SOME VASCULAR ANOMALIES OBSERVED DURING THE SESSION 1888-89. By FRANCIS J. SHEPHERD, M.D., Professor of Anatomy in M'Gill University, Montreal.

THE following anomalies, which are of some rarity, I have thought of sufficient interest to be placed on record :—

I. Right Subclavian Artery arising from the Descending Aortic Arch—Right Vertebral Artery given off from the Common Carotid—Right Pulmonary Vein emptying into the Vena Azygos Major—Absence of the Levator Ani Muscle.

The subject in which these anomalies occurred died of phthisis in the General Hospital, aged 30. She never had any difficulty in swallowing, nor was she left-handed. There was well-marked rickety deformity of the bony thorax and other parts of the skeleton.

The right subclavian artery arose from the posterior part of the aortic arch, opposite the 3rd dorsal vertebra, passed obliquely upwards over the dorsal vertebræ to the root of the neck on the right side. In its course it went behind the trachea and œsophagus. There was, of course, no innominate artery, the right common carotid arising directly from the transverse arch. The right vertebral arose from the right common carotid at the point where the subclavian is usually given off from the innominate; it passed up the neck to enter the transverse process of the 4th cervical vertebra. The left vertebral arose from the transverse arch between the left common carotid and left subclavian, and entered the transverse process of the 3rd cervical vertebra. The right inferior laryngeal nerve turned around the right vertebral artery instead of the subclavian. The right sympathetic was divided into two cords, which embraced the abnormal subclavian; the superficial cord hooked round the lower part of the artery to join its fellow. This was mistaken at first by the student dissecting the part for the recurrent laryngeal nerve.

The explanation of this anomaly is well recognised, and has been described by Rathke, Wood, Turner, and others. It is an example of persistence of the right aortic root. The fourth arch, from which the subclavian of the right side is usually derived, having atrophied and partially disappeared—that is, the portion external to the origin of the vertebral. The vertebral, then, would represent the shortened fourth arch, and the part of the carotid, as far as the vertebral, the innominate. This