

Report of a committee of the Linnaean Society of New England, relative to a large marine animal, supposed to be a serpent, seen near Cape Ann, Massachusetts, in August 1817.

Contributors

Linnaean Society of New England.
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9.
REPORT

OF A

COMMITTEE

OF THE

LINNÆAN SOCIETY OF NEW ENGLAND,

RELATIVE

TO A LARGE MARINE ANIMAL,

SUPPOSED TO BE

A SERPENT,

SEEN NEAR CAPE ANN, MASSACHUSETTS,

IN

AUGUST 1817.

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BOSTON :

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1817.

COMMITTEE

In the month of August 1871, it was determined to hold a series of public lectures, and an effort was made to secure the services of a lecturer of high reputation and high standing in the community. It was found that no one was available who could give the general form of instruction, to be of the highest quality, and to move with rapidity, to give an impression of the right way to study and to study, and to give a number of hours of instruction, following the other in a line.

In consequence of this report, at a session of the Executive Committee of the Board of Education at Boston on the 10th day of August, 1871, Messrs. James H. Thompson, Jr. and Charles C. Carter, Esq. were appointed a Committee to select a lecturer, and to report to the Executive Committee at the next annual meeting. The following report made by that Committee is now published by order of the Executive Committee.

REPORT

REPORT

THE BOARD OF EDUCATION, CITY OF BOSTON.

1871.

THE BOARD OF EDUCATION, CITY OF BOSTON.

1871.

In the month of August 1817, it was currently reported on various authorities, that an animal of very singular appearance had been recently and repeatedly seen in the harbour of Gloucester, Cape Ann, about thirty miles distant from Boston. It was said to resemble a serpent in its general form and motions, to be of immense size, and to move with wonderful rapidity ; to appear on the surface of the water only in calm and bright weather ; and to seem jointed or like a number of buoys or casks following each other in a line.

In consequence of these reports, at a meeting of the Linnæan Society of New England, holden at Boston on the 18th day of August, the Hon. JOHN DAVIS, JACOB BIGELOW, M. D. and FRANCIS C. GRAY, Esq. were appointed a Committee to collect evidence with regard to the existence and appearance of any such animal. The following report made by that Committee is now published by order of the Society.

Linnean Society of New England.

THE Committee appointed on the 18th of August last to collect evidence with regard to the existence and appearance of a Sea Serpent, said to have been recently seen in the harbour of Gloucester, now lay before the Society the following facts and documents.

On the 19th of August your Committee wrote to the Hon. LONSON NASH of Gloucester, requesting him to examine upon oath some of the inhabitants of that town with regard to the appearance of this animal, to make the examination as early as possible, to request the persons examined not to communicate to each other the substance of their respective statements, until they were all committed to writing; to have these statements signed and certified in due form, and sent to us. Our letter also contained certain rules with regard to the mode of conducting this examination, and questions to be put to the persons examined.

In answer to it we received from Mr. Nash a letter, dated 28th August, enclosing eight depositions, duly certified, which on the 1st September were read before the Society, as were also three depositions taken in Boston, on the 30th August and 1st September. You directed us to return your thanks to Mr. Nash for his readiness in complying with our request, to continue the investigation of the subject committed to us, in such manner as we should deem expedient, and to lay before you a formal report of the whole evidence that should be procured. In compliance with your directions, the chairman of the Committee wrote again to Mr. Nash on the 2d September, and received from him an answer dated 9th September. We also wrote to Mr. Samuel Davis of Plymouth on the 1st September, requesting him to examine upon oath some respectable man of that place, with regard to the appearance of an animal said to have been seen there in the year 1815, and to resemble the one lately seen near Gloucester; this letter contained the same rules and questions as were sent to Mr. Nash. In answer to this application, a letter from that gentleman was received on the 4th October, enclosing the deposition of

Capt E. Finney. Your Committee have also received a communication from the Rev. William Jenks of Bath relative to this subject. All these documents are now laid before you in the following order.

1. The rules and questions of your Committee.
2. The letter from Mr. Nash of 28th August, enclosing the eight following depositions.
3. The deposition of Amos Story.
4. That of Solomon Allen.
5. That of Eppes Ellery.
6. That of William H. Foster.
7. That of Matthew Goffney.
8. That of James Mansfield.
9. That of John Johnston.
10. That of William B. Pearson.
11. The deposition of Sewall Toppan,
12. That of Robert Bragg,
13. That of William Somerby,
14. The letter from our Chairman to Mr. Nash.
15. The answer of Mr. Nash.
16. Our letter to Mr. S. Davis of Plymouth.
17. His answer, containing
18. The deposition of Elkanah Finney.
19. The letter from the Rev. William Jenks to your Committee.
20. Is an account of a serpent said to have been frequently seen in the North Sea, extracted from the history of Norway, written by the Right Rev. Erich Pontoppidan, bishop of Bergen, in the year 1751.

I.

Boston, Aug. 19, 1817.

THE Committee appointed by the Linnæan Society, at their meeting on the 18th inst. for the purpose of collecting any evidence which may exist respecting a remarkable animal, denominated a *Sea Serpent*, reported to have recently been seen in and near the harbour of *Cape Ann*, have concluded on the following method of proceeding in the execution of their commission.

I. The examination to be confined to persons professing actually to have seen the animal in question.

II. Such persons to be examined as may be met with by either of the Committee, or by Hon. Lonson Nash of Gloucester, who is to be requested by a letter addressed to him from the Committee to undertake this service.

III. All testimony on the subject to be taken in writing, and after being deliberately read to the person testifying, to be signed by him, and sworn to before a magistrate. The examinations to be separate, and the matter testified by any witness not to be communicated until the whole evidence be taken.

IV. The persons testifying to be requested first to relate their recollections on the subject, which being taken down, the following questions to be proposed, if not rendered unnecessary by the statement given.

QUESTIONS.

1. When did you first see this animal?
2. How often and how long at a time?
3. At what times of the day?
4. At what distance?
5. How near the shore?

6. What was its general appearance?
7. Was it in motion or at rest?
8. How fast did it move, and in what direction?
9. What parts of it were above the water and how high?
10. Did it appear jointed or only serpentine?
11. If serpentine, were its sinuosities vertical or horizontal?
12. How many distinct portions were out of water at one time?
13. What were its colour, length and thickness?
14. Did it appear smooth or rough?
15. What were the size and shape of its head, and had the head ears, horns, or other appendages?
16. Describe its eyes and mouth.
17. Had it gills or breathing holes, and where?
18. Had it fins or legs, and where?
19. Had it a mane or hairs, and where?
20. How did its tail terminate?
21. Did it utter any sound?
22. Did it appear to pursue, avoid or notice any thing?
23. Did you see more than one?
24. How many persons saw it?
25. State any other remarkable fact.

II.

Gloucester, August 28, 1817.

JOHN DAVIS,
JACOB BIGELOW, and } Esq's.
FRANCIS C. GRAY,

Gentlemen,

I have received your favour of the 19th inst. In that communication you request my assistance, in collecting evidence relative to a strange marine animal, that has appeared in the harbour in this place; and I have most cheerfully complied with your request. I send you, herewith, the testimony that I have taken. The subject is calculated to excite much interest, at home and abroad.

The deponents were interrogated separately, no one knowing what the others had testified, and though they differ in some few particulars, still, for the most part, they agree.

I am confident, from my own observation, that Mr. Allen is mistaken, as to the motion of the animal. His motion is vertical. I saw him, on the 14th instant, for nearly half an hour. I should judge he was two hundred and fifty yards from me, when the nearest. I saw him twice with a glass for a short time, and at other times, with the naked eye. At that distance, I could not take in the two extremes of the animal that were visible, *at one view*, with a glass. His manner of turning is well described in Messrs. Pearson's and Goffney's depositions. The persons who have deposed before me, are men of fair and unblemished characters. The interrogatories that you sent to me were all put to the witnesses; but generally, I have omitted inserting them in the depositions, when the witnesses declared their inability to answer them.

I think Mr. Allen is likewise mistaken, as to the distinct portions of the animal that were visible, at one time. I saw, at no time, more than eight distinct portions; though more may have been visible; still, I cannot believe that *fifty* distinct portions were seen, at one time. I believe the animal to be straight, and that the apparent bunches were caused by his vertical motion.

I have questioned Daniel Goffney, who was in the boat with his brother Matthew, when he fired at the animal, and Daniel's answers corroborate Matthew's testimony.

Respectfully, gentlemen,

Your most ob't,

LONSON NASH.



III.

I, AMOS STORY of Gloucester, in the County of Essex, mariner, depose and say, that on the tenth day of August A. D. 1817, I saw a strange marine animal, that I believe to be a serpent, at the southward and eastward of Ten Pound Island, in the harbour in said Gloucester. It was between the hours of twelve and one o'clock when I first saw him, and he continued in sight for an hour and half. I was setting on the shore, and was about twenty rods from him when he was the nearest to me. His head appeared shaped much like the head of the sea turtle, and he carried his head from ten to twelve inches above the surface of the water. His head at that distance appeared larger than the head of any dog that I ever saw. From the back part of his head to the next part of him that was visible, I should judge to be three or four feet. He moved very rapidly through the water, I should say a mile in two, or at most, in three minutes. I saw no bunches on his back. On this day, I did not see more than ten or twelve feet of his body. I likewise saw, what I believe to be the same animal this day, viz. the twenty third of August, A. D. 1817. This was in the morning, about seven o'clock. He then lay perfectly still, extended on the water, and I should judge that I saw fifty feet of him at least.

I should judge that I was forty rods from him this day. I had a good spy-glass both days when I saw him. I continued looking at him about half an hour, and he remained still and in the same position, until I was called away. Neither his head nor tail were visible. His colour appeared to be a dark brown,

and when the sun shone upon him, the reflection was very bright. I thought his body was about the size of a man's body.

AMOS STORY.

Essex ss. Aug. 23, 1817. Personally appeared Amos Story, and made oath that the foregoing deposition by him subscribed is true, according to his best knowledge and belief.

COR. LONSON NASH, Jus. Pacis.



IV.

I SOLOMON ALLEN 3d, of Gloucester, in the county of Essex, Ship master, depose and say ; that I have seen a strange marine animal, that I believe to be a serpent, in the harbour in said Gloucester. I should judge him to be between eighty and ninety feet in length, and about the size of a half barrel, apparently having joints from his head to his tail. I was about one hundred and fifty yards from him, when I judged him to be of the size of a half barrel. His head formed something like the head of the rattle snake, but nearly as large as the head of a horse. When he moved on the surface of the water, his motion was slow, at times playing about in circles, and sometimes moving nearly straight forward. When he disappeared, he sunk apparently directly down, and would next appear at two hundred yards from where he disappeared, in two minutes. His colour was a dark brown, and I did not discover any spots upon him.

