ON VISION, BY T. WILLIAMS, ESQ.

To the Editor of THE LANCET.

SIR,—An essay appeared in the last Number* of THE LANCET, on the subject of vision, in reference to which, the author would remark, that the results of all his experiments are evidently accordant with optical principles, but he then studiously avoided noticing the rationale of his data, it being his exclusive intention to establish positions on decisive experiments. His main object was to deduce physiological arguments from optical facts—facts demonstrable to the illiterate and the wise; and arguments, not more calculated to bias the mind of the optician than that of the student unskilled in the science. But, if a theoretical explanation be not deemed superfluous, it will be inserted, when required, in any appropriate publication. The operation of well known scientific principles is not always detected, and therefore not always adduced, in explanation of natural phenomena. The following quotation from Nicholson's Journal (quarto series) will afford a striking example.

“Every attentive observer must have taken notice, that light is of as much consequence to artificial vision as magnifying power. It may, therefore, afford matter of surprise, that the most variable of all adjustments of the eye, viz., that of aperture, should never be introduced into our artificial combinations. Distant woods, and other land objects, are invisible to a high magnifying power *for want of light*, when the same object may be distinctly seen with a lower. By means of an artificial iris, which an ingenious artist will find little difficulty in contriving, this disadvantage in telescopes might be obviated,” &c. &c.

Now, the writer of this ought to have known, that it is absolutely impossible to correct this defect in the powerful telescope, for the very cause of its great power is the cause of the disadvantage he would attempt to obviate, viz., the low refractive power of the object-glass. The small aperture of the instrument, so far from being the cause, has an opposite tendency, and no degree of light, however obtained, would effect the desired improvement. This is well worthy the attention of the physiologist; it will enable him to conceive the important con-

ditions on which the higher classes of animals possess the power of extensive vision. If the refractive powers of the human eye had been equal to that of the minor animals, objects might have been seen nearer, which would have been no material advantage, while the power of distant vision would have been greatly diminished. Again, if the refractive powers of the eyes of the minor animals were identical with those of the higher classes, a needless power of distant vision had been granted, and one positively essential denied, viz., that of seeing to seize their prey or eat their food, which, when sufficiently near, would not only have been but dimly seen, but also such approximating objects would tend to confuse others more remote. Thus defective might have been the structure of the *natural* camera obscura, had it been possible for nature to slight her own laws, and such is the important default, we often observe in those which are made with regard to the rules of art, as imposed by the fallible dictates of reason.

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LARGE POLYPUS, GROWING FROM THE WHOLE CIRCUMFERENCE OF THE OS UTERI.

SARAH LLOYD, aged 41, a stout healthy looking woman, was admitted into the Hospital, March 12, 1828, under the care of Mr. Lawrence. Six months ago, she was delivered by the forceps of a still born, full sized child. During delivery, the accoucheur, who is an intelligent practitioner in the country, observed for the first time a polypus in the vagina, so large that he at first mistook it for the head of the child.

The tumour has since gradually increased, being attended with a sensation of weight and bearing down, and with mucous discharge, sometimes mixed with blood. There has not been much pain, and the constitution has been but little affected. The catamenial discharge has ceased.

At the time of admission, a tumour nearly as large as a child's head, protruded from the vagina, into which it could be completely returned by moderate pressure. It was a firm and nearly insensible mass, of a somewhat pyriform shape, with a surface for the most part smooth, but at some points a little knotted, deep red, and plentifully bedewed with mucus. On passing the finger up the vagina, the neck of the tumour was felt as large as the wrist; its texture was firm, and the patient complained of pain when it was pressed. In the recumbent position, the tumour remained in the vagina;

* In the article by the same author, p. 70, of Number 242, the following errata occur:—

Second paragraph, for “usual,” read *visual*.

Third ——— for “seem,” read *seemed*.

Seventh ——— for “bases,” read *lenses*.