BRIAN HOUGHTON HODGSON b. 1800

BIRDS OF INDIA Ms. VOLUME 1

N.B Manuscript Pagination shown on Left hand side of sheet

PAGE 1

This page has very simple drawings of a bird and parts of the bird the illustrations are uncaptioned. The number 67 is written on this page

PAGE 2

This page has unnumbered illustrations. For the purposes of identification their location will be referred to in 'rows'-first, second etc.

First CLAW Polypterix Cupido

Second SKULL Polypterix Cupido Cinereus[anet]?

Third L.H. Illus. SKULL Aquila Crassipes
Third R.H. Illus. SKULL Vultur Bengalensis

Fourth between illus. in Third and Fourth -

Ranwaz Eagle

Fifth SKULL Gypaetus Barbatus

Sixth note 'near face'

Seventh CLAW Gypaetus Barbatus

To the left of the claw illustration is a note' Illustrations, of Aquila Vultur & the intermediate forms'

Pencilled note in extended brackets

Tarsus elevate. stout reticulate. nude or part clothed in front with down. Vultur. toes [ambulat]y mid toe greatly developed the stoutest of all & more than double the length of inner [toe]? Subeq. in size & length & membraned. hind feeblest & least and not much acropodia. Talons small curved scaled

CLAW Vultur Fulvus CLAW Aquila Daphanea

Below the last is crossed through Chrysaetis [Anet]?

ATTACHMENT TO PAGE TWO

Attached to the back of page two is a smaller page with 4 numbered illustrations. Each below the other showing skulls

- 1. Gypaetus
- 2. Polypterix

- 3. Vultur
- 4. Aquila

The illustrations which are done in pencil have been placed within a frame at the bottom o

NOTE 1.

fec. = fecit(maker or artist)

NOTE 2. In A Himalayan Ornithologist - The Life and Work of Brian Houghton Hodgson by Mark Cocker and Carol Inskipp OUP 1988 Singh rather than Sinh is given as the name of the artist. In the Ms. the name is spelled without a g

PAGE THREE

This page has many preliminary unlabelled drawings both of claws and skulls Below these are completed drawings of claws

The largest claw - Polypterix

Note - below this is crossed through Gypaetus Barbatus

A smaller drawing of a claw placed directly below Polypterix is unlabelled. On the same line are three further claw drawings

First - Claw showing feathery ankle Polypterix(vultur) cinereus
Second Hemigyps(vultur)Pondiceriamus
Third Vultur Bengalensis

ATTACHED TO THE REVERSE OF PAGE THREE

Two thin scraps of paper one with a list of measurements and one with notes. On both the writing on the left hand m incomplete

REVERSE OF PAGE THREE Upper scrap MEASUREMENTS

1st Spec. & [Form] Polypterix

Illeg. 3 . 7 . 0 [Lewco]? Beng.

Illeg. 9 . 7 . 0 3. 0. 0 2 . 10. 0

Bill 35/8

Width 2 1/2

Height 22/8

Tarsus 513/16 0. 41/2

Ant. toe 3 3/4 3 9/16 3 13/16 0 . 3 3/4

& nail 1 1/4

Outer toe 2 3/8 2 4/16 2 7/16

Inner toe 113/16 1 13/16 1 13/16 0 . 110/16

& nail 1 1/2

Hind toe 15/8 1 3/16 1 2/16 0. 1 1/16

& nail 11/2

[a.cl]? 2. 7. 0

wing

Tail 1.* 5. 0 * Note: 1 for wear

Wt. 20 lbs.