Question. When did you first see this animal ?

Answer. I saw him on the twelfth, thirteenth, and fourteenth of August, A. D. 1817.

Q. How often, and how long at a time ?

A. I was in a boat on the twelfth inst. and was around him several times, within one hundred and fifty yards of him. On the thirteenth inst. I saw him nearly all the day, from the shore. I was on the beach, nearly on a level with him, and most of the time he was from one hundred and fifty to three hundred yards

from me. On the fourteenth, I saw him but once, and had not so good a view of him.

Q. What parts of it were above the surface of the water, and how high?

A. Its joints or bunches, appeared about eight or ten inches above the surface of the water.

Q. Did it bend its body up and down in moving, or to the right and left?

A. He moved to the right and left.

Q. How many distinct portions of it were out of water, at one time?

A. I should say fifty distinct portions.

Q. Did it appear smooth or rough?

A. It appeared rough and scaly.

Q. Had it ears, horns, or any other appendages?

A. I perceived none.

Q. How did its tail terminate?

A. He seemed to taper towards (what I thought) his tail, though I had no distinct view of his tail.

Q. Did it utter any sound.

A. Not in my hearing.

Q. Did it appear to pursue, avoid, or notice any thing?

A. It appeared to me to avoid the boat where I was, though afterwards, I saw him make towards a boat, in which was Mr. Goffney and others.

Q. Did you see more than one?

A. I did not.

Q. How many persons saw it?

A. Twenty or thirty persons were in view of me.

Q. Did he open his mouth when you saw him, and if so, how wide?

A. Yes, when I looked at him from the shore with a glass, at about two hundred yards distance, his mouth appeared to be open about ten inches. I had no glass, when I saw him from the boat.

Q. Did he carry his head above the surface of the water?

A. Yes, at times, about two feet, then again he would carry the top of his head just on the surface of the water.

Q. Did he turn short and quick, and what was the form of the curve that he made, when he turned?

A. He turned short and quick, and the first part of the curve that he made in turning resembled the link of a chain; but when his head came parallel with his tail, his head and tail appeared near together.

SOLOMON ALLEN, 3d.

Essex ss. August 21, 1817. Personally appeared Solomon Allen the third, and made oath that the foregoing facts, by him subscribed, are true, according to his best knowledge and belief.

COR. LONSON NASH, Jus. Pacis.



V.

I, EPES ELLERY, of Gloucester, in the County of Essex, Ship master, depose and say; that on the 14th day of August, 1817, I saw a sea animal that I thought to be a serpent, in the harbour in said Gloucester. I was on an eminence, near low water mark, and about thirty feet above the level of the sea, when I saw him. I should judge that he was about one hundred and fifty fathoms from me. I saw the upper part of his head, and I should say about forty feet of the animal. He appeared to me to have joints, about the size of a two-gallon keg. I was looking at him with a spy-glass, when I saw him open his mouth, and his mouth appeared like that of the serpent; the top of his head appeared flat. His motion when he turned was quick, but I will not express an opinion of his velocity. The first part of the curve that he made in turning was of the form of a staple, and as he approached towards his tail, he came near his body with his head, and then ran parallel with his tail, and his head and tail then appeared near together.

Q. At what time of the day did you see him?

A. It was a little after sun set.

Q. What parts of it were above the surface of the water, and how high?

A. I did not count the number of bunches, but they appeared about six inches above the surface of the water.

Q. Were its sinuosities vertical or horizontal?

A. Vertical.

Q. Did it appear to pursue, avoid, or notice any thing?

A. It did not appear to avoid any thing. He appeared to be amusing himself, though there were several boats not far from him.

Q. Did you see more than one?

A. I did not.

Q. How many persons saw it?

A. There were fifteen or twenty persons, near where I was.

EPES ELLERY.

Essex ss. August 25, 1817. Personally appeared Epes Ellery, and made oath to the truth of the foregoing facts by him subscribed.

COR. LONSON NASH, Jus. Pacis.

VI.

I, WILLIAM H. FOSTER, of Gloucester, in the county of Essex, merchant, depose and say: That on the fourteenth day of August, A. D. 1817, I first saw an uncommon sea animal, that I believe to have been a serpent, in the harbour in said Gloucester. When I first discovered him, his head was above the surface of the water, perhaps ten inches, and he made but little progress through the water. He was apparently shaded with light colours. He afterwards went in different directions, leaving on the surface of the water, marks like those made by skating on the ice. Then he would move in a straight line west, and would almost in an instant, change his course to east, bringing his head, as near as I could judge, to where his tail was; or in fact, to the extreme hinder part visible, raising himself as he turned, six or eight inches out of water, and shewing a body at least forty feet in length. On the seventeenth of August instant, I

again saw him. He came into the harbour, occasionally exhibiting parts of his body, which appeared like rings or bunches. As he drew near, and when opposite to me, there rose from his head or the most forward part of him, a prong or spear about twelve inches in height, and six inches in circumference at the bottom, and running to a small point.

Q. Might not the prong or spear that you saw, have been the tongue of the serpent?

A. I thought not; as I saw the prong before I saw the head; but it might have been.

Q. At what distance was you, when you saw the spear of the serpent?

A. I should judge forty rods; I had a spy-glass when I saw the prong or spear.

Q. Did the animal appear round?

A. He did.

Q. Did he appear jointed, or only serpentine?

A. He appeared jointed.

Q. Were its sinuosities vertical, or horizontal?

A. Vertical.

Q. What was its colour?

A. It appeared brown.

Q. Did it appear smooth or rough?

A. It appeared smooth.

Q. What was the size and shape of his head?

A. At the distance where I was, his head appeared as large as a man's head; but I cannot describe its shape.

Q. Did it appear to pursue, avoid, or notice objects?

A. I thought it appeared to notice objects.

Q. How fast did it move?

A. At the rate of a mile in a minute, at times, I have no doubt.

WILLIAM H. FOSTER.

Essex ss. August 27, 1817. Personally appeared William H. Foster, and made oath that the foregoing deposition, by him subscribed, is true, according to his best knowledge and belief.

Before LONSON NASH, Jus. of Peace.

VII.

I, MATTHEW GAFFNEY, of Gloucester, in the County of Essex, Ship carpenter, depose and say: That on the fourteenth day of August, A. D. 1817, between the hours of four and five o'clock in the afternoon, I saw a strange marine animal, resembling a serpent, in the harbour in said Gloucester. I was in a boat, and was within thirty feet of him. His head appeared full as large as a four-gallon keg; his body as large as a barrel, and his length that I saw, I should judge forty feet, at least. The top of his head was of a dark colour, and the under part of his head appeared nearly white, as did also several feet of his belly, that I saw. I supposed and do believe that the whole of his belly was nearly white. I fired at him, when he was the nearest to me. I had a good gun, and took good aim. I aimed at his head, and think I must have hit him. He turned towards us immediately after I had fired, and I thought he was coming at us; but he sunk down and went directly under our boat, and made his appearance at about one hundred yards from where he sunk. He did not turn down like a fish, but appeared to settle directly down, like a rock. My gun carries a ball of eighteen to the pound; and I suppose there is no person in town, more accustomed to shooting, than I am. I have seen the same animal at several other times, but never had so good a view of him, as on this day. His motion was vertical, like the caterpillar.

Q. How fast did it move?

A. I should say he moved at the rate of a mile in two, or at most, three minutes.

Q. Did it appear smooth or rough?

A. I thought it smooth, though I was endeavouring to take aim at him, and will not say positively, that he was smooth, though that is still my belief.

Q. Does he turn quick and short, and if so, what is the form of path that he makes, in turning?

A. He turns quick and short, and the first part of the curve that he makes in turning, is in the form of the staple; but his head seems to approach rapidly towards his body, his head and

tail moving in opposite directions, and when his head and tail come parallel, they appear almost to touch each other.

Q. Did he appear more shy, after you had fired at him?

A. He did not; but continued playing as before.

Q. Who was in the boat with you, when you fired at the serpent?

A. My brother Daniel, and Augustin M. Webber.

MATTHEW GAFFNEY.

Essex ss. August 28, 1817. Then Matthew Gaffney made oath that the foregoing, by him subscribed, is true according to his best knowledge and belief.

Before LONSON NASH, Jus. of Peace.

VIII.

I, JAMES MANSFIELD, of Gloucester, in the county of Essex, merchant, depose and say: That I saw a strange creature, of enormous length, resembling a serpent. I think this was on the fifteenth of August, A. D. 1817. I should say he was from forty to sixty feet in length, extended on the surface of the water, with his head above the water about a foot. He remained in this position but a short time, and then started off very quick, with much greater velocity than I have seen him move with at any other time. I saw bunches on his back about a foot in height, when he lay extended on the water. His colour appeared to me black, or very dark. It was a little before six o'clock P. M. when I saw him. I should say, he moved a mile in five or six minutes.

Q. How near the shore was the serpent?

A. About one hundred and eighty yards from the shore where I stood.

Q. Were its sinuosities vertical, or horizontal?

A. Vertical.

Q. What were the size and shape of its head; and had it ears, horns, or any other appendages?

A. His head appeared to be about the size of the crown of a hat, at the distance from whence I saw him. The shape of his head I cannot describe, and I saw no ears, horns, or other appendages. I had no spy-glass, and cannot describe him so minutely as I otherwise could. I have seen him at other times, but my view of him was not so good, as on this day.

JAMES MANSFIELD.

Essex ss. August 27, 1817. Then James Mansfield made oath to the truth of the foregoing deposition by him subscribed.

Before LONSON NASH, Jus. Pacis.

IX.

I. JOHN JOHNSTON, jun. of Gloucester, in the County of Essex, of the age of seventeen years, depose and say : That on the evening of the seventeenth day of August, A. D. 1817, between the hours of eight and nine o'clock, while passing from the shore in a boat, to a vessel lying in the harbour in said Gloucester, I saw a strange marine animal, that I believe to be a serpent, lying extended on the surface of the water. His length appeared to be fifty feet at least, and he appeared straight, exhibiting no protuberances. Capt. John Corliss and George Marble were in the boat with me. We were within two oars length of him, when we first discovered him, and were rowing directly for him. We immediately rowed from him, and at first concluded to pass by his tail ; but fearing we might strike it with the boat, concluded to pass around his head, which we did, by altering our course. He remained in the same position, till we lost sight of him. We approached so near to him that I believe I could have reached him with my oar. There was not sufficient light to enable me to describe the animal.

JOHN JOHNSTON, jun.

Essex ss. August 25, 1817. Personally appeared John Johnston, jr. and made oath that the foregoing deposition, by him subscribed, is true according to his best knowledge and belief.

