PROCEEDINGS

OF THE

ZOOLOGICAL SOCIETY OF LONDON.

January 8, 1833.

Joseph Sabine, Esq., Vice-President, in the Chair.

The Chairman opened the business of the Meeting by referring to the By-laws under which it was held, and stated the anticipation of the Council that the General Meetings for the transaction of Scientific Business, of which the present was the first, would be productive of great advantage to science. He adverted to the known abilities and industry of many of the Members of the Society, who have contributed to the Proceedings of the Committee of Science and Correspondence, (the meetings of which have now ceased,) and dwelt on the certainty of much important information being communicated by their continued labours. There were also other Members equally in possession of facts of interest, and equally capable of imparting the knowledge of them, to whom the Society might look with confidence for contributions. He trusted that these experienced zoologists would be continually excited to fresh discoveries, by the acquisition of additional subjects of investigation in the Society's Menagerie and Museum, and that others would be stimulated by their example to pursue similar inquiries with equal zeal, and with all the increased facilities for successful study afforded by more extensive collections. The result of such researches would, he hoped, be freely brought before the Society at the Meetings which had now commenced, and which would thereby be rendered at once interesting to the Members, and important to the advancement of knowledge.

The Secretary then read the By-laws referred to in the Chairman's address.

The Vice-Secretary called the attention of the Meeting to a stuffed specimen of the *M'horr Antelope*, which was exhibited on the table. He remarked that it belonged to that form of the genus to which the name of *Antilope Dama* has been given, on account of the horns being curved forwards; a character mentioned by Pliny as belonging to the animal which he designated *Dama*, and which was also of transmarine origin. By references, however, to other classical authors, Mr. Bennett was induced to infer that the same name was used by them to designate another animal which was subservient to the chase in Europe, and not improbably the *Fallow Deer*.

The earliest distinct mention in modern times of an *Antelope* of the form of *Dama* was by Buffon, who described under the name of *Nanguer*, an animal brought by Adanson from Senegal: on this description is founded the *Ant. Dama* of Pallas. Under the same name M. Lichtenstein and M. Ruppel have severally described an *Antelope* with procurved horns, the *Addra* or *Leddra* of Nubia and Upper Egypt. These differ, however, in colouring from each other, and also from the *M'horr* of Tafileht; and Mr. Bennett was therefore disposed to regard them as distinct races of the same form of *Antelope*, (a form for which the name of *Damæ* may be retained,) and to consider them provisionally as the representatives of three species, equivalent probably in value to the *Corinne* and *Kevel* recently distinguished by M. F. Cuvier from the *Gazelle*, *Ant. Dorcas*, Pall. He characterized them respectively under their local names as follows:—

Genus Antilope, Pall.

Sectio, Damæ. Cornua reflexa, annulata; versus apicem insigniter procurva, lævia. Collum elongatum, maculâ mediâ anticâ transversâ albâ.

Antilope Mhorr. *Ant. obscurè badius; facie albidâ vittis tribus griseis, vel nigrescentibus; prymnâ lineâque latâ utrinque inde antrorsum ductâ, caudâ, ventre, artubusque internè anticè posticèque albis; coloribus abruptis.*

Antilope Nanguer. *Ant. suprà fulva; infrà, prymnâ, clunibusque totis albis.*

Antilope Addra. *Ant. collo dorsoque medio dilutè fulvis; infrà, prymnâ, dorso posteriore, lateribusque albis.*

The individual of the *M'horr Antelope* exhibited was one of the two recently presented, while living, to the Society by E. W. A. Drummond Hay, Esq., Corr. Memb. Z.S., His Majesty's Consul General at Tangier, for whom it had been procured by the exertions of W. Willshire, Esq, Corr. Memb. Z.S., Vice-Consul at Mogadore. The characters of the animal were further illustrated by reference to an imperfect skin, also presented to the Society by Mr. Drummond Hay.

Mr. Bennett's detailed description of the *M'horr Antelope* will be published, with a figure, in the Society's Transactions.