Note (1)

Between the first column i.e. the part names and the second column i.e. the first set of measurements are written vertically the words 'OLD STYLE' Note(2) The specifications are set out as in the mss. even though it may appear that some are missing. second and third columns of measurements are without headings and first two items of list are illeg. 2nd may be 'crop'

REVERSE OF PAGE THREE CONTINUED

Lower scrap NOTES

Polypterix compared with Bengalensis

Vulture Head in Beng. is narrow & convex above with medial gape to [fore]? eye only or less & with long

----ted backwards. Head of Beng. nude like neck wh(ich) is very long. Head of other clad with 2/3 of neck this frill being set on near head in Beng(crossed through) this & at turn of wing in Beng. in which second frill is --ed these both have crop clad in thick set short plumes. Legs & feet of both have general forms alike but both -- & feet longer in Bengalensis when stretched out reach [2] inch plus [tail]? nail? whereas in them fall 4 inch short of it. In Beng. middle toe stoutest in their inner & hind wh(ich) has also talons stouter whereas in Beng. all 3 equal. acrop. in Beng 1/2 scaled in this only 3 or 4 scales neck to cere. In Beng. tarsi nude in them plumed

Wings and tail seem lack tho' in them seems a difference owing to wings not equalling tail.Legs nude[part of neck] THIS IS THEN REPEATED Legs nude part of neck eyelids cere and base of bill bluish paint white bill dusky and horn brown below - eye hazel brown. Differs totally from Beng. *et le ----- wh(ich) have long narrow head and bill. no brow. Nude legs tarsi and much longer toes with lateral [gule]? equal & shorter more equal wings with 3rd {alar]? longest.

NOTE * curt = short

NOTE L.H. margin is faded so several words are difficult to make out NOTE * I am wondering whether the missing word third line from the bottom might be written in french as et is followed by le Hodgson has thrown in the odd french phrase before. I can only make out the letters LE followed by what looks like VEONO or UEONO. However the word could be something like LEVEONO. I cannot make anything more of it.

PAGE FOUR

This page shows a pai

Associated text is written across the top of the page above the illustration, directly below it and, lower down on the left hand side.

Text above illus..

Agrees with aquila in broad depressed head and bill, both head neck and tarsi [nearly]? clad. wide gape large eye and valiant brow. bill not bulging in region of festoon, simple tongue. tail of 12 plumes. feet with short middle toe feebler than inner or hind & its talon is also & in inner toe being free.

Agrees with vultur in partial nudity of neck & tarsi, in general form of foot, bluntness of talons & their interior curve & size. general form of tongue, of wing & of tout ensemble also in habits. Tho' ungregarious like Eagles, in protuberance of crop & general style of alimentary organs in size & mass heaviness & in equality of size in sexes.

Text below illustration

Vulturidae genus Polypterix nob. P. Cupido nob. 1/3 natural size [feem] Valley of Nepal Feb(ruar)y 20 This form leads from true Vultures to Gypaeti by and thro' Po Auricul & Cinereus

Text at lower left hand side

Unknown to plains found in Nepal proper only in -----colder months of the year. not gregarious 2, 3 or 4 in same vicinity but seldom together. feeds on carrion like true Vultures so far as yet seen. Shot & caught with them feeding but also true Eagles(crassipes nob.) & Adjutants. Sexes alike as to size & colour. Young have the tarsi less intirely(sic) plumed & head also. Soar at a very lofty pitch & shyer of descending near dwellings & people than any Vulture

10th Feby [1839]? Residency

PAGE FOUR REVERSE

This page has specifications at the top, notes below and notes written along the left hand margin

Specifications	4th Mas.	1st Form	2nd Fo	rm 3rd	Mas	5th Mas	[F-6tl	h]
Tip bill to tip/2	3. 70	3. 51/2	3. 7	71/2 3.	7	0 3. 51	′2	
Bill length 4. 0 0	3 1/	2 35/8		3 1/2	35/8		3 3/4	
Bill bas. length 2. 0 0	2 0	2	21/8	2 1/4	23/16	3	21/16	
Bill bas. width 25/16	2 1/4 21/4		21/2	2 1	/4	21/2		
Tai1. 0 1. 3 0	1	4 0 1	1 5	0 1	4 0	1 51/2	1	5
a closed wing 6 1/2 2.	2 6 0 61/2) 2 7	7 0	2 6	0 :	2 6	0	2
Expanse 8 11 0	8 8.	6 0 9 9 0	9 7	0 8	10 0	9	0	0
Tarsus	5 1/	2 53/4	· 1 57/	8 53⁄	4	6 0	less 6	3
Central toe 0 1 3 ⁄16	37/1	6 3 & Nail	3 9⁄16	11⁄	′ 4			4
toe 23 ⁄16 & Nail	2 1	/2/3/8	less 7/8	0	uter			

