ROWLAND WARD'S RECORDS OF BIG GAME

WITH

THEIR DISTRIBUTION, CHARACTERISTICS, DIMENSIONS, WEIGHTS, AND

HORN & TUSK MEASUREMENTS

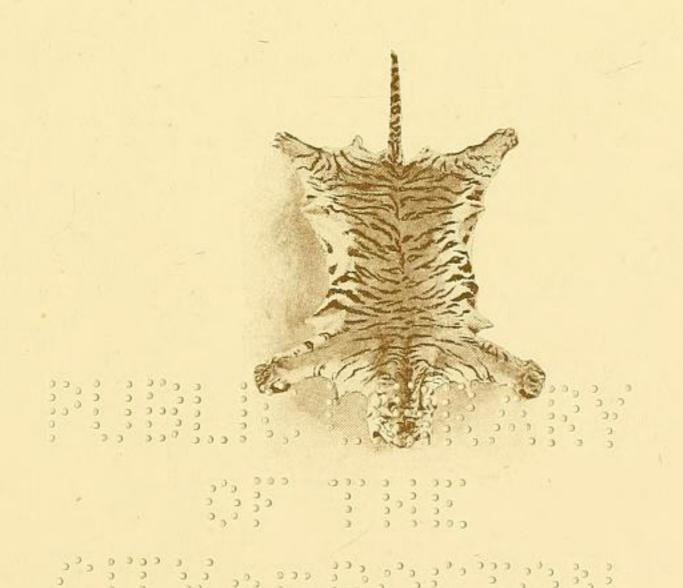
SEVENTH EDITION

EDITED BY

R. LYDEKKER, F.R.S.

AND

J. B. BURLACE, F.R.G.S., F.Z.S.



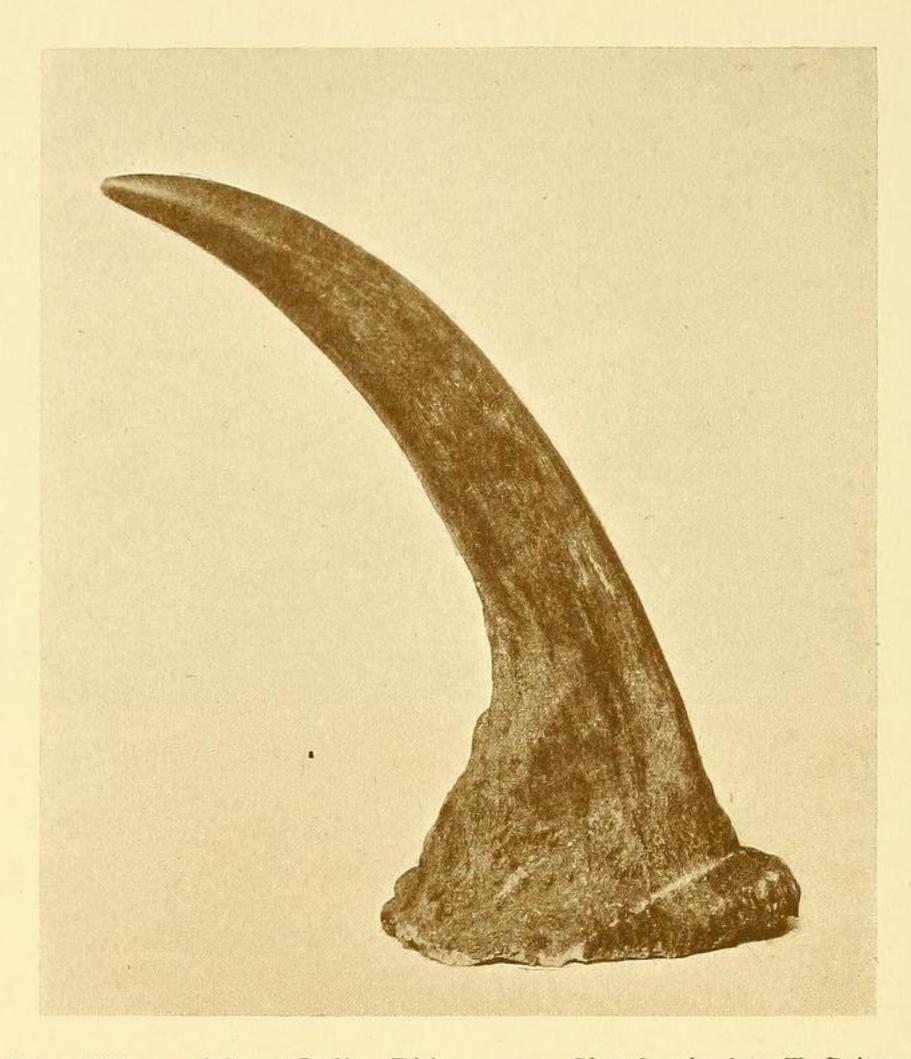
LONDON

ROWLAND WARD, LIMITED "THE JUNGLE," 167 PICCADILLY, W.

1914



All rights reserved



Record Horn of Great Indian Rhinoceros. Shot by the late T. Briscoe.

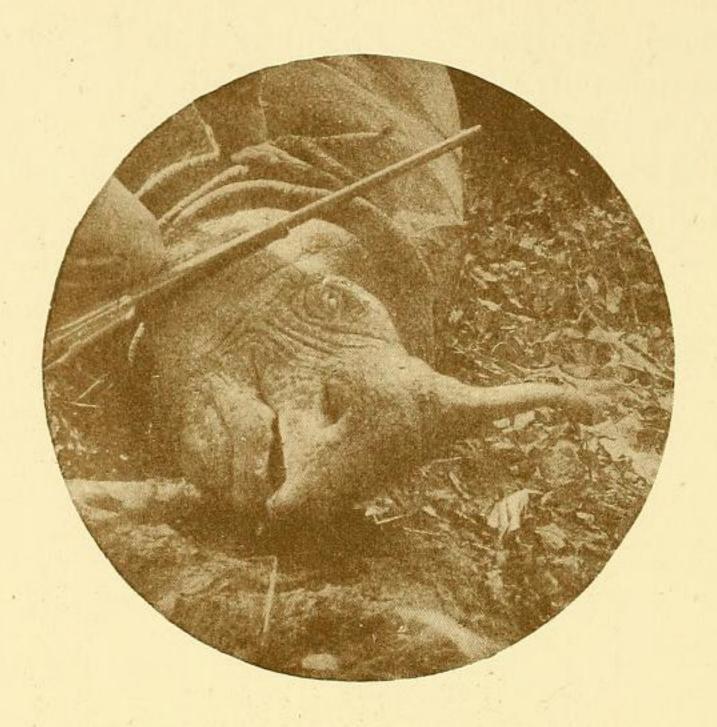
The GREAT INDIAN RHINOCEROS (Rhinoceros unicornis).