At the request of the Chairman Mr. Spooner read the following Notes of the *post mortem* examination of the *M'horr Antelope*:—

"The external conformation of the animal exhibited great emaciation. On laying open the abdominal cavity it was remarked that the peritoneal secretion was more abundant than is usual in health, and the membrane exhibited marks of chronic inflammation throughout its extent, but more particularly in the portion reflected over the small intestines. Several hydatids were adherent to the mesentery and *omentum*. The latter *viscus* was extremely thin and transparent, and did not possess the slightest portion of *adeps*, which is somewhat singular in the *Ruminantia*, among which an accumulation of *adeps* is generally observed in this *viscus*, even where great

emaciation has been present in other parts. The anatomical structure of the abdominal *viscera*, for the most part, agreed with the same in the tribe of *Antelopes* in general.

" The kidneys were healthy, and were rather larger than is usual, while the bladder was very small. The renal capsules were of an oblong figure, and situated about half an inch anterior to the kidneys.

" The tendinous portion of the diaphragm was very extensive, and most beautifully developed, having nearly the appearance in colour of the *tapetum lucidum* of the eye. The substance of the lungs was hepatized, and there were in many parts adhesions to the inward surface of the ribs. The right lung consisted of four lobes, the left of three. The right side of the heart was peculiarly flaccid, and the blood found in both sides was very dark in colour, and had not undergone coagulation. The *vena azygos* passed upon the left side of the spine, and terminated in the anterior *cava*: I have observed a similar disposition in the *Sheep* and *Chamois*, but in the latter animal the termination was in the posterior *cava*."

A stuffed specimen was exhibited of a female of the *harnessed Antelope*, *Antilope scripta*, Pall., which had lived for some months in the collection of the Zoological Society of Dublin, by whom it was presented to the Society.

Preparations were exhibited of the *tracheæ* of the *Penelope Guan* of M. Temminck, and of the *Anas Magellanica*, Auct., and Mr. Yarrell read the following short descriptions of them.

" The *trachea* of the *Guan* is uniform in size and substance throughout its whole length. After descending by the neck in the usual way, it is extended and passes downwards under the skin, but over the outer surface of the pectoral muscle on the right side, to the extent of 2 inches beyond the angle formed by the junction of the two portions of the *os furcatorium*. The tube of the *trachea* is then reflected, and ascending to the cavity of the *thorax*, again turns to be carried to the lungs as in other *Birds*, and is provided with one pair of true muscles of voice, which have the usual origin and insertion. The loop or fold of the tube formed on the surface of the pectoral muscle is imbedded in cellular tissue, and further retained in its place by a strong ligament, which firmly adhering to the loop, passes backwards to be first attached to the posterior angle of the *sternum*, and afterwards dividing once, and passing still further backwards, the two slips are inserted on the two elongated pubic points of the *pelvis*.

" This structure in the *Guan* has been noticed and figured by M. Temminck, in his ' Histoire des Pigeons et Gallinacés,' but this is the first opportunity that has occurred of exhibiting a preparation from the bird on the table of the Society.

" The *trachea* of the male *Magellanic Goose* is furnished with a large hollow bony protuberance on the left side, near the bottom of the tube, at the point of divarication, similar in character to those observed in the *wading Ducks*, but differing in its form. The dorsal

surface is flat, the external surface convex, the lateral circumference rounded.

" The male of the *Egyptian Goose* possesses also a bony enlargement at the same part; but as much difference exists between the appendages in these two *Geese*, as is known to prevail in the form of the enlargements of the *tracheæ* in the various species of *Ducks*.

" The protuberance in the *Egyptian Goose* is much broader than it is high, its greatest measurement being in the line of its transverse diameter; that of the *Magellanic Goose* is, on the contrary, higher than it is broad, and its line of greatest measurement is from before backwards.

