deviations, nor is the labour rendered tedious in consequence of their existence.

ART. IV.—On the Means of distinguishing real from apparent Enlargement of the Eyeball, in Cases of Hydrophthalmia and Exophthalmia. By James O'Beirne, M. D., Surgeon Extraordinary to the Queen, one of the Surgeons of the Richmond Surgical Hospital, Dublin, &c.

Amongst the observations appended to the case of General Hydrophthalmia, published in the Number of this Journal for May last, it was my intention to have inserted some on the subject of this communication. I was particularly anxious to do so, in consequence of one of my colleagues in the Richmond Hospital having expressed an opinion, that the case in question was one of protrusion, not enlargement, of the eyeball—an opinion which I combated at the moment; and, subsequently, in my clinical lecture on the case; by pointing out certain diagnostic marks, which, I am strongly disposed to believe, have been overlooked by all writers on diseases of the eye. Yet, strange to say, it will be found, on referring to my published observations, that I have altogether omitted to touch on the subject which I was so anxious to treat. How such an omission occurred, I am now quite unable to say. Be that as it may, shortly after the publication of the case, I received a letter from my friend Mr. Guthrie of London, expressing doubts of its nature; and some weeks afterwards, another from Mr. Middlemore, of Birmingham, requesting to be informed whether I could have mistaken protrusion for enlargement of the eyeball. These communications, of course, instantly reminded me of my omission, and its consequences; but I cannot regret an oversight which has, at once, procured for me the opinions of such distinguished men, and afforded me an opportunity of treating an interesting point of practice at more length, and in a distinct article. Suffice it then to say, that my reply to
Mr. Middlemore's query may be collected from the following exposition of the point in question.

In the natural state, by far the greatest portion of the globe of the eye lies imbedded in the orbit, and hidden behind the folds of the conjunctiva. We cannot, therefore, see the whole diameter or size, or more than a small segment, of this globe. Accordingly, when one eye is protruded by any newly formed solid or fluid body or bodies, situated in the back part of the orbit, it appears considerably larger than the other, although both are really of the same size. Such being the state of the facts, how are we to distinguish between cases of hydrophthalmia and others of exophthalmia, in both of which there is protrusion, and either real or apparent enlargement of the eyeball?

In order to try this question fairly, let us consider, first, protrusion as a circumstance common to both cases. In hydrophthalmia, the eyeball is protruded by its own enlargement, and fills the orbit so as to render it impossible to ascertain by the touch whether the latter is occupied, or not, by any unusual solid or fluid body. In exophthalmia, the touch, the state and appearance of the parts, and the history of the case, may often enable us to detect an enlarged lachrymal gland, an abscess, fatty tumours, serous cysts, exostoses, and sanguineous or serous effusions, when situated immediately behind the conjunctiva; but none of these means will enable us to ascertain the presence of these or other morbid degenerations more deeply seated in the orbit. Again, with respect to the next feature common to both diseases, the appearance comes so exceedingly near to the reality of enlargement of the eyeball, as to make the distinction between them one of too great nicety to be decided by the eye of even the most acute and clear-sighted observer; and hence arises the frequent diversity of opinions on the point. Neither can measurement by callipers give any idea whatever of the relative size of the affected and the unaffected eye; for, although we may thus measure the former, we cannot measure the latter, in consequence of its greatest diameter being situated so deeply, and covered by the folds of the conjunctiva.