In addition to being the giant among its Asiatic kindred and possessing only a single horn, this species is specially characterised by the form of the folds in its hide, and the large tubercles on the foreand hind-quarters, which look as though the skin had been fastened to the body by means of rivets. Folds before and behind the shoulder mark off one large triangular shield on each side, while another fold before each thigh separates a large rump-shield; the saddle-shaped body-shield being defined by the fold behind the shoulder and the one in front of the thigh, both of which extend across the back. Very characteristic, too, are the great folds which form heavy rings of skin round the neck. Although the tubercles are largest on the fore- and hind-quarters, they also occur on other parts of the body. Height at shoulder, from 5 feet 8 inches to over 6 feet; girth behind shoulder, 105 inches. Weight of living animal, 1010 lbs. (New York Zool. Soc.).

Distribution.—The Assam plain and the Tarailand of Nepal and some of the adjacent territories. Formerly this rhinoceros was found over the greater part of the Indian peninsula, as attested by fossil remains. There is evidence of the occurrence of a more or less nearly related rhinoceros, apparently with two horns, in the Singpu district of Upper Burma.

Length on front curve.	Circum- ference.	Weight.	Locality.	Owner.
24	24 ³ / ₄		Assam	. British Museum (the late T. Briscoe).
19\frac{1}{8}	$22\frac{3}{8}$		Assam (?)	. Ipswich Museum.
188	231/4	lbs. 9 oz.	Assam	. D. H. Felce.
2 18	16	***	Do	. The late M. H. Logan.
$16\frac{3}{4}$	3***		Belsire, Assam .	. W. C. Sherwill.
♀ 16‡			Cooch Behar .	. H.H. the Maharaja of Cooch Behar.
₽ 16		$3\frac{1}{2}$ lbs.	Nowgong, Assam	. L. Fabre Tonnerre.
15	$22\frac{3}{4}$		Nepal	. Dr. T. G. Longstaff.
144	21		Assam	. Dr. W. P. Y. Bainbrigge.
₽ 14	$22\frac{7}{8}$	$4\frac{1}{2}$ lbs.	Nowgong, Assam	. L. Fabre Tonnerre.
/ I3½	22		Nepal	. His Majesty The King.
13	20		Do	. Capt. M. L. Pears.
13	$20\frac{1}{2}$	2010	Assam	. G. A. Dolby.
13	$20\frac{3}{4}$		Do	. W. A. Doxat.
$12\frac{3}{4}$	23		Do	. H. B. Firman.
$12\frac{1}{2}$	21 5		Do	. H. C. Holland.
$12\frac{1}{2}$	21	***	?	J. W. Grieve.
12	$21\frac{1}{2}$		Cooch Behar .	. A. Ezra.
12	$21\frac{3}{4}$		Nepal	. Major Lord Charles M. Nairne.
113	194		Do	. H.S.H. the Duke of Teck.
		01	VNER'S MEASUI	REMENTS.
$21\frac{1}{2}$	$24\frac{3}{4}$		Nepal	. Lord Curzon of Kedleston.
$13\frac{7}{8}$			Cooch Behar .	
113			Do	. Do.
13		7	?	Indian Museum, Calcutta.
121/2	$15\frac{1}{2}$		Cooch Behar .	. Col. J. J. Harrison.

1 Height at shoulder, 6 ft. 6 ins.



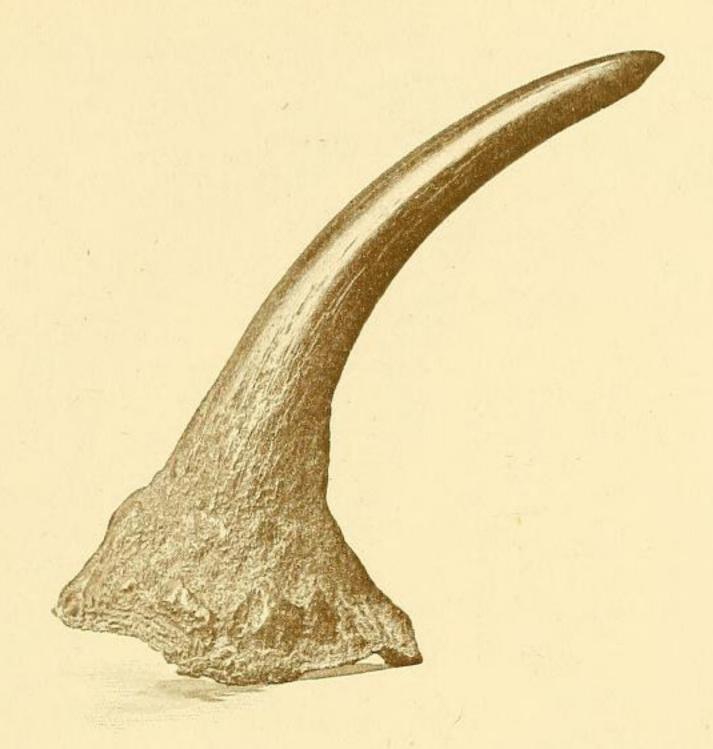
Javan Rhinoceros. Shot by Mr. M. Maxwell.

The JAVAN RHINOCEROS (Rhinoceros sondaicus).

A less gigantic and smaller-headed species than the last, with the skin marked by a kind of mosaic pattern, and the fold in front of the shoulder continued right across the body like the two hindmost folds. The neck also lacks the large ring-like masses of folded skin. Horn never very large, and generally almost or completely wanting in the female. A female has been measured which stood $5\frac{1}{2}$ feet at the shoulder, and it is probable that the male is not much inferior in height to the Indian species, although of lighter build.

Distribution.—The Sanderbans and other parts of Eastern Bengal, to the Tarai, Sikhim, Assam, and thence through Burma and the Malay Peninsula to Sumatra, Java, and Borneo.

Length on front curve.	Circumference.		Locality.	Owner.
$10\frac{3}{4}$	20	Java		M. Maxwell. (See illustration).
10 ⁵	195	Do.		British Museum.
105	19½	Do.		H. Van Son.
81	20	Do.		A. S. Campbell.



Front Horn of Sumatran Rhinoceros. Shot by Mr. G. F. W. Curtis.