" As in all those *Ducks* possessing tracheal enlargements of bone only, the stomach of the *Magellanic Goose* is a true muscular gizzard, with a small internal cavity having a dense and strong cuticular lining; the intestines are long and furnished with two cæcal appendages, each 9 inches in length. This bird has also one pair of true muscles of voice. It and the *Egyptian Goose* are the only species of *Anser*, as far as I am aware, in which any bony enlargements have been noticed. They bear considerable general resemblance to each other in the colour of their plumage, and both exhibit a brilliant *speculum* on the wing, like those observed in the *Ducks*."

Specimens were exhibited of numerous *Mollusca* and *Conchifera*, hitherto undescribed, which form part of the collection made by Mr. H. Cuming, during a voyage undertaken by him in 1827, 1828, 1829, and 1830, for the purpose of obtaining subjects in Natural History on the western coast of South America, its adjacent islands, and many of those which form the Archipelago of the South Pacific Ocean. Nearly three hundred new species of these classes have been already brought under the notice of the Committee of Science and Correspondence, at various meetings during the past year, and characters of them from the pens of Mr. Broderip and Mr. G. B. Sowerby, have been published in the Proceedings of that Committee. The remaining species Mr. Cuming proposes to lay before the Society from time to time, as the descriptions of them are completed. The intention of publishing coloured figures of them was again announced.

The new species exhibited at the present Meeting were accompanied by characters by Mr. Broderip. They are as follow :—

Genus Spondylus.

Spondylus Princeps. *Spond. testâ rotundatâ, 6-costatâ, rubrâ, spinosâ, spinis lingulatis, latis; costis interstitialibus 5 spinosis, spinis brevioribus; intùs albâ, limbo lato profundè plicato, rubro: long. 5⅛, alt. 5, lat. 3 poll. (spinis haud inclusis).*

Hab. ad Insulam Platam Columbiæ Occidentalis.

Found attached to coral rocks at the depth of seventeen fathoms. In old specimens the interior is of a brownish hue, especially at the hinge.—W. J. B.

Spondylus dubius. *Spond. testâ subrotundatâ, croceâ, 6-costatâ,*

costis interstitialibus numerosis, spinis frequentibus, brevibus, subarcuatis; intùs albâ, limbo lato plicato croceo, plicis numerosis: long. 4⅞, *alt.* 4⅛, *lat.* 2⅛ *poll.* (*spinis inclusis*).

Hab. in Americâ Centrali. (Gulf of Tehuantepec).

Obs. Varietas forsan *Spond. Principis.*

Dredged up from ten fathoms attached to shells.—W. J. B.

Spondylus Leucacantha. *Spond. testâ rotundatâ, 6-costatâ, spinosâ, subcroceâ, spinis sublingulatis, subreflexis, longioribus, albis; interstitiis striatis; costis interstitialibus 3 (mediâ maximâ) spinosis, spinis brevioribus; intùs albâ, limbo angusto pallidè subcroceo: long.* 2⅛, *alt.* 2⅛, *lat.* 1⅛ *poll.* (*spinis haud inclusis*).

Hab. ad Insulam Platam.

Obs. Spinis infrà subcanaliculatis.—W. J. B.

Spondylus aculeatus. *Spond. testâ rotundatâ, planiusculâ, albâ, spinis aculeatis, subrecurvis, frequentibus, gracilibus horridâ: long.* 1, *alt.* 1, *lat.* ⅜ *poll.* (*spinis haud inclusis*).

Hab. in Oceano Pacifico. (Lord Hood's Island.)

Found attached to a piece of coral on the reefs.—W. J. B.

Genus Triton.

Triton lignarius. *Trit. testâ globoso-pyriformi longitudinaliter subplicatâ, transversim granuloso-striatâ, flavâ striis saturatioribus; columellâ excavatâ, aperturæ limbo luteo-sanguineo, dentibus albis; labro lato, crasso; caudâ mediocri subrecurvâ; epidermide fuscâ, reticulatâ, ad labrum villosâ: long.* 1⅛, *lat.* ⅞ *poll.*

Hab. ad Portum Protrero et Panamam.

