

SCHOOL BUILDING.

REPORT OF THE COMMISSIONER OF SCHOOL BUILDINGS,
ST. LOUIS.

By the kindness of Mr. William B. Ittner, Commissioner of School Buildings of St. Louis, we have received a copy of his just published annual report to the Board of Education of the City of St. Louis. That portion of the report which relates to the new school buildings is of great interest as representing the latest developments and evidencing high perfection. We reprint it *in extenso*.

The prevailing and approved type of building in vogue previous to the present administration (1897) was three stories high. It contained 12 class rooms, four on each floor; a corridor ten feet wide passing through the center of the building, was lined with wardrobes on either side and terminated at the rear of the building in a corridor at right angle with the main axis of the building. This corridor was sixteen feet wide and contained two stairways, usually of iron

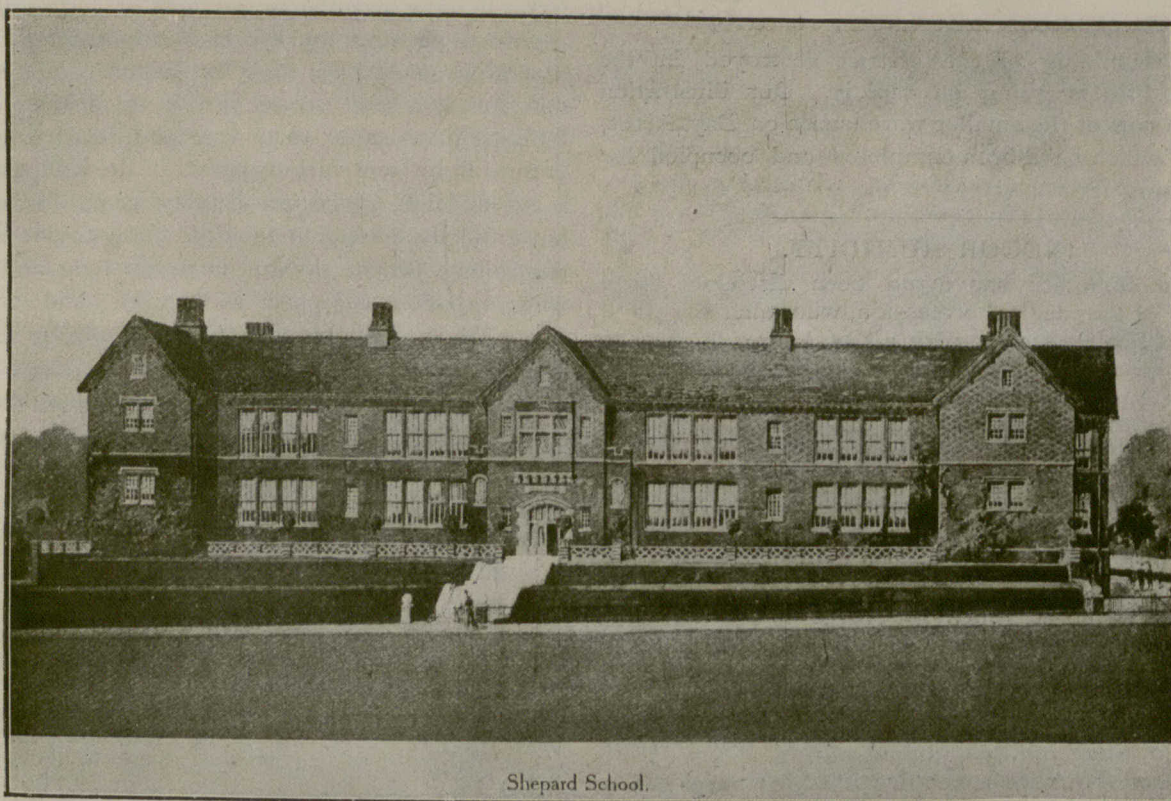
this led finally to the abandonment of the furnace.

The cost of these buildings was \$0.12 per cubic ft. or \$94.50 per pupil.

The objection to this type of building, aside from its defects as a good substantial structure, was the dark corridor lined with wardrobes which were without ventilation; the cramped and inadequate exits; and the size of the class rooms which were much too wide for perfect lighting; this, together with the passage of the new building laws (approved April 7th, 1897) requiring school buildings to be fireproof, demanded a radical departure from the prevailing methods.

Before plans for any new buildings were attempted, a careful study of the school house problem was begun, through all obtainable publications upon the subject, as well as through a visit to all cities in the country offering anything in the line of modern school house planning. The result of this study led to the adoption of the present plan, as one meeting local conditions in all respects. Its success has been such as to fix, for the present at least, the plan for our city, as well as to influence in a large measure the school architecture of the country.

The effort has been to develop a plan in line with the



Shepard School.

stringers with wooden treads, risers and balustrades. Entrances were provided to the yards and basement with vestibules under the first landing of these stairways, as well as at the front of the building directly into the main corridor.

The class rooms were usually 28x30 feet with a clear storey height of about fourteen feet. They were lighted, as a rule, from two sides, the windows generally containing transoms.

The corridors were of fireproof construction, while the class room floors, attic floor and roof, were of ordinary joist construction, the roof being covered with slate.

Where more than twelve rooms were required, the main corridor was extended; and twelve rooms, duplicating in plan the main building, were erected, with one additional stairway closing the extreme end of the corridor.

The toilet rooms, as well as the heating and ventilating apparatus, were placed in the basement. The sanitariums were of an inferior make and were generally without proper ventilation.

The heating and ventilation system was of the plenum type, with furnace or steam for heating the air. The furnaces were found to be totally inadequate for proper heating, and were in constant need of repair;

best thought and most thorough study of school architecture; one that would insure improved hygienic condition, and consequently preserve the health and morals, as well as promote the intellectual progress of the pupils; and at the same time invest the buildings with that measure of architectural fitness now recognized as essential in training the minds of the pupils to the perception of the beautiful, during the most receptive period of life.

Briefly summarized, the general requirements that have influenced the plan, design and construction of the schools may be stated as follows:

SIZE OF CLASS ROOMS.

The adoption of the almost universal rule advanced by experienced educators, that a class room should accommodate not more than fifty pupils, forms the keynote to and has largely governed the planning. Authorities agree that each pupil in the grammar grade requires a floor space of about sixteen square feet, and two hundred cubic feet of air space; it follows that a room approximating 24 or 25 feet wide by 32 feet long by 13 feet six inches or 14 feet high, will give the required accommodation, admit of adequate lighting and enable the teacher easily to control the room. With