wrong, for example) to stand up and look at their books. I ask them for their opinion as to whether the mark is right or not, as I admit my liability to err. They are sensitive to this criticism. But mind, it won't do to be too critical or find too much fault. I seek an opportunity to praise. When I see improvement in the copy I make a mark at the bottom. The same mark at the bottom as at the top means improved in that respect. They are qualified to find such marks.

The first thing is to hold the pen right. Tracing books are made for this. Their proper use is not to teach the formation of letters but how to hold the pen and hand, in going over the tracing. If you tell them how to do this, and then tell them to write, they at once knuckle down to it with cramped fingers and hands, trying to make a good letter. But first let them use a dry pen until they can hold it easily, and bring his book into a position to suit the slant he wants to give. That is, train to hold the pen before writing with ink.

## ECONOMIC METHODS OF TEACHING.

A PAPER READ BEFORE THE COLLEGE OF PRECEPTORS, LONDON, BY MR. D. NASMITH, LL.B.

When addressing an audience mainly composed of members of this College, and, consequently, of persons who have made the subjects of Education and Instruction a study, it is probable, and but reasonable, that I should be expected to state at the outset the real object of my paper. It is this:—I venture to think, that the vast increase in the number of the subjects of study, the most striking and characteristic feature of this age, necessarily involves one of The schoolmaster who wishes to get and keep two consequences. his pupils up to the modern standard, must become a mere teacher, if not a pure coach, or new systems of imparting information must be found, which, while enabling master and pupil to satisfy present conditions, do not involve the sacrifice of the benefits that naturally attached to the system of what we may now call the Old School—a system which was essentially educational, as distinguished from instructional.

Defective and objectionable as was that system, in that it not merely confined scholastic advantages to the few, but denied to that favoured few knowledge of anything beyond the classics and mathematics, it is by no means clear that the system by which the old has been replaced is an unqualified blessing either to the state The present system might, with no or to the individual pupil. small propriety, be styled the system of wholesale instruction.

Happily, most enlightened persons now admit that a proper education and proper instruction are the birthrights of every subject, and that a state that does not secure and enforce these rights, neglects, if it may be so expressed, a primary duty to itself and to each of its subjects.

The question, however, still remains—What is proper educa-tion? What is proper instruction?

It cannot be doubted that the answers to these questions are most discordant; that, in fact, but few outside the profession of schoolmaster, and not a few within it, regard the two words as practically synonymous, and that the great mass, by the term "proper education" or "proper instruction," intend adequate instruction in the subjects commonly taught in the schools of the class and period to which they refer. The term, consequently, has no positive, but a mere relative signification.

When used by one class respecting themselves or their children,

it means something widely different from that which they intend when used by them respecting persons in another class; hence the lament, not now unfrequent, that the children of the poor are receiving, at the cost of the state, an education equal to that enjoyed by the more wealthy, at their parents' charge.

I venture to think that it is in the interest of the state, and therefore of the ratepayer, that the children of the poor should receive as good an education as the children of the most wealthy; but that it is unreasonable, if not absurd, to give them the same instruction. The better the education, the better must they be fitted for the battle of life, and the better able to do justice to themselves and others, in whatever sphere of life they may happen to be. good, better, best, when applied to instruction, is meant much, more, most, it is possible, it is even highly probable, that the comparative physical, the mental, and the moral elements, but the various and superlative instruction will prove not merely superlative but senses of each pupil.

pernicious. If, however, by good, better, best, when applied to instruction, is meant degrees of quality and not of quantity, then I venture to say of instruction, as of education, the better it is, the better it must be alike for all.

It is the duty of the educator to develop native forces. It is the duty of the instructor to instil foreign elements. It is the duty of the schoolmaster to do both scientifically. To educate his pupil, the schoolmaster must throw the burden of the labor upon the pupil. To instruct his pupil he should take, as far as possible, the burden of the labor upon himself. When the primary object of instruction is mental education, the burden of the labor should be adjusted according to the nature of the particular subject dealt

with as a means of educating.

Parmit me to illustrate. It is desired to educate the pupil phy-The machines employed are the parallel The educator stands by, directs and watches. His knowledge enables him to dictate what the pupil should and what he should not do; what will develop the muscles and what will strain them; what amount of labor can be endured with benefit, and the point at which the exercise, to be profitable, should cease. true that, by going through the exercise himself, the educator might show what he could not otherwise explain, but it is clear that no amount of physical labor on his part could develop a single muscle of the pupil.

Again, it is desired to instruct for the purpose pure and simple of instruction, i.e., to impart to the pupil information on a given subject,—e. g., the leading incidents in the life of Nelson. In this instance, the pupil becomes the practically passive recipient, the labor is taken upon himself by the instructor. By skilful arrangement of his matter, and by a happy manner of handling his subject, he lays stress upon the more important features of his narrative, and passes lightly over the less important though necessary links; and by just modulation of voice, and occasional change of position, he keeps the pupil's mind from wandering, absorbs his attention, and leaves upon his memory a lasting impression of the great hero.

It is true that he might have given the pupil a life of Nelson, and told him to read it, but it is clear that that would not have been instruction. Is it not equally clear that the same amount of information and depth of impression could not have been acquired and made in the same time by any other process?

If these illustrations are apt, it is obvious that, for the purpose of educating, the labor must be thrown upon the pupil; for the purpose of instructing it should be taken upon himself by the tutor. That being so, it becomes necessary to determine the true province of education, and to distinguish it, as accurately as possible, from In other words, it is necessary to determine that of instruction. where the schoolmaster should be active, where essentially passive.

I assume it to be admitted that no system of training can be good which ignores or discards the doctrine of equilibrium—that is to say, which overlooks the fact that each pupil has a physical, a mental, and a moral nature (I use the word moral for the want of a better term); or which attempts to improve or develop either of the three at the expense of, or to the neglect of, another or others.

Further, I take it to be admitted that the notion of teaching

drawing, because the pupil happens to have a good eye, or music, because there happens to be a good ear, is a thing of the past,— a dull and stupid confusion of the province of the school, which is to develop those senses and faculties that are defective, and the question of the selection of the proper profession or business to which the child should be assigned, which, if intelligently done, must necessarily be determined by regard to the natural abilities and tendencies of the youth

The drilling master, the music master, the drawing master, the language master, the mathematical master, the orderly, may each be perfect of his kind; but neither of these, nor all combined, constitute the schoolmaster. It is his duty to use each and all of these as instruments, each in its proper sphere, and good only as each serves to work out the schoolmaster's peculiar problem, the equal development of each pupil.

As the harper tunes his harp before he begins to play, or as the tuner tunes the piano before he leaves it to be played upon, and as each gauges the strength and quality of the instrument, and tightens or loosens, as need may be, in order that equilibrium may exist consistent with the capacity of the particular instrument; so, I take it, is the aim and high art of the schoolmaster, whose duty it is, not to stuff a given amount of information into his pupil, but as far as possible to bring into equilibrium, not merely the