The elevated *striæ*, especially the two middle ones of the body whorl, are of a much darker colour than the ground of the shell, which is reddish yellow, here and there mottled with whitish on the longitudinal plaits, and on the ledge of the lip. The teeth of the outer lip are very large, and there is one very large one at the upper angle of the inner lip. The reticulated *epidermis* is villous at the outer lip, and the villous edges mark the stages of growth in young specimens. Found in sandy mud at a depth of from seven to twelve fathoms.—W. J. B.

Triton constrictus. *Trit. testâ fusiformi, valdè distortâ, transversim noduloso-striatâ, subcancellatâ, subfulvâ; spirâ elongatâ, attenuatâ; canali brevissimâ, subrecurvâ; aperturâ coarctatâ, limbo castaneo, granuloso, granulis albidis: long.* 2⅛, *lat.* 1⅜ *poll.*

Hab. ad Montem Christi et Xipixapi.

Another species of those shells called *grimaces*. It differs materially both from *Trit. Anus* and *Trit. clathratus*, is a heavier shell than the latter, and has a much longer spire and shorter canal than either of those species, while it wants the laminated border that so remarkably surrounds the aperture of *Trit. Anus*, and is even more distorted.

Mr. Cuming dredged it up from sandy mud from seven to ten fathoms below the surface.—W. J. B.

Triton tigrinus. *Trit. testâ fusiformi, lævi, subcostatâ, anfrac-*

tibus subangulatis, hinc et hinc subnodosis, anfractu basali ventricoso, lato, et suturam juxta carinato; spirâ elongatâ, attenuatâ; croceo-fuscâ, varicibus et labri limbo externo, nigro vel castaneo maculatis; aperturâ expansâ, aurantiacâ, strigis et maculis nigro-castaneis pictâ; epidermide fuscâ, subfoliaceâ: long. 6⅝, *lat.* 4 *poll.*

Hab. in Americâ Centrali. (Guacomayo.)

This fine shell bears some distant resemblance to *Trit. femoralis*, and there was a specimen in the Tankerville collection marked No. 1718. a. in the Catalogue as a variety of that species in these terms: "Var. notabilis, latissima, aperturâ expansâ." This resemblance is greater in dwarfs than in well-grown individuals, but the length and shape of the spire, the comparative smoothness, the breadth of the ventricose body-whorl, the expanded aperture with its rich orange mouth, variegated towards the border of the outer lip with dark chestnut stripes in pairs, and the shortness of the canal, indicate that *Trit. tigrinus* is very distinct from *Trit. femoralis*; and Mr. Sowerby, who drew up the Tankerville Catalogue, is now of that opinion. The throat or internal part of the aperture is of a blueish white, and, as in the rest of the species, the outer lip, and, consequently, the *varices*, acquire a greater thickness as the shell advances in age. The *epidermis* is particularly foliaceous upon the *varices* and edge of the outer lip.

Mr. Cuming dredged up this species at Guacomayo from a bottom of sandy mud at the depth of eleven fathoms.—W. J. B.

TRITON RUDIS. *Trit. testâ ovato-fusiformi, fulvâ, transversim lineatâ, longitudinaliter unduloso-nodosâ; aperturâ albâ, labro intùs denticulato; epidermide fuscâ, rugosâ: long.* 1⅞, *lat.* 1⅜ *poll.*

Hab. ad Peruviam. (Iquiqui.)

The aperture of this shell has the appearance of white porcelain, and the internal denticles, placed about the eighth of an inch from the margin of the lip, are ranged in a line. There are a few obscure plaits towards the bottom of the pillar, and the canal is open, very short, and somewhat recurved. This species approaches *Buccinum* very closely.

Found in mud and sand at a depth of from six to ten fathoms, and in coarse gravel at the depth of nine fathoms.—W. J. B.