Before LONSON NASH, Jus. of Peace.

X.

I, WILLIAM B. PEARSON of Gloucester, in the County of Essex, merchant, depose and say: That I have, several times, seen a strange marine animal, that I believe to be a serpent, of great size. I have had a good view of him, only once, and this was on the 18th of August, A. D. 1817. I was in a sail boat, and when off Webber's cove (so called) in the harbour of said Gloucester, I saw something coming out of the cove; we hove to, not doubting but that it was the same creature that had been seen several times in the harbour, and had excited much interest among the inhabitants of Gloucester. James P. Collins was the only person with me. The serpent passed out under the stern of our boat, towards *Ten Pound Island*; then he stood in towards us again, and crossed our bow. We immediately exclaimed, 'here is the snake!' From what I saw of him, I should say that he was nothing short of seventy feet in length. I distinctly saw bunches on his back, and once he raised his head out of water. The top of his head appeared flat, and was raised seven or eight inches above the surface of the water. He passed by the bow of the boat, at about thirty yards distance. His colour was a dark brown. I saw him at this time about two minutes. His motion was vertical. His velocity at this time was not great; though at times, I have seen him move with great velocity, I should say at the rate of a mile in three minutes, and perhaps faster. His size I judged to be about the size of a half barrel. I saw Mr. Gaffney fire at him, at about the distance of thirty yards. I thought he hit him, and afterwards he appeared more shy. He turned very short, and appeared as limber and active as the eel, when compared to his size. The form of the curve when he turned in the water, resembled a staple; his head seemed to approach towards his body for some feet; then his head and tail appeared moving rapidly, in opposite directions, and when his head and tail were on parallel lines, they appeared not more than two or three yards apart.

Q. At what time of the day was this?

A. Between the hours of five and six, in the afternoon.

Q. How many distinct portions of it were out of water at one time?

A. Ten or twelve distinct portions.

Q. Can you describe his eyes and mouth?

A. I thought and believe, that I saw his eye at one time, and it was dark and sharp.

Q. How did its tail terminate?

A. I had not a distinct view of his tail; I saw no bunches towards, what I thought, the end of his tail, and I believe there were none. From where I judged his navel might be, to the end of his tail, there were no bunches visible.

WILLIAM B. PEARSON.

Essex ss. August 27, 1817. Then William B. Pearson made oath to the truth of the above.

Before LONSON NASH, Jus. of Peace.



XI.

SEWELL TOPPAN, master of the schooner *Laura*, declares: That on Thursday morning the 28th day of August, at about 9 o'clock A. M. at about two miles, or two and half miles east of the eastern point of Cape Ann, being becalmed, I heard one of my men call to the man at helm, "what is this coming towards us;" being engaged forward, I took no further notice till they called out again—I then got on top of the deck load, at which time I saw a singular kind of animal or fish, which I had never before seen, passing by our quarter, at distance of about forty feet, standing along shore. I saw a part of the animal or fish ten or fifteen feet from the head downwards including the head; the head appeared to be size of ten-gallon keg, and six inches above the surface of the water. It was of a dark colour. I saw no tongue, but heard William Somerby and Robert Bragg, my two men, who were with me, call out, "look at his tongue." The motion of his head was sideways and quite moderate; the motion of the body, up and down. I have seen whales very often; his

motion was much more rapid than whales, or any other fish I have ever seen ; he left a very long wake behind him ; he did not appear to alter his course in consequence of being so near the vessel. I saw him much less time than either of the others, and not in so favourable a position to notice his head.

I have been to sea many years, and never saw any fish that had the least resemblance to this animal. Judging from what I saw out of water, I should judge the body was about the size of a half barrel in circumference.

SEWELL TOPPAN.

Suffolk ss. Boston, September 1, 1817. Personally appeared Capt. Sewell Toppan, and made solemn oath, that the foregoing declaration, by him subscribed, is true.

Before me, Jos. MAY, Jus. Pacis.

XII.

ROBERT BRAGG, of Newburyport, mariner, of the schooner *Laura* of Newburyport, Sewell Toppan master, testifies : That on Thursday last, about ten o'clock A. M. coming in said schooner, bound from Newburyport to Boston, off Eastern point, (Cape Ann) about a mile and a half from the shore, I being on deck, the vessel being becalmed, looking at the windward, I saw something break the water, and coming very fast towards us ; I mentioned it to the man at helm, William Somerby ; the animal came about 28 or 30 feet from us, between the vessel and the shore, and passed very swiftly by us ; he left a very long wake behind him. About six inches in height of his body and head were out of water, and as I should judge about 14 or 15 feet in length. He had a head like a serpent, rather larger than his body and rather blunt ; did not see his eyes ; when astern of the vessel about 30 feet, he threw out his tongue about two feet in length ; the end of it appeared to me to resemble a fisherman's harpoon ; he raised his tongue several times perpendicularly, or nearly so, and let it fall again. He was in sight about ten minutes. I think he moved

at the rate of 12 or 14 miles an hour; he was of a dark chocolate colour, and from what appeared out of water I should suppose he was about two and a half feet in circumference; he made no noise; his back and body appeared smooth; a small bunch on each side of his head, just above his eyes; he did not appear to be at all disturbed by the vessel; his course was in the direction for the Salt Islands; his motion was much swifter than any whale that I have ever seen, and I have seen many—did not observe any teeth; his motion was very steady, a little up and down.

To this account I am willing to make oath.

ROBERT BRAGG.

XIII.

I, WILLIAM SOMERBY of the schooner *Laura*, testify and say: That on Thursday last about 10 o'clock, A. M. as I was coming in said schooner from Newburyport, bound to Boston, off Brace's cove, a little eastward of Eastern point, (Cape Ann) about two miles from land, the sea calm, I was at helm. Robert Bragg, one of the crew, asked me if that was not the snake coming, pointing out a break in the water, south of us; a strange animal of the serpent form passed very swiftly by us—the nearest distance I should judge to be between 30 and 40 feet—the upper part of his back and head was above water—the length that appeared was about 12 or 15 feet, his head was like a serpent's, tapering off to a point. He threw out his tongue a number of times, extended about two feet from his jaws—the end of it resembled a harpoon—he threw his tongue backwards several times over his head, and let it fall again—I saw one of his eyes as he passed; it appeared very bright, and about the size of the eye of an ox. The colour of all that appeared was very dark, almost black. He did not appear to take any notice of the vessel, and made no noise. There appeared a bunch above the eye—Should judge him to be about two and a half feet in circumference. Have often seen whales at sea. The motion of this animal was much swifter than that of any whale. The motion of the body was rising and

falling as he advanced, the head moderately vibrating from side to side. The colour of his tongue was a light brown.

To this account I am willing to make oath.

WILLIAM SOMERBY.

Commonwealth of Massachusetts, August 30, 1817. Then appeared Robert Bragg and William Somerby, and made oath to the truth of the above declarations, by them respectively subscribed.

Before me, Jos. MAY, Jus. Pacis.

XIV.

Boston, September 2, 1817.

SIR,

YOUR letter of the 28th ult. to the Committee of the Linnæan Society, and the accompanying depositions, were duly received, and were yesterday communicated to the Society. The committee are greatly obliged to you for your ready compliance with their request. In these sentiments the Society unite, and I am charged with the agreeable office of communicating to you their vote of thanks for your very acceptable labours. What you have thus accomplished will go far in giving some precise and accurate conceptions on a subject, peculiarly exposed to exaggeration and mistake. This evidence, with some additional documents, will probably be published. The Committee will not make their final report on the subject of their commission until evidence shall be procured respecting some other reputed appearances of like description, particularly one at Plymouth in 1815.

We have been informed that the animal at Gloucester was once seen, and it was said by a woman, lying dormant very near the shore. The Committee wished this intimation to be given to you, that if it should point to any material circumstances, the evidence might be taken.

The last we hear of the object of our inquiry is of his appearance off Eastern point on the 28th ult. This we gather from

the testimony of Capt. Toppan, and his crew, of the schooner Laura, coming from Newburyport to Boston.

It appears by your letter, that you had sight of the animal. A letter from you, giving a detailed account of your observations, would be particularly acceptable.

We understand that a gentleman in Gloucester, (Capt Beach,) has a drawing, supposed to be a pretty good representation of the animal. Some information respecting this drawing would be agreeable ; how far it is considered by those who had the best view of the animal as a correct representation, and whether the person possessing it would be disposed to permit an engraving from it to be annexed to the publication of the evidence, and on what terms.

Yours very respectfully,

JNO. DAVIS.

XV.

Gloucester, September 9, 1817.

SIR,

YOUR favour of the second inst. has been received. The vote of thanks of the Linnæan Society for my services was highly gratifying to me, not simply on account of the high consideration I entertain for the members of that laudable institution ; but likewise for the agreeable manner, and respectable channel, through which their vote of thanks was communicated to me.

I have seen and conversed with the woman, who was said to have seen the serpent dormant on the rocks, near the water, to whom you refer in yours ; but she can give no material evidence. She says that she saw something, resembling a large log of wood, on the rocks, on the extreme eastern point of Ten Pound island, (a small island in our harbour,) resting partly on the rocks, and partly in the water. The distance was about half a mile. She took a glass, looked at the object, and saw it move. Her attention was for a short time arrested, by some domestic avocation, and when she looked for the object again, it had disappeared.

You request a detailed account of my observations, relative to the serpent. I saw him on the fourteenth ultimo, and when nearest, I judged him to be about two hundred and fifty yards from me. At that distance I judged him (in the largest part) about the size of a half barrel, gradually tapering towards the two extremes. Twice I saw him with a glass, only for a short time, and at other times, with the naked eye, for nearly half an hour. His colour appeared nearly black—his motion was vertical. When he moved on the surface of the water, the track in his rear was visible, for at least half a mile.

His velocity, when moving on the surface of the water, I judged was at the rate of a mile in about four minutes. When immersed in the water, his speed was greater, moving, I should say, at the rate of a mile in two or at most three minutes. When moving under water, you could often trace him by the motion of the water, on the surface, and from this circumstance I conclude he did not swim deep. He apparently went as straight through the water, as you could draw a line. When he changed his course, it diminished his velocity but little—the two extremes that were visible appeared rapidly moving in opposite directions, and when they came parallel, they appeared not more than a yard apart. With a glass, I could not take in, at one view, the two extremes of the animal, that were visible. I have looked at a vessel at about the same distance, and could distinctly see forty five feet. If he should be taken, I have no doubt that his length will be found seventy feet, at least, and I should not be surprised, if he should be found one hundred feet long. When I saw him I was standing on an eminence, on the sea shore, elevated about thirty feet above the surface of the water, and the sea was smooth.

