

it is a force which is extensively used in the process of development, that, in some cases, at least, it determines the manner and direction of growth in a very remarkable degree. A very curious example of this kind is furnished by the experiments of Mirbel upon the gemmæ of *Marchantia polymorpha*. He found after thoroughly testing the matter, by repeated trials, that during the development of these little discs, stomata are formed upon the side exposed to the light, while root fibres grew from the under surface; and it is a matter of indifference which side of the disc is at first turned upwards, since each has the power of developing stomata or roots according to the influence it receives.\*

This division of my subject might be almost indefinitely extended, but I have not attempted to do more than notice some of the more salient points belonging to it, which is all my space will admit of.

Higher in the scale of organization there are to be found such facts as the influence of light in the development of tadpoles into frogs;—multitudes of the like instances will present themselves to the mind of every one.

Finally, to test a theory we examine it in all its ramifications, and if it be found to be absolutely opposed to fact in any one case it cannot stand. So if any physical or vital force, however inconsiderable in amount, can be shown to be produced in the ordinary course of nature, as we observe its operations, which do not proceed from some antecedent physical or vital force, such theory can no longer be entitled to belief or consideration. But if, on the other hand, there are vital forces of which we do not know the antecedent force, or that they have any except from analogy, it is the business of the holders of this view to endeavour to clear up, and show the connection between such forces and their correlatives, either in the organic, or in the inorganic world; or to show, if such be the case, that none exist, and so destroy a false hypothesis.

ART. LX.—*Wood's operation for the radical cure of Hernia.* By FRANCIS WAYLAND CAMPBELL, M.D., L.R.C.P., Lond.; Member of the Royal Medical Society of Edinburgh, &c.

In the London Medical Times Gazette of June 1861, Mr. John Wood, one of the Surgeons to King's College Hospital, communicated a new method for the radical cure of Hernia, which he had performed some thirty times with very great success. Having lately been in communication with Mr. Wood, he has informed me that he has made some modifications in the operation, and in a letter to me dated June 16, 1862, describes the method he now pursues. As it may be interesting to the profession, I subjoin the letter. Those who may wish to peruse a description of the operation as originally performed, will find it, as above mentioned, or in Braithwaite's Retrospect of Medicine, Vol. XLIV. July to December, 1861.

London, 4 Montague Street, Russell Square, W.C.,  
June 16, 1862.

Dear Sir,

I must apologize for the delay in answering your note. One reason is that I have been absent from town part of the time. Another that I have

\* Carpenter, Phil. Tran. 1850.