

the late Rev. W. A. Willock (father of Dr. Sophie Bryant), in his "Elementary Geometry of the Right Line and Circle," has similar excellent remarks on this subject. "It is almost certain," says Dr. Willock, "that Euclid wrote his 'Elements' not for boys, but for grown-up, hard-headed thinking men."

Certain concessions have been made to the advocates of reform, led chiefly by Mr. Hayward—notably by the University of Oxford and the Civil Service Commissioners; and, in the existing state of affairs, it is not reasonable to expect more.

It will be clear from the foregoing that, in my opinion, a more rapid progress in the study of science generally would ensue from any system which would facilitate and accelerate the understanding of geometry by boys in the very elementary stage; and to this end I would suggest that the initiative should be taken by the Universities of Oxford and Cambridge. Our vast system of competitive examinations renders it necessary that a fixed source of authority on the order of deduction in geometry should exist. Such a source is Euclid at present; but a better one might, without serious difficulty, be drawn up by a University Committee, and its adoption by the schools and colleges throughout the country would follow as a matter of course. The chief difficulty is to avoid "fads"; but I learn, from conversation with a distinguished master in the largest of our public schools, that sympathy would not be wanting in an attempt to improve existing methods.

GEORGE M. MINCHIN.

Practical Hints and Examination Papers.

—THE BREADTH OF EDUCATION.—Dr. William R. Harper, in stating in the *Methodist Magazine* the views on Education of Dr. Vincent, the promoter of the Chautauqua movement, says: "Education is not to be confined to formal study. It includes this, but it includes much more. Books alone are insufficient. One must come in contact with people, and especially with the ablest men and women specialists, scientists, littérateurs, great teachers who know how to inspire and quicken minds, and from whom a special inspiration may be gained for the doing of special service. One must travel at home and abroad, and bring