If I saw his head, I could not distinguish it from his body; though there were seafaring men near me, who said that they could distinctly see his head. I believe they spoke truth; but not having been much accustomed to look through a glass, I was not so fortunate.

I never saw more than seven or eight distinct portions of him above the water, at any one time, and he appeared rough;

though I supposed this appearance was produced by his motion. When he disappeared, he apparently sunk directly down like a rock.

Capt. Beach has been in Boston for a week past, and I am informed that he is still there. An engraving from his drawing of the serpent has been, or is now, making in Boston; but I have not been able to ascertain how far his drawing is thought a correct representation.

Respectfully, Sir,

your most ob't,

LONSON NASH.

HON. JOHN DAVIS.

XVI.

Boston, September 1, 1817.

SIR,

AT a meeting of the Linnæan Society, on the 18th ultimo, the subscribers were appointed a Committee for the purpose of collecting any evidence which may exist respecting a remarkable animal, denominated a *Sea Serpent*, reported to have been recently seen in and near the harbour of Gloucester. The Committee have procured evidence from Gloucester, which they are prepared to report to the Society, and this evidence is of such a character, that they have thought it expedient to extend their inquiry to other reported appearances of a similar nature on our coasts. An appearance of this sort is mentioned as having been noticed by some persons at Plymouth two or three years since. We would ask your assistance in procuring the evidence on this subject.

Your connexion with the Society seems to authorize the request for your assistance in having the evidence on this subject, which may exist at Plymouth, properly taken and transmitted; but separately from any such claim, we know your habitual readiness to aid in any investigation in natural science. This subject is now of general interest among us, and will probably be so abroad. Any co-operation which you may wish from magis-

trates and intelligent gentlemen at Plymouth, we doubt not will be readily afforded you. We shall suspend our final report to the Society, until your communication shall be received.

Yours respectfully and

with esteem,

JOHN DAVIS,	} Committee.
JACOB BIGELOW,	
FRANCIS C. GRAY,	

Mr. SAMUEL DAVIS, *Plymouth.*

XVII.

Plymouth, Oct. 2, 1817.

GENTLEMEN,

INCLOSED is the deposition duly authenticated of Capt. E. Finney of this town, descriptive of an unusual animal, which was seen by him in the outer harbour of Plymouth, in June 1815. Capt Finney lives a few miles from town, and is much engaged in business, which must apologize for the delay that has followed, since the receipt of your letter of the first of September. His deposition is impartial and unbiassed—and agrees uniformly with his first declarations in 1815—besides he has not read, whatever he may have heard, of the Cape Ann descriptions; he has been from his youth accustomed to a seafaring life—in the fishing employ, and in foreign voyages—has frequently seen whales, and almost every species of fish.

The drawing on the other page (made by me) I have shewn to Capt. Finney, who says it illustrates his conceptions on the subject exactly. All your questions were asked him, and when his replies are negative, such as gills, breathing holes, &c. &c. it must not be inferred that such things were not displayed—but only that he did not see them, &c. Certain house carpenters, who were at work on a building near the spot, also saw it; as well as many others—these persons dwell with emphasis on the long and distinct *wake* made in the water by the passage of the fish.—As

to the point of time, it must have been from known data between the 18th and 25th of June. And I would remark, that this is exactly the season when the first setting in of mackerel occurs in our bay.

Yours respectfully,

S. DAVIS.

Hon. J. DAVIS, }
Dr. J. BIGELOW, } *Committee of the Lin-*
Mr. F. C. GRAY, } *nean Society.*

XVIII.

I, ELKANAH FINNEY of Plymouth, in the County of Plymouth, Mariner, testify and say : That about the twentieth of June A. D. 1815, being at work near my house, which is situated near the sea shore in Plymouth, at a place called Warren's cove, where the beach joins the main land ; my son, a boy, came from the shore and informed me of an unusual appearance on the surface of the sea in the cove. I paid little attention to his story at first ; but as he persisted in saying that he had seen something very remarkable, I looked towards the cove, where I saw something which appeared to the naked eye to be drift sea weed. I then viewed it through a perspective glass, and was in a moment satisfied that it was some aquatic animal, with the form, motion and appearance of which I had hitherto been unacquainted. It was about a quarter of a mile from the shore, and was moving with great rapidity to the northward. It then appeared to be about thirty feet in length ; the animal went about half a mile to the northward ; then turned about, and while turning, displayed a greater length than I had before seen ; I supposed at least an hundred feet. It then came towards me, in a southerly direction, very rapidly, until he was in a line with me, when he stopped, and lay entirely still on the surface of the water. I then had a good view of him through my glass, at the distance of a quarter of a mile. His appearance in this situation was like a string of buoys. I saw perhaps thirty or forty of these protu-

berances or bunches, which were about the size of a barrel. The head appeared to be about six or eight feet long, and where it was connected with the body was a little larger than the body. His head tapered off to the size of a horse's head. I could not discern any mouth. But what I supposed to be his under jaw had a white stripe extending the whole length of the head, just above the water. While he lay in this situation, he appeared to be about a hundred or a hundred and twenty feet long. The body appeared to be of a uniform size. I saw no part of the animal which I supposed to be a tail. I therefore thought he did not discover to me his whole length. His colour was a deep brown or black. I could not discover any eyes, mane, gills, or breathing holes. I did not see any fins or legs. The animal did not utter any sound, and it did not appear to notice any thing. It remained still and motionless for five minutes or more. The wind was light with a clear sky, and the water quite smooth. He then moved to the southward; but not with so rapid a motion as I had observed before. He was soon out of my sight. The next morning I rose very early to discover him. There was a fresh breeze from the south, which subsided about eight o'clock. It then became quite calm, when I again saw the animal about a mile to the northward of my house, down the beach. He did not display so great a length as the night before, perhaps not more than twenty or thirty feet. He often disappeared, and was gone five or ten minutes under water. I thought he was diving or fishing for his food. He remained in nearly the same situation, and thus employed, for two hours. I then saw him moving off, in a northeast direction, towards the light house. I could not determine whether its motion was up and down, or to the right and left. His quickest motion was very rapid; I should suppose at the rate of fifteen or twenty miles an hour. Mackerel, manhaden, herring, and other bait fish abound in the cove, where the animal was seen.

ELKANAH FINNEY.

Plymouth ss. October 2, 1817. The above named Elkanah Finney appeared and made oath to the truth of the foregoing statement, by him subscribed, before me,

NATHANIEL M. DAVIS, Jus. Peace.

XIX.

Bath, September 17, 1817.

DEAR SIR,

SUPPOSING the interests of natural science may be promoted, and some light thrown on a subject, which receives, as it deserves, much attention ; and understanding lately from Dr. Vaughan of Hallowell, and Mr. Professor Farrar of Cambridge. that the Linnaean Society is prosecuting researches respecting it, I make no other apology for communicating to you the following statements in reference to the Sea Serpent of our coasts.

They consist of extracts from some MS. Notes on the District of Maine, which I have been in the habit of making ever since I have resided in the country, and I shall transcribe literally, in order to communicate with greater accuracy.

“June 28th, 1809. The Rev. Mr. Abraham Cummings,” who has been much employed in Missions in the District of Maine, and navigated his own boat among the islands, &c. in the discharge of his duty, “informs me,” in conversation, which was immediately written from his lips, “that in Penobscot bay has been occasionally seen within these thirty years, a Sea Serpent, supposed to be about sixty feet in length, and of the size of a sloop’s mast. Rev. Mr Cummings saw him, in company with his wife and daughter, and a young lady of Belfast, Martha Spring ; and judged he was about three times the length of his boat, which is twenty three feet. When he was seen this time he appeared not to notice the boat, though he was distant, as nearly as could be ascertained, but about fifteen rods. Mr. Cummings observes, that the British saw him in their expedition to Bagaduse ; that the inhabitants of Fox and Long islands have seen such an animal, and that a Mr. Crocket saw two of them together about twenty two

years since. When he was seen by the inhabitants of Fox island, two persons were together at both times. People also of Mount Desert have seen the monster. One of those which were seen by Mr. Crocket was smaller than that seen by Mr. Cummings, and their motion in the sea appeared to a perpendicular winding, and not horizontal. The British supposed the length of that, which they saw, to be three hundred feet, but this Mr. Cummings imagines to be an exaggeration. A gentleman of intelligence (Rev. Alden Bradford of Wiscasset, now Secretary of the Commonwealth,) inquired of Mr. Cummings whether the appearance might not be produced by a number of porpoises following each other in a train; but Mr. Cummings asserts, that the animal held his head out of water about five feet till he got out to sea; for when seen he was going out of the bay, and Mr. Cummings was ascending it. The colour was a bluish green about the head and neck, but the water rippled so much over his body that it was not possible to determine its tint. The shape of the head was like that of a common snake, flattened, and about the size of a pail. He was seen approaching, passing, and departing. Till this, Mr. Cummings was as incredulous in respect to its existence, as many of his neighbours. The weather was calm, and it was the month of August, in which month, Mr. Cummings remarks, that, as far as he has heard, the serpent makes his appearance on the coast."

I am inclined to suppose that Mr. Cummings' account is that, which in one of the public papers was lately alluded to, as having been communicated to the American Academy of Arts and Sciences, but mislaid.

"Aug. 23, 1809. Mr. Charles Shaw, (then of Bath, now an attorney in Boston,) informed me, that a Capt. Lillis, with whom he had sailed, observed cursorily in conversation, that he had seen off the coast a very singular fish; it appeared, said he, more like a snake than a fish, and was about forty feet long. It held its head erect, had no mane, and looked like an ordinary serpent. He asked Mr Shaw if he had ever seen, or read, or heard of such an animal."

About two years after hearing this, while on a journey to Indian Old town, as one of the Massachusetts Commissioners to induce the Indians to cultivate their lands, I had opportunity to make further inquiry, and find in my journal the following entry.

"Sept. 10, 1811. Have heard to-day further testimony respecting the Sea Serpent of the Penobscot. A Mr. Staples of Prospect, of whom I inquired as I passed, was told by a Mr. Miller, of one of the islands of the bay, that he had seen it; and 'it was as big as a sloop's boom, and about sixty or seventy feet long.' He told me also that about 1780, as a schooner was lying at the mouth of the river, or in the bay, one of these enormous creatures leaped over it between the masts—that the men ran into the hold for fright, and that the weight of the serpent sunk the vessel 'one streak,' or plank. The schooner was of about eighteen tons."

These extracts I put into your hands, dear sir, without any comment. If they shall tend to increase the evidence of facts, on which the Linnæan Society is seeking information, you will make of them what use is deemed expedient. It is, however, proper to suggest, that the Rev. Mr. Cummings can probably furnish more testimony on the subject, although I attempted to elicit from him what he possessed. He is now, I believe, on mission, (with a boat obtained in this town,) at the Grand Menan, or in its vicinity.

