance into the opening, no part of the eye being visible, giving little chance of injury occurring to the organ of sight. The chameleon is unique, with the exception of the flat and certain other fishes, in possessing this independent relationship of the two eyes.

Further, the structure of the toes of both the fore and hind legs is also peculiar. As will be observed by examining the photographs, they are similar to those of parrots and other perching birds, thereby enabling the

158 WILD ANIMALS AND THE CAMERA

chameleon to firmly grip the branches of the trees, shrubs, &c., which it inhabits, and the tail, being prehensile, acts as a fifth support, thereby protecting the body of the animal against any "back kick" when it fires off its tongue, which never fails to make a bull's-eye.

The colour of this curious animal may be summed up in the words of the poet:—

"As the chameleon, which is known To have no colour of its own."

PRIOR.

This is true in effect, but the exaggerated descriptions of the chameleon's power of changing its hue must be taken cum grano salis. I have watched for many years numbers of these reptiles, but have never seen any one of them change from or to a distinct blue, bright red, or any other of the bright primary colours. They do change to low-toned tints,

owing to the rete mucosum containing two kinds of colouring pigment, but greens and browns verging into yellows are the only changes I have witnessed with chameleons in captivity. The colour adopted by the reptile has generally no relation to the colour of the surroundings, and when it has, it seems more a coincidence than a colour selected by the chameleon to match the object upon which it is resting.

I had been watching the methods employed by this animal for some considerable time, and on a certain day in 1904 a number of chameleons arrived from Morocco, upon which I determined to try an experiment. They were very quick in getting from the perforated box in which they arrived into the glass vivarium, and seemed to be on the feed. I asked Tyrrell, the keeper, to put a meal-worm on the bristle he kept for the purpose and offer it outside the glass, my object

ches

RA

it isile,

tectany

gue, e.

may the

ated of

any ave

om

ırs.

ıts,

being to see whether the chameleon experimented upon would realise that the glass came between it and the object it was after. It had already taken several worms inside the vivarium, and when wriggling worm appeared outside, the chameleon worked its way along the branch of the small shrub until it arrived at a distance at which it knew it could reach its prey with its tongue. Taking aim, which it always does with precision, it let fly, and, as I anticipated, its tongue stuck to the glass side of the vivarium for a second or two, which gave me sufficient time to make a cursory examination of it, the results of which are given in the description above.

I had prepared all my apparatus for another attempt at securing a record of the movements of the tongue, and repaired with some of the fresh arrivals to my temporary studio at the back of the Reptile House, where a small shrub eleon
the
the
the
the
the
veral
when
side,
the
vived
ould
king
sion,
ngue
rium
me
tamare

RA

for d of ired my the arub



THE CHARLES INLAND TORTOISE, (Testude significa.)



without leaves had been set up with a plain background, so that no detail of the chameleon and its shooting tongue might be lost.

I had made several previous attempts to secure cinematograph films showing the movement of the tongue, but at close quarters found it impossible to get a sufficiently rapid exposure to give a picture that showed the action other than I had a focal-plane shutter made for my camera which allowed of an exposure of one five-hundredth of a second, and with a Zeiss lens working at F. 6.3 I eventually secured a series of negatives on the fastest plates procurable, which show the movements of the tongue from start to finish, six of which are here reproduced. I accredited with being the first to obtain photographs showing this action, which have been published in scientific papers, &c., in Europe and America.

TORTOISE AND CAYMAN

The Charles Island Tortoise (Testudo gigantea), an enormous monster from the Galapagos Islands, is now almost extinct. The specimens in the Tortoise House at the Zoo are considered very rare and In his "Voyage of the Beagle," unique. Darwin gives some interesting details concerning the habits of these giant tortoises. Some of the old males live hundreds of years, and measure about 45 inches long by 32 inches high, and weigh about 800 lb. Unlike the turtles, these tortoises have the ability to completely draw their head, limbs, and tail within the shell, the back of which is barrelshaped. Notwithstanding their size and weight, they are comparatively active and do well in captivity.