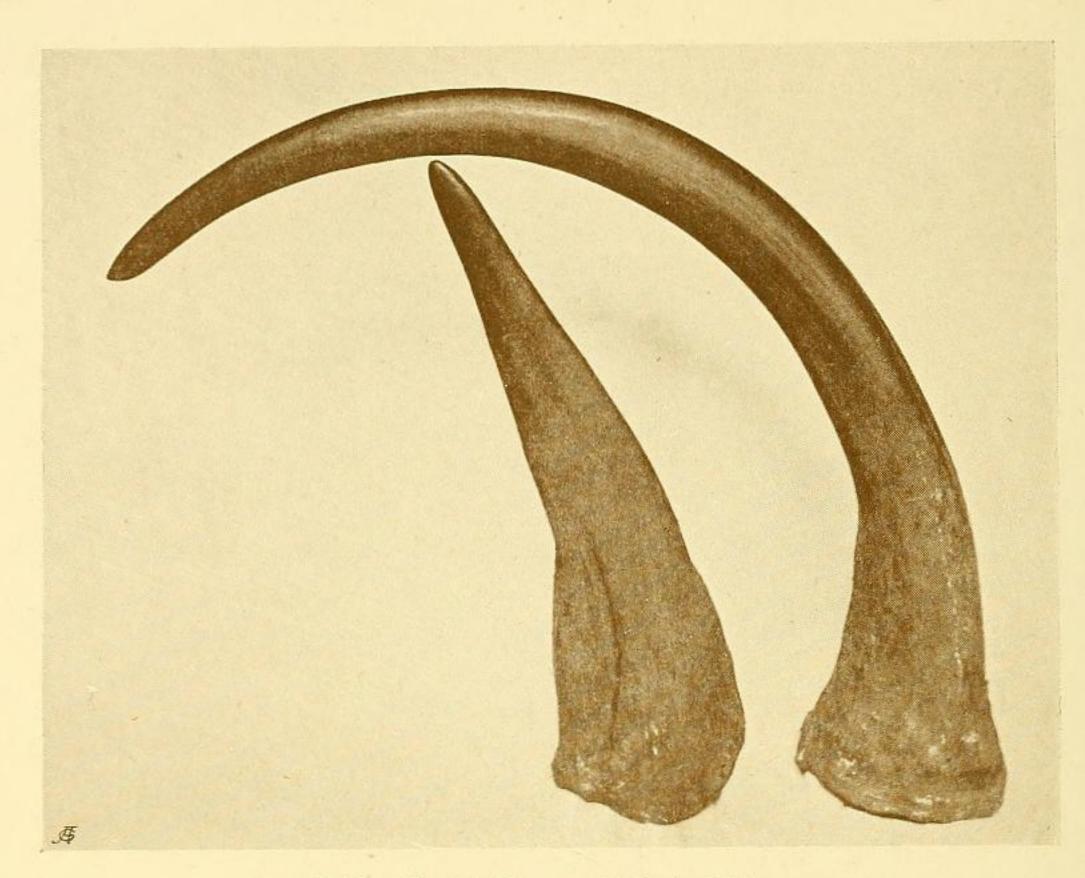
The SUMATRAN RHINOCEROS (Rhinoceros [Ceratorhinus] 1 sumatrensis).

The smallest of the Asiatic rhinoceroses, and the only one with two horns; differing, however, from the African members of the genus by the presence of folds in the skin and of teeth in the front of the jaws. Only the fold behind the shoulders is continued across the back, and the brown or black skin is rough, granular, and more or less hairy. Height at shoulder, from about 4 feet to $4\frac{1}{2}$ feet; weight, about 2000 lbs.

Distribution.—From Assam (where the species is very rare) to Siam, the Malay Peninsula, Sumatra, and Borneo. The Assam animal is a distinct local race (R. sumatrensis lasiotis).

	Length o		Circumfere	nce.	Loc	cality.	Owner.
. F	ront.	Rear.	Front.	Rear.			
3	$32\frac{1}{8}$	*** *** **	17 3			?	British Museum.
2	$27\frac{1}{8}$		$17\frac{7}{8}$?	Do.
1	15	$7\frac{1}{2}$	$17\frac{1}{2}$	17	Malay Per	ninsula	C. B. Smales.
1	II	$3\frac{1}{2}$	154	1114		?	Sir T. S. Tancred, Bart.
	7	$2\frac{1}{2}$	14	10		?	Capt. P. Hudson.
	5	$2\frac{3}{4}$	13	11	Burma		Capt. W. F. Brayne.

¹ An earlier name is Dicerorhinus, but this is too like Diceros, the subgeneric (or generic) name of the African rhinoceroses.



Mr. S. L. Hinde's Horns of Black Rhinoceros.

The BLACK RHINOCEROS (Rhinoceros [Diceros] bicornis).

Aurarissi, Abyssinian.
Abu Gesn-Khartyl, Sudani.
Chipamberi, Lower Zambesi.
Chipémberi, Chilala.
Fava, Swahili.
Gurhu, Danakil.
Muin, Masai.
Kifuvi or Marili, Hausa.

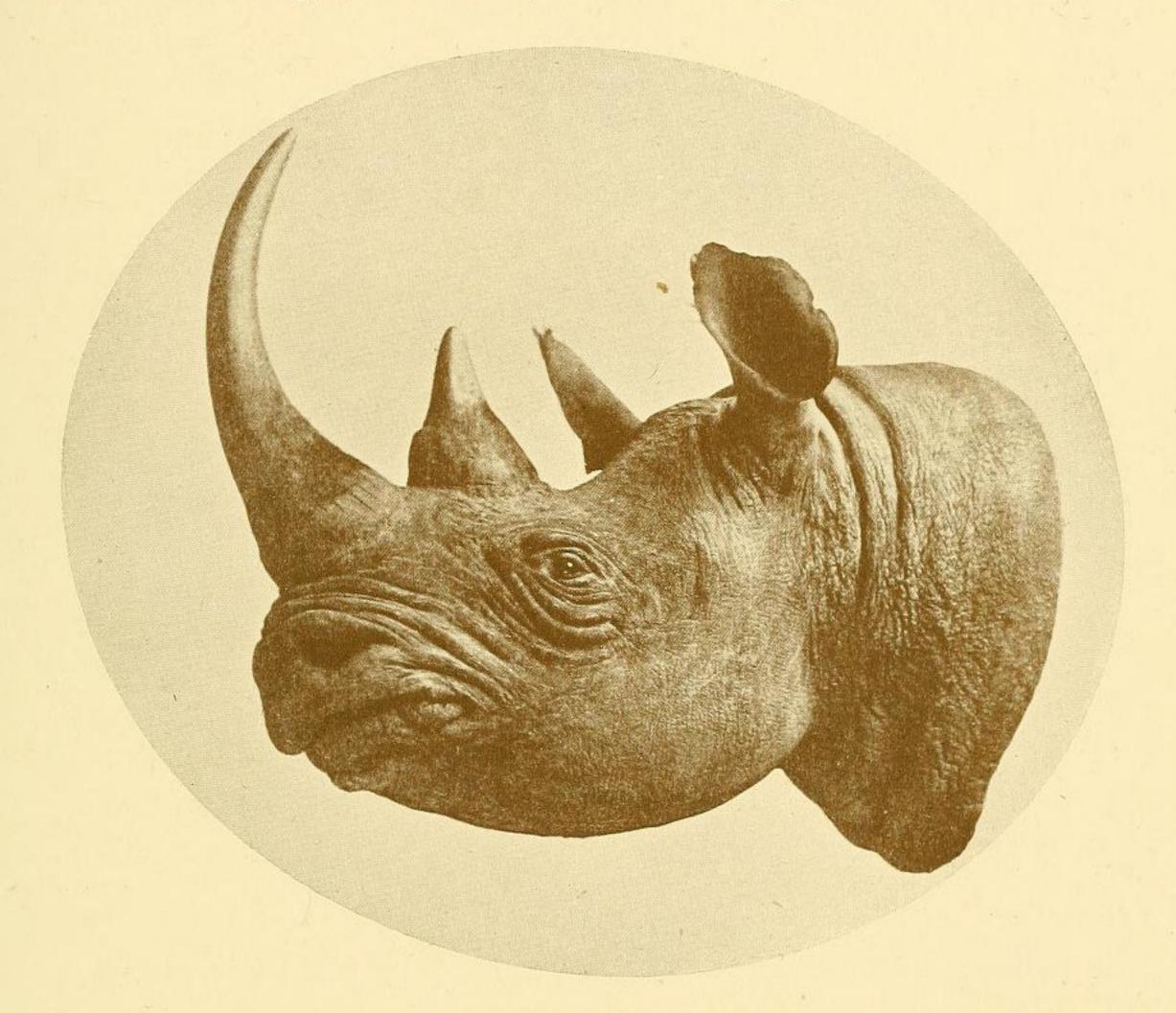
Megi, M'Kua.
Sipejana, Swazi and Matonga.
Upejana, Matabili and Zulu.
Upelepi, Basuto.
Wărtses, Galla.
Wil, Somali.
Zwart Rhinaster, Boer.
Shempola, Chila.

