

## CORRESPONDENCE

To the Editor of the *Mathematical Gazette*

Dear Sir,

May I add shortly to what Mr. Snell has written in the Gazette about our mutual friend Arthur Siddons?

I would like to emphasize how helpful he was to young schoolmasters, and never seemed to grudge the time involved. There is no one to whom I owe a greater debt in learning how to teach Mathematics. We had much in common. He succeeded my father at Harrow. We had taken the same two Triposes at Cambridge, though my result was far less distinguished. I often went to see him during School holidays to put forward difficulties which he soon resolved. At a later date, about 1913, the school I was then serving provided a **Mathematical** laboratory. The work I did there was entirely based on that done in his pioneer laboratory at Harrow

He had ambitions in early days to become a headmaster. I often told him, and still believe, that this would have interfered with his work for Mathematical reform. Other interests would inevitably have come his way, and I did not regret that he remained where he was.

I would like to stress that our Association owes him an incalculable debt for his pioneer work some sixty years ago. Prejudice had to be overcome. Committees had to be persuaded. Time and patience were necessary. No doubt the reform of Mathematical teaching was due to many, but his contribution was notable, and he stands in the forefront among those whose services we remember with gratitude.

Yours etc.,

W. F. BUSHELL

To the Editor of the *Mathematical Gazette*

Dear Sir,

In the review of Ministry of Education Pamphlet 36 in last February's Gazette the introduction of certain new topics is approved, including "some of the newer branches of mathematics, e.g. symbolic logic and Boolean algebra". We may well feel that they should have a place with us, when, as has been said, their inventor, George Boole, in discovering them discovered Pure Mathematics. Who was Boole? He lived and taught in England and Ireland between 1815 and 1864. For eighteen years he was a school teacher, starting as an 'usher' at the age of 16, later on having a school of his own. According to E. T. Bell, it was during this latter period that impetus was given to his work in mathematics by his dismay at the then available text books. All his own higher education he got by part-time study; and then in his spare time he started his great original work with which he "made a far-reaching advance in mathematical methods" Mr. Flemming, in his review, suggested that we should be keeping abreast of the times and helping to close the gap between school and University. And so indeed we should. But the

matter has I think a still wider significance and importance: it is put in the Pamphlet that "a lesson or two on Boolean Algebra (or another 'modern' algebra) with its novel operational rules might reveal more clearly, by contrast, what 'ordinary' Algebra is and does, and also give a taste of symbolic logic to those whose appetites and digestions are suited to it." The suggestion being that, even without taking Boolean Algebra a long way for its own sake but remaining content with an introduction, we shall be giving valuable experience which cannot fail to enhance understanding of what algebra is and does. I think this will be found to be the case.

Is there any evidence to the point? None that I know. It seems to me important that we should collect some: for this sort of increase of understanding is surely one of our primary aims. I should be extremely interested to hear from anyone who would help to collect evidence on this topic. When? and How? Your syllabus may allow you a slight relaxation, after examinations perhaps or at any rate toward the end of the Summer term—a new topic at these times is often a relief and a refreshment. I need hardly say that I do not propose we take Mr. Hooley's article on Sentence Logic as a text (though of course this logic is a Boolean algebra); rather I suggest an introductory course that might be a father to his precocious child, developing an algebra from immediate or commonsense notions in a way applicable at any level in a secondary school. Since no text exists for a naïve introduction, my interest has led me to prepare very full annotated lesson notes adaptable for any level. To those readers who are interested I will gladly send duplicated copies of my notes to try and test what there is in the idea.

Requests to me at 56 Vicars Hill, S.E.13.

Yours sincerely,  
PETER CALDWELL

To the Editor of the *Mathematical Gazette*

Dear Sir,

S. Inman suggests that the phrase "Take away" is an artificiality which should be abolished. Why? What's artificial about it? To say that subtraction is simply being given the sum of two numbers and one of them and being asked to find the other, is merely one way of looking at the question. It is certainly not the only way

I quote from his letter: "Of course, I am describing the method very briefly and I am not dealing with the gradual build-up which is needed for young children." Quite! It would be interesting (to me) to know how the build-up would proceed, using, say, bundles of sticks, which is what infants employ in the early stages.

The method mentioned by Mr. Inman is very good "on paper", but I suggest the practical demonstration of it is not going to be quite so easy. Credit is, indeed, due to Miss Burslem for her attempt to grapple with the problem. But to ask her to scrap what has been found to be successful in practice and start again "on the lines which I have indicated" strikes me as being just a little bit . . . Has Mr. Inman ever taught infants? . . . A very relevant question, believe me.