The Cayman (Caiman laterostris) or Jacare, as it is called by the natives of Brazil, takes the place of the alligator (to

ERA

studo
n the
tinct.
se at
and
agle,"
etails
torlive
about
and
rtles,
comtail
arreland

or os of or (to

and



THE BROAD-SNOUTED CAYMAN, (Caiman latinostrix)



which it is closely allied) in the tropical South American rivers. The cayman seems to be very similar to the Old World crocodile, and in the Amazon and Orinoco it numbers countless myriads. Bates, in writing of the great cayman, says that it grows to a length of 18 or 20 feet and attains an enormous bulk. Like the turtle, the cayman (he calls it alligator) has its annual migrations, for it "retreats to the inner pools and flooded forests in the dry season and buries itself in the mud and becomes dormant, sleeping until the rainy season returns. It is scarcely exaggerating to say that the waters of the Solimoens are as well stocked with large alligators as a ditch in England is in summer with tadpoles." There is no comparison between the crocodile and the alligator or cayman for ferocity. One of the former, belonging to the late D'Oyly Carte, although only about 4 feet long, would keep any two men at bay, whereas I have seen one

164 WILD ANIMALS AND THE CAMERA

man enter a tank where thirty or forty alligators were kept and hold them in check with a small stick. The eggs of the cayman are much sought after by the natives as food.

PYTHON AND BOA CONSTRICTOR

The Python (Python spilotes) in captivity does not exhibit much vivacity—or vitality, except that it lives for a considerable time. When the snakes were fed publicly, the Reptile House was one of the sights of The excitement of some of the London. visitors who knew when certain reptiles were to be fed was intense. They came with their friends to witness the murder of the innocents, strained in every nerve. as if about to witness a public execution. The exhibition of the crushing out of the life of a poor inoffensive goat by an accursed constricting reptile was abolished. but the animals were sacrificed all the

RA

orty
in
of
the

R ity, me. the

the iles me der ve, on. the an ed, the



THE DIAMOND PYTHON. (Python spilotes)



same until about four years ago; now, however, not even a rat is given alive to the snakes, publicly or privately.

The reptile illustrated is the handsomely marked Diamond Python of Australia, which, although one of the non-poisonous species, cannot be classed as "not dangerous."

The Boa Constrictor has the distinction of having the same name for its familiar as for its scientific title. The one shown round the neck of Mr. Tyrrell has been in the Zoo quite a number of years. is remarkable what a fascination the reptiles have for many people. There are many who go to the Zoo expressly to visit the snakes; and on one occasion the keeper, Tyrrell, who has been there about thirty-five years, was asked by a visitor who was constantly in the Reptile House if the Society would accept a collection of snakes which he had, and it was arranged that Tyrrell should go and fetch

He went to the house, which is quite near to Regent's Park, taking with him two sacks and an assistant to help him bring back the snakes. The lady who came to the door, on being told the object of the keeper's visit, asked Tyrrell in, and explained that the gentleman who asked him to call was always seeing snakes in his bedroom, although no one else in the house had been able to discover the vestige of one. Tyrrell was shown up into the sleeping apartment where the snakes were said to swarm. The gentleman was there; he thanked Tyrrell for coming, pointed out to him where the snakes were coiling-round the bedposts, up the walls, on the ceiling-in fact, in every direction in which he turned. **Tyrrell** grasped the situation, for on being shown the inside of one of the cupboards from which the snakes were said to come, tell-tale bottles by the dozen met his view. He therefore pretended to pick the

RAı is vith him who ject and ked in the tige the ere re; ind kes up ery rell ng rds ne, his