With great respect,

Your, and the Society's obed't servant,

WILLIAM JENKS.

Hon'ble JUDGE DAVIS,
President of the Linnæan Society.

XX.

THE account given by Pontoppidan of the Sea Snake said to have been often seen near the coast of Norway, agrees in so many particulars with the preceding depositions and statements, that your Committee think proper to lay it before you, as affording additional evidence of the existence of the animal, described in

them; since they display coincidences with that account apparently too close and numerous to be attributed to mere accident, and beyond any reasonable suspicion of design. The work of Pontoppidan is hardly known in this country, and the extracts from it in the Cyclopaedia of Dr. Rees, and in Guthrie's Geography, state but few of the peculiarities, in which this coincidence is observed; and mingle with these few, several traits ascribed by Pontoppidan to a different animal, none of which agree with any statement in our depositions.

Extracts from the Natural History of Norway, by Pontoppidan, Bishop of Bergen, translated from the Danish. London, 1755. Part 2. From p. 196 to p. 207.

"This creature, particularly in the North Sea, continually keeps himself at the bottom of the sea, excepting in the months of July and August, which is their spawning time; and then they come to the surface in calm weather, but plunge into the water again, so soon as the wind raises the least wave."—"I have questioned its existence myself till that suspicion was removed by full and sufficient evidence from credible and experienced fishermen and sailors in Norway; of which there are hundreds, who can testify that they have annually seen them. All these persons agree very well in the general description."

"In all my inquiry about these affairs, I have hardly spoke with any intelligent person, born in the Manor of Nordland, who was not able to give a pertinent answer, and strong assurances of the existence of this fish: and some of our north traders, that come here every year with their merchandize, think it a very strange question, when they are seriously asked whether there be any such creature; they think it as ridiculous as if the question was put to them whether there be such fish as eel or cod."

The author then records a letter from the honourable Lawrence de Ferry, Captain in the Navy; which is as follows:

"MR. JOHN REUTZ.

"The latter end of August, in the year 1746, as I was on a voyage, in my return from Trundheim, in a very calm and hot

day, having a mind to put in at Molde, it happened that when we were arrived with my vessel within six English miles of the aforesaid Molde, being at a place called Jule-Næss, as I was reading in a book, I heard a kind of murmuring voice from amongst the men at the oars, who were eight in number, and observed that the man at the helm kept off from the land. Upon this I inquired what was the matter, and was informed that there was a Sea Snake before us. I then ordered the man at the helm to keep to the land again, and to come up with this creature, of which I had heard so many stories. Though the fellows were under some apprehensions, they were obliged to obey my orders. In the mean time this Sea Snake passed by us, and we were obliged to tack the vessel about in order to get nearer to it. As the snake swam faster than we could row, I took my gun, that was ready charged, and fired at it: on this he immediately plunged under the water. We rowed to the place where it sunk down, which in the calm might easily be observed, and lay upon our oars, thinking it would come up again to the surface; however it did not. When the Snake plunged down, the water appeared thick and red; perhaps some of the shot might wound it, the distance being very little. The head of this Snake, which it held more than two feet above the surface of the water, resembled that of a horse. It was of a greyish colour, and the mouth was quite black and very large. It had black eyes and a long white mane that hung down from the neck to the surface of the water.* Besides the head and neck, we saw seven or eight folds or coils of this Snake, which were very thick, and as far as we could guess, there was about a fathom distance between each fold. I related this affair in a certain company where there was a person of distinction present, who desired that I would communicate to him an authentic detail of all that happened; and for this reason two of my sailors, who were present at the same

* This statement is not absolute proof that the animal here described was different from that seen near Gloucester. For when the head was elevated above the water, the white colour of the neck, or the spray of the sea, might possibly have been mistaken for a mane.

time and place when I saw this monster, namely Nicholas Pederson Kopper, and Nicholas Nicholson Anglewigen, shall appear in court to declare on oath the truth of every particular herein set forth ; and I desire the favour of an attested copy of the said descriptions.

“ I remain, Sir, your obliged servant,

(Signed) L. DE FERRY.”

Bergen, 21 February, 1751.

“ After this the before named witnesses gave their corporal oaths, and with their finger held up according to law, witnessed and confirmed the aforesaid letter or declaration, and every particular set forth therein, to be strictly true. A copy of the said attestation was made out for the said Procurator Reutz, and granted by the recorder. That this was transacted in our Court of Justice we confirm with our hands and seals.”

“ Signed by A. C. DASS, *Recorder of Bergen*,
and by H. C. GARDNER, *First Burgher*.”

Pontoppidan then describes a monster with fins, seen by Mr. Egede, a Greenland missionary, and declares that it differs much from the Sea Snake, of which he has had the most consistent accounts ; he then returns to the Sea Snake and says :

“ Though one cannot have an opportunity of taking the exact dimensions of this creature, yet all that have seen it are unanimous in affirming, as far as they can judge at a distance, it appears to be the length of a cable, i. e. one hundred fathoms, or six hundred English feet ; that it lies on the surface of the water, when it is very calm, in many folds ; and that there are in a line with the head some small parts of the back to be seen above the surface of the water when it moves or bends. These at a distance appear like so many casks or hogsheads floating in a line with a considerable distance between them. Mr. Tuchsén of Heroe is the only person of the many correspondents, I have, that informs me he has observed the difference between the body and the tail of this creature as to thickness. It appears that this creature does not, like the eel or land snake, taper gradually to

a point, but the body, which looks to be as big as two hogsheads, grows remarkably small at once just where the tail begins. The head in all the kinds has a high and broad forehead, but in some a pointed snout, though in others that is flat, like that of a cow or horse, with large nostrils, and several stiff hairs standing out on each side like whiskers. They add that the eyes of this creature are very large, of a blue colour, and look like a couple of bright pewter plates. The whole animal is of a dark brown colour, but it is speckled and variegated with light streaks or spots, that shine like tortoise shell. It is of a darker hue about the eyes and mouth than elsewhere, and appears in that part a good deal like those horses, which we call Moors heads.—Those on our coast differ from the Greenland sea snakes, with regard to the skin, which is as smooth as glass, and has not the least wrinkle but about the neck, where there is a kind of mane, which looks like a parcel of sea weeds hanging down to the water. Some say it sheds its skin like the land snake. It seems the wind is so destructive to this creature, that, as has been observed before, it is never seen on the surface of the water, but in the greatest calm, and the least gust of wind drives it immediately to the bottom again. These creatures shoot through the water like an arrow out of a bow, seeking constantly the coldest places. I have been informed by some of our seafaring men that a cable would not be long enough to measure the length of some of them, when they are observed on the surface of the water in an even line. They say those round lumps or folds sometimes lie one after another as far as a man can see.”

“If any one inquires how many folds may be counted in a Sea Snake, the answer is, that the number is not always the same, but depends upon the various sizes of them; *five and twenty* is the greatest number I find well attested. Adam Olearius in his *Gottorf Musæum*, p. 17. writes of it thus: “A person of distinction from Sweden related here at Gottorf, that he had heard the Burgomaster of Malmoe, a very worthy man, say, that as he was once standing on the top of a high hill towards the North Sea, he saw in the water, which was very calm, a Snake, which

appeared at that distance to be as thick as a pipe of wine, and had twenty five folds. Those kind of Snakes only appear at certain times and in calm weather."

—

We have seen and heard sundry other statements of various authority relating to similar animals, said to have been seen at sea by different persons; but do not insert them in our report, because we consider the foregoing testimony sufficient to place the existence of the animal beyond a doubt; and because they do not appear so minute and so well authenticated as the preceding documents.

ACCOUNT

OF THE

SCOLIOPHIS ATLANTICUS.

Σκολιὸς, *flexuosus*, ὄφις, *serpens*.*

ABOUT four weeks after the foregoing depositions had been received, a serpent of remarkable appearance was brought from Gloucester to Boston, and exhibited as the progeny of the great serpent. It had been killed upon the sea shore by some labouring people of Cape Ann. Capt. Beach jun. the possessor, very liberally submitted it to examination, and permitted an opening to be made in the side for the inspection of its internal structure. The following appearances were the result of this examination.

External appearance.

The animal had the general form and external characters of a serpent; but was remarkably distinguished from all others of that class known to your Committee, by a row of protuberances along the back, apparently formed by undulations of the spine. From the back of the head to the first of these protuberances, was a distance of three inches and three fifths of an inch, during which the spine was straight. Between this place and the vent, its undulations were nearly regular, twenty four of these protuberances, about equally distant from each other, occupying the space between the neck and the vent. From the latter to the twenty fifth protuberance, the spine formed a straight line, of the length of one inch and nine tenths; its undulations there commenced again, and were continued quite to the extremity of the tail, forming sixteen more distinct protuberances. The size of these forty protuberances was proportioned to that of the body at the places, where they were respectively situated. The body

* Σκολίωσις, apud Hippocratem, *Spinæ distortio*.

could be bent with facility upward and downward as represented in Plate I. a circumstance not common to other serpents.* Those parts of the spine, which were straight, admitted much less motion in a vertical direction, than those, which were undulatory.

	<i>ft.</i>	<i>in.</i>
The length of the head was		$1\frac{3}{10}$
From the back of the head to the vent	2	$2\frac{4}{5}$
From the vent to the end of the tail		$7\frac{2}{5}$
Whole length	2	$11\frac{1}{2}$

The smallest circumference of the neck, one inch and a half. The circumference of the body over the largest protuberances $2\frac{4}{5}$ inches. The circumference of the body between the two largest protuberances $2\frac{9}{10}$ inches. The size of the body diminished suddenly at the vent, immediately beyond which the circumference of the tail was one inch and three fifths. The tail was round, and tapered very much, terminating in a point.

The head was rather larger than the neck, flattened, its anterior part pyramidal, rounded at the nose; the upper lip entire. The back part of the head was so much bruised that its original form was not easily distinguishable. In the fragments of the upper jaw were seen three slender recurved teeth; in those of one side of the under jaw seven similar teeth, and the sockets of three others. No venomous fangs were found. The tongue was bifid, each fork being nearly half an inch long. The nostrils, situated between the second and third plate from the nose, were large, and oval. Between the nostril and the eye was a longitudinal hollow, bounded beneath by the upper lip, above by a very prominent superciliary ridge, extending beyond the eye. The eye was very large, nearly round, its breadth apparently a little diminished by the superciliary ridge, jutting over it. The whole head was covered with plates, but those on the top of it were so much broken, that their number and form could not be perfectly ascertained. The under jaw was divided by a longitudinal fur-

* Ce mode d'articulation explique très bien le mouvement du corps des reptiles, qui, en général, s'exécute sur les côtés, et non de haut en bas, comme le représentent les peintres.

row, having a triangular scutella at its anterior extremity, and two rows of scutellæ on each side.

