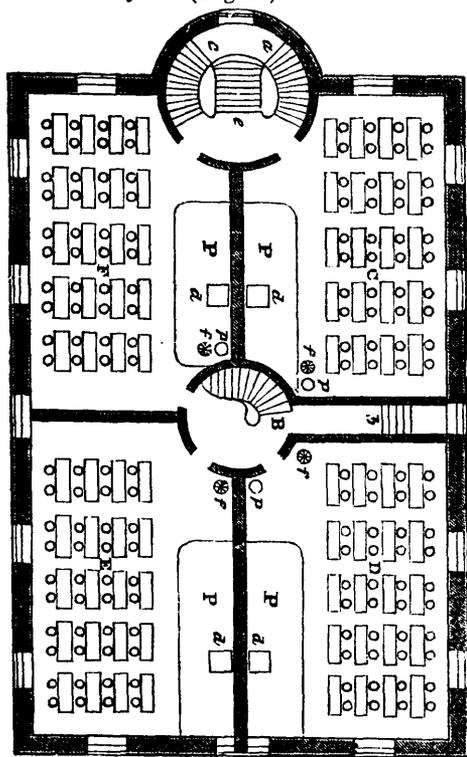


which is raised seven inches from the floor, is a long table, *d*, made convenient for experimental Lectures in Chemistry, Natural Philosophy, &c., having pneumatic troughs for holding gases. At *F*, (*i*, *g*, *i*) are suitable provisions for furnaces, &c., required in the preparation of chemical experiments. The pump, *p*, with a sink like the other, in room *H*,) is used exclusively by the pupils in the boys' department.

At all Lectures and other exercises in this room, the girls, entering at *a*, occupy the seats on the right of the middle aisle. The boys, entering by descending the short flight of stairs *b*, are seated at the opposite side of the room. This arrangement is deemed advisable in order to obviate the objections sometimes made against having a School for boys and girls in the same building. The departments are thereby kept entirely separate, except in exercises in vocal music and occasional lectures. The boys enter the house at the end door *B*, which is six feet above the basement floor, and by a short flight of stairs they reach the first story at *e* (*Fig. 3*.)



PLAN OF THE FIRST FLOOR.—FIG. III.

The three rooms, *D*, *E* and *F*, (*Fig. 3*.) are appropriated to the department for girls. They are easy of access to the pupils, who, ascending the broad flight of stairs (*a*, *Fig. 2*), terminating at *B*, can pass readily to their respective rooms.

As the course of instruction in this School occupies three years, the room *D*, (*Fig. 3*.) is appropriated to the studies of the *first* year, *E* to those of the *second*, and *F* to those of the *third*. In each room there are three sizes of seats and desks, but the arrangement in all is uniform—the largest being at the back of the room. The largest desks are 4 feet 8 inches long, and 22 inches wide on the top; the middle size is two inches smaller, and the other is reduced in the same proportions. The largest seats are as high as common chairs (about 17 inches,) and the remaining sizes are reduced to correspond with the desks. The passages around the sides of the rooms vary from 2 to 4 feet wide, and those between the rows of desks from 18 to 24 inches.

On the raised platforms, *P*, *P*, *P*, *P*, are the Teachers' Tables, *d*, *d*, *d*, *d*, covered with green baize and furnished with four drawers each. The registers, *f*, *f*, *f*, *f*, admit the warm air from the furnace, and the pipes, *p*, *p*, *p*, conduct it into the rooms in the upper story. The passage, *b*, leads into the yard, which is ornamented with a variety of shrubbery. The door near *e*, leading from the room *F* is used only for Teachers and Visitors, except when the two departments assemble in the hall. In the room *C* the boys pursue the studies prescribed for the first year. The other rooms in this department are in the next story.