The African rhinoceroses are two-horned animals, distinguished from their Asiatic relatives by the absence or slight development of the folds of skin which form such a characteristic feature of the latter, and also by the lack of front teeth in both the upper and lower jaws. The hide, too, is almost completely naked, although there are some bristly hairs on the margins of the ears and the tip of the tail.

Perhaps the most distinctive external feature of the black rhinoceros, as the present species is commonly called, is to be found in the prehensile tip to the upper lip, which is rounded and not very wide in front. Other points of distinction are, however, shown by the form of the horns and ears and the position of the eyes; while in bodily size

this animal is also considerably inferior to the next. The black rhinoceros is likewise well characterised by the comparative shortness of its skull, and the form and structure of the cheek-teeth, which are adapted for a diet of twigs and leaves. Average height at shoulder, 5 feet. Weight (Capt. R. Meinertzhagen), I ton I cwt. I qr. 8 lbs.

Black rhinoceroses sometimes have more than the usual two horns. Gordon Cumming, for instance, records having killed a three-horned



Head of Black Rhinoceros.

specimen; and several others have been recorded from East Africa, including a five-horned specimen.

Distribution.—From Abyssinia and Somaliland through East and Central Africa, in suitable localities, to the Cape. Now rare to the south of the Zambesi, but probably more abundant in the districts between the interior of Somaliland and Lake Rudolf than anywhere else. Although more alert and active than the white rhinoceros, and thus a more dangerous animal, this species is by no means difficult to kill with modern weapons; and in the old days hunters frequently shot half-a-dozen in a single evening as they

came to drink at a pool. Of the local races at present named, the E. African R. bicornis holmwoodi is distinguished by the long and compressed front horn; while the Somali R. b. somaliensis is a relatively small form characterised by the proportions of the skull.

3 Living animal, 602 lbs. (New York Zool. Soc.). 9 ,, ,, 1080 ,, ,,

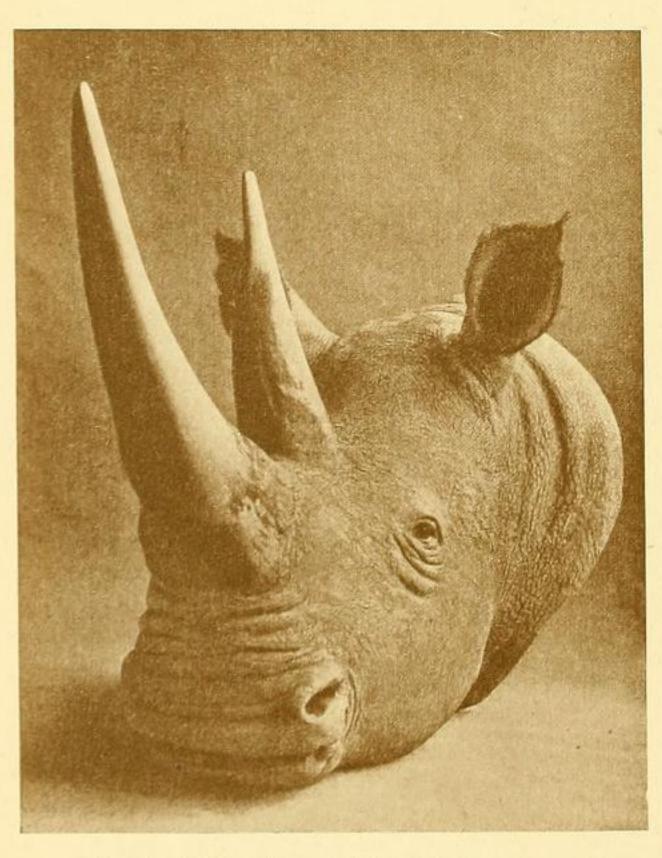
Lengt		Circumfe	erence.				
Front horn.	Rear horn.	Front horn.	Rear horn.	Locality.			Owner.
$53\frac{1}{2}$		181	***	East Africa	. 1		Dr. C. H. Orman.
47	$22\frac{1}{4}$	22	20	Do			S. L. Hinde.
44				Do.			The late F. Holmwood.
$^{1}43\frac{1}{2}$	•••	$21\frac{3}{4}$		Congo-Uganda			Hon. Walter Rothschild.
43	,	$2I\frac{1}{2}$		Boundary ?			The late A. Beit.
$41\frac{1}{2}$	10	$20\frac{1}{2}$	$16\frac{1}{2}$	Zululand .			The late LieutCol. the Hon.
40	$14\frac{3}{4}$	$18\frac{1}{2}$	$20\frac{1}{4}$		tish E	ast	W. Coke. The late A. H. Neumann.
39	$19\frac{3}{4}$	$19\frac{3}{4}$	17	Africa East Africa			E. B. Horne.
383		21					Hon. Walter Rothschild.
$38\frac{1}{2}$		19		Masailand .			Sir John Kirk.
♀ 35¾	* > 6	171	·	Do			Capt. G. H. Riddell.
35	1114	21	20	East Africa			Capt. L. W. Sadlier-Jackson.
334	16	20	$19\frac{1}{2}$	Do.			T. P. Kempson.
9 33½		$17\frac{1}{2}$,	Matabililand			W. Van Ness.
33	22	$19\frac{1}{2}$	$20\frac{1}{2}$	East Africa			A. J. A. Douglas.
$32\frac{1}{2}$	16	22	19	Do.	• .		Capt. R. Meinertzhagen.
314	12	$16\frac{1}{2}$	16	Do.	-		G. St. J. Orde Browne.
31		18		Do.			R. P. Carroll.
931	$13\frac{1}{2}$	181	18	Do.			W. Neilson.
31	$19\frac{1}{2}$	16	16½	Do.			H. C. V. Hunter.
$30\frac{1}{2}$	$16\frac{3}{4}$	2I ³ / ₄	$20\frac{1}{2}$	Do.			R. W. McKergow.
² 30	$2I\frac{1}{2}$	$22\frac{1}{2}$	$23\frac{1}{2}$	Do.			LieutCol. the Hon. A. Greville.
30	$7\frac{3}{4}$	21	$19\frac{1}{2}$	Do.	N.		K. V. Painter.
$29\frac{1}{2}$	$14\frac{1}{2}$			Somaliland			A. H. Straker.

