

the integument. They extend from the occiput and the posterior extremity of the lower jaw bone, as far backwards as the junction of the posterior and middle thirds of the neck, where they cease to be distinguishable as a separate muscle. Along the middle line of the neck, inferiorly, this muscle is easily separable from the subjacent panniculus, but above, *i.e.*, along the dorsal middle line of the neck, there is no natural separation between this muscle and the panniculus, the fibres of the two muscles blending with one another.

*Action.*—The muscle wrinkles the skin of the neck, and elevates the feathers of that region.

*Relations.*—The constrictor colli separates the skin from the subjacent panniculus carnosus.

*Nerve supply.*—Branches from various cervical spinal nerves.

### 3. *Panniculus carnosus.*

*Sterno-cervicalis*, Owen, p. 23.

*Panniculus carnosus* (first portion), Reid, p. 139.

*Peaucier du cou* (plan profond), Gervais and Alix, p. 39.

*Attachments.*—The panniculus is the great cutaneous muscle of the neck. It arises from the whole of the anterior border of the clavicle below the articulation of that bone with the coracoid. From this origin the fibres diverge, the anterior fibres passing obliquely forwards and upwards, the posterior backwards and upwards, while the intermediate fibres pass with varying obliquities towards the dorsal middle line of the neck. The anterior fibres pass forwards to the occipital bone, into which, as well as into the post-orbital process of the frontal bone, they are *inserted*. By far the larger number of fibres reach the dorsal middle line of the neck, where they blend with the corresponding fibres of the opposite side, while the posterior fibres, passing obliquely backwards and upwards, blend in a similar manner as far back as the fourth dorsal vertebra. In this way the two muscles of opposite sides form as it were a hood, which covers the cervical as well as the anterior portion of the dorsal region. The lower borders of the two muscles are in contact in front of the clavicle, but as they pass forwards to their insertion into the skull, they diverge so as to leave an angular interval, in which, after removal of the constrictor colli, the trachea and larynx with their muscles are exposed.

*Action.*—This muscle wrinkles the skin of the neck, and ruffles the feathers of that region.

*Relations.*—The anterior fibres of this muscle are concealed by the constrictor colli, but the greater portion of the muscle lies immediately underneath the skin. The posterior border of the muscle is free, and extends between the shoulder joints of opposite sides. Its origin is concealed by the anterior fibres of the pectoralis major.