

### Part III.—Epitome of Current Literature.

#### 1. Anatomy and Physiology.

*The Cranial Nerve-roots: A New Classification* [*Le radici nervose encefaliche: Nuova classificazione*]. (*Riv. di Pat. Nerv. e Ment.*, vol. xxxix, p. 415, May-June, 1932.) *Francesconi, G. L.*

The cranial nerves are divided, according to function, into two main groups—(1) those concerned with the relation of the individual to the environment, and (2) those concerned with the vegetative life.

Each group is further divided up. The author places 18 nerves in the first group and 6 in the second, as follows:

I. (a) Motor:

1. Common oculomotor.
2. Trochlear oculomotor.
3. Abducent oculomotor.
4. Motor to the muscles of mastication.
5. Facial.
6. Glossopharyngeal motor.
7. Pneumogastric motor.
8. Accessory.
9. Hypoglossal.
10. Spinal.

(b) General sensory:

11. Trigeminal.
12. Glossopharyngeal (bodily sensation).
13. Intermediary sensory root of Wrisberg-Sapolini.

(c) Special sensory:

14. Olfactory.
15. Visual.
16. Auditory.
17. Taste.
18. Equilibrium.

II. (a) Motor:

19. Common oculomotor to intrinsic muscles.
20. Pneumogastric for visceral motility.

(b) Sensory:

21. Pneumogastric for visceral sensation.

(c) Secretory:

22. Lacrymal.
23. Superior salivary.
24. Inferior salivary.

G. W. T. H. FLEMING.

*The Direct Pyramidal Tract* [*Contribution à l'étude du faisceau pyramidal direct de Türck*]. (*L'Encéph.*, vol. xxviii, p. 10, Jan., 1933.) *Nicolesco, J., and Hornei, T.*

A study of lesions of the direct pyramidal tract, based on a group of 14 cases. The authors conclude that this tract is involved in palsies of the upper limbs when the lesion of the nervous system is situated between the motor cortex and the

capsule, and that it is accompanied by lesions of the crossed pyramidal tract. This was Türck's original view. Crural palsies, on the other hand, do not show any involvement of this tract, and the authors state that it does not extend to the lower levels of the cord. This suggests a connection between the tract and the particularly fine range of voluntary movement in hand and arm, and also with the neck and trunk muscles. The authors suggest a subcortical neuron as the origin of the tract, and believe that it occupies a position between the pyramidal and the extrapyramidal systems.

W. McC. HARROWES.

*Reflexes and Other Motor Activities in the Newborn Infant.* (Bull. Neur. Inst. N.Y., vol. ii, p. 1, March, 1932.) Chaney, L. B., and McGraw, M. B.

This study is based on the investigation of reflex and other reactions in 125 apparently normal infants. Twenty-five of these infants were examined at the time of birth in the delivery room, and these are termed "partunates". The remaining 100 included 10 for each day during the first ten days of life, and these are termed "neonates". Certain general differences in the responses in the partunates and neonates were demonstrated, e.g., tendon reflexes were more easily elicited from partunates than neonates, but neonates were strikingly more responsive to cutaneous stimulation than were partunates. The following general conclusions were drawn: (a) Individual differences are evident in the simplest type of reflex action in newborn infants; the more complex the type of reaction, the more marked is the individual variation. (b) Although the variability in type of reaction is great among newborn infants, the total absence of any reflex response is strongly suggestive of a pathological condition. (c) Nothing in this investigation has tended to substantiate the contention that certain reflex patterns, such as the Babinski, are, in infants, normal reflex reactions, attributable to an immature nervous system. Reflex reactions of normal newborn infants are different from the characteristic reflexes of normal adults; they are also different from the classical pathological reflex patterns.

J. L. FAULL.

*Plantar Tendon Reflexes.* (Bull. Neur. Inst. N.Y., vol. ii, p. 312, July, 1932.) Weingrow, S. M.

A distinction between the plantar tendon and skin reflexes should always be made. A number of tendon reflexes of the plantar region, not previously reported in the literature, are described, and are said to be easily elicited in the recumbent position of the patient. The tendons in which reaction to tapping is described were those of the peroneus longus and brevis, tibialis posticus, flexor longus digitorum, flexor hallucis longus and digiti quinti brevis. The reaction consists of plantar flexion of the foot or toes, collectively or individually. The motor cells concerned in the reflex arcs of the plantar tendon responses are located in the fourth and fifth lumbar and first and second sacral segments of the spinal cord. Owing to the proximity of the centres in the cord representing the plantar and tendo Achillis reflexes, the changes which affect the one may also involve the other. There are pathological conditions in which the plantar tendon reflexes are affected, while the Achilles reflex of the same foot may be normal or *vice versa*. In sciatica the plantar tendons may be more distinctly affected than the Achilles tendon reflex, and so particular attention should be paid to the former. In syphilis of the nervous system the plantar tendon reflexes may disappear earlier than the Achilles jerk, and so their investigation may help in the early diagnosis of this condition.

J. L. FAULL.

*Further Studies on Individually Acquired Automatic Associated Movements.* (Bull. Neur. Inst. N.Y., vol. ii, p. 294, July, 1932.) Brickner, R. M., and Lyons, I. V.

There is, apparently, a fundamental difference between phyletically and ontogenetically acquired automatic associated movements. Evidence for this contention is adduced from the consideration of certain phenomena observed in