The growth of cities has increased the proportion of graded schools, and classification has increased the length of time devoted to the conduct of a lesson. This alone of itself has led to a greater degree of thoroughness. The lesson has been analyzed more critically, the pupil has been called upon to explain in his own words the thought of the text-book, and finally he has undertaken laboratory work and the comparison of authors. The rapid increase of cities, then, has brought about a reform of our methods in the direction of the German ideal. But we still lay more stress on discipline in our schools than we do upon intellectual instruction, and we doubtless shall continue to do so while the character of our people remains action-loving rather than knowledge-loving. Our inhibitory work we see must lie along the lines of caprice and adventure. The German must look out for a defect in a different quarter. He must make his knowledge-loving children as active as possible and stir them up to adventure and original effort, at least in the realm of the intellect. We, Americans, defend our great tendency to prescription by calling it moral education and asserting that it is far more important than intellectual education

We have already seen how easy it is to defend it, in our discussion of instruction as furnished by the well-disciplined school.

The second great paradox in school education is the counter-impulse of the course of study to drift towards prepartion for one's industrial vocation on the one hand, or on the other hand towards ideal standards of culture removed from the wants of daily life. It is the conflict between the bread and butter and the culture studies. This second paradox is quite as much a perennial subject of educational discussion as is that first one of prescription *versus* spontaneity, or self activity *versus* conformity to imposed patterns.—*Education.*

THE SIMPLIFICATION OF ELEMENTARY MATHEMATICAL TEACHING.

BY G. HEPPEL, ESQ., M.A.

(Continued from December Number).

ABOUT algebra, at the present time, I propose to ask you to consider what has been said by the best authorities. It is impossible, however, to continue keeping geometry out of the way, as both geometry and trigonometry come into close connection with modern algebra. Professor Chrystal says, in his address to the Brittish Association at Aberdeen in 1885 :

"In the higher teaching, which interests me most, I have to complain of the utter neglect of the all-important notion of algebraic form. I found, when I first tried to teach University students co-ordinate geometry, that I had to go back and teach them algebra over again. The fundamental idea of an integral function of a certain degree having a certain form and so many coefficients, was to them as much an unknown quantity as the proverbial x. I found that their notion of higher algebra was the solution of harder and harder equations.