

at the rate of a little more than three minutes for each child. He had long shown elsewhere that pigs that were washed put on one-fifth more flesh than the pigs that were unwashed, and more than this was the result with children.

TOBACCO EFFECTS ON THE YOUNG.—In an experimental observation of thirty-eight boys of all classes of society and of average health, who had been using tobacco for periods ranging from two months to two years, twenty-seven showed severe injury to the constitution and insufficient growth; thirty-two showed the existence of irregularities of the heart's action, disordered stomach, cough, and a craving for alcohol; thirteen had intermittency of the pulse, and one had consumption. After they abandoned the use of tobacco, within six months one half were free from all their former symptoms, and the remainder had recovered by the end of the year.

ESSENTIALS OF THE MOTHER.—Calmness and equanimity are what young women most frequently lack, says Donne. Cazeaux says;—So essential a condition is this, that I take into deep consideration the nervous condition of the mother when judging of the propriety of her nursing; and, if she is too excitable, I prefer intrusting the child to a wet nurse. A mother whom the least cry of her child fills with anxiety, or who cannot see it fretful or in pain without being overcome, will hardly fail to make a bad nurse. A child is rarely brought up without suffering some derangement or other of its health, and, sometimes, even serious disease. It is precisely on such occasions most important to have milk perfectly pure, which it never can be from the breast of a mother who will not, or cannot, control her emotions.

A VENTILATING DADO.—At a recent meeting of the Glasgow Philosophical Society, the subject of house ventilation was brought up by Mr. D. G. Hoey, who said that he was a disciple and follower of Sir Humphrey Davy, and that the method he had elaborated was founded on Davy's work. A dado of three to four feet in height was placed round the walls of the apartment, with a narrow space between the dado and the wall to form a reservoir for fresh air let in from without by inlets in the wall. On the top of the dado wire

gauze or perforated metal was placed, through which the air percolated into the room. The area of the exit from the top of the dado being much greater than that of the inlet, and the total space enclosed by the dado being much greater still, the fresh air passing through this extended space lost its initial velocity, and percolated gently into the room. The total area of the inlet was proportioned to that of the hot-air shaft for carrying out the impure air. The needful column of hot air, for carrying off the impure exhausted air, could best be supplied by a chimney of suitable capacity, with a close-throated firegrate, having an opening in the room at a high level into the flue. When a suitable chimney was not available, the same results were produced by a tube of sufficient area and height erected above a sunlight in the roof of the hall.

SPIRIT AND OBJECT OF MANUAL TRAINING.—The production of thoughtful, self-relying, honest men. It is believed that the specific purpose of education is to cultivate character, to induce sound thinking, and to make a necessity of scientific inquiry. Its highest end is ethical. Of great value, but secondary to its supreme purpose, are the skill and the information which would be the natural result of such cultivation. The aim of the school is to prepare for completeness of life. The central thought in its entire organization is always the boy himself, and everything that is done, every study that is taken up, every influence that is brought to bear, has for its sole purpose his development. In this view of its proper function, the school is a purely educational institution, and is industrial only in making use of the tools of industry to accomplish its chosen purpose. The manual work, like the work in science and literature, is simply a means of development. It bears the same relation to the process of education that a railway train does to travel. One may select slower modes of approach if he chose, but, in his delight at the rapid transit, he must not confuse the journey with the end for which the journey is made. Those who hold this view of manual training, watch with sincere regret any encroachment of that spirit which places the inanimate product, however ingenious and beautiful it may be, above the human product. The object of manual training, they believe, is the production of thoughtful self-reliant, honest men.—Prof. C. H. Henderson, in *Popular Science Monthly* for August.