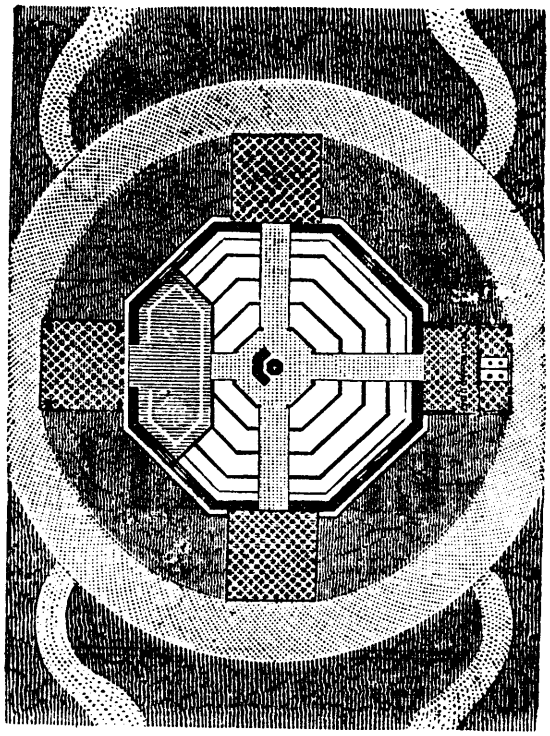


PLAN NO. 4—GROUND PLAN OF AN OCTAGON SCHOOL-HOUSE.—FIG. II.

This lobby is to finish eight feet high, the inside wall to show like a screen, and rising to the roof, and the space above be open to the school-room, and used to put away or station school apparatus. This screen-like wall may be hung with hats and clothes, or the triangular space next the window may be inclosed for this purpose. The face of the octagon opposite to the porch, has a wood-house attached to it, serving as a sheltered way to a double privy beyond. This wood-house is open on two sides, to admit of a cross draught of air, preventing the possibility of a nuisance. Other wing-rooms may be attached to the remaining sides of the octagon, if additional inconveniences for closets, library, or recitation rooms be desired.

The mode here suggested of a lantern in the centre of the roof for lighting all common school-houses, is so great a change from common usage in our country, that it requires full and clear explanations for its execution, and plain and satisfactory reasons for its general adoption, and of its great excellence in preference to the common mode. They are as follows, viz.:

1. A skylight is well known to be far better and stronger than light from the sides of the building in cloudy weather, and in morning and evening. The difference is of the greatest importance. In short days (the most used for schools) it is still more so.

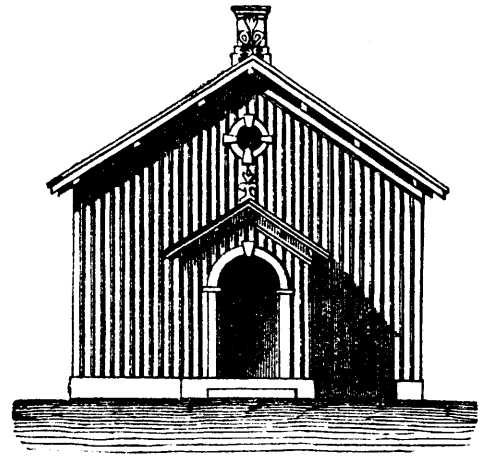
2. The light is far better for all kinds of study than side light, from its quiet uniformity and equal distribution.

3. For smaller houses the lantern may be square, a simple form easily constructed. The sides, whether square or octagonal, should incline like the drawing, but not so much as to allow water condensed on its inside to drop off, but run down on the inside to the bottom, which should be so formed as to conduct it out by a small aperture at each bottom pane of glass.

4. The glass required to light a school-room equally well with side lights would be double what would be required here, and the lanterns would be secure from common accidents, by which a great part of the glass is every year broken.

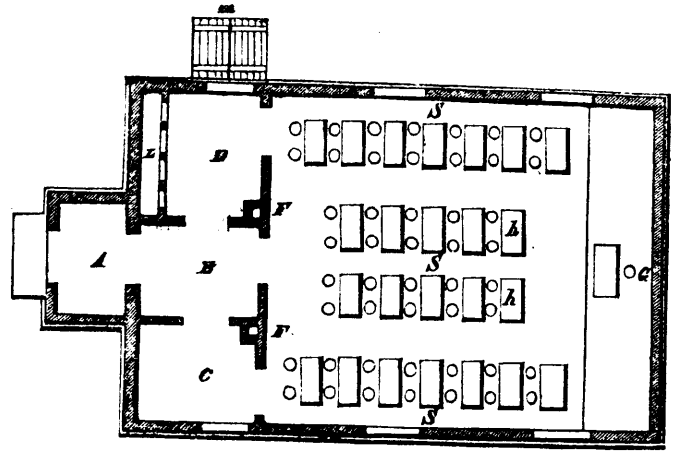
5. The strong propensity which scholars have to look out by a side window would be mostly prevented, as the shutters to side apertures would only be opened when the warm weather would require it for air, but never in cool weather, and therefore no glass would be used. The shutters being made very tight, by calking in winter, would make the school-room much warmer than has been common; and being so well ventilated, and so high in the centre, it would be more healthy.

6. The stove, furnace, or open grate, being in the centre of the room, has great advantages, from diffusing the heat to all parts, and equally to all the scholars: it also admits the pipe to go perpendicularly up, without any inconvenience, and it greatly facilitates the ventilation, and the retention or escape of heat, by means of the sliding cap above.



PLAN NO. 5.—END ELEVATION OF HALL END SCHOOL HOUSE—FIG. I.

The size of this building is twenty-three by thirty-four feet, one story high, thirteen feet in the clear, and pitch of roof nine feet. The interior arrangements resemble many of the others, but in this an outside lobby is made at the entrance, which gives an additional room appropriated for library and recitation.



PLAN NO. 5.—FIRST FLOOR—FIG. II.

A. Lobby or outside porch, 5 by 6 feet.
B. Entrance, 8 by 8 feet.
C. Girls' bonnet room, 6 by 8 feet.
D. Boys' cap room, 6 by 8 feet.
FF. One a smoke flue, the other a ventilator brought together in the loft and topped out together.
G. Teacher's desk on a platform, 4 by 22 feet.
hh. Seats for two pupils.
L. Library.
m. Entrance to the cellar.
S. Passages or aisles.

In framing this building, it will be done so that the weather-boarding can be put on vertically. The rafters will be twenty inches between centres, with a collar beam of one and a half inch plank, well spiked across each, and the heel of the rafter notched out to rest upon the plate; the front part projecting and forming the support to the eave, and that portion of the rafter will be planed, as will also the projecting pieces supporting the roof at the gables. The weather-boarding will be planed, and beveled, and strips three inches wide firmly nailed over the joints.

The carpenter work, including blackboard, will be the same as others, excepting where the change in the plan makes it necessary; and the materials also of the best quality. The masonry will also be as the first, with the same arrangement of cellar windows and cellar entrance; the plastering also in like manner; the painting also the same, with glass of the same size and number in each frame. A well and privy, also fencing, and all complete to the satisfaction of the committee.

ESTIMATE.

A building after this plan would cost four hundred and eighty dollars without a cellar; with one, according to the specification, six hundred dollars.