TRITON LINEATUS. *Trit. testâ sub-fusiformi, undulato-nodulosâ, subcancellatâ, pallidè flavâ lineis transversis crenulatis, fusco-castaneis, frequentibus vittatâ; anfractibus subventricosis, varicibus crassis; aperturæ ovatæ margine albo, denticulato, fauce atro-purpureâ: long.* 2⅜, *lat.* 1⅛ *poll.*

Hab. ad Insulas Gallapagos.

In young shells the rich dark purple of the throat, with its denticulated white border, is absent, but in these the *varices* are thick and large. In a young shell of this species I found the remains of a very beautiful *Pagurus*, which is new to me. The legs, two of which are the only visible remnants, are of a brownish black, and the feet are tipped with red. The body whorl of *Trit. lineatus* (in-

cluding the canal which is moderate,) is twice the length of the spire, and much more ventricose than the other whorls.

Found in coral sand, in six fathoms.—W. J. B.

TRITON GIBBOSUS. *Trit. testâ sub-fusiformi, subfulvâ vel sub-fuscâ, subnodulosâ, transversim creberrimè lineatâ; anfractibus subtrigonis; aperturâ subrotundâ, albâ, labri expansi radiati margine interno dentato: long.* $1\frac{1}{2}$, *lat.* $\frac{1}{1\frac{1}{2}}$ *poll.*

Hab. ad Panamam et ad Montem Christi.

This shell approaches *Trit. lineatus*, but differs from it in many points.

Found in coarse sand at the depth of seven fathoms.—W. J. B.

TRITON SCALARIFORMIS. *Trit. testâ fusiformi, sordidè albâ, subcancellatâ, lineis transversis elevatis, crassiusculis, crenulatis, crebris vittatâ; labri limbo subfimbriato; canali brevi, subrecurvâ: long.* $\frac{7}{8}$, *lat.* $\frac{3}{8}$ *poll.*

Hab. in sinu Montijano.

This elaborately wrought species has the *varices*, in well-grown specimens, placed with a regularity that almost entitles it to a situation among the *Ranellæ*. It was found in coarse sand at the depth of ten fathoms.—W. J. B.

TRITON CONVOLUTUS. *Trit. testâ fusiformi, spirâ elongatâ, albidâ, lineis elevatis, subacutis, creberrimis vittatâ; labri margine crenulato: long.* $1\frac{1}{8}$, *lat.* $\frac{1}{2}$ *poll.*

Mus. Sowerby.

This species approaches *Trit. scalariformis*, but differs materially from it. The lines which gird *Trit. convolutus* are much finer, much more frequent than those of *Trit. scalariformis*, and are without the crenulations that distinguish the coarser ridges of the latter. There are also other points of difference, and the *varices* are irregular and not arranged in a nearly lateral direction as they are in the last-mentioned species.

Mr. Sowerby, who sent me this shell, does not know its locality. —W. J. B.

Genus TURBINELLA.

TURBINELLA TUBERCULATA. *Turb. testâ fusiformi-turritâ, transversim tuberculato-costatâ, et insterstitialiter striatâ, anfractibus angulatis, angulis noduliferis, albidâ costis nodulisque nigro-castaneis; aperturâ albâ, columellâ* 3—4-*plicatâ: long.* $1\frac{1}{8}$, *lat.* 1 *poll.*

Hab. ad Insulas Gallapagos.

Found under stones.

This shell, in its general appearance, approaches some of the *Pleurotomata*, which have a short canal.—W. J. B.

TURBINELLA ARMATA. *Turb. testâ fusiformi, transversim striatâ, tuberculis spinisque fortibus muricatâ, griseo castaneoque fasciatâ et maculatâ; aperturâ albâ; columellâ* 6—7-*plicatâ, labro sinuato, intùs striato et dentato, dentibus castaneis: long.* $2\frac{3}{8}$, *lat.* $1\frac{3}{8}$ *poll.*

Hab. ad Insulam Elizabethæ.