Inner toe 113/16	17/8	1	0					2	0		
& Nail 1 7/16	11/2		1 11⁄16						1 6⁄ 16		
Hind toe 10/16 111/16	13/16			1 1/2							1
& Nail 7/16	17 ⁄16		1 1/	2						1 6	/ 161
Length of neck 9 1/2 from jaw to base	9 1/2			0	11 ()	0	9	0	11	0
of crop	x 11/2 for										
Legs[pushed]up 4 1 /2 n - & n - the tail very thin	6 1/2				3 1/2	2	0	4	0	5	1/2
Wt	17 lbs	17lb	s	18lb	S	17lb	s	17	lbs		

Transcriber's note: 6th Column - two items that would not fit in

Central toe 3 3/4 & Nail 1 5/16 Outer toe 2 1/4 & Nail 1 0

A note on this specification reads' Newest style of ----March 10/40 is to take base of mid-toe on bent tarsus & then to measure all fores as compressed together - LAST TWO WORDS UNDERLINED from that base. Hind toe as closed & others from its true [osseous]? base'

PAGE FOUR REVERSE CONTINUED NOTES

Vol. 4 Valley March 5

mas testes small moult Stomach Intestines thin coated. Stoml both much worn but as they are the wings are 21/4 less tail & add 11/2 inches for greater wear of latter. will be 33/4 inch less. Tail 12 & gradated much. the ruffs are small & legs considerably denuded from [nonage]? or moult. Nares short vertical wide and ellipse lateral exposure. toes proportioned as in vultur proper but shorter. Inner fore less palpably membraned & it and hind with their talons far stouter exceeding the middle ones in strength.

1st [feem]? Feb(ruar)y 2nd Valley

eggs small & plumes full and rich. toes nude part & [neck]? eyelids cere & base bill bluish pa more hairy than above. At top of occiput plumes become down & are slightly reverted like a tuft, below it is nudity w(it)h however a slight corrugation of the skin that is habitual with live bird hides and the upper frill is then brought in contact

with occipital tuft, tho' tuft is none almost. but only reverted set of plumes downy plumes caused by p ressure below of the frill. Lowe

r down neck & near body another larger frill wh(ich) however is chiefly developed[antially]? or abdominally as upper one is postially or dorsally. This larger one begins near scapulars where it commonly shows in live bird under excitement like a pair of tiny cupid's wings erect above shoulders. In thin circles round the [b--nd]? of closed wings & passing down sides of crop blends into breast plumage wh(ich)is all lanceolate. Crop thickly clad in short adpussed plumuli usually hid by frill just named. crop pendant & vulturine intirely(sic). Wings & tail vulturine but both ampler & less equal each other and tail less even 4m alar longest. Caudals. 12 only. tarsi elevate, plumed nearly to base, real plumes but soft, toes shorter[fore]? than in vulture but similarly purved tho' habits essentially vulturine. Toes & talons like general structure lead thro' Gypaetus to Aquila from Vultures PAGE FOUR REVERSE CONTINUED

proper. Wings 21/2 less tail. tertials 1/2 inch less primes. Scapulars 63/4 inch less 4th prime longest 1st -3. 2nd- 1/2 3rd -1/4 inch less 4th - 1st is 11/4 inch[less] 6" & 11/2 plus 7" 1st to 6" and 2nd to 7" emarginate high up on both webs save 1 which has outer web intire(sic) Tail 12 gradated to plus 2 inch hard worn each plume broadly lanceolate bill & head very massive. bill

both broad & deep gradually narrowing forwards without any of vulturine swelling out in region of festoon. Gape wide & tomia near it soft & nude like lips. Cere large & nude.n

