

IX.

A Singular Distribution of some of the Nerves and Arteries in the Neck, and the top of the Thorax. Observed by GEORGE WILLIAM STEDMAN, M.D., late President of the Royal Medical Society of Edinburgh. (*With a Plate.*)

WHILE employed in dissecting the neck, in the Dissecting-room of the Royal Surgical Academy at Copenhagen, in the beginning of May 1823, I discovered a singular distribution of the nerves and arteries on the right side, which may not be uninteresting to the medical public.

The subject was a thin aged female. I had dissected the upper part of the neck with great care, when, after displaying the superior laryngeal nerve on the right side, I discovered that a great number of branches were sent off about the middle of the neck, from the trunk of the *nervus vagus*, some of which proceeded to the thyroid gland, while the largest were reflected a little up, and entered the larynx, in the same manner as the branches sent off from the recurrent nerve. Of the lowest filaments, some entered the trachea, while others were lost upon the back of it. Proceeding farther down, I could not at first find the right subclavian artery, and could only see the right carotid arising from the arch of the aorta. I dissected with the greatest care for the recurrent nerve, but I could not find it; to my surprise, however, I discovered the right subclavian artery coming from behind the œsophagus. I traced the *nervus vagus* a considerable way down in the thorax, in order, if possible, to discover the recurrent; but I could not find it. I then proceeded to dissect the other side of the neck. Here I found the recurrent nerve with great ease, and traced it from its origin to its termination in the larynx. I next dissected the arteries. The left subclavian and carotid were in their natural situations; but the right subclavian rose from the arch of the aorta behind, and a little to the left side of the left subclavian, and, forming an arch, pierced between the œsophagus and vertebral column, in the region of the first vertebra of the back, and then passed over the first rib on the right side.

It is probable that, in this case, the nerves coming directly from the trunk of the vagus, on the right side, performed the same function as the recurrent; for they were distributed very much in the same manner as the branches of that nerve. Na-

D^r STEDMAN'S CASE

Fig. 2.

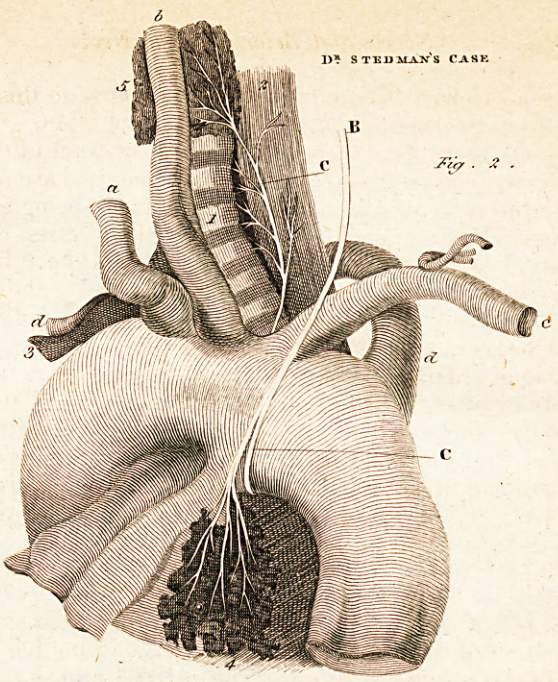
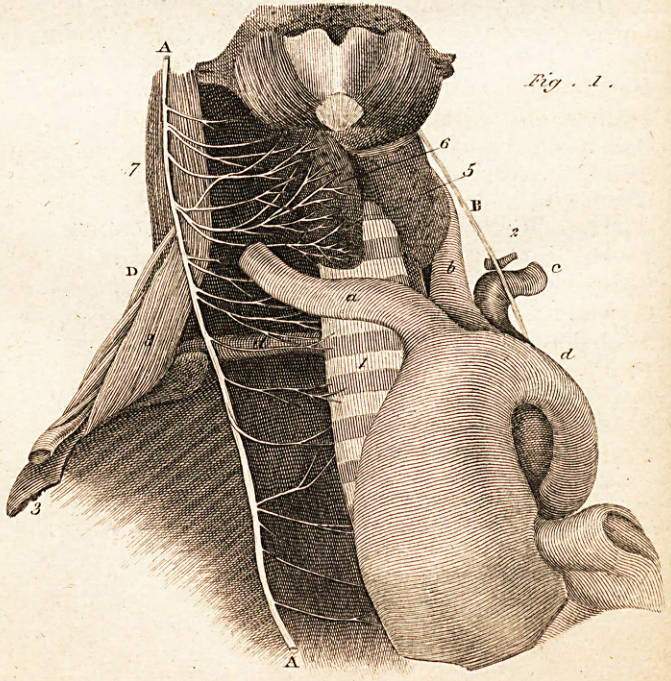


Fig. 1.



ture seems to have been forced to have recourse to this arrangement, from the singular situation of the subclavian.

I do not know if any other example of the want of the recurrent nerve is on record. Meckel says, that two are sometimes found; but he makes no mention of the nerve being altogether wanting. With regard to the course of the arteries, the deviation is not so rare; as the right subclavian has been frequently observed to come from the arch of the aorta on the left side; but in these cases, according to Meckel, it goes either before the trachea, or, what is more frequent, between the trachea and œsophagus. The drawings that are annexed were taken the second day after the dissection. I have compared them with the preparation which I presented to the Museum of the Royal Surgical Academy at Copenhagen, and can certify that they are correct in every thing but one particular, which is, that the artist has omitted to show the entrance of the nerve into the larynx, which I had distinctly traced.

Description of the Plate.

Fig. I. is a view of the right side, and shows the anomalous distribution of the nerve; Fig. II. is a view of the left side, and displays the relative situation of the arterial trunks. The letters on both figures refer to the same objects.

A, The right *nervus vagus*, with its thyroid, tracheal, and œsophageal branches.

B, The left *nervus vagus*.

C, The left recurrent nerve, or *laryngeus inferior*.

D, Part of the right axillary plexus of nerves.

a, The right carotid artery.

b, The left carotid artery.

c, The left subclavian artery.

d, The right subclavian artery.

1. The trachea.

2. The œsophagus.

3. The first rib.

4. A portion of the left lung.

5. The left portion of the thyroid gland inflected.

6. The right portion of the thyroid gland reflected.

7. The *scalenus medius* muscle.

8. The *scalenus anticus* muscle.