than Socrates, Cicero and Plato.

There is no argument more fallacious than the one urged against the classics of want of practicality.

Prof. Cooke of Harvard University in his last address on "Scientific Culture" makes this remarkable concession : "After having spent a quarter of a century in assiduous labor to establish the present methods of science teaching, I am far from believing that they are the only true modes of obtaining a liberal education. So far from this, if it were necessary to choose one of two systems, I should favor the classical." After giving good reasons for this, he says further: "I never had any taste myself for classical studies, but I know that I owe to the study a great part of the mental culture which has enabled me to do the work which has fallen to my share in life." Multitudes of instances might be cited in proof of this position, but we shall pass this point with a single undeniable assertion that a large majority of men who form all the works of life, and all the professions, have done the most to ennoble, dignify, and develop English and American scholarship in all departments of literature, science and art, have been and are classical scholars.—American Journal of Education.

DRURY COLLEGE.

Drawing in the Public Schools.

BY HELEN L. D. POTTER.

Like mathematics, drawing is generic and not a specific term. If I say I am studying mathematics, you really know but little of what I am actually studying. It may be arithmetic or algebra or geometry or trigonometry or calculus or some special application of mathe matics, as in astronomy or navigation; so it is with drawing, for drawing is also divided into departments and you may be wholly absorbed in one of these departments without the slightest regard to any other department.

f say this because an idea seems to be prevalent that drawing is an accomplishment only and if a child draws, he must necessarily make what we understand to be pictures. The art of picture making is only one and the least useful one perhaps of all kinds of drawing. No one can form a thoroughly intelligent opinion of

the educational and practical value of drawing until he knows exactly what is meant by drawing. It is best therefore to give a short account of the five departments of Drawing.

1. Linear, or outline drawings, from flat copies, and designing. Free-hand.

This department is based on plane geometry, dealing with two dimensions only, length and breadth. The patterns for all flat surfaces come under this division of drawing ; viz., carpets, laces, print, wall-paper, table-linen, etc. The learner begins by sight lessons, motionexercices, and by drawing lines and plane geometrical forms, as triangles, rectangles, etc. Then follow geometrical patterns or designs, that is, designs not made in imitation of natural forms; next come conventional designs, that is, designs derived from natural forms, but not imitating them exactly; some other work is added to this course, of which we will speak by and by.

The copies should be as beautiful as possible, for the purpose of developing the pupil's taste. They should be enlarged and diminished as well as exactly copied in size, in order to teach form distinct from size, and taught are employed by all kind of artisans, machinists,

Demosthenes; none on ethics purer and more persuasive so that pupils may learn to judge of the proportion of figures by use of the eye alone. In this way the pupil obtains what is often "correct judgment of eye." He learns to see the difference between a square and an oblong by their proportions, and also to recognize a triangle, however small or great it may be.

In this department the p ipil also begins to draw from memory; again from dictation, that is, from verbal description only, which enables him to translate words into visible forms-a power of great value to every artisan. Finally he is exercised in making original designs; this develops the inventive powers, and shows whether the learner has acquired knowledge and taste as well as dexterity in the use of the pencil.

Ideas are of more importance than skill of hand. Give a pupil knowledge of symmetry, of historic forms of beauty, etc., and there is a prospect that he may make use of this knowledge some day; but skill of hand without knowledge, is fruitless; at best it can only feebly copy the work of others. Next in importance is rapidity of work; those lines are most beautiful which are made at one stroke or revolution of the pencil, and a hesitation at any point will cause it to look patched or spiritless as a whole. So pupils at the outset must do what is to be done at once, whether it proves good or bad. Skill will follow, and pupils so taught will undoubtedly produce work of far greater spirit and become swifter artisans than those who drag along and hesitate in their work. Draw first with understanding, each line having a meaning or purpose; next draw what you draw without hesitation, swiftly; then fear not but that fine finish will follow in due time.

We should never confine a pupil to one line or one figure until it is perfect; any more than we would make him produce a perfect letter in script before he is permitted to begin another. Every one allows him to write poorly at first, expecting him to correct and perfect his work by varying the combination of letters day by day. All this work, except the designing, is done free-hand. Original design is intended to display the originality, knowledge, and taste of pupils, and not to test their power to overcome difficulties; hence pupils should be allowed to bring out their ideas, to express their thoughts by any means possible, whether mechanical or free-hand.

II. Drawing problems in plane geometry with practical application. Instrumental

The drawings in this department represent two dimensions, length and breadth; so far they resemble the drawings in the first department. Some of the drawings are indeed the same, being geometrical forms in plane geometry ; but they will were done free-hand before, here they are executed with instruments, and are valuable only in utmost accuracy and precision. An instrumental drrwing to be good must be absolutely perfect. The construction of the higher plane curves which do not close like the cycloid, the epicycloid, the parobola, is included in this department. Then practical applications follow, to show the use of the knowledge acquired in the drawing of geometrical problems. The drawings are made with a pair of compasses and

a square. Of all the departments of drawing this is the easiest to learn. The work is delightful, and even young pupils will acquire considerable skill in the use of instruments. In this work the difficulty of executing with precision increases as the size of the drawing decreases. The great value of this department of drawing is in the fact that the figures and curves here