NOTE XIV.

ON THE HABITS AND ANATOMY OF OPISTHOCOMUS CRISTATUS, ILLIG.

BY

Dr. C. G. YOUNG. April 10th, 1888.

(Plate 8).

This bird is known also as the stinking pheasant, anna, stinking anna, and van Batenburg's turkey — after a Dutch Governor of years gone by. It gets the name »stinking" from the peculiar smell, like fresh cow-dung, that comes from its crop or stomach or both, for when the skin is preserved it possesses no smell, and the body when the inside has been removed is quite sweet. Notwithstanding the possibility of removing the smell by removing the bowels, it is never used as food; consequently it passes its time in peace and plenty.

It is found in only one place in this country viz. the Berbice River and one of its branches, the Canje Creek, living together in great numbers on the low bushes that border these waters, especially on a "pimpler" (*Dreponocarpus lunatus*) that stretches its branches over the muddy water and rises and falls with the tide. Any day in the year they can be seen sitting side by side like love-birds on the branches of this shrub or on the low trees behind them. They fly from twig to twig and although I have

seen these birds every day for the last six years, I have never seen them extend their flight beyond twenty or thirty yards at one time, and never once saw them on the ground. This inactivity is not the result of inability, for their wings are well developed, and their legs and feet are strong. They never leave the river side, and their food is the leaves and seeds of this "pimpler" and of a plant that grows in the water, a kind of gigantic cuckoo pint, called at home "lords and ladies", in this country called "Mucca-Mucca" (*Caladium arborescens*). I may mention in passing that there is not a puddle of water in the Colony in which this Caladium is not found, and *Dreponocarpus lunatus* fringes every river and creek in the country.

In the middle of March and beginning of April they make a flat nest, like that of a sparrow hawk on the top of the low shrubs by placing a few dry sticks together, but so loosely united that one can, when under them, see if they contain eggs or young, by simply looking up through them. They lay two, sometimes three, whitish eggs, spotted all over with light and dark rusty coloured spots, commencing with a blotch at the larger end. The egg is about the size of a small hen-egg.

The young is covered with a light coat of dark brown down. The eyes, bill, feet, claws of feet, and claws on thumb and tip of finger are a dark blue-brown.

The bill is short, thick and conical like that of a sparrow, with a slight bend in the upper mandible. The legs are strong, with large strong toes, three directed forwards and one backwards, and have well developed claws. In the wing the fore-arm is larger than the arm, and the hand is larger than the fore-arm. The thumb is long and well developed, and has a long well developed claw; the point of the wing is developed into a finger, tipped with a claw equal in size to that of the thumb; both the thumb and finger have the power of ab- and ad- duction. As soon as the young escape from the egg they creep about with the assistance of these hands, stretching out their wings

and digging these claws into or hooking on to whatever they meet, the hand taking the form roughly sketched in fig. 1. They have not the power of grasping anything between their finger and thumb. The specimen forwarded with this paper, by means of these claws walked out of a large calabash, which is a basin made out of the skin of a gourd and has a smooth inside.

When the wing is drawn in to the body and in a state of rest the thumb and finger are parallel (fig. 2).

The tongue is short, smooth and spear-shaped; the oesophagus passes down the neck on the right side of the wind-pipe to its root, where it dilates and passes in front of that tube to the left side, where again bending on its self and at the same time gradually getting smaller, it passes into the chest on the right and behind the wind-pipe. The second oesophagus is a little larger than the first. This bend forms the crop (fig. 3). It passes through the chest to the left side and again dilates, passing towards the right side it becomes the stomach, which is thin-walled. There is no gizzard. The duodenum takes its origin on the spinal surface of the stomach one third of its length from its right extremity, thus causing that end to become a bag (fig. 4). The intestinal tube keeps the same diameter until it reaches to within an inch and a half of the anus, where that gut appears to meet it by dividing into two blind sacks (fig. 5), which lie at each side of the bowels.

The whole intestinal canal contained a green pulpy mass like some well pounded vegetable matter, and had the peculiar smell of the adult bird. This green matter was so finely ground down that it was impossible to tell whether it consisted of leaves or seeds.

From the weak state of the jaws of this specimen, and from the food in the crop being of the same consistance as that contained in the stomach, and having as strong a smell as that contained in the crop of an old bird examined at the same time, I am inclined to conclude that

at this stage of its existance the parents feed it by passing the contents of its own crop into that of its young.

When the neck is stretched out, the intestinal tract is four times the length of the bird.

The liver is large and well developed and covers the stomach.

The kidneys have two ducts which enter the cloaca near its outer orifice.

The wind-pipe after it enters the chest gives off on each side one small branch, and passing on terminates into two tubes (fig. 6).

In the adult the crop is one quarter the size of the body. It is covered with a coat of red muscular fibres that pass upwards along the upper oesophagus and downwards along the second oesophagus making the latter alternately contracted and dilated and at the same time giving it a wavy appearance, until it reaches the stomach.

The second oesophagus fills half the cavity of the chest, and keeps the same diameter throughout until it becomes stomach when it contracts. The stomach is small, smaller in diameter than the second oesophagus, and has a thin red muscular cap on its right extremity. In the young fledgling the crop and stomach are the same size, while in the adult the stomach is the size of the intestinal tube, in fact the old bird has no stomach at all.

The liver has two lobes and no gall-bladder.

Both jaws have a row of tubercles on their inner margin that act as teeth. The lachrymals are anchylosed to the nasals. The coracoids, clavicles, and sternum are united into one piece; the sternum is keeled, and bevelled at the expense of the keel forwards, and has two small notches on each side; the two clavicles are united anteriorly and unite with the breast-bone through a long thin plate; their plain is almost parallel with the spine, and so affording a resting place for the enormous crop. The ribs are broad and flat. The head of the fibular assists in the formation of the knee-joint and is not fused with the tibia. The

feet have no spurs. There is an atrophied nail on the top of the thumb and finger.

The length of the bird is about twenty four inches, including the long tail, which is half this length. The bill, dark brown, is broad, short and conical, with the tip of the upper maxilla slightly bent, and with black hairs at the base: the nostrils are round. The eyes, brick-red, have black eye-lashes; the skin round them and on the neck is light blue, and immediately round the eye and on the sides of the head it is almost naked having only black hairs and small feathers here and there. The head is crested with long narrow stiffish feathers that have a fawn coloured base and black tip. The front of neck and top of chest is fawn coloured: the back of neck and back is greenish brown, the feathers on the back of neck having a fawn coloured centre, and those on the back a fawn coloured margin. The wings are rounded, the primaries are nut-brown with a grey tip; the secondaries, tertiaries and wing-covers are greenish brown, the latter having fawn coloured tips, those on the thumb having their outer half fawn colour. The tail is greenish brown, tipped with fawn; the centre feathers being the longest. The rump, thighs and sides of body are a nut-brown. The feet are the same colour as the bill and have long toes and claws.

The voice is only a hiss.

The female is slightly duller in colour than the male. There is every probability that these birds ruminate.

I have mentioned nothing about the circulation as I have not yet worked it out to my satisfaction.

New Amsterdam, Berbice, British Guyana.

EXPLANATION

OF

Plate 8.

Fig. 1. Wing when the bird is creeping about.

- » 2. » » » » » at rest.
- » 3. Crop.
 - » 4. Stomach.
 - » 5. Rectum: a. anus.
 - » 6. Wind-pipe.
 - » 7. Egg (natural size).



Young, Charles Grove. 1888. "On the habits and anatomy of Opisthocomus cristatus, Illig." *Notes from the Leyden Museum* 10, 169–174.

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