.....with only 3 or 4 scales [anat]? each talon. Tongue as in vulture save that sides intire(sic). It is deeply cupped thick but rather curtil than flesh being red & granulated only near base tip truncate intire(sic)

PAGE 5

This page shows 4 illustrations On the lower part of the page (CORRECT WAY UP) is a completed pencil and wash illustration of a bird-Caption No.1 Polypterix Cupido Cinereus Type Vulture Cinereus 1/9 nat. size

On the upper part of the page are three heads(WRONG WAY UP) From the top the captions read Vultur fulvus Polypterix cupido cinereus anet? **Eagle Aquila Crassipes**

Along the side of this page is written Illustration of the osculant form Polypterix wh(ich) is half Eagle & half vulture

PAGE 6

Illustration of a group of 4 birds captioned No.802 Polypterix Miki type Vultur Cinereus Cupido miki

NOTE - The question mark is the writer's Underneath in pencil is written 'Monachus'

PAGE 7

This page has a number of illustrations at various stages of completion Pencilled Captions:-

At lower R.H. edge of page under most advanced drawing Polypterix cupido miki type Vultur Cinereus Monachus

Higher up the page next to a series of four heads facing R.H. margin Polyperix cupido Cinereus anet?

N.B. There are further preliminary drawings on the reverse of Page 7

PAGE 8 No.804

Completed colour illustration Caption Vultur? Ponticeriamos Genus HemiGyps Miki[M.S]? There are also two pencil sketches on this page

REVERSE OF PAGE EIGHT

..... Below it edging crop down only the neck abdominally from the upper line of ruff being as well as crop clad in elate but true plumes. No second ruff. wings 2 inch less tail. primes & tertials equal & both very perfect.scapular 4 inch less. 4th prime longest. 2 - 5 e

3rd - 1/4 less 4th 1 - 5 intra and 2 - 6 extra. Emarginated high up & strongly less tarsi long and nude. Thighs naked[In----] toes medial shorter than in Bengalensis plus Polypt. Character of latter acropod with scales. Central plus 2of inner lats. unequal decidedly inner fore & with hind stouter than central hind with its talon reaching toward talons of inner. Talons in youth very acute & channelled below. unequal inner fore largest, next hind. Tail 12 short nearly square from below ear to frill. laterally seen. the lappets of skin wh(en) undilated are 3 inch by 1" deep & wh(ich) are merely a fold of skin not fixed but wh(ich) may be explicated by distension & spread out laps on the neck.

PAGE EIGHT REVERSE CONT.

Jaw to frill (behind) 4 . 0 Jaw to bend wing Legs less tail/4

0.41/2

Mas. [Form] Mas.[Juv.]? Lower jaw to base crop 0.7.00.9.00.81/2 & length of neck

Tip bill to tip tail 2.61/2 2.10.0 2.10.0

Expanse 7.0.0 7.4.07.11/2

A closed wing 1.10 1/2 2.0.0 1.11 1/2

Bill 0.23/4 0.31/16 0. 3 1/16

Basal I[eng]th 0.13/40.111/16

0.21/8 0.21/16 0. 2.0 Basal width

Tail 0.10 1/2 0.11 1/21. 0.0

0.47/8 0.51/16 0.415/16 Tarsus

C. toe 0.43/40.47/80.311/16

& nail plus 1 1/8

Outer 0.21/16

& nail plus 7/8

Inner 0. 1 13/16 & nail plus 1 15 /16

Hind toe 0.21/2Plus 2 1/2 0.17/16

& nail plus 1 4/16

W[eigh]t 9lbs 5 ozs. 10lbs 11 ozs. 9 lbs. ozs.