The tubercles and strong spines are disposed in transverse series. The angle of the body whorl is coronated with spines, and then follows, after an interstitial transversely striated space, a band of large tubercles; this is followed by an intermediate space transversely ribbed and striated, and towards the base is an elevated transverse ridge, armed with stout but rather blunt spines; the other whorls have one row of spines only, and no tubercles.

Found on the coral reef.—W. J. B.

TURBINELLA CÆSTUS. *Turb. testâ subrhomboideâ, crassissimâ, ponderosissimâ, albâ, anfractu basali longitudinaliter subplicato, angulato et transversim sulcato, angulo tuberculis conico acutis, maximis, armato, sulcis maximis; cingulis basalibus tuberculatis, penultimo maximo; columellâ quadriplicatâ; labro sinuato; epidermide crassâ, longitudinaliter striatâ; umbilico magno: long.* $3\frac{7}{8}$, *lat.* $3\frac{1}{8}$ *poll.*

Hab. ad Caraccas.

This species approaches nearest to *Turb. pugillaris*, but the difference of shape, the extreme thickness and weight of the shell, the smaller number but increased size of the furrows, the immense bulk of the conical tubercles, the reduced number of the plaits on the pillar, and the enlarged *umbilicus*, point it out as distinct,—to say nothing of the *epidermis*, which is much thicker and coarser, and not unlike that of *Pyrula patula*, nobis. *Turb. Cæstus* varies much in size, but not in character.

It was found in soft mud among the rocks of the bay.—W. J. B.

Genus PURPURA.

PURPURA XANTHOSTOMA. *Purp. testâ ovato-acutâ, ventricosâ, tuberculiferâ, longitudinaliter subplicatâ, transversim costatâ et interstitialiter striatâ, anfractibus angulatis; aperturâ flavâ, nitente; labro intùs substriato et denticulato, striis distantibus, dentibus intermediis; long.* $3\frac{1}{8}$, *lat.* $2\frac{1}{8}$ *poll.*

Hab. ad Valparaiso.

The angulated body-whorl, which is nearly thrice as long as the spire, is crowned by waved tubercles. The aperture is of a shining yellow, and the denticles, which are whitish, are generally placed in pairs between the internal *striæ* of the outer lip.

Dredged up from gravel and sand at a depth of from seven to twenty-five fathoms.—W. J. B.

A paper was read by Dr. Grant, "On the Nervous System of *Beroë Pileus*, Lam., and on the Structure of its *cilia*."

Dr. Grant having obtained, in September last, on the coast of Sheppey, a specimen of this animal, examined it with great care; and from this examination he describes it in detail as regards its external form, its alimentary canal, its ovaries, and its two lengthened *tentacula*, which latter organs distinguish it from the group comprehending *Beroë ovatus*; and mark it as the type of a genus designated by Péron *Eucharis*, and by Dr. Fleming *Pleurobrachia*.

At a short distance above the mouth a double transverse filament, resembling in colour the abdominal nerves of *Pectinaria*, surrounds the body: it swells out in each space intervening between the bands of *cilia* into a *ganglion*; and from each of these *ganglia* there pass on each side two nerves to the adjoining band, while a larger filament proceeds upwards to beyond the middle of the body, having two or three smaller ganglionic enlargements, from which filaments are detached to the *viscera*. The whole of this system is seated near the surface of the body. In the circular disposition of the central filaments and *ganglia*, and in the regular radiation of nerves from that centre, it resembles the nervous system of *Holothuria* and *Asterias* among the *Echinodermata*.