Pupils ascending from the area *e*, *Fig. 3*, by two circular staircases, land on the broad space *a*, *c*, from which, by a short flight of stairs, they reach the second story, which is sixteen feet high in the clear. This second story is divided into three school-rooms—two of the smaller of which, separated from the third by a cross partition, are fitted up precisely like rooms *C* and *F*, in *Fig. 3*. and are immediately them; and the third is fitted up like *D*, *Fig. 2*, only that it is furnished with three rows of seats instead of two, and has three seats and desks on each side of, and parallel to the ends of, the Teacher's platform.

One of the smaller rooms in the second story is appropriated to the middle class, and the other to the senior class of pupils. The arrangement of the seats and desks are the same as in the other rooms, except that they are *movable*—being screwed to a frame not fastened to the floor. The cross partition, referred to above, is composed of four very large doors, about 14 feet square, hung with weights in such a manner that they may be raised into the attic, thus throwing the whole upper story into *one large hall*—an arrangement by which one room can be changed into *three* and three into *one*, as occasion may require. On all public occasions, such as Quarterly Examinations and Annual Exhibitions, the rooms are thus thrown together, and the seats and desks turned so as to face the large platform in the principal School room.

In erecting a building, such as we have described, in which the School rooms are necessarily placed one over the other, care should be taken to deaden the noise overhead. This may be done by filling up (with proper precautions) the spaces between the joice of the floors with tan bark, cork shavings, or some other compact light substance.

PERSPECTIVE VIEW OF A GRAMMAR OR CENTRAL SCHOOL.

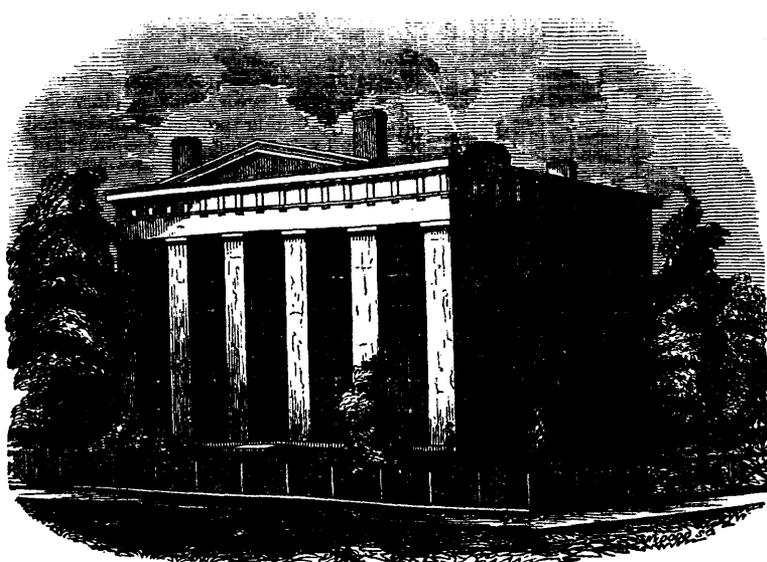


FIG. I.

The building, which has already been erected on a corner lot 198 by 170 feet, is of brick, 70 by 44 feet on the ground. The basement wall, up to the water table, is of stone, laid in hydraulic cement. The roof is covered with tin, laid in white lead.

The basement wall, 10 feet high in the clear, contains a lecture room, (which serves also as a chapel,) 26½ by 40 feet, with comfortable seats to accommodate conveniently 200 pupils. The floor descends 2 feet from the rear of the room to the platform, giving 12 feet height immediately in front of it. A laboratory, 12 by 15½ feet, adjoins the lecture room, with which it communicates by a door at the end of a platform. The remainder of the basement floor is occupied by the

furnaces for warming the building, and by the rooms of the Janitor.

The first floor is occupied by the male department, and consists of a School room about 30 by 54 feet, and nearly 15 feet high in the clear, with two recitation rooms, entries, &c.—There are 62 desks, each four feet long and accommodating two pupils.

On the second floor are the girls' school room, about 28 by 40 feet, with seats for 76 pupils, 2 recitation rooms, library, hall, and room occupied by primary department. There is a large skylight in the centre of the girls' School room, and another in the library. The rooms are fifteen feet in height.

The building is thoroughly and uniformly warmed by two