¹ Determination provisional.

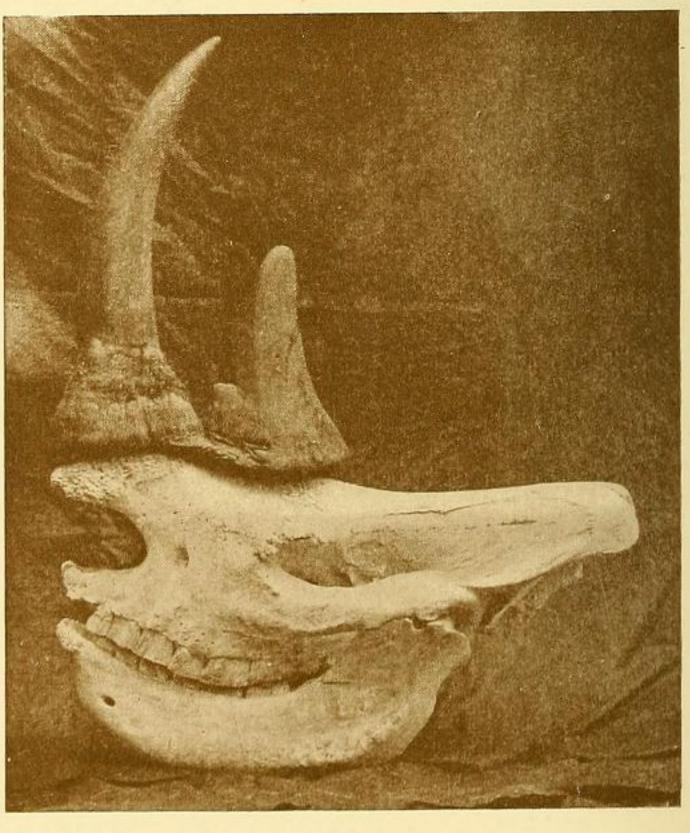
² Weight front horn, 13³ lbs. Weight rear horn, 15 lbs.

Lengtl outside		Circumfe	ence.				
Front horn.	Rear horn.	Front horn.	Rear horn.	Locality.			Owner.
29	$29\frac{1}{2}$	174	18	South Africa			R. B. Keeling.
29		19		East Africa			S. H. Christy.
$28\frac{1}{2}$	$11\frac{3}{4}$	$20\frac{1}{4}$	$20\frac{1}{2}$	S.E. Africa	•		Dr. Sauer.
281	83	181		South Africa	•		F. C. Selous.
28		231		East Africa			F. Baden-Powell.
28	$7\frac{1}{2}$	$17\frac{3}{4}$	$18\frac{1}{2}$	Do.	•		F. C. Selous.
$927\frac{3}{4}$	22	193	$20\frac{1}{4}$	Do.			The Master of Belhaven.
$27\frac{1}{4}$	10	21	17	Masailand .			The late Rear-Admiral R. A. J.
27	$I2\frac{1}{2}$	24 ³ / ₄	20	East Africa		100	Montgomerie, R.N. Abel Chapman.
27		$20\frac{1}{2}$		Do.			E. Gedge.
27	$16\frac{1}{2}$	178	$17\frac{1}{2}$	Do.			Sir Robert Harvey, Bart.
27	12		•••	Do.			Sir John Willoughby, Bart.
$26\frac{3}{4}$	$20\frac{1}{2}$	$21\frac{3}{4}$	19	Do.			W. N. McMillan.
$26\frac{1}{2}$	$10\frac{1}{2}$	191	15	Do.			Henry Charrington.
$26\frac{1}{2}$	$25\frac{1}{2}$	$18\frac{1}{2}$	19	Do.			H. Sampson.
$26\frac{1}{2}$	II	24	20	Do.			Col. A. Colville.
26	13	201	$23\frac{1}{2}$	Do.			C. Craig.
26	9	18	17	Do.			LieutCol. M. Tighe.
26	10	$20\frac{1}{2}$	19	Do.			F. W. Belt.
26	$13\frac{1}{2}$	$18\frac{1}{2}$	17	Do.			Stephenson R. Clarke.
26	$12\frac{3}{4}$	$17\frac{1}{2}$	$17\frac{3}{4}$	Do.			H. S. L. Scott.
26	$16\frac{3}{4}$	$20\frac{1}{2}$	21	N.E. Rhodesia			P. M. Stewart.
26	19^{1}_{2}	113	22	N. Nigeria			Capt. N. K. Street.
26	113	23 ³ / ₄	22	East Africa			H. C. Allfrey.
25\frac{3}{8}	$10\frac{1}{2}$	$20\frac{3}{4}$	$16\frac{1}{2}$	Nigeria .			Major J. G. Browne.
$22\tfrac{1}{2}$	$14\frac{1}{2}$	17	161/2	Somaliland			Sir Abe Bailey.
$22\frac{1}{4}$	10	$22\frac{3}{4}$	19	Do.			The late Sir H. D. Tichborne, Bart.
22	$6\frac{3}{4}$	174	16	Do.			O I II D OU'
$21\frac{3}{8}$	17	14	16	Abyssinia .	•	•	British Museum.
201		194	•••	Lake Chad	•		Capt. G. W. Moran.
$19\frac{1}{2}$	93	18	14	Nigeria .			Capt. H. V. Venables Kyrke.

