

superficiality, for the student jumps from one subject to another, doing no good work in any one.

These are some of the features of the educational system of the State of Iowa, and to a greater or less degree, similar conditions will be found in every state of the Union. It is in just these existent conditions that the defects of the system are evident,—in the entire lack of central authority to supervise and control each step in the progress of the individual in the schools, to harmonize and grade the work in every institution, so that no time will be lost or nothing will be omitted or will clash in the advancement of the pupil, and so make as nearly as possible of the pupil who passes from the lowest to the highest grade under its supervision, a finished product.—MAUD M. CAWTHORPE SMITH, B. A., St. Catharines.

Teach them How to Breathe.

THERE are two ways of breathing—naturally through the nose and unnaturally through the mouth. Many children breathe a great deal through the mouth, and it would seem worth while for teachers to know something of the causes and results of such a habit.

The nose is not placed on the human face merely for ornament. Neither is the nasal cavity a simple passage for the air to the windpipe. It is much larger than one would think, has a partition in the middle, and has projecting into it on each side several scroll-shaped bones. It also communicates on each side with a large cavity in the cheek bone, and another in the frontal bone over the eye, to say nothing of the Eustachian tube leading to the ear. This whole cavity is lined with a highly vascular, moist membrane, the intricacies, the partition and the extra bones being for the purpose of providing room for more membrane. When we breathe, air is drawn in by the pumping action of the

chest walls, and circulates freely through every part of the nasal cavity. What is the result? The air is warmed to the temperature of the body by the highly vascular membrane; it is moistened by the secretions of the same membrane, and it is freed from dust and impurities by circulating among the intricacies of the nasal chambers. The lungs (which are inconceivably delicate in structure) are thus saved a good deal of irritation through the air being warmed, moistened and filtered in the nose before reaching them.

Now, if nature has provided such an important organ as the nose and teaches all young animals to use it, why do so many children become mouth-breathers? The immediate cause of mouth-breathing your physician will tell you, is that the nasal membrane has become hypertrophied, in other words, it has received an over supply of blood so often that it has actually become *over-grown*—and has partly blocked up the passage through the nose. Thus it is sometimes a physical impossibility for the child to get air through his nose as fast as he needs it. But we must go further and inquire what caused the obstruction to grow. The immediate exciting cause is frequent taking cold. The predisposing causes, however, are all important, and might be summed up as follows:

- 1.—Inherited tendencies.
- 2.—Improper clothing.
- 3.—Improper feeding.
- 4.—Improper exercise.
- 5.—Impure air.

6.—Mere habit has not a little to do with making children breathe too much through the mouth, and so predispose themselves to colds, by interfering with the circulation through nose and throat. The colds thus formed block the nostrils and cause mouth-breathing. So a vicious circle is established.

The exciting cause of nasal obstruction, we have said, is frequent taking cold. Now, what does taking