

away, in the course of his trigonometry, from Riemann's modern plane, unusual and fruitful and thus mysterious, consisting of several interconnected sheets—unless he takes refuge from originality in the complications of algebraic analysis provided for him in the texts. And what of consistent measures of time in view of astronomical light-ranging with Bradley's finite speed of light? The Improvement and Vivification of Mathematical Teaching surely sets an urgent problem!

Another phase of this subject is set by a conundrum once propounded to the writer from a ladies' school, where it had made a great sensation, as indeed it did when expounded to him for advice. The argument proved irrefragably a geometrical result that was in common sense quite wrong: so what was to become of the faculty of human reasoning? The key to the paradox proved to be that though the reasoning employed was right, the diagram on which it was based was wrong. If it is drawn so that an essential point  $P$  of it lies on one side of an essential line  $AB$ , then all is well; but if by bad drawing it is put on the other side, then everything may be upset. Euclid had an adequate notion that in his own simple domain his diagrams should be verified: but what of more complex cases like the one that so intelligently disturbed the ladies' rational atmosphere?

With the suitable hesitations the writer must present himself as  
DIDASCULUS.

#### GEOMETRY REPORT. GEOMETRY IN SCOTLAND.

To the Editor of the *Mathematical Gazette*.

DEAR SIR,—May I draw your readers' attention to what I think is an important mistake (so far as Scotland is concerned) in the excellent new Geometry Report.

On p. 183, in the Appendix on "Geometry in Scotland" it is stated that, for the Scottish Leaving Certificate Examination, "This geometrical strictness makes it necessary to prove *Euclid* VI. 1, as in *Euclid* . . ." and there is a footnote explaining that this involves using the definition of proportion which Euclid used. But the compiler of the Appendix seems not to have noticed an asterisk in "Education (Scotland) Note as to Mathematics", on which the Appendix is based; that asterisk seems to refer to a footnote which says that the fact (*Euclid*, VI. 1) should be thoroughly known, but formal proof will not be required in examinations.

May I also point out that the page headings give no help to the reader trying to look up anything in the Report. Anyone reading the Report does not wish to be reminded of its title on nearly every page. I would suggest giving on the left-hand page the title of the section, and on the right-hand page subtitles (as given on pp. v, vi of the Report). Could not this be done when the Report is reprinted?

Yours truly,

A. W. SIDONS.