The comparatively large size of the *cilia* on the *Beroë Pileus*, enabled Dr. Grant to observe their structure more satisfactorily than in the microscopic animals on which they have previously been particularly noticed. In the latter they appear like flat tapering filaments prolonged from the homogeneous cellular tissue of the body to which they are attached. But in the *Beroë* it is evident that they are not single fibres, but consist of several straight, short, transparent filaments placed parallel to each other in a single row, and connected together by the skin of the animal, like the rays supporting the fin of a fish. These fins are of the same breadth with the band to which they are attached, and extend from the mouth to the *anus*, there being about forty on each band. Under a lens the parallel fibres appear like transparent tubes, sometimes a little detached from each other at their extremities, by injury done to the connecting membrane, and at these parts the isolated spines project stiffly outwards. When the *cilia* are in active vibration, there is observed along the middle of each band to which they are attached, a motion like the continued undulations of a fluid. Connecting this with the analogy which may be deduced from the motion produced in the tubular feet of *Asterias* and *Echinus* by the entrance and exit of water sent into them by vessels destined for that office, it seems highly probable that the motions of the *cilia* of *Beroë* are intimately connected with the streams passing along the bands, and that hence an explanation may be obtained of one of the most remarkable phænomena of animal motion, which is at the same time one of the most frequent occurrence among the less highly organized of animated beings.

Dr. Grant's paper will be published entire, with a figure of the animal, in the Society's Transactions.

Mr. Yarrell detailed some observations on the changes of plumage in *Birds*; which he illustrated by Notes on several species in the Society's Gardens made by James Hunt, one of the Keepers.

In his observations Mr. Yarrell pointed out three modes by which changes in the appearance of the plumage of birds are produced: 1. By the feather itself becoming altered in colour. 2. By the bird's obtaining a certain portion of new feathers without shedding any of the old ones. 3. By an entire or partial moult, in which

the old feathers are thrown off, and new ones produced in their places. The first two of these modes of change are observed generally in the spring, indicating the approach of the breeding season; the third is usually partial in the spring, and entire in the autumn.

The Keeper's notes furnish some remarkable instances of change of plumage, observed by him on birds in the Society's Menagerie: —on the *Ruff, Tringa pugnax*, Linn., in which the spring moult is partial, and in which the ruff produced round the neck of the male preparatory to the breeding season is found to differ in colour in successive years; that of an individual which had it black in 1832 having been ash-coloured in 1831:—on the *Mandarin Duck, Anas galericulata*, Linn., which moults entirely in the spring, and undergoes a partial moult in the autumn, to assume his breeding plumage: —on the *Summer Duck, Dendronessa sponsa*, Swains., which resembles the preceding in its moult:—on the *Cormorant, Carbo Cormoranus*, Meyer, which acquires in the spring white feathers on the head and neck, and on the thighs, without parting with any of its old feathers: —on the immature *Herring Gull* and *lesser black-backed Gull, Lari argentatus* and *fuscus*, Brunn., which during two years have been undergoing a continued change of colour in their feathers, independent of moulting, which does not appear to influence the change of colour:—and on the *laughing Gull, Larus ridibundus*, Linn., in which the feathers of the head change in the spring from white to black, the colour alone being changed without a feather being shed, and the change being effected in four or five days; in the autumn the black feathers are moulted, and are replaced by white ones.

Mr. Yarrell stated his intention of entering more fully into the explanation of the laws which regulate the changes of plumage in Birds, in a paper which he is preparing to lay before an early meeting of the Society.

A Note by James Hunt, one of the Society's Keepers, was read. It related to the breeding of the *Passenger Pigeon, Ectopistes migratorius*, Swains., in the Society's Menagerie.

"A pair of these birds began to build their nest on the 25th of April, 1832, having been three or four days in selecting a proper place in a fir-tree in the inclosure appropriated at the Gardens to the *Pigeons*. The female was the nest-builder. The male bird performed the most laborious part of the work: he collected and conveyed to the spot all the materials, principally sticks and straw, of which the nest was composed. He alighted on the back of the female with each fresh supply, so as not to disarrange any part of the nest which she had formed. They began their task in the morning, and completed it the same evening. One egg was laid on the morning of the 26th, and the female commenced sitting immediately. A young bird was hatched in sixteen days. The male relieved the female during the period of incubation."

Another instance of the breeding in this country of the *Passenger Pigeon* occurred nearly at the same time in the Menagerie of the President.