inserted into the base of the last caudal vertebra, or ploughshare bone, as well as into the spinous processes of the three preceding vertebræ.

The second or posterior portion of the muscle (transversaire-épineux of Gervais and Alix) consists of shorter fibres, which arise from the upper surfaces of the transverse processes of all the caudal vertebre. They pass obliquely backwards and upwards, and are inserted into the bifid spines of the last four caudal vertebre, including the ploughshare bone. A few of the fibres of this portion of the muscle are, moreover, inserted into the fibrous capsule of the uropygium.

The two portions of the levator coccygis are quite continuous with one another, and form, as it seems to me, a single muscle, the distinction between its parts lying rather in the difference in length of the fibres which compose them than in any clearly defined separation of these parts from one another.

Action.—Through the action of the muscle of one side, the tail is abducted. When both muscles contract simultaneously, the tail is elevated.

Relations.—The anterior portion of the muscle lies in contact with the origin of the biceps cruris on its outer side. The posterior portion is to a large extent concealed by the caudal gland which rests upon it.

Nerve supply.—The dorsal branches of the coccygeal nerves give off several twigs to this muscle.

Variations.—In Eudyptes chrysocome from Kerguelen, as well as in a specimen from the Falklands, I observed that the slip of this muscle which is inserted into the capsule of the caudal gland is of relatively larger size than in other species.

In Eudyptes chrysolophus this slip is given off from the middle in length of the second portion of the muscle. In several species, e.g., Spheniscus magellanicus and Eudyptes chrysocome from Kerguelen, the transverso-spinal portion is provided with a series of tendons of insertion, one of which is attached to the spinous process of each of the caudal vertebræ. That to the ploughshare bone is stronger than the others, and appears to be formed by the junction of several distinct tendons corresponding to the separate vertebræ which unite to form the ploughshare bone. It would therefore appear that the levator coccygis is composed of a series of distinct transverso-spinal slips, each of which passes between the transverse process of one vertebra and the spine of that succeeding, and that in some birds these remain distinct throughout life, while in others their tendons become more or less fused together, and give rise to the arrangement above described in Eudyptes chrysocome from Tristan d'Acunha, in which separate tendons to each of the caudal vertebræ are no longer recognisable.

## 2. Interspinales.

In addition to the levator caudæ above described, there are a number of fleshy slips