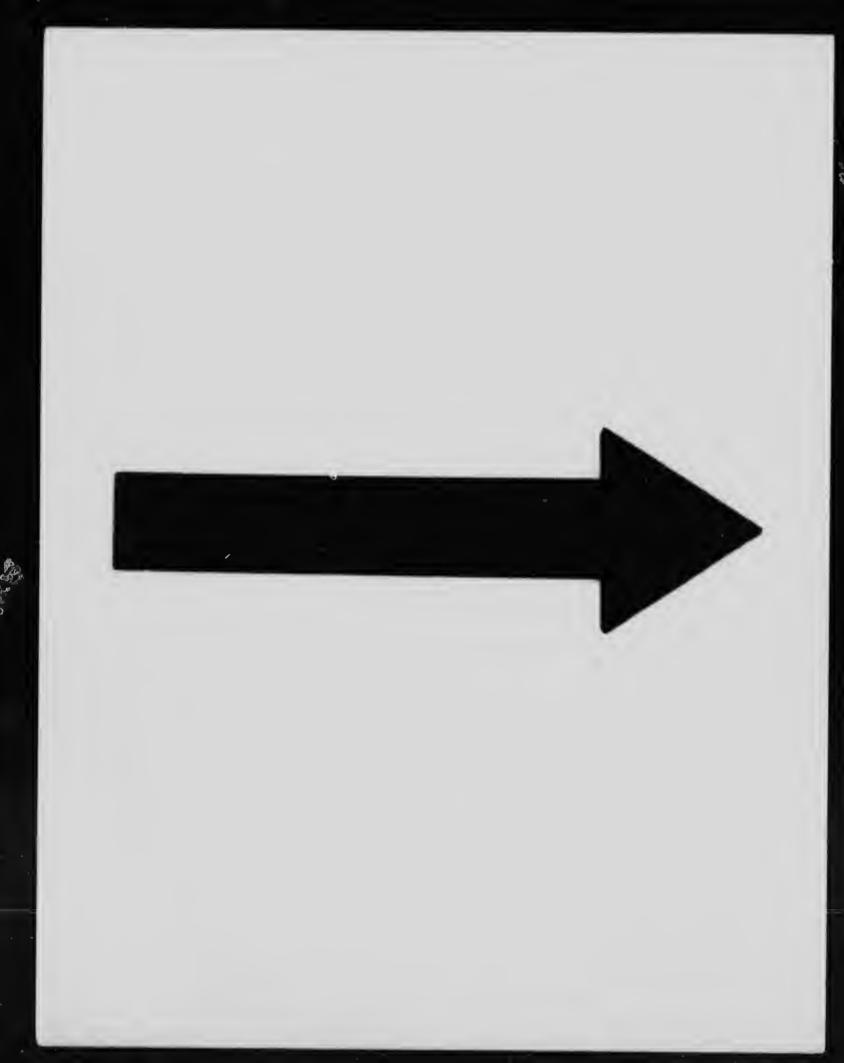
he



THE BOA-CONSTRICTOR, WITH ITS KEEPER.

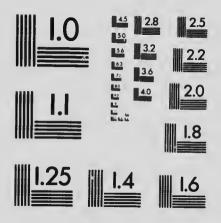


snakes off the bedstead and walls and ram them into his sack, which he threw over his shoulder, and departed. It was but a week or two afterwards that the old gentleman "turned up" again at the Reptile House and asked Tyrrell to bring his sack for some more snakes, which he did on several occasions after official hours, receiving a substantial reward for his trouble. Either the snakes or the gentleman disappeared, Tyrrell's services in phantom-snake catching being suddenly stopped.



MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART Na. 2)





APPLIED IMAGE

Inc

1653 East Mein Street Rochester, New York 14609 USA

(716) 482 - 0300 - Phone

(716) 288 - 5989 - Fax

CONCLUSION

AT A SNAKE CHARMER'S SÉANCE

THEN I was in Switzerland at the last great Exhibition held Geneva, with that well-known friend to the blind, M. Levanchy Clark, who had engaged me to mount a series of tableaux vivants similar to the originals invented and produced by me at the Palace Theatre, London, I had the opportunity of observing the Egyptian Cerastes, or Horned Viper, which is known to be the most deadly of the serpents. M. Levanchy Clark, during his travels in Egypt, had across some natives who were come possessed of that secret art of handling poisonous serpents and scorpions

absolute impunity to which allusion is often made in the Bible (Psa. lviii. 4, 5; Eccles. x. 11; Jer. viii. 17), and had brought some of them to Geneva to share with my tableaux vivants in an entertainment he was giving for the benefit of an institution for the blind.

These Raifa'ee or Saadee dervishes were not charlatans of the kind who extract the poisonous teeth of the horned vipers or blunt the stings of the scorpions with which they perform, but professors of the incantation of serpents. A private séance was given on their arrival at Geneva, to which I and a few of M. Clark's friends were invited.

ne

in

to

d

X d

e,

)d

st

d

The Egyptians were four in number, and one of them, a thin man, appeared to be eighty years old. When I entered he was squatting on his hams before a gourd-shaped basket made of plaited palm leaves and measuring about two feet in diameter at the base. One of the

party was playing a strange-shaped onestringed viol, which he held between his knees, he being also in a squatting position. Another came forward and removed the wicker cover from the basket, and took out what appeared to be some pieces of dirty blanket. The old dervish began whistling some weird sequences of notes, alternated by clucking noises with his tongue. The viol ceased to emit sounds, and the other three men, all squatted on their heels, closely watched him with an air of mystery. After a few minutes the head of a horned viper slowly rose from the basket, from which it gradually crept, its scaly brownish skin-more or less tinged with yellow, ornamented with six longitudinal rows of quadrangular markings-glistening in the sun.

