

the decision was in favor of the time-honored "Black Giant." A hundred dollars or so extra could not be thought of, to make sure that the young people should have good air, good health, good nature and good work, even though the S. S. would not have to pay on an average one dollar more on \$1,500 of assessed value. This false economy, growing out of ignorance of the laws of hygiene, must ultimately give place to wise and liberal provision for giving good air to the schools.

4. *Its Temperature.*—The temperature of the School-room has much to do with its success and comfort. In fixing the degree of temperature, several matters should be considered:—the flow of air into and out of the room, the quantity of air, the restoration of the children, their clothing, the state of their health, their proximity or remoteness from the stove, &c., &c. You cannot lay down any arbitrary rule. The teacher, who is, or should be constantly moving, and is usually in a more elevated position, can be comfortable in a lower temperature than children sitting at their desks. Then, too, some are thinly clad, and poorly fed, and some are delicate; so that you should consider what is best for the whole, and not risky for any. I should say a temperature of about 70 degrees where a thermometer is usually hung—behind the teacher—would not be much out of the way, especially if the house is a comfortable one. But when your house is cold, and stands on cedar posts, without banking, you cannot make the temperature what it should be: and, if your children suffer from cold feet, let them go to the stove to warm them, even if they do not study half time. It is worse than cruelty to compel them to inhabit such a house winter after winter. If you are obliged to heat your stove like a smelting furnace in such a house, have screens to set around the stove, to protect those who must sit near it. Many a child has been made ill by this half roasting, half freezing process.

Next to the atmosphere, one of the most potent influences affecting school-room hygiene is

II. LIGHT.

The influence of light on the health is largely over-looked. Yet its silent, gentle, constant power, is vastly important. Plants soon languish and die without it, and animals deprived of it lose sight and health, and even life. Much attention should be given in the school-room to

1. *Its Color.*—Pure, prismatic colors, in the right proportion, should always be secured. The light admitted through frosted or stained glass is usually deprived of some of its constituents, and distresses the eye, and injures the health to some extent. That transmitted through orange or yellow Holland is still worse. It is so far robbed of its proportions and properties as to be very uncomfortable. Reflected light, too, is often very much impaired. The surface of walls, ceilings, &c., should be of such a color as to soften and harmonize shades of light. Where the direct rays have to be shut out, green or blue shades are preferable even to white.

2. *Its Intensity.*—Men can labor out doors in the direct rays of the sun, without distress, if the eyes are shaded, when children and other students, who are poring over marks and characters at a small distance, suffer readily from excess of light. The reason is not far to seek. Out of doors the eyes are constantly bathed in fresh air, the focus is seldom the same for more than a few moments, and there is relief in variety of shades and objects; while with the student this is all reversed. The light is the same, the focus is the same, and there is no variety. The monotony of effort, of color, of focus, of object, taxes to injury very quickly. The light of the school-room should therefore be sufficient, but softened, and even subdued, to meet the change of circumstances under which the eye is used. Black slates and white paper are objectionable. Nature's prevailing shades should be copied in the materials on which the eye has to gaze with steady and trying intensity. In this way variety and harmony would relieve the unavoidable taxation.

3. *Its Direction.*—Little "at your own observation may not suggest can be said on this point, which, however, is not unimportant. The direct or reflected light which strikes directly into the eye, is always to be avoided. Light should be admitted so as to enable the pupils to see their work clearly and readily. It should come from a direction not to throw shadows which interfere with vision, nor to oblige the eyes to squint or strain after their work. In this connection, let me urge upon you the great evil that is so often done to the eyes by allowing them to squint, or look awry at work, and by permitting the face to approach within a few inches of the book in use. Train to proper attitude and the proper focus, considering cases of myopia, or the reverse.

In the last place I speak of

III. ACCOMMODATION.

1. *Accommodation for Study.*—This should be removed as far as possible from the place for recitation. It should be convenient, so that work could be taken or replaced without trouble or noise. It should be comfortable, so that the body, as well as the mind, may rest naturally and at ease. It is too late in the day to ignore physical comfort to children. Matured persons can far better endure physical discomfort than immature ones, in the early stages of development, when bones, muscles, and nerves, are less capable of strain. Yet, in three out of four cases, the effects of even the improved desks and seats on the young people, are seriously hurtful. What is more fatiguing for a child than to sit for hours with its feet dangling in the air, throwing the spine out of its natural curve, and crowding the lungs, wearying the muscles that must support the weight of the lower limbs, and curving the soft thigh bones? How few of your children are of the size to take advantage of their chairs, which are far better adapted for giving a finish to their looks than support to the weary spine of the growing, tired boy or girl? Why should not the seats be graded in height so as to allow the feet to rest comfortably on the floor? Why should not the chairs brace the seat and back so as to support and preserve the natural postures and curves of the body? Why should not the desks be so sized and shaped as to hold the work at a comfortable and natural distance before their occupants? Look over your children at a writing exercise, and count how many of them look like star-fish on the back of an oyster; and all because the seats and desks are not suitable for them. If you have any penitent stools in the shape of for a without backs, at least cut off the feet till the top is within ten inches of the floor, and set them along the wall. If you do not you will be responsible for round shoulders, hollow chests, and enfeebled frames, to a serious extent.

2. *Accommodation for Recitation.*—In Schools not graded thoroughly, hearing of lessons and teaching interfere very seriously with the quiet and work of the school-room. In such schools of the future, I hope to see a separate room for recitation, with glass doors between that and the study room, (which may be thrown open when not in use), into which the teacher and class will retire. If the future boy and girl are as irrepressible as some are now, a monitor can be left in charge. In this way there will not only be less interruption of work, but more air space; and, in addition, there should be comfortable seats, rests for books, &c., so that the fatiguing practice of standing still for half an hour may not be a necessity. When a class-room is not provided, seats between the teacher's desk and those of the children may be used, though health may suggest standing sometimes instead of sitting. In either posture, insist upon natural attitudes. Much harm is done to the powers of developments, as well as to the grace and ease of the human form, by neglecting this point. Who ever heard of compelling soldiers to stand half an hour "Heels together, toes out!" or hands pinched behind or at sides? These awkward and tiresome postures are as inconsistent with health as they are with grace of figure or motion. Study the simple laws of "Action," as laid down in any work on elocution, and you will find that they take hold of the graceful and expressive laws of a healthy and well developed physical frame, and make them contribute to the power of vocal language. Let the right hand and foot be at "At ease," the shoulders thrown back, the organs of speech free to move by holding the head erect, and the eyes taxed by neither too great nor too short a distance from their work.

3. *Accommodation for Recreation, Lunch, Rest, &c.*—Not only would it add to the comfort of a school-house to possess such a room; but it would also be healthful, and prevent damage to furniture. Basements or second floors could readily be fitted and heated for such purposes. The children would not be tempted to disobey orders, by making the school-room proper a play or lunch room. In disagreeable weather, physical exercise, exhilarating games, songs, drill, &c., could be secured. Without such accommodation, in bad weather, as matters now are, how the buoyancy, the activity, the good humor of children must be repressed! and how the inventive but restless spirits will involve themselves, the teacher, and sometimes the whole school in trouble.

Thus, hurriedly and imperfectly, have I tried to lay before you seed thoughts on a subject to which very small justice has as yet been done, but to which, if children are to be educated aright, must ever increasing importance be attached—School-room Hygiene.