Valley Feb(ruar)y. 4th

Male & old, iris golden straw. head, neck, gules, flap and feet fleshy red bill & nails. black bill & head depressed, broad & stout.gape wide to mid-eye nearly. eye medial with strong brow. nares vertical elliptic in mid depth of bill & inner fore [end]? of large cere. Tongue curtil, scooped with subflex by

rounded edges wh(ich) have no

being being(sic) 21/2 inch long & 11/2 of exreme breadth. rest of neck thickly and simple(sic) plumed above & on sides without almost any upper frill & no lower one & below or on the windpipe & crop. also plumed but in close

adpussed plumuli edged all round with finest down but without lanceolate plumes of large species. large patch on inside of each thigh naked & soft -

skin like neck. legs full size of Bengalensis & nude but toes short with greatest

PAGE EIGHT REVERSE CONTINUED

strength thrown into inner & hind ones as in the big spec. only that in it those a/2 plus tail. wings equall(sic) & have 3rd decid(edl)y longest 2nd equal. 4th & 1st 21/2 to 3/4 less. tert. & pr equal. Tail 12 worn hinds rounded short rather agrees in all essentials with large bird save that legs(tarsi) are of full size and character of Bengal. that nude part of neck has fleshy & rather skinny flaps & that wings & tail seem

shorter in this & that head is nude. Intestines 7.6.0 three inches from end caeca of 1/4 inch

Feb(ruar)y 5th Valley

Female same as male save that nude parts have the red hue of skin much paler & almost flesh white. gular flap as big as in male & when stretched fully is 3 inch long but usually but 21/2 .it's full depth or width is 11/2 inch and its outline (3) Res(idenc)y Nov 12

Young male like young form drawn. Head above & sides covered with [sooty] down, naked skin of head. cere neck & legs more fleshy .bill to head as

3 1/16 to 2 1/2. tongue1 1/2 caruscait thick cupped smooth sides with [alie]? & c-----t atween(sic)

THE NOTES IN THIS SEGMENT SLANT OFF AT THE END OF THE PAGE SO POSSIBLY SOME OF THEM MAY BE MISSING.

PAGE NINE

This page has 6 pencil drawings and a completed colour illustration.

From top of page - claw and two birds

Centre of page - Completed colour illustration Numbered 804

Bottom of page - claw and two birds

There are also random pencilled notes:-Vultures 17 sheets Hemigyps. nob. type

PAGE NINE CONTINUED

Along L.H. Margin both pencilled and inked notes Pencil - Vultur Ponticeriamus seen in Sep(tembe)r to April 8*below Hemigyps Miki

Ink - Vultur Ponticeriamus anet.

Next to the main illustration is the note - nude skin of neck dilated downwards

NOTE* Below referred to as a loc

I originally had the illustration numbered as 904 but altered it to 804. I also have 804 as an illustration on page Eight so it may need to be re-checked R.D.

PAGE NINE REVERSE

Tip bill to tip tail 0.2.81/2

Bill length 0. 0.27/8

Basal length 0.0.15/8

" width 0. 2.0

Tail expanse 0.1.01/2

Tarsus 7.1.0

C. toe & nail 0.0.53/16

Hind toe 0.0.43/4

& nail 25/8

Wt. 9lbs. 6 ozs

The Valley. Nov.15

Female young plumes very full but wing & tail feathers worn. wings about 2 inch less tail [pr. & terts subeq. 4th quill apparently longest. bill & head depressed gape to [fore] or[lore] only of eye. bill to head is 27/8 to 2 1/8

cere large nude very

nares vertical elliptic. Head downy on top. hairy down around opening of ears. rest head & all neck nude. nude lappets descend from under ears down side of neck & are when stretched 5 inch(es) long by 2 wide. Toes are stout with full soles depresso papillate & not balled. Central toe is long, laterals and

PAGE NINE REVERSE CONTINUED

hind short & unequal. all inner & hind stoutest. membrane of outer large. Inner obliquely inserted & its talon distinctly in curved thereby. Talons strong & sufficiently acute especially the inner & hind w(hic)h are equal & flat below with cutting groove. In this young bird the nude neck & legs are fleshy white hardly tinted with red of maturity. cere blue. bill & talons black. Intestines 8.6.0 caeca 1/2 inch each & 3 inch from end. s muscular surface.

