mences percentage he thinks it is something entirely new, and probably never sees the relation between percentage and common fractions.

- 9. Arithmetic covers a worse than useless range of subjects. This point is incidentally mentioned in the quotation given above from the report of the Committee of Ten, and is fully discussed in that report.
- 10. A considerable part of the so-called arithmetic is pure algebra, taught to great disadvantage without the methods and nomenclature of that subject.
- 11. The opacity of the text-books is almost impenetrable even by older persons. Involved, prolix, bungling statement is the rule; a clear and natural mode of expression is the exception.
- 12. There are too many text-books in arithmetic primary arithmetics, grammar school arithmetics, high school arithmetics, practical arithmetics, philosophical arithmetics.
- 13. Arithmetic as ordinarily taught fails to offer an adequate motive for study. No one can do good work without a sufficient motive. Adults do not, why expect children to! This is a subtle but important point.

## THE TRUE WAY.

The true aim should be to so teach as to secure the interest of the pupil, to stimulate his thought, and to render him capable of solving independently and with certainty the problems that are likely to arise in practical life. In other words the object should be to develop intellectual power. The ability to make one horse-shoe nail is of more value to the blacksmith than a ton of nails already made. So the ability to acquire facts is vastly more important than the acquisition of any number of facts, and yet the most of our arithmetic teaching is simply the acquisition of facts, the laying of burdens upon our children which they rightly throw off at the earliest possible moment.

There are some American schools to which but few, if any, of the above criticisms apply, and herein is the hope for improvement in all our schools. Why should not all American boys have the best instruction! As a rule the superior schools cost no more than the inferior ones. Exchange

## College Graduates and School Licenses.

"State Superintendent Skinner of New York continues to signalize his administration by important advances in the common school system of the state. The latest of these resulted in a conference between Superintendent Skinner and Mr. Downing of his staff, and representatives of the colleges of the state. The object of the conference was to consider a plan submitted by Mr. Skinner by which college graduates, having received instruction in the theory and practice of education, shall be given first grade state licenses.

These licenses are valid for three years and are then renewable for life without examination, if the holder's teaching experience has been satisfactory.

"The importance of such an arrangement is apparent. College graduates ought to be found in the public school service in far greater numbers than at present. That they are not found there is largely due to the fact that their scholarship and training have been discriminated against in rules governing teachers licenses.

"Obviously, a college training alone does not equipone for teaching: but a college training, plus a careful study of principles of education, and some contact with its practice, does give the desired equipment.

"The minimum to be insisted upon by the State Department of Public Instruction will probably be (1) satisfactory course on psychology, logic, and economics, and (2) about thirty weeks instruction in the history, principles and practice of education." V. Y. Educational Review, May 1899.

## Educational News.

The Woman's Educational Union of Chicago claims that the Bible must be taught in the public schools because the laws of Illinois specify it as a book containing the primary elements of that religion, morality and knowledge which the public school act requires to be taught, and which is necessary to good government and the happiness of mankind.

In a town of New Jersey the commissioners of schools tendered a reception to their teachers.

A bill has been introduced in the legislature of Maryland providing for the introduction of physical training in the public schools and making it compulsory.

The system of supplying free text-books in the public schools is making rapid progress in the United States. During the last month ten towns decided in its favor—one of these being Minneapolis.

The vertical system of writing adopted in Halifax three years ago, bids fair to become the system of the future. There are now several publishers on this side of the Atlantic who advertise books with head lines in this style.

In some countries the law requires that in all school-rooms the doors shall open outwards to prevent danger in case of fire. The Maritime provinces should require the same. When the doors open inwardly, teachers should call the attention of the trustees to the danger.

In the state of New York the scholastic qualifications of a school commissioner are made the same as those of a first class school teacher.