Slowly the viper wriggled towards the old man, who had evidently fascinated it. Then it crawled on to his outstretched hand and slowly coiled itself around his

ie-

is

ls, on

in ie

m t,

SS

ix C-

ie t.

d

arm, its forked tongue licking the bare flesh of the charmer every few seconds. The sounds from the viol recommenced, and the old man changed his clucking to a dirge-like chant, accompanied in unison by the viol, at the same time bringing the Cerastes slowly towards his face till it was within a few inches of his lips, gazing with a fixed stare into its glassy eyes.

If these venomous reptiles are capable of "showing off," this one did; about eight inches of the body stiffened into an erect position, with the deadly head horizontally turned towards the old man's mouth, which it kissed with its forked tongue. I was transfixed by the horrid sight, or by some mysterious power transmitted by these occult men, my feelings being also experienced by the other persons present.

Slowly the old man moved his arm to an outstretched position at right angles

to his body, and recommenced his whistling and clucking. The serpent, relaxing its rigid, sphinx-like attitude, worked its way up the sleeve of his garment and disappeared, only to reappear in about a minute from beneath that part of it which encircled the wizard's scraggy neck, around which it coiled its body. Then, moving its head towards the chin of the charmer, with its tongue it kissed the toothless mouth of the dervish, who finally clutched its neck and whistled some weird notes. The reptile relaxed its hold and was put into the basket, which contained many more horned vipers that had not been summoned from their resting-place.

No sooner had the cover been placed on the opening of the basket than another of the party drew from beneath his robe a perforated horn box, from which he took three horrible hairy scorpions, the largest I have ever seen, measuring quite eight inches in length. These he placed st-

ng its

bn

a ch

bı

ıg

r.

SS

d

s.

n

 \mathbf{f}

r

upon the ground, handling and teasing them without their showing any resentment, only arching their segmented bodies upwards with the object of protecting their needle-pointed stings; but when a palm stick, upon the end of which an apricot had been thrust, was put in front of them, they struck at the apricot with great vigour. Although the man's hand was close to them all the time, the scorpions did not attempt to strike at it, and when he withdrew it and the apricot was moved about, they darted towards the man with the horn box as if for protection.

The soft apricot was placed at the end of the palm stick to prevent the scorpions injuring the points of their stings, and on examination it was found to be covered with perforations. Remarkable to relate, the performer ate the apricot and seemed to enjoy it.

This séance was awe-inspiring, and

all present were very pleased when the creepy things were safely replaced in the basket and the box; but I may mention that this "show" was too realistic to attract the public in any great numbers.

With the vast number of suitable photographs for a book of this kind, it has been a great difficulty with my publishers to decide which should be reproduced in this my first book, as I had submitted sufficient material to fill double the space at my disposal. I am, however, keeping quite a number of prints aside, with the hope that my animal studies will be appreciated and prove sufficiently entertaining to warrant my offering at some future date "More Wild Animals and the Camera."

INDEX

A African Elephant, 68 African Spotted Cat, 37 Algæ, 92 Anthropoid Ape, 95 Anthropoides virgo, 147 Anthropopithecus troglodytes, 95 Anthropopithecus gorilla, 112 Ape House, New, 102 Appendicitis in man-like Apes, 117 Aptenodytes pennanti, 142 Apteryx australis, 139 Arab Sword Hunters, 74

RA

the

the ion

to

S.

ble

it

ιb-

0-

ad

ole

er,

le,

es

ly

at

ls

Baboon, the, 119 Baden-Powell, General, 78 Baker, Sir Samuel 38, 65 "Barbara," 56 Barker, Robert, 62 Bartlett, Mr., 143 Bateleur Eagle, 133 Bates, 163 Bennett, Mr. G., 145 Bird of Odin, 147 Birds of New Zealand, 140 Birds, photographing, 136 Blackpool Tower, 50 "Breeches" Bible, A.D. 1560, the, 62

Brown Pelican, the, 138 Bulldogs, brindle, 27 Buller, Sir William, 140 "Bun manus" (jungle man),