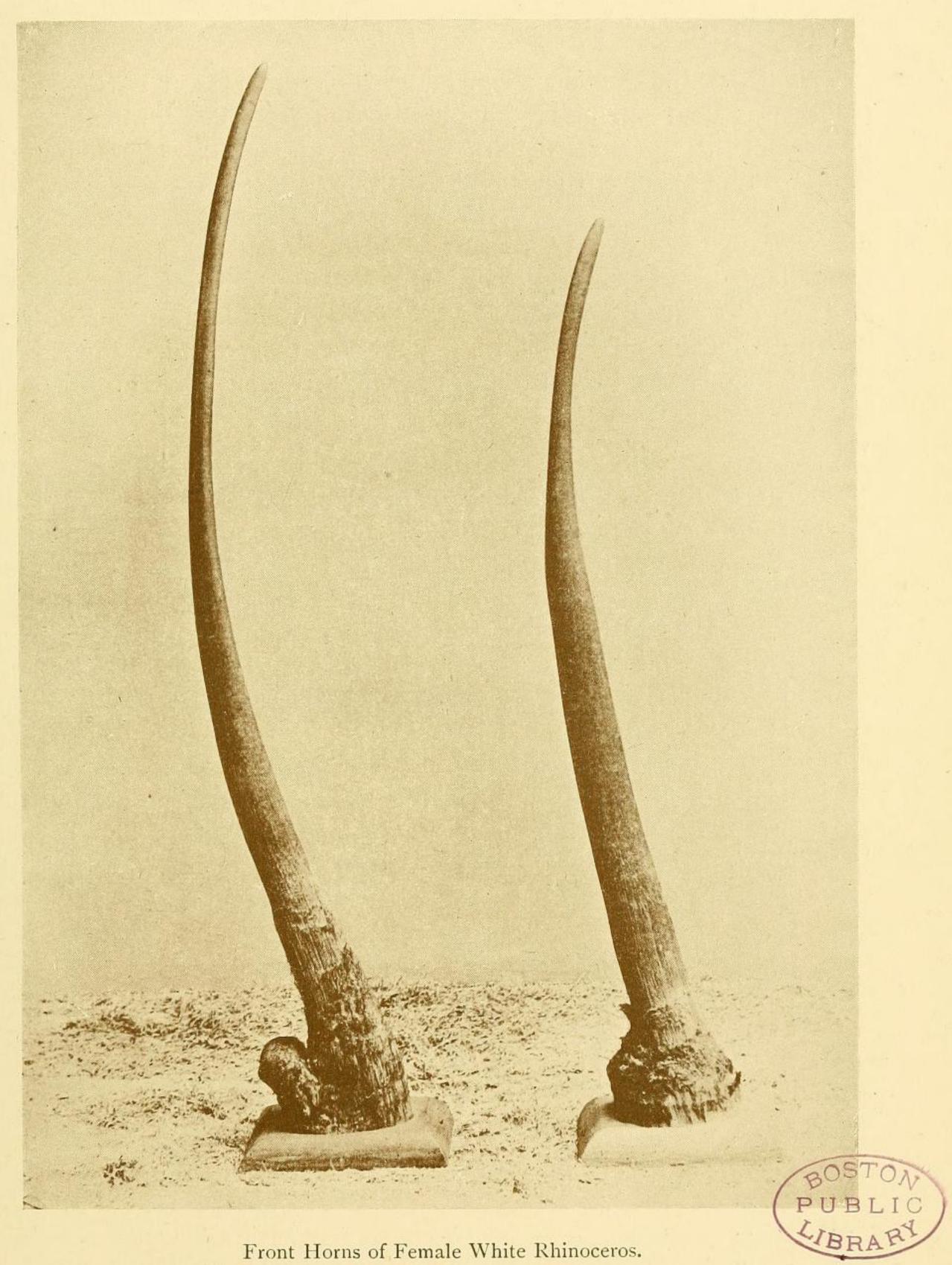
Leng outside		Circumf	erence.			
Front horn.	Rear horn.	Front horn.	Rear horn.	Locality.		Owner.
$17\frac{3}{4}$	8	$16\frac{3}{4}$	$15\frac{3}{4}$	Nigeria		Major J. B. Cockburn.
16	$9\frac{3}{4}$	17	153	Do		P. E. Bradney.
$14\frac{3}{4}$	9	$17\frac{1}{4}$	14	Benue, Nigeria .		Capt. E. J. Wolseley.
13 .	$6\frac{3}{4}$	174	$16\frac{1}{2}$	Abyssinia	٠	O. Neumann.
-			OWNE	R'S MEASUREME	NT	S.
$44\frac{1}{2}$				East Africa .		Imperial Museum, Vienna.
411		$22\frac{1}{2}$	***	Orange River Colony		Major - Gen. Sir William Crossman.
41						Carl Hagenbeck.
40		22		East Africa .		Berlin Museum.
39 ¹ / ₈	•••	$2I\frac{1}{2}$		South Africa .		J. Lamont.
38	II	24	$21\frac{3}{4}$	Do		Earl of Dartmouth.
37	$I2\frac{1}{2}$	$20\frac{1}{2}$	$17\frac{1}{2}$	Uganda		Sir Edmund G. Loder, Bart.
36				East Africa .		Sir Bartle Frere, Bart.
$35\frac{1}{2}$		18		?		H. Murray.



Head of Northern White Rhinoceros.



Skull and horns of White Rhinoceros from Lado in the possession of Sir Edmund G. Loder, Bart.



Front Horns of Female White Khinoceros.

From specimens in the Collection of the late Roualeyn Gordon Cumming, in the possession of Col. W. Gordon Cumming.

The WHITE or BURCHELL'S RHINOCEROS (Rhinoceros [Diceros] simus).

Um Girin, Sudani. Vit Rhinaster, Cape Dutch.

Next to the Indian elephant this is the largest existing land mammal. Its huge bulk, the bluntly truncate muzzle, which has no prehensile tip, the great length of the skull, and the enormous front horn, with its expanded base and flat front surface, form the most striking external characteristics of this species. The cheek-teeth are of a different type of structure from those of the preceding species, being, in fact, adapted for chewing grass. In walking, the animal carries its head low, so that in examples in which the front horn bends forward, its tip becomes worn by being pushed along the ground. It is stated that the colour of the skin is rather lighter than that of the black species.

Distribution.—South and South-East Africa, in suitable localities, as far north as the Zambesi; and again in Equatorial Africa at Lado, just north of the equator. Exterminated early in the last century to the south of the Orange River, and now represented in South Africa at the most by a few survivors in North-East Mashonaland, and possibly by others in the reedy swamps at the junction of the Black and White Umvolosi rivers. Between the Zambesi and Orange rivers the species was abundant about half a century ago; Andersson alone having killed sixty in the course of a few months. Its existence in Central Equatorial Africa was indicated by Sir Samuel Baker on the evidence of horns, and subsequently made certain in the neighbourhood of Lado by Major Gibbons. The northern race (R. s. cottoni) is distinguished by the proportions of the skull, and apparently by the sculpture of the skin.

A.—SOUTHERN or TYPICAL RACE.

	th on curve.	Circumfe	erence.			
Front horn.	Rear horn.	Front horn.	Rear horn.	Locality.		Owner.
$56\frac{1}{2}$		$23\frac{1}{2}$ about		South Africa		British Museum.
503	10	25	22	Do.		W. N. McMillan.
$46\frac{1}{2}$		27		Do.		Carl Hagenbeck.
44		20		Do.		British Museum.
434		$23\frac{3}{4}$		Do.		The late A. Beit.
$42\frac{3}{4}$		255		Limpopo		The late W. C. Oswell.
403		293		South Africa		Sir Edmund G. Loder, Bart.
$40\frac{1}{2}$		203		Do.	٠.	Hon. Walter Rothschild.
$40\frac{1}{2}$		$22\frac{1}{2}$.		Do.	4.	Sir Edmund G. Loder, Bart.

