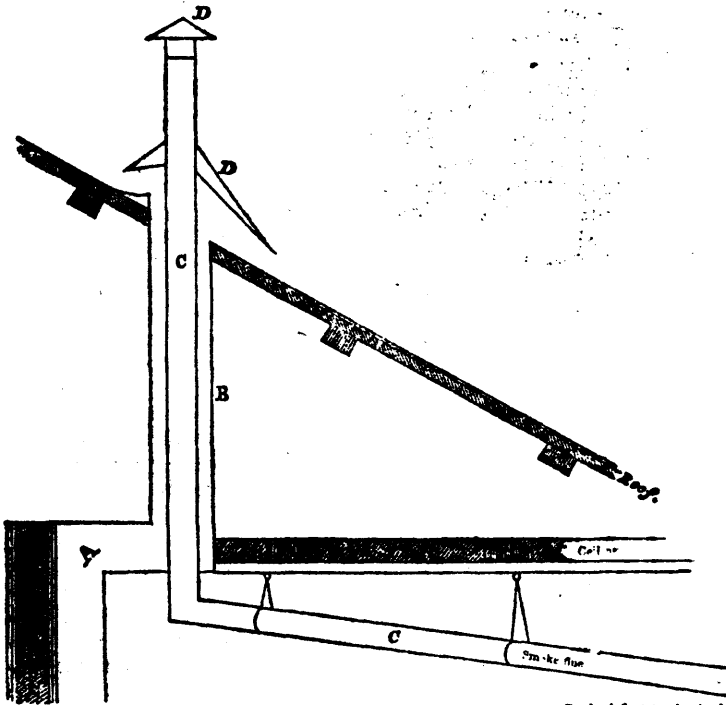


For further details of construction and arrangements we refer to the explanations connected with the plates.

(Fig. 5.)

VENTILATING APPARATUS.



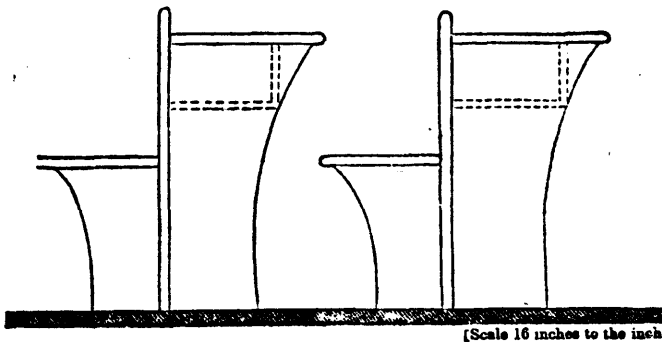
[Scale 4 feet to the inch.]

- A. Air box, 1 foot square, or 24 inches by 6, covered by the pilaster, and opening at the floor, in the base of the pilaster.
 B. Round iron tube, 15½ inches in diameter, being a continuation of the air box, through the centre of which passes,
 C. The smoke flue, 8 inches diameter
 D. Caps to keep out the rain.

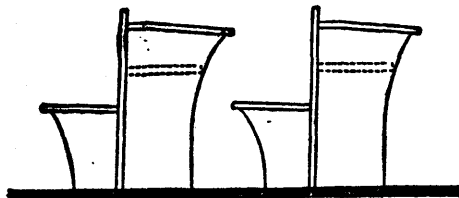
We next present two engravings of seats and desks. It will be seen that the upper surface of the desk in Fig. 6 is level; and that shown in Fig. 7 is sloped, except about three inches of the most distant portion, in the ratio of one inch in a foot. The edges of the seats are in the same perpendicular line with the fronts of the seats.

(Fig. 6.)

SECTION OF SCHOLARS' DESKS AND SEATS.



(Fig. 7.)



Section of Seat and Desk.

We will conclude our present remarks on School Architecture in the following graphic language of the Hon. HORACE MANN:—

“The voice of Nature forbids the infliction of *annoyance, discomfort, or pain*, upon a child, while engaged in study. If he actually

suffers from position, or heat, or cold, or fear, not only is a portion of the energy of his mind withdrawn from his lesson,—all of which should be concentrated upon it;—but, at that indiscriminating age, the pain blends itself with the study, makes part of the remembrance of it, and thus curiosity and the love of learning are deadened, and turned away towards vicious objects. This is the philosophy of children's hating study. We insulate them by fear; we touch them with non-conductors; and then, because they emit no spark, we gravely aver that they are non-electric bodies. If possible, pleasure ought to be made to flow like a sweet atmosphere around the early learner, and pain be kept beyond the association of ideas. You cannot open blossoms with a northeast storm. The buds of the hardest plants will wait for the genial influence of the sun, though they perish, while waiting.

“The first practical application of these truths, in relation to our Common Schools, is to School-house Architecture,—a subject so little regarded, yet so vitally important. The construction of school-houses involves, not the love of study and proficiency only, but health and length of life. I have the testimony of many eminent physicians to this fact. They assure me that it is within their own personal knowledge, that there is, annually, loss of life, destruction of health, and such anatomical distortion as render life hardly worth possessing, growing out of the bad construction of our school-houses. Nor is this evil confined to a few of them, only. It is a very general calamity. I have seen many school-houses, in central districts of rich and populous towns, where each seat connected with a desk, consisted only of an upright post or pedestal, jutting up out of the floor, the upper end of which was only about eight or ten inches square, without side-arms or back-board; and some of them so high that the feet of the children in vain sought after the floor. They were beyond soundings. Yet, on the hard top of these stumps, the masters and misses of the school must balance themselves, as well as they can, for six hours in a day. All attempts to preserve silence in such a house are not only vain, but cruel. Nothing but absolute empalement could keep a live child still, on such a seat: and you would hardly think him worth living, if it could. The pupils will resort to every possible bodily evolution for relief; and, after all, though they may *change the place, they keep the pain*. I have good reasons for remembering one of another class of school-houses, which the scientific would probably call the *sixth order of architecture*,—the wicker-work order, summer-houses for winter residence,—where there never was a severely cold day, without the ink's freezing in the pens of the scholars while they were writing; and the teacher was literally obliged to compromise between the sufferings of those who were exposed to the cold of the windows and those exposed to the heat of the fire, by not raising the thermometer of the latter above ninety degrees, until that of the former fell below thirty. A part of the children suffered the Arctic cold of Captains Ross and Perry, and a part, the Torrid heat of the Landers, without, in either case, winning the honours of a discoverer. It was an excellent place for the teacher to illustrate one of the facts in Geography; for five steps would have carried him through the five zones. Just before my present circuit, I passed a school house, the roof of which on one side, was trough-like; and down towards the eaves there was a large hole; so that the hole operated like a tunnel to catch all the rain and pour it into the school-room. At first, I did not know but it might be some apparatus designed to explain the Deluge. I called and inquired of the mistress, if she and her little ones were not sometimes drowned out. She said she should be, only that the floor leaked as badly as the roof, and drained off the water. And yet a healthful, comfortable school-house can be erected as cheaply as one which, judging from its construction you would say, had been dedicated to the evil genius of deformity and suffering.”