The body was covered with hexagonal flat scales, those on the back narrowest; the throat with three or four rows of small scales; the belly with a hundred and eighty plates; the tail with ninety three pairs of scutellæ. Over the vent was one pair of scutellæ; at its sides four pair, the scales opposite to which were smaller than those on any other part of the body.

The colour of the head and of the upper part of the body and tail was an uniform deep brown; that of the belly and under part of the tail a bluish lead colour, lightest in the middle. The whole of the under jaw and throat were white, which colour extended in a clouded streak some way down under the neck, and fore part of the belly.

In the general disposition of its colours, in the number, form, and arrangement of the scuta and scutellæ, this animal approaches most nearly to the Coluber Constrictor; from which however it is strikingly distinguished by its undulating back, by its body being larger in proportion to its length, and diminishing more suddenly at the vent, the tail shorter, the teeth much larger and more distant, and the colour brown instead of black.

This animal is probably amphibious, although it has not the flat tail of the Pelamides; nor did the examination of its exterior, enable us to discover any thing in its structure, peculiarly adapting it to a residence in the water, excepting only the remarkable facility of bending in a vertical direction. This motion, which may be observed in the leech, and various other aquatic animals, is quite as important as a horizontal one to an inhabitant of the ocean, and comparatively useless in an animal confined to the land.

Internal Structure.

The structure of the *spine* in this animal is very singular, and different from that of any serpent which we have seen, or known to be described. Its course throughout the greater part of the body is regularly undulating or flexuous, consisting of successive curves upward and downward. The structure of the different

vertebræ varies to accommodate itself to this configuration, so that the spine cannot be extended into a straight line without dislocation of its parts. In the portion of spinal column which we examined each curve consisted of about nine vertebræ. Each vertebra was articulated by a round head on its posterior extremity to a socket in the anterior extremity of the next.* It had five principal processes, one a spinous process; two anterior, and two posterior transverse processes. There were also smaller processes articulated with the ribs, and a sharp longitudinal prominence underneath. The spinous processes varied remarkably in shape and size, according to the part of the spine in which they were situated. Those occupying the top of the curve were very broad, and those of the bottom of the curve very narrow, the latter being not more than half the breadth of the former. The top of the spinous processes in the ascending or anterior half of each elevation of the back-bone projected considerably backward. In the descending half, on the contrary, they projected forward, so as to appear as if this part of the spine were inverted. The space between the spinous processes was very great, amounting to nearly two thirds of their longitudinal diameter; a circumstance which contributes very much to the vertical flexibility of the spine, being much greater than it is in the *Boa constrictor*, one of the most flexible serpents, as represented by Sir Everard Home in his comparative anatomy; or than it is in the *Coluber constrictor*, which your committee have examined. The two anterior transverse processes are long and sharp, and are received

* This is the reverse of what Cuvier asserts of serpents in general, in his learned work on comparative anatomy. He states that the tubercle is on the anterior, and the cavity on the posterior part of the vertebra. "*La partie antérieure du corps de la vertèbre présente un tubercule arrondi demi-sphérique; et la partie postérieure offre, au contraire, une cavité correspondante; de sorte que chacune des vertèbres est articulée en genou avec celle qui la suit, et avec celle qui la précède.*"—*Leçons d'anatomie comparée* I. 176.—We are induced to believe that in the above passage the terms anterior and posterior must have been misplaced. The tubercle, we think, always occupies the posterior part of the vertebra.

under, or pass within the two posterior transverse processes of the preceding vertebra. They differ in direction according to the place which they occupy. Those in the highest vertebræ pass obliquely downwards, and those in the lowest, obliquely upwards; as may be seen in the vertebræ *a* and *b* in *Fig. 6, Plate II.* The posterior transverse processes also grow broader and less oblique as the vertebræ descend. The whole connexion and proportion of the processes is such, that the greatest downward flexion takes place at the top of the curve, and the greatest upward flexion at the bottom; an arrangement admirably adapted to increase the power of the muscles which act in the vertical flexion of the spine.

The ribs are articulated by a double cavity to a small double headed process under the anterior transverse process of each vertebra. They differ in length and direction, those at the bottom of the curve being shorter and more spreading than those at the top, so that the lower extremities of the whole fall in a right line.

Muscles.—The principal muscles on the outside of the trunk consist of three strong dorsal muscles with oblique fibres continually arising from the vertebral processes, or ribs, and inserted by an aponeurosis into other bones of a similar kind. Below these is a broad thin lateral muscle or congeries of muscles, connected to the ribs only. These muscles according to their situation act in performing the various inflexions of the body.

On the inside of the ribs a series of their muscles was observed, arising from the bodies of the vertebræ, passing obliquely downwards and forward under three ribs and over the fourth, and afterwards inserted into ribs beyond. These muscles in conjunction with others, according to Sir Everard Home and other authors, act upon the ribs in serpents to assist their progressive motion on land.

Viscera.—The only part of the viscera, which the limited openings permitted us to examine, were a portion of the lung and œsophagus with the mesentery and blood vessels, also a small part of the stomach. The lung was a long cellular and tubular viscus, as in other serpents, but with this remarkable peculiarity. It was successively dilated and contracted so as to adapt itself to the cavities formed by the undulations of the spine. The œsophagus was also unequal, but without relation to the cavities of the spine, not being in contact with it. In the stomach was found a mass of scales, also the tail and part of the skin of a serpent of a different species, having all the scales carinate.

In regard to the use or final cause of the curvatures in the back-bone, which give so peculiar a character to this animal; it is obvious that two important ends are effected by it. These are an increase of *flexibility* and an increase of *strength* in *vertical motions*.

1. The flexibility is increased, because in any given length of body, there will be more joints in a crooked, than there would be in a straight spine, composed of vertebræ of the same dimensions.

2. The strength in vertical motions is increased, since the fulcrum formed by the highest articulation is more remote from the power applied by the lateral muscles, and the fulcrum formed by the lowest articulation is also more remote from the power applied by the dorsal muscles; than they would be if the spine pursued a straight and intermediate course.

The dorsal muscles, however, being bound down by an aponeurosis, so as to pursue nearly the course of the spine, are nearer their fulcrum and have less of this advantage than the lateral muscles, which are farther from their fulcrum; so that the greatest power is probably that which is exerted in the forward flexion or extension of the body. This power is the one which would be most useful to the animal in swimming at the surface of the water with a motion in any degree vertical.

Your committee considering this serpent* as nondescript, and as distinct from other genera of serpents in the flexuous structure of its spine, have deemed it necessary to constitute a new genus, founded on this peculiarity. They have adopted the descriptive name of *Scoliophis*, and have added the local specific name of *Atlanticus*. Compared with the genera of Linnæus and Lacepede its character will stand thus :

SCOLIOPHIS.—*Scuta on the belly, scutellæ on the tail, spine flexuous.*

Atlanticus.

SCOLIOPHIS.

The following documents relate to the appearance of this animal while living, and to the circumstances under which it was killed.

The deposition of GORHAM NORWOOD, of Gloucester.

I live in that part of the town of Gloucester, called *Sandy Bay*. On Saturday, the 27th day of September last, I was at work in a field near Loblolly cove, about a mile and a half from Sandy Bay village ; Mr. Colbey and his son were at work near me. The boy called out that there was a snake, and that it did not move like other snakes, and did not move fast. I went with Mr. Colbey immediately to the spot pointed out by the boy ; the snake had in the mean time taken shelter under a rock, which the boy observed, and pointed out to us. I turned over the rock and saw a snake coiled up ; at my approach with a pitchfork, he raised his head, and began to move. I immediately pierced him through with the pitchfork, and Mr. Colbey came up and bruised the head of the snake with a stone, which he threw at him and by which the Snake was killed. Upon examining the Snake, it struck us as being different from any we had ever seen, and it was concluded to carry it to the village of Sandy Bay. It was viewed by many people, it being a training day at that place, and all who viewed it, observed that they had never seen such a

* The specimen of the *Scoliophis* is now exhibiting by Capt. Beach, its possessor. It has been presented by him to the Linnæan Society, to be deposited in their cabinet, at the end of his exhibition.

Snake before. Snakes of different sorts, are frequently seen and killed in and about the roads and rocks of the town, and in this part of it. The spot where this Snake was killed, was about ten or twelve rods from the sea. He was between the sea and a pond of brackish water, which the sea water enters in heavy storms. Many of the persons who saw the Snake, suggested that it might be the progeny of the Sea Serpent, which had been so much talked of, and which was said to have been seen near the cove, where this snake was killed. The Snake was sold to Mr. John Gott, of Sandy Bay, who, I understand, afterwards delivered him to Capt. Beach, jun.

GORHAM NORWOOD.

On this seventh day of October, A D. 1817, the above-named Gorham Norwood personally appeared, and made solemn oath to the truth of the affidavit above, by him subscribed.

Before me, JAMES SAVAGE, Justice of Peace.

Gloucester, October 8, 1817.

DEAR SIR,

YOUR kind favour of the 30th ultimo has been received.— I presume the young serpent, that I supposed to be the progeny of the remarkable Sea Serpent, that was so often seen in the harbour, in this place, has been minutely examined by the members of the Linnæan Society. The young serpent ought to undergo the severest scrutiny, and I doubt not, the investigation, by your society, will be thorough and satisfactory to the public.

That I might be enabled to communicate the circumstances attending the capture of the young serpent more minutely, on Friday last, I went to view the place where he was taken, accompanied by Mr. Colbey. He pointed out the spot, where he was first seen by his son, and the place where killed. My statement to you, on the 28th ultimo, relative to the *distance* from the sea, where the young serpent was killed, was not correct. I was informed, by Capt. Beach, that he was within twelve or fourteen feet of the sea, when killed; but I paced the ground, and

and found the distance, from high water mark, one hundred and fifty paces. He lay extended by some whortleberry bushes, when first discovered. The boy called to his father (who was at four or five rods distance) to run, for he had never seen so strange a snake. Mr. Colbey ran, with a pitchfork in his hand, and with his fork, confined the serpent against some loose rocks; when the serpent exhibited the most violent temper. Twice he bit himself, held on, and shook, (to use Mr. Colbey's expression.) as one dog shakes another, when fighting. His tail seemed likewise a weapon of defence; for he struck the end of it against the fork handle several times. His motion was vertical; his progress was very slow, not near so fast as a man ordinarily walks. His progressive motion was produced, by first contracting, and then extending himself. When contracted, Mr. Colbey says, he was not more than one foot and half in length, and then the protuberances on his back were, at least, three times as large, as when extended. The young serpent was killed in a meadow, near Loblolly cove. Loblolly cove lies upon the eastern shore of Cape Ann, about west from Thatcher's island. This cove makes up about one hundred and fifty yards into the main land, in a southwesterly direction. This cove is not much frequented; the nearest dwelling houses are distant from the cove, from one fourth, to half a mile. Doctor Kittredge has been out of town; or I should have answered your letter sooner. He was the writer of the article in the Patriot, to which you refer, in which the great aquatic serpent is represented to have been seen, on shore, here. He says it was general report, and he supposed there was no doubt of the fact. I requested him to get some evidence of this fact, if possible; but he informs me that he has not been able to; though he will still make further inquiry. I do not believe that he was ever seen on land here; though this, and a thousand other rumours, have been in circulation, relative to the mammoth prodigy. Should it hereafter be ascertained, that the great serpent has been seen on land here, I shall take the earliest opportunity to inform you of a fact, so important.