Caiman laterostris, 162 Callosities on horse, 82 Carte, D'Oyly, 163 Catarrh, 52 Caucasus, 53 Cayman, the, 162 Ceratogymna elata as a pet, 150 Chameleon, 155 Chameleon vulgaris, 155 Cheetah, the, 48 Chimpanzee, the, 95 Chimpanzee's gait, 100 Chimpanzees, "Jimmy," "Susan," "Sally," 101 Chimpanzees, baby, 101 " Cnita," 42 "Chloe," 112 Cholopus hoffmanni, 91 Clark, M. Levanchy, 168 Clouded Tiger, 38 Collection, South African, 142 Colobus angolensis, 127

Colour of Sloth, 92

Constrictor, Boa, 165

Coronation Collection, 83 Corvus corax, 145 Crane, Demoiselle, the, 147 Crane, Numidian, the, 147 Cynocephalus neumanni, 119

D

Darwin, Charles, 162 Dasyure, the, 93 Dasyurus viverrinus, 93 "De Spectaculis Libellus," 63 Derby, Lord, 140 Developing under - exposed plates, 93 Diamond Python of Australia, Dickens, Charles, 146 Dixon, the keeper, 45 Domitian, 62 Du Chaillu, 115

Edward VII.'s Coronation, 100 3ypt, Pasha of, 80 Egyptian Cerastes, 168 Elate Hornbill, the, 150 Elephant, the Indian, 70 Elephant's tusks, 69 Elephas Africanus, 66 Elephas maximus, 66, 70 Equus grévyi, 84 Equus Somalicus, 81 Expression of eyes, 48 Eye of lion, 32

Family killed by tiger, 36 Fannin, Mr. J., 86 "Fatima," 78 Felis Leo, 24 Felis lynx, 52

Felis nebulosa, 38 Felis onca, 46 Felis pardus, 40 Felis tigris, 35 Felis uncia, 44 Fernan Vaz, 113 Finn, Mr. Frank, B.A., F.Z.S., "Forester," 88 Franz Josef Land, 55 French Republic, 84

Galapagos Islands, 162 Gayer, Sir John, 31 "Gazza Ladra," by Rossini, 146-Gentleman who saw snakes, the, 165-7 George V., King, 39 German Loang Expedition, 1873-76, 116 Giraffe, 73 Giraffe camelopardalis, 73 Giraffe's hind legs, 81 Gordon and Sharpe, 26 Gorilla, 112 Goura coronata, 149 Goura Victoriæ, 149 Great Crowned Pigeon, the, 149 Great Kangaroo, the, 88 Grévy, President, 84 Griffon Vulture, the, 131 "Grip" in "Barnaby Rudge," 146 "Guy Fawkes," 63 Gypagus papa, 132 Gyps fulvus, 131

Hagenbeck, Carl, 30 Hairy people, 111

Hamburg menagerie, 30
Harris, Captain, 115
Helotarsus ecaudatus, 133
Herr Umlaiff, 116
Hippopotamus, the, 63
Hippopotamus amphibius, 63
"Hobble skirt," 90, 144
Horned Viper, 168
Hunting Leopard, 42
Hylobatis lar, 117

Z.S.,

, 146

kes,

ion,

140

e,''

I

Indian Elephant, the, 66 Indian Rhinoceros, 57

T

Jabiru, the, 148
Jacare, 162
Jackson, Captain Frederick G., 54, 57
Jackson - Harmsworth Polar Expedition, 54
Jaguar, 37, 46
Japanese Ape, 123
Jardin des Plantes, Paris, 33, 121

"Jim," the Snow Leopard, 44
Johnston, Sir Harry, 33

"Jumbo," 67

K

King Edward VII., 99
King Edward VII.'s Indian collection, 68
King George V., 83
King Penguin, the, 142
King Vulture, the, 132
Kinloch, General, 59
Kiwi, the, 139
Kordofan, 74

L

Ladakh, 45 Lar Gibbon, 117 Lemur, 94 Lemur as pet, 94 Lemur brunneus, 94 Leopard, 37 Leopards, 41 Leopards ferocious and bloodthirsty, 42 Leopards man eaters, 43 Lion, 23 Lion a good climber, 32 Lions at the Roman Amphitheatre, 25 Lion, Black-maned, 27 Lion, " Duke," 26 Lion's eye, 31 Lion House, New, 29 Lions, intelligence of, 33 Lion's roar, 30 "Lion Sermons," 31 Lion, "Sultan," 26 Lion-tailed Monkey, 125 Litter of lion cubs, 99 Lydekker, Richard, F.Z.S., 110 Lynceus, 54 "Lynx-eyed," 54 Lynx, Northern, 52 Lyon, Captain, 56

