

## CORRESPONDENCE.

To the Editor of the *Mathematical Gazette*.

SIR,—We owe a debt to Mr. Tuckey for his reply to Mr. Blackwell. Many of us, when we read criticisms of mathematical teaching, probably gain from them; but it is important to distinguish the true from the false, and surely Mr. Tuckey is right when he denies a number of the author's assumptions?

Criticisms such as those of Mr. Blackwell are still abundant. I do not deny their value. In a paper I read some time ago to a local branch of our association on the strictures contained in the Spens report, I pointed out that in no particular did that report say anything that had not been already urged by the teaching committee of the Mathematical Association. I suggested that the neglect of what had been done, by the author of the Spens report, was unfortunate and misleading. It gave me great satisfaction to read, a few months later, a declaration by our committee asserting the same thing.

And now Mr. Blackwell pursues a similar theme, and Mr. Tuckey answers him. I would support the latter by saying that in my judgment no subject has in the last thirty or forty years so largely improved its teaching methods. In my own schooldays the subject was still taught by many on old-fashioned lines, the quickening influence of Mr. Tuckey at that particular school was only just beginning to make itself felt. I remember well how a colleague of his, with a considerable reputation as a mathematical teacher, heard a class of forty boys say in early morning school a number of Euclidean propositions. It fell to me to quote the enunciation of Euclid I. 4, and to lose all my marks, with a serious admonition, for omitting the famous "each to each." I could tell similar stories, and so could others. Surely the gulf that separates that time from to-day is immense? And yet Mr. Blackwell suggests that we are still in many respects in the dark ages!

But Mr. Tuckey is perhaps at his best when he denies the insinuation that Mathematics is an unpopular subject. Often has it been mentioned to me as one of the more popular subjects of the curriculum. This was not true forty years ago. I certainly know schools where it is true to-day. There are no doubt many commonplace teachers in Mathematics, as in all subjects, but the general level has risen, and in consequence so has the popularity of the subject. Mr. Tuckey tells us "if the boys don't enjoy the work, it is your fault." I am confident this is true of Mathematics.

No one would deny the possibilities of further improvement. Professor Hogben and Mr. Westaway have both been quoted by Mr. Blackwell. These brilliant teachers can clearly do what most of us cannot, but I suggest they have provided something at which most of us are aiming, and while criticism is often helpful, pessimism is completely unjustified.

Yours faithfully, W F BUSHELL.

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