

pay attention to each individual child. Here the child is always engaged in useful work, suited to his age and capacity; prizes are never offered for successful work, nor punishment for failure.

The natural love for games is here taken advantage of, so as to cause a healthy development of the moral nature, the physical powers, the imagination, etc.; and a love of nature and all forms of beauty is here stimulated and encouraged.

Great importance is attached to the development of the hand in the kindergarten, not only in the gifts and occupations, but in the games and finger plays, for the hand is to be such an important factor in the future when the child is striving to earn his own livelihood.

Great accuracy is taught in the kindergarten. The tables are cut into one-inch squares and the child is taught to build his blocks and other material upon them—the foundation of accuracy in thought, word and deed. The games, gymnastics, songs and stories of the kindergarten all tend to teach the child impressively and clearly the helpful influence of common purpose of labor, of unity of interest and action, or in other words, it educates the child to be a part of the world.

In the kindergarten, hurry and rush which are so destructive to education are unknown. A consideration for others and a regard for their rights, is a lesson which the kindergarten endeavors to impress upon the children.

The circle in the kindergarten is a miniature world, where one unruly member can spoil the pleasure of all, where the greatest good comes from the participation of all. Here the child learns that he is one of many, as he can learn it nowhere else. While he has opportunity, at times, to exercise his individuality by choosing his favorite games, yet he has oftener to play the games chosen by others, and here first learns the lesson of unselfish enjoyment of other's joys.

Here by personal example and by various other means the child is trained in politeness, pleasant address, gentle speech, and kindness to others, all of which are of so much importance in his later social life.

The quiet waiting "to hear the clock tick," while the eyes are bright with pleasure, the moment of stillness before the new game follows the old, the quiet waiting while a word of thanks is offered before generous hands distribute the lunch, all hold the spirit of the kindergarten through the spirit of the children.

The kindergartner encourages generous impulses by noticing the first indications of them. The child

loves to have his efforts recognized, even if by his own companions; how much more would he appreciate it from his teacher if she is also his loving friend.

In the various ways above mentioned the kindergarten seeks to produce law-abiding children, children who are orderly in thought, feeling and action, who enjoy "the feelings of liberty, because license is far from them, and children who are planting a high parenthood, a pure citizenship and an exalted manhood."

ETTIE DEWOLFE.

For the REVIEW.]

#### Practical Chemistry in a Country School.

Although these notes will be quite unnecessary to any teacher who has studied with Mr. Brittain, I trust that they will be of benefit to some one about to begin chemistry with grades VII. and VIII.

The first thing required is a tray which may be removed when the lesson is over. My boys made them for every pupil out of light packing boxes. The trays are as wide as the desks and proportionably long; the sides from two to three inches deep, rising higher at the ends where handles are whittled out. Two little blocks must be placed under the front corners of the tray to make it level.

Each tray is fitted with a little box to hold litmus paper, stirring rod, matches, etc.; a few two-inch squares of window glass, and two or three little dishes (exaggerated butter plates or sauce dishes provided by the pupils), should be in front of the box. Each tray has two of the little glass-stoppered bottles in which perfume comes, filled with  $\text{HCl}$  and  $\text{H}_2\text{SO}_4$ . A pound of each acid costing twenty cents will last for a long time. The place of honor in the tray is held by the pneumatic trough. These are furnished by J. M. Wiley, druggist in Fredericton, for forty cents, but we made our own out of deep tin cake pans with a shelf of tin or zinc. Pan and tray should both be painted to prevent rust. With the trough goes a rubber delivery tube costing thirty cents per yard. A yard is enough for two trays. The end of the tube is passed up through the hole in the shelf and held in place by a good sized pin or a slender darning needle. The generating bottle is a wide-mouthed bottle costing ten cents, its cork pierced by two tubes. Other necessary apparatus, ignition tubes at 10 cents, test tubes at 5 cents, etc., can be obtained of any druggist. The chief expense is the alcohol lamp and its fuel, but so far I have managed to do with only one. Chemistry lesson comes just after recess. I began to prepare oxygen and the gas was coming freely at the beginning of the lesson. Then a bottlefull was collected for every tray and the ex-