

is undivided the grain of wheat is said to be *Monocotyledonous*" (p. 42). Not even the solemn name of the Revised Code can enable us to digest this without distress.

Plant-Life. Popular Papers on the Phenomena of Botany.
(London: Marshall Japp and Co., 1881.)

THIS is a most attractive-looking book by the same author as the dismal little tractate just noticed. It might have been hoped that it would have made clear some of its dark sayings. But they all seem to be *ipsissimis verbis*, sugared over with copious extracts from all sorts of people, from Thoreau and Kingsley to Mr. Worthington Smith, Dr. Masters and Mr. Darwin. On p. 30 we have "The carbon absorbed from the air is combined with the cell-sap and forms a substance called starch," which is even harder doctrine than anything in the "Easy Lessons." Much is said about *Equisetaceæ* and the hygroscopic movements of the elaters of their spores. An unfortunate microscopist is quoted from *Science Gossip* of such a remote date as 1878, who is of opinion that "the ultimate cause of this movement is quite unknown . . . most probably it takes place by the contraction and expansion of the cells of which the elaters are composed." Of course it is well known that the spores are unicellular and the elaters are simply strips of the spirally torn outer cell-wall. The book, with all its blundering accounts of *Englena* (sic), *Claydonia* (sic), the "lovely *Closterium*" which "consists of two cells," and the like, may stimulate the curiosity of those who know nothing of plants to know more and better. It is at any rate interesting to find that Prof. Schwendener's lichen-theory has found its way to popular books, even though it is introduced with the remark that "concerning" gonidia "a humorous theory was promulgated a few years ago, but met with the ridicule it deserved." The book has 148 illustrations drawn by the author, which scarcely do justice to the "specially prepared rolled paper" provided for them.

The London Catalogue of British Mosses and Hepatics.
Published under the direction of the Botanical Record Club. Second Edition. (London: David Bogue, 1881.)

THIS is a handy list on the well-known model of that formerly issued by Mr. Hewett Cottrell Watson for British flowering plants. It gives the distribution through the eighteen provinces into which Mr. Watson divided Great Britain for the purpose of ascertaining the range of British plants.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]

The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to ensure the appearance even of communications containing interesting and novel facts.]

Dr. W. B. Carpenter and Mr. W. I. Bishop

I AM sorry to find that Dr. Carpenter is "greatly surprised" at my allusion to the effect which has been produced by the circulation of his letter to Mr. Bishop, for in making that allusion I was under the impression that this letter had been put to a use other than that which Dr. Carpenter could have either intended or desired. If, as it now appears, I was wrong in entertaining this impression, it is needless to say that I am willing to apologise for having so far given it public expression; and in this case I can only infer that my error arose from an unfortunate difference in the estimate which we have respectively formed touching the scientific importance of the phenomena which Mr. Bishop has displayed. Such physiological and psychological interest as these phenomena present appeared to me to call for investigation in the ordinary way, *i.e.* by one or a few competent persons; it did not occur to me that they were of so much scientific

value as to call for such "an assembly of gentlemen" as that which met at Bedford Square. Therefore, in writing my report, I took it for granted that Dr. Carpenter would have concurred in the "regret" which I expressed that his friendly recommendation should have been, as I thought, so far misused by Mr. Bishop as to constitute a general advertisement to scientific men; and my expression of regret was thus intended to show that I did not suppose Dr. Carpenter was to be considered intentionally responsible for the excitement which Mr. Bishop has succeeded in creating. It would no doubt have been wiser had I ascertained Dr. Carpenter's views upon this subject before assuming that they were the same as my own, and I do not yet quite understand whether he considers Mr. Bishop's manifestations worthy of all the attention which they have received. But in any case I hope that Dr. Carpenter will accept as more satisfactory an expression of further "regret," when I say I am very grieved to find that my allusion to his relations with Mr. Bishop, although intended as a friendly allusion, does not appear to have met with his approval.

GEORGE J. ROMANES

Re W. I. Bishop

LET any one read carefully Dr. Carpenter's account of the card trick exhibited to him by Mr. Bishop; let him suppose that Mr. Bishop had two packs of cards, the one an ordinary pack for exhibition to the company, and the other a pack containing fifty-two cards, all alike (the backs of both packs being of the same pattern). Let Mr. Bishop now perform the trick with cards from the latter pack, and his success can be readily explained. But grant that Mr. Bishop had only one pack of ordinary cards: even then it is possible that the explanation of the trick is not hard to find.

Dr. Carpenter allows that Mr. Bishop may have known where the selected card was placed. Take Dr. Carpenter's diagram on p. 188, and let No. 11 be the card known to Mr. Bishop, and which is to be finally discovered by Dr. Carpenter. "Drop your left hand on any row you wish *taken away*," says Mr. Bishop to Dr. Carpenter. Suppose, *by chance*, B, D, and A successively dropped on and removed, as in the instance given by Dr. Carpenter, then the upper pair of row C, then 15, we have 11 left and the trick done.

Suppose that C is selected first. Mr. Bishop may now assure Dr. Carpenter that the card wanted is in that row, and that he has forced Dr. Carpenter to select it. The chances are equal that Dr. Carpenter will in his next selection drop on that pair in row C, which includes 11. Should Dr. Carpenter in his third choice drop on 11, a most convincing proof of Mr. Bishop's will-compelling power will have been exhibited.

Should Dr. Carpenter however drop on 15, Mr. Bishop has merely to ask him to put it aside, and turning up the remaining card to exhibit it as the chosen and identified card. By a combination of the two methods of removing and leaving, Mr. Bishop can provide for all cases, and can perform a trick well known to schoolboys.

Dr. Carpenter, as I read his letter, tells us how Mr. Bishop acted when he himself was the subject of the experiment. If Dr. Carpenter can declare that the rows of cards, pairs of cards, and single cards *dropped in* were in all three experiments removed, I must confess that the laws of probabilities are against me, and that there seems to be strong proof of Mr. Bishop's power of *will-compelling*, a power which, as far as I have heard, Mr. Bishop has not yet publicly claimed to possess.

If Mr. Bishop *did not* know where the selected card was placed, Dr. Carpenter must invent a name for Mr. Bishop's new power of discovering a card, the position of which neither Mr. Bishop nor "the subject of the experiment" knew.

We can all regret with Dr. Carpenter "that Mr. Bishop did not offer for like careful testing experiments," &c.

I had the pleasure of attending a *public performance* given by Mr. Bishop in Edinburgh, on which occasion Mr. Bishop, much to the entertainment of a crowded hall, exhibited the legerdemain by which he had duped the subjects of, I believe, the before-mentioned experiments.

At this entertainment Mr. Bishop also showed how spiritualists performed such feats as knocking nails into boards, putting rings on scarves, &c., while their hands were tied together behind their backs and secured to a post. Prof. Turner, of the University of Edinburgh, explained to the spectators (no doubt at Mr. Bishop's request) that Mr. Bishop *seemed* to be enabled to perform those feats by the peculiar conformation of the bones and muscles—perhaps both—of his shoulder and arm.