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.

Finally, it may be very naughty of me, but I confess to being unim
pressed by the battery of famous names (including as it does, four pas
Presidents of the Association). Dare I ask also: Has any of thes
gentlemen ever taught Infants?

> Yours etc.
> R. V PARKEI

To the Editor of the *Mathematical Gazette*

Dear Sir,

I like the method of beginning subtraction suggested by Miss Burslen
in your October number, 1959, but I cannot agree that equal additions i;
as hard to demonstrate as she suggests. Equal additions is the method o:
subtraction that derives from problems in which the difference must be
found. If a child has to find the difference between a 6 inch rod and ε
9-inch rod, he has both minuend and subtrahend before him, and both
do have an existence. It is then, also, quite easy to show that equa.
additions do not alter the difference. Children see this quickly when their
own ages are used in examples.

This method of subtraction has some advantages, one of which includes
the appreciation of the basic idea that equal additions do not alter
differences, but this is appropriate to a year or more of mental growth
beyond decompositions, and should probably not be attempted until
then.

The difficulty with crutches is easily dealt with by always adding one
to the bottom at the same time as one to the top line, where that is
necessary.

Many teachers object to teaching more than one process of sub-
traction in the scare of confusion. I doubt if this is reasonable for I have
observed that, without knowing it, teachers who use equal additions for
whole numbers will use decomposition for fractions—and without
confusing the children.

> Yours sincerely,
> RAY CHAPMAN-TAYLOR

WANTED

Mathematical Questions from the Educational Times, in particular the
volumes by W. I. C. Miller.

Robert Simson's Euklid from 1756, and those of I. Playfair, Ch. Hutton,
T Perronet Thompson, A. de Morgan, Todhunter, R. Townsend,
Nixon. I. MacMahon, Elementary Plane Geometry, 1903.

Offers to Karl Michaelis,

> Hamburg-Wandsbek,
> Rodigallee 100.