

become a terrible and discordant jangle after a few reflections, interferences, rotations, and the like. Certainly the introduction of this additional stringiness adds a considerable complication to our conception of the ether, which for the most part has always been regarded as homogeneous except as to points (matter) rather than lines (Faraday tubes). There seem to be, however, phenomena † which this picture explains. Perhaps the universe does indeed look like a tremendous boiling pot of spaghetti. On this point Föppl and Abraham are silent.

After thus developing at some length a few points which the *Theorie der Elektrizität* has suggested, we shall not take away the zest of the reader by entering into details of the work under review. It remains to state in closing that in the revision the modern point of view is so fully adopted and the connections with the older theories so little discussed that one who had been brought up on the old would have some difficulty in immediately comprehending the new, notwithstanding its logical excellence and clear exposition. But the utility of modulations has largely vanished during the past decade, and Abraham is undoubtedly right in omitting them. This book is written by the young school for the young school — and we wish it an increase of its deserved success. The second volume will be awaited with impatience.

EDWIN BIDWELL WILSON.

YALE UNIVERSITY,
February, 1904.

NOTES.

THE seventeenth regular meeting of the Chicago Section of the AMERICAN MATHEMATICAL SOCIETY will be held at the University of Chicago on Saturday, April 22. Titles and abstracts of papers to be presented at this meeting should be in the hands of the Secretary of the Section, Professor THOMAS F. HOLGATE, 617 Hamline Street, Evanston, Ill., not later than April 8.

THE Macmillan Company is about to issue for the AMERICAN MATHEMATICAL SOCIETY a volume of 187 pages, of BULLETIN size, containing the lectures delivered before the

* Thomson, *loc. cit.*