Lengt outside	th on curve.	Circum	ference.			
Front horn.	Rear horn.	Front horn.	Rear horn.	Locality.		Owner.
39 ¹ / ₈		23		? East Africa .		Lord Delamere.
♀ 385		$24\frac{1}{2}$	***	South Africa .		The late W. C. Oswell.
384		221		Do		J. B. Taylor.
$37\frac{3}{8}$	1778	27½		Mashonaland .		F. C. Selous.
36		281		Do		C. D. Rudd.
$^{1}35\frac{1}{2}$	75	26	21	Mount Domo, shonaland	Ma-	South African Museum (late Cecil Rhodes).
$33\frac{1}{2}$		23	- • • •	?		Sir Abe Bailey.
33	13\frac{1}{8}	$23\frac{1}{4}$		Mashonaland .		F. C. Selous.
314	$8\frac{1}{4}$	$26\frac{3}{4}$	26	Zululand .	•	J. C. Phillips.
31		22		Mashonaland .		J. G. Griffiths.
1 \bigcirc $^{2}9_{4}^{3}$	$5\frac{1}{2}$	23	$20\frac{1}{2}$	Zululand		Pretoria Museum (Julius Jeppe).
$^{1}22\frac{1}{2}$	$7\frac{1}{2}$	261		Mashonaland .		Hon. Walter Rothschild.
$^{1}20\frac{3}{4}$	7	$28\frac{3}{4}$		Do		British Museum.
120	6	$25\frac{1}{2}$	$18\frac{1}{2}$	Zululand		H.R.H. the Duc d'Orléans.
			OWNI	ER'S MEASURE	MEN	TS.
			-			
59		$22\frac{1}{2}$		South Africa .		Col. W. Gordon Cumming.
$52\frac{1}{2}$		$2I\frac{1}{2}$		Do		Do.
41				Do		J. W. Fitzherbert.
	- X	D 37	O D MITT	IDN DAGE (D		
		B.— N (ORTHI	ERN RACE (R.	sim	us cottoni).
41	11	B.—N0	OR TH]	ERN RACE (R. Mongalla .	sim	
41 40 1	11					
		26	$22\frac{1}{4}$	Mongalla .		Major P. M. Dove. Major F. G. Poole.
401	•••	26 25	22 ¹ / ₄	Mongalla . Bahr-el-Ghazal		Major P. M. Dove. Major F. G. Poole.
40 1 39		26 25 26 1	$22\frac{1}{4}$ $25\frac{3}{4}$	Mongalla . Bahr-el-Ghazal Do		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham.
40½ 39 36½ 36½	 II I4	26 25 264 194	22 ¹ / ₄ 25 ³ / ₄	Mongalla . Bahr-el-Ghazal Do S. Sudan .		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon.
40½ 39 36½ 36½ 35	 II I4 I3 ¹ / ₂	26 25 26 ¹ / ₄ 19 ³ / ₄ 27 21 ¹ / ₂	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$	Mongalla . Bahr-el-Ghazal Do S. Sudan . Lado		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden.
40½ 39 36½ 36½ 35 9 35	 II I4	26 25 26 ¹ / ₄ 19 ³ / ₄ 27 21 ¹ / ₂ 22 ¹ / ₄	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$	Mongalla . Bahr-el-Ghazal Do S. Sudan . Lado		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford.
40½ 39 36½ 36½ 35 9 35 33¾	11 14 13 $\frac{1}{2}$ 10 $\frac{3}{4}$ 12	26 25 26 $\frac{1}{4}$ 19 $\frac{3}{4}$ 27 21 $\frac{1}{2}$ 22 $\frac{1}{4}$ 25 $\frac{1}{2}$	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20	Mongalla . Bahr-el-Ghazal Do S. Sudan . Lado Do		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff.
40½ 39 36½ 36½ 35 9 35	II I4 I3 $\frac{1}{2}$ I0 $\frac{3}{4}$	26 25 26 ¹ / ₄ 19 ³ / ₄ 27 21 ¹ / ₂ 22 ¹ / ₄	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$	Mongalla . Bahr-el-Ghazal Do S. Sudan . Lado Do Do S. Sudan .		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton.
40\frac{1}{4} 39 36\frac{1}{4} 36\frac{1}{4} 35 \text{\$\frac{9}{35}\$ 33\frac{3}{4} 32\frac{1}{2}	II I4 I3 $\frac{1}{2}$ I0 $\frac{3}{4}$ I2 I2 $\frac{1}{2}$	26 25 26 $\frac{1}{4}$ 19 $\frac{3}{4}$ 27 21 $\frac{1}{2}$ 22 $\frac{1}{4}$ 25 $\frac{1}{2}$	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20 19	Mongalla Bahr-el-Ghazal Do. S. Sudan Lado Do. Do. S. Sudan Near Lado .		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff. Col. J. J. Harrison. Capt. the Hon. M. P.
40 ¹ / ₄ 39 36 ¹ / ₄ 36 ¹ / ₄ 35 9 35 33 ³ / ₄ 32 ¹ / ₂ 32	11 14 13 $\frac{1}{2}$ 10 $\frac{3}{4}$ 12 12 $\frac{1}{2}$ 13	26 25 26 $\frac{1}{4}$ 19 $\frac{3}{4}$ 27 21 $\frac{1}{2}$ 22 $\frac{1}{4}$ 25 $\frac{1}{2}$ 21 $\frac{1}{2}$ 21 $\frac{1}{2}$	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20 19 $25\frac{1}{2}$	Mongalla Bahr-el-Ghazal Do. S. Sudan Lado Do. Do. S. Sudan Lado Do. Do. S. Sudan Near Lado Do. Do. Do.		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff. Col. J. J. Harrison. Capt. the Hon. M. P. Macnaghten.
40\frac{1}{4} 39 36\frac{1}{4} 36\frac{1}{4} 35 \frac{2}{35} 33\frac{3}{4} 32\frac{1}{2} 32	11 14 13 $\frac{1}{2}$ 10 $\frac{3}{4}$ 12 12 $\frac{1}{2}$ 13	26 25 26 ¹ / ₄ 19 ³ / ₄ 27 21 ¹ / ₂ 22 ¹ / ₄ 25 ¹ / ₂ 21 ¹ / ₂ 27 ¹ / ₄ 21	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20 19 $25\frac{1}{2}$ $16\frac{3}{4}$	Mongalla . Bahr-el-Ghazal Do S. Sudan . Lado Do S. Sudan . Do Do Lado . Do Do		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff. Col. J. J. Harrison. Capt. the Hon. M. P. Macnaghten. Douglas McDouall. C. Mathews. British Museum (Major P. H. G. Powell-Cotton).
40\frac{1}{4} 39 36\frac{1}{4} 36\frac{1}{4} 35 \frac{9}{35} 33\frac{3}{4} 32\frac{1}{2} 32 31\frac{1}{4}	11 14 13 $\frac{1}{2}$ 10 $\frac{3}{4}$ 12 12 $\frac{1}{2}$ 13	$ 26 25 26\frac{1}{4} 19\frac{3}{4} 27 21\frac{1}{2} 22\frac{1}{4} 25\frac{1}{2} 27\frac{1}{4} 21 25\frac{1}{4} $	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20 19 $25\frac{1}{2}$ $16\frac{3}{4}$ 24	Mongalla Bahr-el-Ghazal Do. S. Sudan Lado Do. Do. S. Sudan Lado Do. Do. Lado Do. Lado Do. Lado Do. Lado Do. Lado		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff. Col. J. J. Harrison. Capt. the Hon. M. P. Macnaghten. Douglas McDouall. C. Mathews. British Museum (Major P. H. G. Powell-Cotton). LieutCol. C. J. Hawker.
