

that pus does not contain so much potash or muriate of soda as is contained in the above expectorated secretions.

Dr. Pearson also thinks it much more probable that the circulating and secreted fluids are impregnated with potash, as he has observed, than with soda, as observed by others.

Finally, we are informed, that expectorated matter contains globules, which have not before been observed, and seem to the author to denote organization.

On the Attractions of homogeneous Ellipsoids. By James Ivory, A.M.
Communicated by Henry Brougham, Esq. F.R.S. Read June 15, 1809. [*Phil. Trans.* 1809, p. 345.]

The theory of the figures of the planets involves two questions perfectly distinct from each other; first, the *figure* which a mass of matter would assume by the mutual attraction of its particles, combined with a centrifugal force, arising from rotatory motion; and secondly, the *force* with which a body so formed will attract a particle occupying any proposed situation. The latter is the subject of the present inquiry; and it is also limited to the consideration of homogeneous bodies bounded by finite surfaces of the second order.

This subject was first partially treated of by Sir Isaac Newton, who, in determining the attraction of spherical bodies, has also treated of other solids, formed by the rotation of curves round an axis, and of the attractions they exert upon bodies placed in the line of their axes. MacLaurin was the first who determined the attractions that such spheroids of revolutions exert on particles placed anywhere, either *in* or *within* their surfaces.

Le Gendre extended the same inquiry to particles *without* the surface of such solids of revolution.

La Place took a more enlarged view, and extended his researches to all elliptic spheroids, not formed by revolution, but such whose three principal sections are all elliptical; and he arrived at conclusions, with regard to them, similar to those of MacLaurin and Le Gendre.

But notwithstanding the ingenuity and skill displayed by La Place in this investigation, Mr. Ivory conceived that the inquiry might be simplified, and the results obtained more directly, by a method which forms the subject of the present communication; which, however, is of a nature not adapted for public reading.

Observations on Albumen, and some other Animal Fluids; with Remarks on their Analysis by electro-chemical Decomposition. By Mr. William Brande, F.R.S. Communicated by the Society for the Improvement of Animal Chemistry. Read June 15, 1809. [*Phil. Trans.* 1809, p. 373.]

Mr. Brande's paper consists of two parts; first, Observations on mucus and on the composition of liquid albumen; and secondly, On the composition of some animal fluids containing albumen.