Respectfully, dear sir,

Your most obedient,

HON. JOHN DAVIS, *Boston.*

LONSON NASH.

*A few remarks on the question, whether the great
Serpent, seen in the harbour of Gloucester, be
the Scoliophis Atlanticus, will close our report.*

THE appearance at nearly the same time and place of two creatures, agreeing with each other in certain important and conspicuous particulars, disagreeing in the most remarkable of these particulars with other animals of their class; and between whom no difference, but that of size, has been discovered, must naturally lead to a conjecture that they are of the same species. The evidences in favour of this supposition are so considerable, that your Committee would not be justified in neglecting to direct your attention to them.

The principal circumstances which encourage the idea that these animals possess the same structure and configuration are the following.

The appearances noticed in the depositions, relative to the great Serpent, except in the few instances of contradiction, all of them agree with, and are accounted for, by a structure like that of the Scoliophis. The protuberances seen above water might be produced in two ways. By bunches on the back projecting out of the water, while the animal was at rest, as in No. 8 and No. 18, or by vertical undulations of the body when in motion, as stated in Nos. 2, 5, 6, 7, 8, and 10. The supposition that both these appearances have been presented at different times, is the most satisfactory mode of accounting for the variety of testimony with regard to the *number, size, and distance* of these protuberances. The other facts stated in relation to the form and general arrangement of colours in the large Serpent, apply sufficiently well to the Scoliophis. The shape of the head and proportion of the eye—the protuberance on the side of the head, just above the eye—the form of the mouth—the distance from the head to the commencement of the protuberances—the brown colour of the body, and the whitish colour of the under part of the head and neck—the disappearance of bunches from what was suppos-

ed to be the navel *towards* the tail—the tapering of the body toward the tail—its roundness, and great flexibility, are all points of the closest resemblance. These coincidences cannot be the effect of design, since all the depositions from Gloucester, relative to the great Serpent, were in the hands of your Committee before the Scoliophis was discovered.

Some other circumstances stated by the deponents, though not applying to the smaller serpent, are nevertheless easy to be accounted for. The prong or spear seen near the head of the animal when in motion, was probably the tongue. The shape of a harpoon ascribed to that organ was doubtless an optical illusion, occasioned by its rapid vibration ; and this, it is well known, is not the first instance of such a deception.

The structure of the Scoliophis is well suited to a residence in the water, being capable of various and complicated motions. It bends horizontally, as did the great Serpent, in the act of turning ; it bends vertically, as that animal was supposed to do, in the act of swimming ; and it might assume any compound and intermediate motion, which should be most effectual in propelling it through the water.

It is worthy of remark, that nearly all the circumstances with regard to the appearance of the great Serpent, stated by the deponents, as facts, agree with the structure of the Scoliophis. On the other hand, those stated as conjectures, such as these, that the whole belly was white, that the animal had a navel, and no bunches beyond that quite to the end of the tail, &c. almost uniformly disagree with it. This is what might naturally be expected from honest men testifying in regard to an object, with which they were but partially acquainted.

Supposing that the species of the two serpents is the same, it is not improbable that one is the progeny of the other. The Colubri without fangs, the tribe most nearly resembling the Scoliophis, are said by naturalists to be generally if not always oviparous, to deposit their eggs in the sand in the spring or the end of summer, and to abandon them. These eggs are hatched by the

heat of the sun often in less time than a month.* It will be remarked that the large serpents described in our accounts and depositions, were seen near the shore, and only in the month of August, excepting once at Plymouth in June.

The principal objections against the specific identity of these two animals are derived from the following circumstances.

1. Their disproportionate size. This however is not apparently greater than is found between the young and the full grown individuals of some other animals. The Boa constrictor may be mentioned as an instance.†

2. The one was seen only in the water and the other on land. This objection is lessened when we recollect that the eggs of amphibious animals are deposited on land. The large serpent may have visited the shore in the night or at other times. That it was an amphibious animal, dependent on respiration, is rendered probable by its general structure, and by its frequenting the surface of the water, often with its head elevated above it. The small serpent was found near the salt water, in a place, over which the sea breaks in stormy weather. Supposing it a young animal, it might have remained in the place where it was hatched, or it might occasionally have resorted to the shore from the water. We should not expect it to venture far from the shore,

* Les couleuvres peuvent pondre des œufs jusqu' à deux fois chaque année, savoir des les premiers jours du printems et vers la fin de l'été; et il faut souvent moins d'un mois pour que la chaleur du soleil fasse éclore leurs œufs enterrés dans le fumier ou dans le sable.

Daudin hist. des Reptiles, t. 6, p. 232.

† Les œufs du Devin (Boa constrictor) n'ont, en effet, que deux ou trois pouces dans leur plus grand diamètre. Tonte la matière dans laquelle le fœtus est renfermé, n'est donc que de quelques pouces cubes; et cependant, le serpent, lorsqu'il a atteint tout son développement, ne contient-il pas moins de quarante ou cinquante pieds cubes de matière.

Lacépède hist. des Serpens, t. 2, p. 135.

Il paroît que c'est a cette espèce qu'il faut rapporter les individus de quarante ou cinquante pieds de longueur.

Id. t. 2, p. 144.

Daudin cites from Merrem the description of a young Boa constrictor, whose whole length was fourteen inches and a half.

Daudin hist. des Reptiles, t. 5, p. 199.

until its increased size should afford it some security from becoming a prey to larger animals of the ocean.

The circumstance that no evidences of immaturity were observed in the *Scoliophis* might be considered as the source of a third objection, if it were not well known, that as serpents generally abandon their eggs, the young are perfect in all their parts, and capable of providing for their own subsistence immediately on being hatched.*

On the whole, as these two animals agree in so many conspicuous, important and peculiar characters, and as no material difference between them has yet been clearly pointed out, excepting that of size; the Society will probably feel justified in considering them individuals of the same species, and entitled to the same name, until a more close examination of the great Serpent shall have disclosed some difference of structure, important enough to constitute a specific distinction.

JOHN DAVIS,
JACOB BIGELOW,
FRANCIS C. GRAY.

Boston, 11th Oct. 1817.

* Lorsque les petits Serpens sont éclos, ou qu'ils sont sortis tout formés du ventre de leur mère, ils traînent seuls leur frêle existence; ils n'apprennent de leur mère, dont ils sont séparés, ni à distinguer leur proie, ni à trouver un abri; ils sont réduits à leur seul instinct.

Lacépède hist. nat. des Serpens, t. 1. p. 37.

One of the six general characteristics of Serpents, according to Daudin, is the following: "Des petits, qui au sortir de l'œuf, sont parfaitement semblables à leurs parens."

Daudin hist. des Reptiles, t. 5, p. 10.

POSTSCRIPT.

[After the completion of the foregoing report, the following article appeared in a New York paper.]

Rye-Neck, Oct. 21, 1817.

Silvanus Miller, Esq.

Sir, I observed in the *Columbian* of the 15th inst. a paragraph stating that an animal had been seen in Long Island sound, corresponding with the description of the serpent lately seen in Gloucester harbour. That communication probably resulted from some observations which I made to you, and several other gentlemen, on the subject alluded to. When I spoke of that occurrence, I had no idea that it would become the subject of newspaper remark; but since it has been publicly noticed, perhaps a more particular detail of the circumstances may not be deemed improper.

On Sunday, the 5th inst. at 10 o'clock A. M. while standing a few rods from my house on Rye-Neck, I observed at a small distance to the southward and eastward of Mr. Ezekiel Halsted's dwelling on Rye Point, and perhaps not more than a half mile from the shore, a long, rough, dark looking body, progressing rapidly up sound (towards New York) against a brisk breeze, and a strong ebb tide. Viewing it with my glass convinced me it was a large living animal.—His back, forty to fifty feet of which was seen above the surface of the water, appeared to be irregular, uneven, and deeply indented. I did not at this time remark that his head was more elevated above the water than the ridges or humps on his back. Some trees standing near the water, Rye Point soon intercepting my view of him, I hastened to a situation from which I obtained another sight of him, as he passed that part of the sound opposite Hempstead bay. At this time he appeared to be nearly in the middle of the sound—his body more depressed below and his head more elevated above the water, going with increased velocity in the direction of Sand's point, creating a swell before him not unlike that made by a boat towed rapidly at the stern of a vessel. From the time I first saw him till I lost sight of him, perhaps could not have exceeded ten minutes, in which short time he had gone probably not less than six or seven miles.

Understanding that Mr. James Guion, a gentleman of character and respectability, had seen what was supposed to be the same animal, I yesterday conversed with him on the subject. He states that on Friday the 3d inst. while on the point of land on the east side of the mouth of the Mamaroneck harbour, he saw at a little distance from the rocks, usually called the Scotch Caps, which lie at the extremity of Rye Point, a large animal going with great rapidity up sound. He judged his speed to be little or no less than a mile in a minute. He describes the irregularity and unevenness of his back, about fifty feet of which appeared above the surface of the water, much in the way in which I have done.

I was yesterday informed on creditable authority, that on the day on which I saw the above mentioned animal he was seen by some persons at or in the vicinity of the light house on Sand's Point.

That it was a sea animal of great bulk, to me is certain.—That it is what is usually called a Sea Serpent, and the same which appeared in Gloucester harbour, is only probable.

With much respect, Sir, yours, &c.

THOS. HERTTELL.

EXPLANATION OF THE PLATES.

PLATE I.

The *Scoliophis Atlanticus* copied from the specimen in possession of Capt. Beach. The dimensions of the animal, the number, size and proportion of the protuberances, are accurately preserved. The body is bent vertically to shew its flexibility in that direction.

a. a. Portions of the head and throat so far destroyed that their structure could not be ascertained.

PLATE II.

Fig. 1. Section of the body.

Fig. 2. Dissection of the same on the opposite side. *A. A. A.* Muscles of the back. *B.* Lateral muscles. *C.* Intercostal muscles.