M

Macacus silenus, 125
Macacus speciosus, 123
Macaque Monkey, 123
Macropus giganteus, 88
Madagascar Cat, 95
Mafeking, relief of, 78
Mahon, Colonel, C.B., D.S.O., 78

"Mammals, Living and Extinct," 110
Mansbridge, the keeper, 97
Marsupials, 94
Martial, 62
Martial Hawk Eagle, 134
Menelik, Emperor, 26, 84
"Mickie," 95
"Mickie" and the lion cubs, 99
"Mickie's "intelligence, 97
Monkey-eating Eagle, 135
Mycteria americana, 148

N

Nepal, 40

0

"Old Bushman," 89
"Old Man," 88
Orang, experience with, 108
Orang-utan, 105
Oreamnos montanus, 85
Ounce, 44
Outram, Sir Joseph, 36

P

Palmist and chimpanzee, 96
"Pard," 41
Pelecanus fuscus, 138
Photographic difficulties, 93
Pithecophaga jefferyi, 135
Poe, Edgar Allan, 146
Polar Bear, 54
Pondicherry Vulture, 131
Pongo, 114
Prince of Wale, H.R.H. the, 39, 67, 142
Prince of Wales's Exhibition
Ground, 40
Prince of Wales's leopard, 40

Princess Mary, 142
Prior, 158
Proboscidea, 70
Protective colour of sloth, 92
Python, the, 194
Python spilotes, 164

O

Queen Mary, 142 Queen Victoria, 84 Queen Victoria Lion, 26

R

Ras Makonnen, 99 Raven, the, 145 Reade, Mr. Winwood, 116 Red-haired Ape from Borneo, 106 Rhampastus toco, 151 Rhesus, 123 Rhinoceros, bullet-proof, 60 Rhinoceros, hide of, 59 Rhinoceros, Hairy-eared, 60 Rhinoceros lasiotis, 60 Rhinoceros unicornis, 57 Rhinoceros, young Indian, 60 Rhinocerotidæ, 61 Rhiptoglossa, 155 River-Swine," 65 Roar of lion, 30 Rocky Mountain Goat, 85 Rocky Mountains, 87

S

Samson and the lion, 24 Sanderson, Mr., 37 "Savage Africa," 116 Scorpions, 172 Secretary Vulture, 134 Selous, F. C., 26 Sharpe, Alfred, 33 Simia Satyrus, 105
Sloth, the, 91
Snake-charmer's séance, 168
Snake-eaters, 134
Snow Leopard, 44
Solimoens, 163
Somali Wild Ass, 81
Souplet, M. Hachet-, 33
Spheniscidæ, 143
Spizaëtus bellicosus, 134
Stanley, Lord, 140
Storms, effect on elephants, 72
Sue, M. Eugene, 98

92

neo,

Ö

60

T

Terrace cages at Zoo, 28
Testudo gigantea, 162
Thibaut, M., 74
"Thirteen Years among the Wild Beasts of India," 42
Thumbless monkeys, 127
Tiger, Asiatic, 36
Tiger, man-eating, 35
Tiger's spring, 37
Toco Toucan, 151
Tone of voice, 48
Tortoise House, 162
Tortoise, Charles Island, 162
Trianon, 147

Tristram, Canon, 132 Tyrrell, the keeper, 159

U

Ungulate, Even-toed, 65 Ungulates, Odd-toed, 61 Ursus maritimus, 54

V

Versailles, 147
Viceroy of India, 46
Victoria Crowned Pigeon, 149
Victoria Nyanza, 84
"Voyage of the Beagle," 162

W

"Wandering Jew," 98
Wanderoo Monkey, 125
White Nile, 66
"Wild man of the woods, 114
Williams, Mr. Bransby, 146

Z

Zebra, Equus, 83 Zebra, Grévy, 84 Zebra, Mountain, 82 Zebras, the, 81 Zeiss lens, 107 Zoo, the, 32

The Gresbam Press. UNWIN PROTHERS, LIMITED, WOKING AND LONDON.

