Head flat, not very distinct from neck, scaled, with following exceptions :—Rostril, anterior frontals; nasals (double, with the nostril between); mental; upper (12) and lower labials.

Gular depression; small groove anterior to orbit; orbit surrounded by scales; eye small, pupil vertical, iris silver grey, with dark longitudinal streak.

Rudimentary hind limbs, scales small, greatly increasing in size as they approach ventrals; colour above greyish brown, vertebral series of dark brown irregular spots, confluent towards neck; lateral series of dark brown spots. Belly whitish, mottled with dark brown; post orbital dark brown streak.

Length of specimen 21 in. A sand snake of sluggish disposition, especially during day-time.—Did not attempt to bite when handled.

Fam. *Elapidæ*. Gen. *Ophiophagus*. *O. Elaps*.—The Hamadryad, a male specimen caught by snake charmers at Agumbi, Western Ghauts, South Canara. Since dead, the skin having been secured by a member of the Basil Mission. I measured the snake when alive, and found it to be 10 ft. 6 in. but it was probably more, as it strongly resisted being stretched out. Colour brownish black, with about thirty bands on fore part of body, formed by dull yellowish interstitial skin. A yellow V mark with the apex towards head on upper part of hood: dark band beneath hood.

The Canarese call the snake "Kalinga havre," and state it to be common in the jungles along the Ghauts. I hope before long to procure a live specimen.

Fam. *Crotalidæ*. Gen. *Trimesurus*. Sp.—Scales 21, ventrals 153, subcaudals 58. Head scales strongly heeled. Colour dark reddish brown, irregularly marked with pale reddish brown, forming pale centred lateral ocelli. A series of pale yellow irregular dots arranged in a lateral stripe. This specimen has been forwarded to Dr. J. Shortt, F.L.S.

A specimen of the *Daboia elegans*, the Tic Polongo of Southern India and Ceylon, was lately brought me having the belly pure white, unmarked with the usual brown spots.

A Tahsildar in a Northern Talug reports the occurrence of a large venomous snake, black above and red beneath. This I think will prove to be *Callophis* (*Elaps*) *nigrescens*.

Mangalore. E. H. PRINGLE

BRITISH MEDICAL ASSOCIATION.—ABSTRACT OF DR. SANDERSON'S ADDRESS ON PHYSIOLOGY

IN his address on Physiology before the British Medical Association, Dr. Sanderson gave a *résumé* of the most important physiological work that has been done during the past year. Commencing with the circulation of the blood, he considered it to be resolved into several constituent processes, such as arterial pressure, velocity of blood-current, and contraction or relaxation of muscular fibre. He referred to a very elegant method adopted by Dr. Marey of Paris, and illustrated by him to the members of the Association, by which the influence of arterial resistance on the heart's rapidity may be demonstrated on the excised heart of the tortoise, the number of pulsations being proved to vary inversely as the *resistance* and not as the blood pressure, a fact previously known, but not before so clearly illustrated. He then referred to the observations of Mr. Dewar and Dr. M'Kendrick, in which they have shown that the normal electromotive force in the optic nerve is reduced in intensity when it is receiving the impression of light, a "negative variation" of the current being the result. Dr. Jackson's and Dr. Ferrier's pathological and physiological studies as to the localisation of the sources whence originate some of the voluntary movements in certain parts of the surface of the brain were shown to have a very important bearing on the progress of cerebral physiology; Dr. Ferrier having arrived at a method by which one at least of the highest functions of the nervous system can be brought under the control of experimental investigation. With reference to the part played by Bacteria in the living organism, Dr. Sanderson remarked that observations respecting them were, though very numerous, not sufficiently connected to allow of a ready summary; the facts added during the year being, first, that in certain persons apparently healthy, and in many animals, organisms belonging to this class are always found in the blood; secondly, that in all acute inflammations which are attended with the destruction of living tissue, Bacteria are to be found in the exudation liquids; and thirdly, that in relapsing fever living beings are present in the blood, which exhibit characteristic forms.

Dr. Sanderson in the latter part of his address gave many reasons in favour of the combination of the study of medicine with that of physiology. It has been said that theoretical physiology has led to injurious medical treatment, *e.g.*, to the over-feeding and over-stimulating treatment of disease; to the unreasonable disuse of venesection; to the neglect of antimony and other so-called antiphlogistics, and to the purgative treatment of cholera. But are the theories on which these changes of treatment have been based, physiological in the proper sense? Decidedly not. Taking the action of mercury as an example. It has been proved to have no influence in increasing the secretion of the liver; nevertheless, blue-pill is of undoubted value in certain well-defined disturbances of the digestive organs. From these facts, however, it is not right to assume that mercurial remedies are useless, or that they act beneficially by exciting the secretion of bile; such inferences are not physiological, but result from the manner in which practical men throw undeserved discredit upon Science by attempting to apply its facts without any sufficient knowledge of their bearing. Therefore it is highly desirable for the welfare of both Medicine and Physiology that a distinct line of demarcation should be drawn between them.

The speaker then entered upon subjects of a more purely medical nature, giving an excellent *résumé* of the present position of our knowledge respecting the nature of fever and pyrexia generally.

LAKES WITH TWO OUTFALLS

SOME years ago a discussion took place concerning the possible or actual existence of lakes possessing outlets into two distinct watersheds, so as to render one watershed continuous with the other. If even one such lake could be shown to exist, the question would of course be resolved in the affirmative. I have frequently heard mentioned as an instance a certain lake at the summit of the Romsdal in Norway, and having lately spent a day or two at each end of this lake, I have taken advantage of the opportunity to examine each of the outlets with care. I have thus convinced myself that it ought not to be quoted as a proof of the natural existence of such lakes.

The piece of water in question is called the Læsöskougens Vaud, or sometimes the Lesje Værks Vaud; it lies between the posting stations of Mölmen and Lesje Jernværks, at an elevation of 1,992 Norwegian feet, or 2,050 English feet above the sea level, occupying, for a length of about seven miles, the highest part of the great valley which in its south-eastern part is known as the Gudbrandsdal, and in its north-western part as the Romsdal. There can be no doubt that from the eastern extremity of the lake flows a small stream, which forms one of the sources of the Laagan or Logen River, while from the western extremity descends a much larger stream, which is the principal source of the river Rauma. Since the Logen, after passing through Miösen Lake, becomes a part of the great river Glommen, and thus falls into the Skaggerat at Frederichshald, while the Rauma reaches the sea through the Romsdal Fjord, it follows that the whole of the south-western part of Norway is encircled by water.

On examining the eastern exit of the lake, however, it soon becomes apparent that the outflow is artificially regulated. The water is retained at this end by a great