PAGE TEN

Completed illustration of two birds

Pencilled note at lower R.H. side

breed always * below PLEASE SEE TRANSCRIBER'S NOTES FOR

HODGSON'S

LOCATION REFERENCES.

Notes down L.H. margin

i.e. below illustrations of birds which face the margin

In pencil Gypae(tus) Indicus

In ink Vultur tenuiceps nob.

1/4 nat. size. * Hills & Plains

PAGE TEN REVERSE

[FAN]? [FIEN OR FIEM]?

Note allow 1/2 for wear

Bill to tip tail 3 21/2 3.3.0

Bill length 3 - 27 /8

" basal length 19 /16 110/16

" basal width 19 /16 110/16

Tail 111 /4 111 /2

A wing closed 1 11 - 1 11 -

Expanse 7. 0.0 7.0.0

Tarsu

PAGE TEN REVERSE CONTINUED

Cent. toe 41 /4 4[1 /8]? & nail 11 /4 13/16

Outer toe 21/2 27/16

& nail 1 - 1 -

Inner toe 21/4 2 - & nail 15/16 11/4

Hind toe 15/8 19/16 & nail 13/16 11/8

Neck - Jaw - Breast 1 21 /4

Wt. 12lb 13oz 12lb

Residency March 12

together WORD CROSSED THROUGH & seeming lg. ----- new sp. testes and eggs large but nails not worn. mature moult. Intestines 8.8 to 8.3 th/2 neck broken off there being little narrowing of organ towards upper orifice w(hic)h is terminal & [refucate]?from lower orifice w(hic)h is subterminal. Purely membraneous in lower 1/2. glandular & thicker in upper m----s 71/2 inch by 33/4. Structure prominently typical & almost identical with Bengalensis save that in this like Fulvoides the tail has 14. Head & neck absolutely nude with hardly a floe of down but thismay be in fact moult. jaw to dorsal ruff 7 inch & spreading of crop 3 more. latter covered with close small firm plumuli as in all rest. Head, neck, cere, bill, legs & nails black two first with sublivid tint & s 1/2 inch less whereas in Fulvoides both measurements equal gape less than eye w(hic)h is small as usual & has a brow. tongue serrate to sides à l'ordinaire, cupped tip intire(sic) fleshy hardly ever at very base less 11/2 long [extensive]? beyond tip. behind [asaph] serrated as usual. laps quite nude. ovoid orifice subcentral & [roundy]? lax skin of head moveable so as to cover it. Nares rather lateral than anteal & hence seeming less lunati than in others. also less long rather. Wings about 1 inch less tail or 11/2 with allowance. 4th quill crude. tert. & primes eg. scap. about 5 inch less. legs equal to tail without allowance. Tarsi nude large as well as toes just as in Beng. Central very long plus

Tarsus as measured to superior and anteal separation o

longer hind feeblest & equal to postial edge of terminal pad of inner. Dorsal upper frill the only one below laterally & so under & round crop is down only & breast plumes not elongate. Minute comparison with Beng. both in same state of moult & shows that this has a more compressed yet less deep head& bill being the slenderest headed & billed of all the species. that ear is larger in the outer -enticular sp. w(hic)h is peculiar to this & that wings here rather

PAGE TEN REVERSE CONTINUED

exceeded by the hardly so even tail of 14 whilst in Bengal. NEXT THREE WORDS SCRIBBLED OUT continues.... but the 'last'THIS WORD IS SUBSTITUTED BY 'first' WHICH IS WRITTEN ABOVE THE LINE points alone material or probably fact on the whole.

SOME VERY FAINT TEXT APPEARS AT THE END OF THIS SECTION DIFFICULT TO TRANSCRIBE SO THIS HAS NOT BEEN INCLUDED. R.D.