in pairs, one following the other with the dorsal fin and the upper lobe of the tail just appearing above the water, and, as each animal is fully 30 feet long, the effect of a body of 60 or more feet long moving through the water is readily produced. To this category belongs the famous serpent cast up on Stτonsay, one of the Orkneys, of which an account was read to the Wernerian Society of Edinburgh @@1 ; some of its vertebrae were preserved in the Royal College of Surgeons of London, and identified as those of *Selache maxima* by both Home and Owen. @@2 There is also evidence to show that specimens of *Carcharodon* must have existed more than 100 feet long. @@3 (5) Ribbon- fish *(Regalecus),* from their snake-like form and great length (sometimes as much as 20 feet), have been suggested as the origin of so-called “sea-serpents,” amongst others by Dr Andrew Wilson @@4; but Dr Günther, @@5 from what is known regarding the habits of these fish, does not regard the theory as tenable. (6) A gigantic squid *(Architeuthus)* most likely the foundation of the old Norse accounts, @@6 and also of those which in the early part of the 19th century came so frequently from the United States as to gain for the animal the sobriquet of “ American sea- serpent.” @@7 These stories were so circumstantial and on the whole so consistent, and vouched for by persons of such eminence, that no doubt was possible (notwithstanding the cavilling of Mitchell) @@8 as to the existence of a strange marine monster of very definite character in those regions.

The description commonly given of it has been summed up by Gosse @@9 somewhat thus:—(i.) general form that of a serpent; (ii.) length averaging 60 feet; (iii.) head flattened, eye generally not mentioned, some distinctly stating that it was not seen ; (iv.) neck 12 to 16 inches in diameter ; (v.) appendages on the head, neck, or back (accounts here variable) ; (vi.) colour dark, lighter below ; (vii.) swims at the surface, head thrown forward and slightly elevated ; (viii.) progression steady and uniform, body straight but capable of being bent; (ix.) water spouting from it; (x.) in shape like a “nun buoy.” The annexed figure (fig. 1) represents one

which was seen

from H.M.S.

“Dædalus.” @@10 To

show the reason­

ableness of this

hypothesis, it

may be added

that gigantic Cephalopode are not unfrequent on the shores of Newfoundland, @@11 and are occasionally met with on the coasts of Scandinavia, @@12 Denmark, and the British Isles, @@13 that their extreme size seems to be above 60 feet, and, furthermore, that their mode of progression is by means of a jet of water forcibly expelled from the siphon, which would impart that equable motion to which several

observers allude as being evidently not produced by any serpentine bending of the body. A very interesting account of a monster almost certainly originating in one of these squids is that of Hans Egede, @@14 the well-known mis­sionary to Green­

land ; the drawing

by Bing, given in

his work, is repro­

duced here (fig. 2),

along with a sketch

of a squid in the

act of rearing itself

out from the water

(fig. 3), an action

which they have

been observed in

aquaria habitually

to perform. Nu­

merous other ac­

counts seem to be

explicable by this

hypothesis. @@15 (7) A

sea-lion, or “Anson’s seal ” *(Morunga elephantina),* was suggested by Owen @@16 as a possible explanation of the serpent seen from

H.M.S. “Dædalus”;

but a this was

afterwards rejected

by Captain M'Qua-

hae, @@17 who stated

that it could not

have been any ani­

mal of the seal

kind, it seems bet­

ter to refer the ap­

pearance to a squid

as above stated.

(8) A plesiosaurus,

or some other of

the huge marine

reptiles usually be­

lieved to be extinct,

might certainly

have produced the phenomena described, granting the possibility of one having survived to the present time. Newman @@18 and Gosse @@19 have both supported this theory, the former citing as evidence in its favour the report of a creature with the body of an alligator, a long neck, and four paddles having been seen by Captain Hope of H.M.S. “Fly” in the Gulf of California. @@20 (9) No satisfactory explanation has yet been given of certain descriptions of the sea-serpent ; among others of this class may be men­tioned the huge snake seen by certain of the crew @@21 of the “ Pauline ” in the South Atlantic Ocean, which was coiled twice round a large sperm whale, and then towered up many feet into the air, and finally dragged the whale to the bottom. Perhaps the most remarkable, however, is Lieutenant Hayne’s @@22 account of a creature seen from H.M. yacht “Osborne.” Two different aspects were re­corded,—the first being a ridge, 30 feet in length, of tri-

*@@@1 Mem. Wem. Soc. Edin.,* vol. i. pp. 418-444, pis. ix.-xi., 1811.

@@@2 *Ann*. *Mag. Nat. Hist.,* ser. 2, vol. ii. p. 461, 1848 ; fora criticism of these views, see Traill, *Proc. Roy. Soc. Edin.,* vol. iii. p. 208, 1857.

@@@3 Owen, *Odontography,* p. 30.

*@@@4 Leisure Time Studies,* p. 115, London, 1879, containing a readable essay on the subject; *Scotsman,* 6th September 1878 ; *Nature, loc. cit.*

*@@@5 Study of Fishes,* p. 521, Edinburgh, 1880.

@@@6 See note 3 ; also Deinbolt, quoted in *Zoologist,* p. 1604, 1847.

@@@7 Bigelow, *Amer. Joum. Sci.,* vol. ii. pp. 147-165, 1820; Warburton, ib. vol. xii. p. 375, 1823 ; *Zoologist,* p. 1714, 1847.

*@@@8 Amer. Journ. Sei.,* vol. xv. p. 351, 1829.

*@@@9 Romance of Natural History,* p. 345, London, 1859.

@@@10 M'Quahae, *Times,* October 1848 ; *Ill. Lοnd. News,* October 1848.

@@@11 Verrill, *Trans. Connect. Acad.,* vol. v. part i., 1880, containing an account of all authenticated specimens of gigantic squids.

@@@12 Steenstrup, *Forhandl. Skand. Naturf., 7de Mode,* pp. 182-185, Christiania, 1857.

@@@13 Seville Kent, *Proc. Zool. Sοc. Lond.,* p. 178, 1874 ; More, *Zoologist,* p. 4526, 1875 ; also *Ann. Mag. Nat. Hist.,* ser. 4, vol. vi. p. 123.

*@@@14 Det garnie Grönlands nye Perlustration,* Copenhagen, 1741 (Eng. trans., *A Description of Greenland,* London, 1745, pp. 86-89) ; also Paul Egede, *Efterretninger om Grönland,* Copenhagen, n.d., pp. 45, 46.

@@@15 L. de Ferry, quoted by Pontoppidan, *op. cit.* ; Davidson and Sandford, quoted in *Zoologist,* p. 2459, 1849 ; Senior, *Graphic,* 19th April 1879 ; Barnett, *Nature,* vol. xx. p. 289, 1879.

*@@@16 Ann. Mag. Nat. Hist.,* ser. 2, vol. ii. p. 461, 1848.

*@@@17 Times,* 21st November 1848. @@@*18 Zoologist,* p. 2395.

*@@@19 Op. cit.,* p. 358. @@@*20 Zoologist,* p. 2356, 1849.

@@@21 Penny, *Ill*. *Lend. News,* vol. lxvii. p. 515, 20th November 1875.

*@@@22 Graphic,* 30th June 1877.