

there is positively no evidence of any of them being in the least implicated. Recent experimental investigations by Beevor and Horsley strongly support the view held many years ago by Hughlings Jackson, that the facial nerve plays no part in supplying the elevating muscles of the soft palate with motor power, and to corroborate this statement I quote the opinion of these investigators: "The idea (*i.e.*, that the levator palati and azygos uvulæ muscles are supplied by the facial nerve through the superficial petrosal nerve) upon which so much stress has been laid is entirely hypothetical, as might have been shown at any time by stimulating the facial nerve in the skull and observing the soft palate. We have found that stimulation of the peripheral end of the divided facial nerve in the internal auditory meatus failed to cause, even with the most powerful currents, the slightest movement of the soft palate, although the face was thrown into violent spasm. We find that the levator palati is supplied entirely by the eleventh nerve. When the peripheral end of the cut nerve was stimulated inside the skull, elevation of the soft palate on the same side was invariably seen. The path by which the fibres from this nerve reach the palate is probably through the upper branch of the pharyngeal plexus."<sup>1</sup>

Fraenkel remarks that in all the cases of paralysis of the accessorius which have come before his notice the soft palate was always involved.<sup>2</sup>

3. *Diminished sensation of the mucous membrane of the buccal and naso-pharynx.*—These parts derive their sensory fibres from branches of the vagus, glosso-pharyngeal nerves, and from the upper cervical ganglion, these forming what is known as the pharyngeal plexus. That the glosso-pharyngeal nerve itself is not involved in the lesion in this case is proven by the fact that the special sense of taste at the posterior third of the tongue is quite intact—presuming, of course, that the view now generally accepted by physiologists that the function of the ninth nerve is, besides being sensory and motor, the nerve of special sense of taste to the posterior part of the tongue. (This view

<sup>1</sup> Brit. Med. Jour., 29th Nov., 1889.

<sup>2</sup> Berlin. Klin. Wochen., No. 8, s. 150, 1888.