

all enthusiasm, and renders the recitation mechanical and lifeless. A reference to the text to determine the correctness of the answers given by pupils, is an evidence of incompetency too palpable to be justified. It may be accepted by the young teacher as a guiding maxim, that the *minimum* of his dependence upon the text-book in conducting recitations will be the *maximum* of his success. He should aim to come before his classes with a *free eye*.

3. The teacher's preparation should also include the method of conducting the recitation. Other things being equal, the better the method, the better will be the results attained. "In what manner can I test the study of my pupils most thoroughly?" "How can I secure the highest possible amount of mental effort from each pupil, during the recitation?" "How can I best teach this principle?" "What new illustration can I use?" "In what respects should my general method be modified in hearing this particular lesson?" These are some of the inquiries which daily spring up in the mind of the earnest, progressive teacher. He is not satisfied to repeat the blunders and failures of yesterday without an effort to avoid them. Every day renews the struggle for the attainment of truer results. Under the inspiration of an unattained but not unattainable ideal, his entire work is subjected to close scrutiny. The educational principles which underlie his methods are searched out and examined into. One guiding maxim after another is accepted and acted upon. Nor does he overlook those details which make up what may be termed the mechanism of his school. The best mode of calling out and dismissing classes; the best mode of calling upon pupils to recite; the best position for them to assume when reciting;—these and other inquiries receive careful attention, with a consequent increase of skill and success.

4. In order that the pupil's preparation may be thorough, *each lesson should be properly assigned*—a matter too often neglected. In the proper assignment of lessons there are three things to be considered: the capability of the class; the time available for study; and the nature of the lesson. To assign lessons frequently which are beyond the pupils' ability to master, is sure to break down the spirit of study in any school. Before assigning a lesson a teacher should make himself familiar with its difficulties, so that he may be able to estimate both the amount and degree of mental effort necessary for its preparation. The lesson should be assigned definitely, and the requirements of the recitation should be clearly stated. Whenever the lesson contains anything that is difficult or specially important, the attention of the class may be called to the same; but, as a general rule, no explanation of difficulties should be given until the pupils have attempted their mastery. Prior explanations take from the pupil the necessity of earnest study, and destroy that manly independence which is the very soul of study. It is the teacher's office to guide and stimulate, but the pupil must himself wrestle with the difficulties which confront him. The teacher may point out the best path, but the pupil must do the climbing. The practice, common in some of our schools, of explaining in advance every rule or process in arithmetic, is pernicious. It reduces the pupil to a mere figuring machine. We here refer more specially to the assignment of lessons to advanced classes.

It may be added for the encouragement of young teachers, that the faithful preparation for the duties of the recitation, above indicated, will lighten the burden of school government, lessen the fret and wear of teaching, keep the mind fresh and vigorous, and promote good health. Try it.—*Ohio Educational Monthly*.

### 3. HABIT OF EXAGGERATION.

"I will skin you alive if you do that again," exclaimed a mother to a naughty child. It was a sort of hyperbolic expression that has crept into frequent use, with a multitude of other expressions of similar character. She did not mean that she would proceed to flay the little one as butchers would a calf or lamb. The execution of her threat would fill her own soul with excessive horror. She would not have strength to make much progress in the very barbarous work of skinning her child alive. It would not be motherly.

"I will whip you within an inch of your life," said a father to an erring son. This would be a terrible whipping indeed. Coming so near to death's door with the rod would be revolting. But he did not mean this. He only meant that he would administer a very severe chastisement. No one would be more careful than he not to jeopardize the life of his son. His expression was only a form of exaggeration which society seems to tolerate.

How many precisely such speeches are made in every circle. "It was done as quick as lightning." "He is as slow as a snail." "It is as hot as an oven." "It is as cold as Greenland." There is no end to such expressions. And they indicate that the habit of exaggeration is very strong in the human family. Human nature seems inclined "to stretch the truth." That is the reason that such strange stories are told, often becoming magnified to such an extent after having passed through several hands. "A story loses nothing by travelling," is an old saying. It usually grows like a ball of snow

which school-fellows roll. Every tongue that repeats it gives it an additional turning over, by which it accumulates. Yet none mean to exaggerate.

It is a fault, however, is it not? May it not be a sin? It is certainly deceptive to tell a child that you will skin him alive, when you have no idea of perpetrating the infernal deed. Should we not talk as we mean? Let your yea be yea and nay nay. At least, this should be done to children.—*Home Monthly*.

### 4. STOP THAT BOY,

A cigar in his mouth, a swagger in his walk, impudence in his face, a care-for-nothing in his manner. Judge from his demeanor, he is older than his father. Wiser than his teacher, more honored than the President of the Board of Trustees for the town, higher than the Governor. Stop him; he is too fast; he can't see himself as others see him; he don't know his speed. Stop him, ere tobacco ruins his nerves; ere pride ruins his character, ere the loafer masters the man, ere good ambition and manly strength give way to low pursuits and brutish aims. Stop such boys. They are legion, they are the shame of families, the disgrace of their town, the sad and solemn reproach of themselves.

## II. Papers on Scientific Subjects.

### 1. GREENWICH OBSERVATORY.

Decidedly one of the most interesting places in England, is the famous observatory at Greenwich. It was built by Charles II. in order to remove a great drawback under which navigators labored. The commerce of England was coming into an important position, and it was necessary that navigators should have some means of finding their longitude at sea, independent of watches or clocks; and a reward was offered to any one who should discover a method by which this result might be obtained. The plan proposed, was that the angular distance of the moon from certain stars should be calculated beforehand, and published, so that, for example, it might be stated, that, at ten minutes and five seconds past nine on such a day, the moon should be distant from Mars forty degrees. If, from a ship in the middle of the Atlantic, Mars and the moon were found to be forty degrees apart, then it would be known that the time in England was ten minutes and five seconds past nine. This method was a good one, but, in consequence of the want of accuracy as regards the moon's motions, and the exact positions of the stars, it could not be practically carried out.

Under these circumstances, Charles II. decided that a national observatory should be built, and an astronomer appointed; and a site was at once selected for the building. Wren, the architect, selected Greenwich Park as the most suitable locality, because from thence, vessels passing up and down the Thames, might see the time signals, and also, because there was a commanding view north and south from the hill selected for the site. The observatory was completed in 1676, and Flamsteed installed in it as the chief astronomer. He at once commenced his labors, and continued them for thirty years, when he was succeeded by Halley; and, up to the present day, Greenwich Observatory has been the headquarters for astronomical observations in that country.

The work carried on at Greenwich is entirely practical, and consists in forming a catalogue of stars and planets, and so watching them that every change in their movements is at once discovered. So perfect has this work become, and so accurately have the movements of the principal stars been determined, that the *Nautical Almanac*—the English official guide on these subjects—is published four years in advance. On the exterior wall of the observatory, there is a large electric clock, which, being placed in "contact" with the various other clocks in the observatory, indicates the exact Greenwich time. The face of this clock shows twenty-four hours. To the left of this clock are the English standards of measurement of distance.

### 2. METEOROLOGICAL STATION, LAKE WINNEPEG.

We are happy to state, that arrangements have been made for the establishment of a Meteorological Station near Fort Garry, in connection with the Educational Department for Upper Canada. Dr. Schultz, a graduate of Victoria University, who resides in that region, has recently supplied himself, at his own expense, with a set of the meteorological instruments specially imported for our stations, and has undertaken to perform the routine of duty prescribed under the authority of the Grammar School Law, and for which he will receive the usual remuneration. We have no doubt that he will prove to be a valuable accession to the staff of observers, and that the results of his communications from the far North West will be of great interest and importance.