

boards set 1 foot 9 inches above floor for lower, and 2 feet 6 inches for higher grades, and extending around the three inner walls of the rooms. The desks are of the single adjustable type, with aisles 18 inches wide between desks. A bookcase, shelf and wardrobe are provided for the teacher, and cases are placed in the library, kindergarten and storerooms for books and supplies.

Drinking fountains are installed in corridors, as well as in yards and basements. Class rooms are painted in lead and oil, the colors being carefully selected with respect to the location of each room and its relation to the point of the compass; in general soft tints of green are selected for the south rooms, while yellow and red tones are used in the rooms having north or cold exposures. All rooms have a stenciled frieze and picture moulding. The corridors are also treated in the same manner, and serve for exhibition of photographs and class work. Kindergartens are sometimes decorated with mural paintings, typifying the life of childhood.

Each room has a self-winding electrical clock, regulated from a master clock in the principal's office.

Artificial light is furnished by gas or electricity.

#### SCHOOL GROUNDS.

Believing that a large well-located site is a wise investment, the Board of Education has purchased generous sites for all new buildings. This, aside from the desirability on the score of light and air, has enabled the department not only to provide ample playgrounds, but has given opportunity in a modest way for making our school grounds object lessons of refined civic taste in the art of landscape gardening.

Each school ground can thus be made to present to the juvenile mind some distinct instructive feature, awakening an interest in the knowledge of decorative plants and their use in the embellishment of home and city at large.

Thus the school grounds through a modest beginning may be made an important factor in the educational system of our city, and it is hoped that this feature will be made a permanent part of every school.

#### DESIGN.

In exterior design the effort has been made to avoid the use of extravagant material and ornamentation and the straining for effect not justified by the function expressed in the plan.

In most instances the buildings are faced with ordinary hard and red brick mixed as to color and laid up with a large bed joint in garden wall or Flemish bond. Stone is used sparingly, and no attempt is made to accent any part of the building except the main entrance, which is generally dignified by fitting architectural treatment.

The attempt has been made to invest each building with some degree of individuality in the belief that this, together with simplicity in design and material, will more clearly express the tendency of the times, and that buildings so expressed will more nearly fulfill their purpose as part of our great system of education.

Here follows a list of the schools (19 in number) built since June, 1897. In this list, the Shepard School, which we have chosen for our illustration (out of three given) is scheduled as fireproof, with 24 rooms, 1,200 fixed seats, and costing \$154,254, which is 16½ cents per cub. ft. and \$128.54 per pupil. As a means of comparing this with the cost of our own schools the next section is useful.

It will be seen that the cost of our buildings has increased from 11 and 12 cents per cubic foot in 1898 to 16 and 17 cents per cubic foot in 1904-05. This is accounted for by the steadily increasing wage scale since that time, and a corresponding increase in the price of all building materials. It may be fairly assumed, however, that the highwater mark in the price of materials and labor has been reached, and although

there has been no decline in these items since the close of the Louisiana Purchase Exposition, the change, if any, will reduce rather than increase our present costs.

The following tables will illustrate the change which has taken place in the price of labor and material during the period:

WAGES PER HOUR								
	1898	1899	1900	1901	1902	1903	1904	Jan. 1 1905
Carpenters.....	\$0.35	\$0.35	\$0.35	\$0.45	\$0.45	\$0.55	\$0.55	\$0.55
Stone Masons....	.50	.50	.55	.55	.55	.60	.60	.60
Bricklayers.....	.40	.50	.55	.55	.60	.65	.65	.65
Plasterers.....	.57½	.57½	.62½	.62½	.62½	.75	.75	.75
Tinners.....	.30	.35	.40	.40	.45	.50	.50	.50
Iron Workers....	.35	.35	.40	.45	.50	.55	.55	.55
Slaters.....	.45	.45	.45	.45	.45	.40	.55	.62½
Comp't'n Roof'rs	.35	.35	.40	.50	.50	.50	.50	.50
Painters.....	.31¼	.31¼	.37½	.37½	.42½	.50	.45	.45
Plumbers.....	.43¾	.43¾	.50	.50	.50	.62½	.62½	.62½
Steam Fitters....	.50	.50	.57½	.57½	.62½	.62½	.67	.67½
Electrician.....	.37½	.37½	.37½	.37½	.50	.62½	.62½	.62½

To illustrate more clearly, an hour's labor of all mechanics employed upon the schools in 1898 cost the Board \$4.90. An hour's labor by the same mechanics in 1904-05 cost the Board \$7.10, an increase of 45 per cent.

The rise in the price of building materials has been just as marked:

	1898	1899	1900	1901	1902	1903	1904	Jan. 1 1905
Brick per M.....	\$ 4 50	\$ 5 65	\$ 7 00	\$ 7 50	\$ 7 75	\$ 8 00	\$ 7 50	\$ 8 00
Steel per ton.....	24 00	38 00	38 00	32 00	40 00	32 00	31 00	32 00
Lumber per M.....	16 50	16 50	18 00	19 00	20 00	20 00	20 00	20 00
*Plumbing Supplies	.....	.....	.....	.....	.....	.....	.....	.....
*Electrical Supplies	.....	.....	.....	.....	.....	.....	.....	.....
*Steam Supplies ..	.....	.....	.....	.....	.....	.....	.....	.....
Hardware.....	39 35	40 50	41 65	43 00	44 40	46 20	49 35	56 95

\* The advance in these items has been from 25 to 65 per cent.

It is only fair to state that in 1898-99 both the building material and labor market were recovering from the panicky prices of 1893-94.

The report continues with an account of reconstructions, repairs, etc., which, except as showing that these are in the direction of fireproofing, wardrobes, better lighting and modern heating and ventilation, are of less interest to us. But the summary of cost, with which the report concludes, is interesting. This summary states that the expenditures through the Department of School Buildings and contracts let from June 30, 1897, to January 1, 1905, have been \$5,377,157.22, and the cost of the Department in salaries, etc., for the same period has been \$149,977.10, or 2.78 per cent.

#### A NOVEL BALANCED DOOR.

A Belgian inventor, Mr. Joseph Henri Dierickx, has recently produced a door which is a radical departure. It consists of two leaves, which are so pivoted that they will swing into partitions as the door opens, leaving an entirely clear passageway. Thus, the new doors partake of the advantages of both the hinged type and the sliding type, while avoiding their objectionable features. The common hinged door has heretofore been considered the most satisfactory type where space allows of its use, because of the ease with which it can be swung open. The sliding door, while it overcomes space objections, is nevertheless not perfect. The rollers on which it travels are too apt to slip off the track, causing the doors to stick and jam.

Mr. Dierickx's door is formed of two triangular leaves, which, when the door is closed, meet on a diagonal line of junction. The leaf, which is largest at the top, is pivoted at the lower corner, and the other leaf is swung from a pivot above the centre of the doorway. A rod connects the two leaves in such manner that when either one is swung in a certain direction, the other will swing in the opposite direction. Thus, in opening the door, it is not necessary to seize both leaves and move them, for if either leaf is moved into or out of its pocket, the other will automatically move in harmony with it. The two leaves are also so connected that they counter-balance each other, and they are controlled in their movements by suitably grooved guides, in which they travel with a minimum of friction. No rollers are necessary. The peculiar shape of the door is apt to strike one as awkward at first; but this is due mainly to the fact that we have always been accustomed to rectangular doors. *Building News.*