Fig. 3. Inside view of the cavity of the ribs and spine, with the internal muscles crossing the ribs.

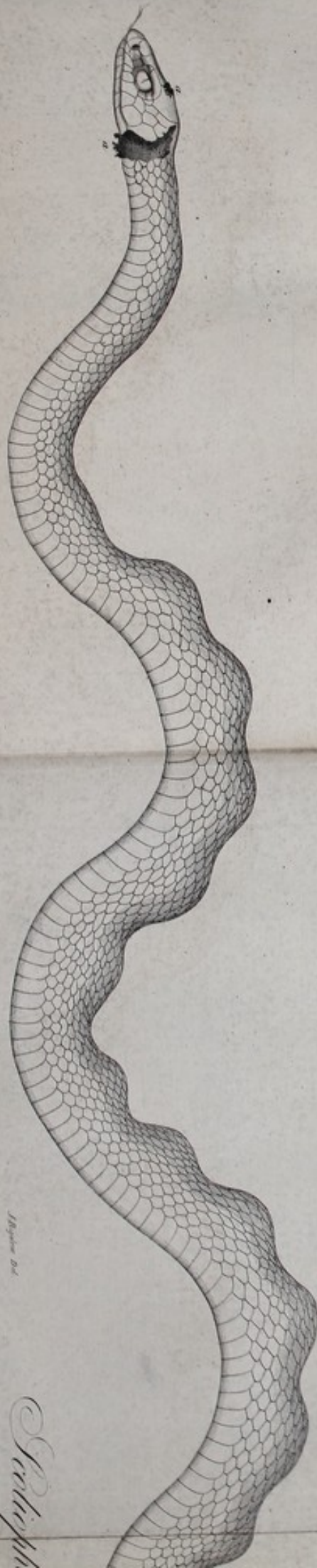
Fig. 4. Side view of a vertebra.

Fig. 5. Front view of the same.

Fig. 6. Portion of the spine, shewing the varieties of the vertebræ, and the direction of the ribs.

Fig. 7. Portions of viscera of the first section. *A.* The lungs, their inequalities corresponding to the cavities in the spine. *B.* The mesentery, which is attached on each side to the ribs. *C.* The great vein. *D.* The Œsophagus.

Fig. 8. Represents an opening in the throat. *A.* The trachea. *B.* The Œsophagus, with a blowpipe inserted into its cavity. *C.* Elastic, retractile filaments of the tongue. *D. D.* Extremities of the ribs.

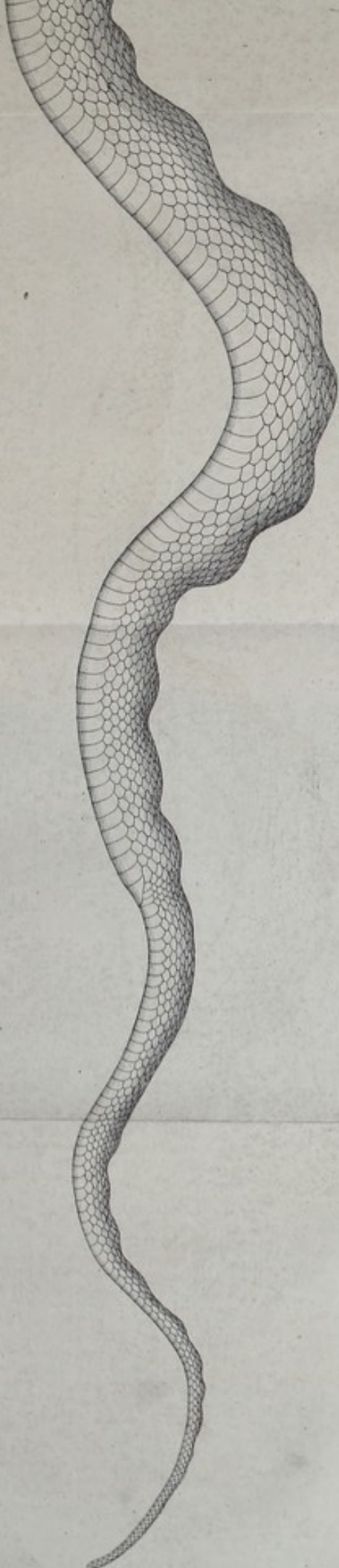


Scorpion Snake

Scorpion Snake

Chantrea

W. L. Brown, Jr.



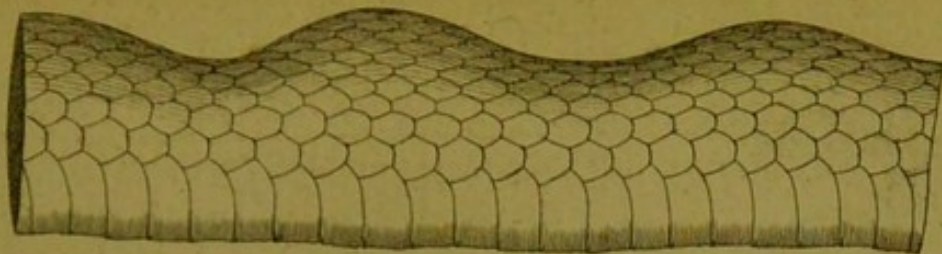


Fig. 1.

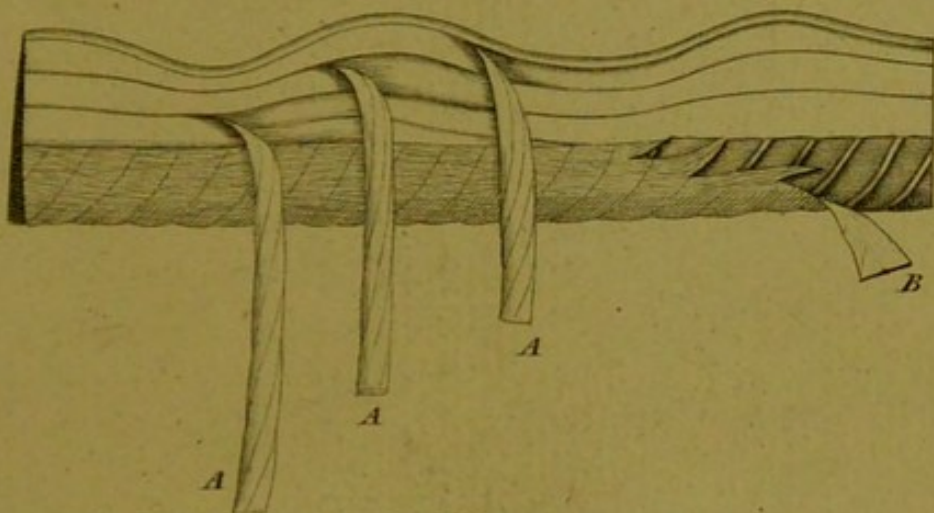


Fig. 2.

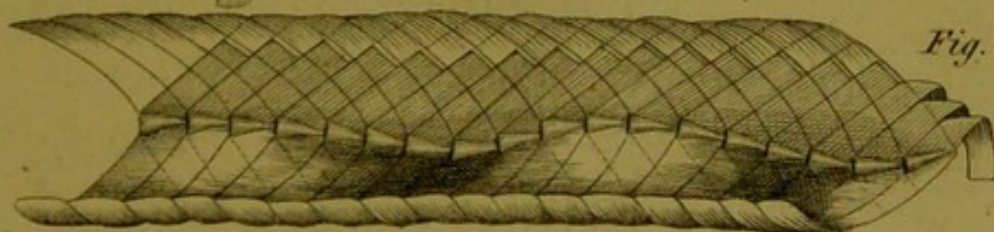


Fig. 3.

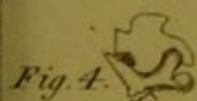


Fig. 4.



Fig. 5.

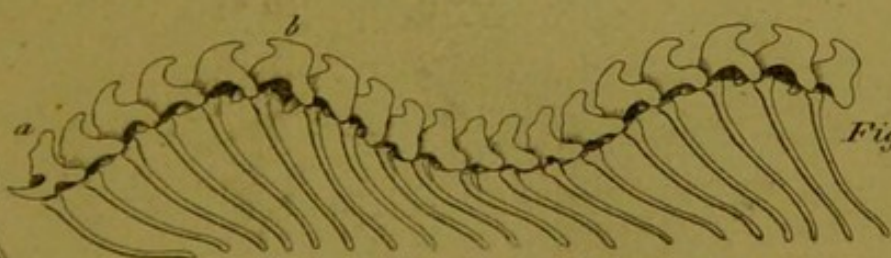


Fig. 6.

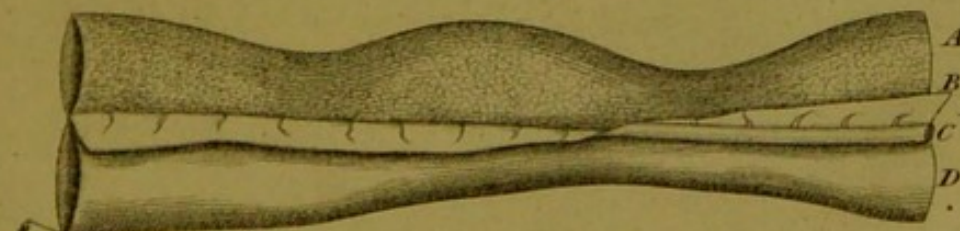


Fig. 7.

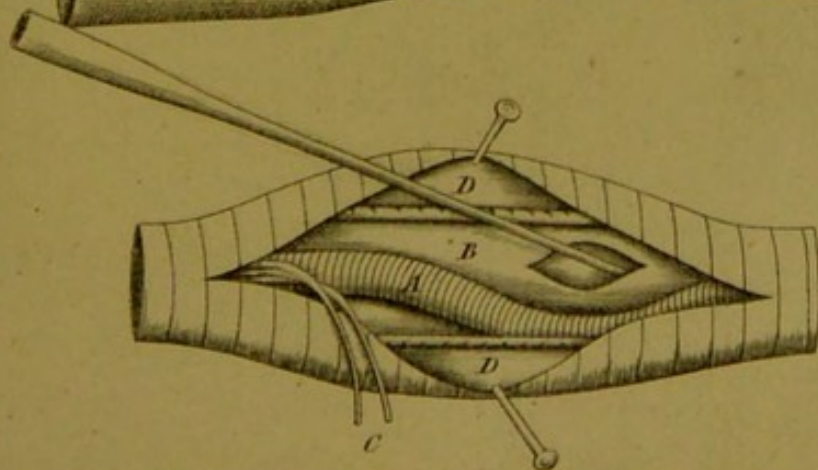


Fig. 8.

