

*An Account of the Trigonometrical Survey, carried on in the Years 1797, 1798, and 1799, by Order of Marquis Cornwallis, Master-General of the Ordnance. By Captain William Mudge, of the Royal Artillery, F.R.S. Communicated by His Grace the Duke of Richmond, F.R.S. Read July 3, 1800. [Phil. Trans. 1800, p. 539.]*

The mode of conducting this important survey having been already noticed in the Journals of the Society on various former occasions, it will only be necessary here to state the progress of the operation, which we find has now been carried on over Essex, the western part of Kent, Suffolk, and Hertfordshire, and portions of the counties contiguous to them. A distinct section contains the calculations of the sides of the principal and secondary triangles extended over the country in the three abovementioned years, together with an account of the measurement of a new base-line on Sedgemoor, and a short historical narrative of each year's operations. Another section contains the computed latitudes and longitudes of the places on the western coast intersected in 1795 and 1796, and also of such others since determined as lie conveniently situated to the newly observed meridians. Here we find likewise the directions of those meridians; one on Blackdown in Dorsetshire, another on Butterton Hill in Devonshire, and another on St. Agnes Beacon in Cornwall; as also the bearings, distances, &c. of the stations and intersected objects from the several ascertained parallels and meridians.

*The Croonian Lecture. On the Irritability of Nerves. By Everard Home, Esq. F.R.S. Read Nov. 20, 1800. [Phil. Trans. 1801, p. 1.]*

Its object is principally to investigate the opinion hitherto entertained, that the nerves may be considered as chords that have no power of contraction within themselves, but only serve as a medium by means of which the influence of the brain may be communicated to the muscles, and the impressions made upon the different parts of the body may be conveyed to the brain. After pointing out the extreme difficulty of such an inquiry, owing to the few opportunities that offer for investigating the real state of the nerves in the living body, Mr. Home intimates that he resolved to avail himself of every opportunity that might offer of any operation in surgery performed upon nerves, either in a healthy state, or under the influence of disease, in order to elucidate this intricate point, without neglecting certain experiments he thought he could devise upon animal bodies, before they are wholly deprived of life.

The first case, which explains some circumstances respecting the actions of the nerves when under the influence of disease, was that of a middle-aged person, who, having hurt his thumb by a fall, experienced long after an occasional swelling and convulsions in that part, attended with spasms, which at times extended in the direct course of the trunks of the radial nerve up to the head, the patient being at times afflicted with absolute insensibility. In order to put a stop to

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