

two Eyes." By T. Wharton Jones, Esq. Communicated by Richard Owen, Esq., F.R.S.

The author animadvertes on the doctrine which Mr. Wheatstone, in his paper on the Physiology of Binocular vision, published in the Philosophical Transactions for 1838, p. 371, has advanced, in opposition to the received theory of single vision being dependent on the images of objects falling on corresponding points of the two retinae. He maintains that, under these circumstances, the two impressions are not perceived by the mind at the same instant of time, but sometimes the one and sometimes the other. If one impression be much stronger than the other, the former predominates over, or even excludes the other; but still the appearance resulting from the predominating image is nevertheless in some manner influenced by that which is not perceived. He supposes that there are compartments of the two retinae, having certain limits, of which any one point or papilla of the one corresponds with any one point of the other, so that impressions on them are not perceived separately; and considers that this hypothesis, combined with the principle above stated, is required, in order to explain the phenomena in question.

February 6, 1840.

JOHN WILLIAM LUBBOCK, Esq., V.P. and Treasurer, in the Chair.

John Parkinson, Esq. and the Rev. Charles Pritchard, M.A. were balloted for, and declared duly elected into the Society.

A paper was read, entitled "Observations on the Blood-corpuscles of certain species of the Genus *Cervus*." By George Gulliver, Esq., F.R.S., Assistant Surgeon to the Royal Regiment of Horse Guards.

The author has found that the blood of the Muntjac*, the Porcine†, and the Mexican Deer‡, contains, together with corpuscles of the ordinary circular form, a still larger number of particles of less regular shape; some curved and gibbous in the middle, and acutely pointed at the ends, with a concave and convex margin, like a crescent; others approaching more nearly to segments of a circle; some shaped like a comma, being obtuse at one end and terminated by a pointed curve at the other; others having an acute projection of the convex part, so as to constitute a triangular, or even quadrangular outline; some having the figure of the head of a lance; while a few presented a double or sigmoid flexure, as if they had been twisted half round at the middle. Like the ordinary blood-discs, these peculiar corpuscles are deprived of their colouring matter by water; but with only a small quantity of water they quickly swell out, and

* *Cervus Reevesii*.

† *C. Porcinus*.

‡ *C. Mexicanus*.

assume an oval or circular figure, forming long bead-like strings by the approximation of their edges. In saline solutions they become rather smaller, but preserve their figure tolerably well.

In an appendix, the author gives an account of his observations of the blood-corpuscles of a new species of Deer inhabiting the mountains of Persia, of which a specimen has been lately received by the Zoological Society. Many of these corpuscles presented the singular forms above described.

A paper was also read, entitled "Meteorological Register kept at Port Arthur, Van Diemen's Land, during the year 1838." By Deputy-Assistant Commissary-General Lempriere, in south latitude $43^{\circ} 9' 6''$, and east longitude $147^{\circ} 51' 33''$. Communicated by Captain Beaufort, R.N., F.R.S.

The height of the instrument above the level of the sea till the 21st of August was 57 feet, 7 inches; and during the remainder of the year 3 feet.

A paper was also in part read, entitled "Experimental Researches in Electricity, 16th Series." By Michael Faraday, Esq., D.C.L., F.R.S., &c.

February 13, 1840.

The MARQUIS of NORTHAMPTON, President, in the Chair.

Martin Barry, M.D. and Joseph Phillimore, LL.D., were balloted for, and duly elected into the Society.

The reading of a paper, entitled "Experimental Researches in Electricity, 16th Series." By Michael Faraday, Esq., D.C.L., F.R.S., &c., was resumed and concluded. On the source of power in the Voltaic pile.

The determination of the real source of electrical power in galvanic combinations has become, in the present state of our knowledge of electricity, a question of considerable importance, and one which must have great influence on the future progress of that science. The various opinions which have been entertained by philosophers on this subject may be classed generally under two heads; namely, those which assign as the origin of voltaic power the simple contact of dissimilar substances, and more especially of different metals; and secondly, those which ascribe this force to the exertion of chemical affinities. The first, or the theory of contact, was devised by Volta, the great discoverer of the Voltaic pile; and adopted, since it was promulgated by him, by a host of subsequent philosophers, among the most celebrated of whom may be ranked Pfaff, Marianini, Fichner, Zamboni, Matteucci, Karsten, Bruchardat, and also Davy; all of them bright stars in the exalted galaxy of science.