40\frac{1}{4} 39 36\frac{1}{4} 36\frac{1}{4} 35 \frac{2}{35} 33\frac{3}{4} 32\frac{1}{2} 32 31\frac{1}{4} 31	11 14 13 $\frac{1}{2}$ 10 $\frac{3}{4}$ 12 12 $\frac{1}{2}$ 13	26 25 26 $\frac{1}{4}$ 19 $\frac{3}{4}$ 27 21 $\frac{1}{2}$ 22 $\frac{1}{4}$ 25 $\frac{1}{2}$ 21 $\frac{1}{2}$ 27 $\frac{1}{4}$ 21 25 $\frac{1}{4}$ 27	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20 19 $25\frac{1}{2}$ $16\frac{3}{4}$ 24 27	Mongalla . Bahr-el-Ghazal Do S. Sudan . Lado Do S. Sudan . Do Do Lado . Do Do		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff. Col. J. J. Harrison. Capt. the Hon. M. P. Macnaghten. Douglas McDouall. C. Mathews. British Museum (Major P. H. G. Powell-Cotton).
40\frac{1}{4} 39 36\frac{1}{4} 36\frac{1}{4} 35 \frac{2}{35} 33\frac{3}{4} 32\frac{1}{2} 32 31\frac{1}{4} 31 30\frac{3}{4}	11 14 $13\frac{1}{2}$ $10\frac{3}{4}$ 12 $12\frac{1}{2}$ 13 7 $13\frac{1}{4}$ 12	$ 26 25 26\frac{1}{4} 19\frac{3}{4} 27 21\frac{1}{2} 22\frac{1}{4} 25\frac{1}{2} 27\frac{1}{4} 21 25\frac{1}{4} 27 25\frac{1}{4} 27 25\frac{3}{4} $	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20 19 $25\frac{1}{2}$ $16\frac{3}{4}$ 24 27	Mongalla Bahr-el-Ghazal Do. S. Sudan Lado Do. Do. S. Sudan Near Lado Do. Do. Do. White Nile Mongalla Lado Lado Lado Lado Lado Lado Lado La		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff. Col. J. J. Harrison. Capt. the Hon. M. P. Macnaghten. Douglas McDouall. C. Mathews. British Museum (Major P. H. G. Powell-Cotton). LieutCol. C. J. Hawker.
40\frac{1}{4} 39 36\frac{1}{4} 36\frac{1}{4} 35 9 35 33\frac{3}{4} 32\frac{1}{2} 32 31\frac{1}{4} 31 30\frac{3}{4} 29	11 14 13 $\frac{1}{2}$ 10 $\frac{3}{4}$ 12 12 $\frac{1}{2}$ 13 7 13 $\frac{1}{4}$ 12 10	$ 26 25 26\frac{1}{4} 19\frac{3}{4} 27 21\frac{1}{2} 22\frac{1}{4} 25\frac{1}{2} 27\frac{1}{4} 21 25\frac{1}{4} 27 25\frac{3}{4} 25$	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20 19 $25\frac{1}{2}$ $16\frac{3}{4}$ 24 27 23	Mongalla Bahr-el-Ghazal Do. S. Sudan Lado Do. Do. S. Sudan Near Lado Do. Do. Do. Do. Do. Do. Do. Do.		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff. Col. J. J. Harrison. Capt. the Hon. M. P. Macnaghten. Douglas McDouall. C. Mathews. British Museum (Major P. H. G. Powell-Cotton). LieutCol. C. J. Hawker. Major R. M. Sanders. Hon. Walter Rothschild.
40\frac{1}{4} 39 36\frac{1}{4} 36\frac{1}{4} 35 9 35 33\frac{3}{4} 32\frac{1}{2} 32 31\frac{1}{4} 31 30\frac{3}{4} 29 27\frac{3}{4}	11 14 $13\frac{1}{2}$ $10\frac{3}{4}$ 12 $12\frac{1}{2}$ 13 7 $13\frac{1}{4}$ 12 10	$ 26 25 26\frac{1}{4} 19\frac{3}{4} 27 21\frac{1}{2} 22\frac{1}{4} 25\frac{1}{2} 27\frac{1}{4} 21 25\frac{1}{4} 27 25\frac{3}{4} 27 25\frac{3}{4} 25 28\frac{3}{4} $	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20 19 $25\frac{1}{2}$ $16\frac{3}{4}$ 24 27 23	Mongalla . Bahr-el-Ghazal Do S. Sudan . Lado . Do S. Sudan . Near Lado . Do Do White Nile . Do S. Sudan .		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff. Col. J. J. Harrison. Capt. the Hon. M. P. Macnaghten. Douglas McDouall. C. Mathews. British Museum (Major P. H. G. Powell-Cotton). LieutCol. C. J. Hawker. Major R. M. Sanders. Hon. Walter Rothschild. A. A. R. Boyce.
40\frac{1}{4} 39 36\frac{1}{4} 36\frac{1}{4} 35 9 35 33\frac{3}{4} 32\frac{1}{2} 32 31\frac{1}{4} 31 30\frac{3}{4} 29 27\frac{3}{4} 27	11 14 $13\frac{1}{2}$ $10\frac{3}{4}$ 12 $12\frac{1}{2}$ 13 10 10	$ \begin{array}{c} 26 \\ 25 \\ 26\frac{1}{4} \\ 19\frac{3}{4} \\ 27 \\ 21\frac{1}{2} \\ 22\frac{1}{4} \\ 25\frac{1}{2} \\ 27\frac{1}{4} \\ 21 \\ 25\frac{1}{4} \\ 27 \\ 25\frac{3}{4} \\ 25 \\ 26\frac{3}{4} \\ 25\frac{1}{4} \\ 25\frac{3}{4} \\ 25\frac{3}{4} \\ 25\frac{1}{4} \\ 25\frac{3}{4} \\ 25\frac{3}{4} \\ 25\frac{1}{4} \\ 25\frac{3}{4} \\ 25$	$22\frac{1}{4}$ $25\frac{3}{4}$ $18\frac{1}{2}$ $20\frac{1}{2}$ $20\frac{5}{8}$ 20 19 $25\frac{1}{2}$ $16\frac{3}{4}$ 24 27 23 $22\frac{1}{2}$	Mongalla Bahr-el-Ghazal Do. S. Sudan Lado Do. Do. S. Sudan Near Lado Do. Do. Do. Do. Do. Do. S. Sudan Near Lado Do. Do. Do. Do. Do. Do. Lado Do. S. Sudan Do. Do. Do. Lado Do. Do. Co. Do. Co. Do. Do. Do.		Major P. M. Dove. Major F. G. Poole. Capt. C. Graham. LieutGen. Sir B. T. Mahon. The late G. G. Longden. H. Twyford. Major P. H. G. Powell-Cotton. The late Prince Paul Demidoff. Col. J. J. Harrison. Capt. the Hon. M. P. Macnaghten. Douglas McDouall. C. Mathews. British Museum (Major P. H. G. Powell-Cotton). LieutCol. C. J. Hawker. Major R. M. Sanders. Hon. Walter Rothschild. A. A. R. Boyce.