

Alluding to former observations for the purpose of determining the dip in London, the author observes that, independent of any imperfection in the instruments, they were made in houses in close built parts of the metropolis, and, therefore, all subject to the influence of local attraction; and, moreover, that the correction found by observing the difference of the dip on the outside of the house cannot be regarded as an effectual remedy, inasmuch as the needle may still have been attracted by iron in the adjoining houses, or in the neighbourhood. It is, indeed, only requisite to try needles in different situations in a city, to be convinced how little dependence should be placed in the accuracy of such results: the author thinks that it is rather owing to this cause than to instrumental error, that the dip at the Apartments of the Royal Society is stated in the Philosophical Transactions for the present year to be $71^{\circ} 06'$. To avoid this source of error, Captain Sabine conducted the observations which form the subject of this lecture in the nursery-ground in the Regent's Park, a situation which he regards in all respects eligible, and far removed from the influence of iron.

Some Positions respecting the Influence of the Voltaic Battery in obviating the Effects of the Division of the Eighth Pair of Nerves. Drawn up by A. P. Wilson Philip, M.D. F.R.S. Edinb. Communicated by B. C. Brodie, Esq. F.R.S. Read July 5, 1821. [Phil. Trans. 1822, p. 22.]

The positions established by Dr. Philip, to the satisfaction of Mr. Brodie, are detailed in this paper in the following order.

First. When the nerves are divided and the ends not displaced, if the animal live some hours, food swallowed *before* the operation is *much* digested; but if the ends of the nerves be turned from each other, no *perfectly digested* food is, under the same circumstances, found in the stomach, nor does digestion go on though the animal live; but galvanism applied to the nerves occasions a degree of digestion in the food contained in the stomach, and when galvanized the animal does not suffer from dyspnœa. When the nerves are simply divided, and the animal lives for six hours, the lungs become congested; but they appear healthy when galvanism has before been sent through the lower portion of the divided nerves.

On some Alvine Concretions found in the Colon of a young Man in Lancashire, after Death. By J. G. Children, Esq. F.R.S. &c. &c. Communicated by the Society for Promoting Animal Chemistry. Read December 13, 1821. [Phil. Trans. 1822, p. 24.]

After detailing the above, and adverting to two other cases of intestinal concretions, Mr. Children describes the appearance and composition of the calculi. The nucleus of each was a plumstone enveloped in a compact coating of phosphate of lime and ammoniaco-magnesian phosphate, and of a fibrous substance alternating in lay-