

tight, and the objection that it is dangerous to carry the sewer-air through the houses is no longer tenable.

A public sewer becomes very well ventilated and practically safe when its ventilation is effected by making every house drain and soil-pipe a ventilating flue. The sewer has then, in cities, special 4-inch suction tubes every 10 or 15 feet throughout its entire length, the houses averaging, say, 20 or 25 feet in width. We know that whatever putrescible matter, excepting street washings, is to be found in the sewers, comes from the house drains themselves.

Assuming, then, that the houses average 25 feet wide and 50 feet high, the number of running feet of soil and drain pipe in each would average at best not less than 100 feet, and the interior surface would, therefore, contain probably at least twice as much decomposing matter as the 12 ft. of sewer serving each house. It would be absurd, therefore, to insert a disconnecting trap and a vast increase of extra piping for the mere purpose of excluding this small extra drain-pipe air, even if it were not demonstrated that this very complication increased rather than diminished the chances of its entrance.

Even the foulest sewers and cesspools must cease to be foul the moment they are ventilated through every soil-pipe. Probably the most dangerous substance in our sewers to-day is illuminating-gas escaping from leaky mains, which modern science has, I believe it can be maintained, at last rendered unnecessary. The house trap is responsible for the presence of this gas in cellars and subways. It is exceedingly important that it should, where it is formed, be diluted and carried up above the houses and thus rendered comparatively harmless.

In conclusion, I will say in regard to calking cast-iron pipes with lead, that the law should rather prohibit this than specify it to-day, in view of the very recent methods discovered of jointing cast-iron both scientifically and economically, the joint permitting of a certain amount of rotation and play of the pipe without sacrifice to its soundness even under pressure."

STUDENTS' COMPETITION AWARD.

The judges in this competition, Messrs. W. L. Symons, appointed by the Ontario Association of Architects, A. H. Chapman, appointed by the Eighteen Club, and J. W. Lyle, chosen by the other two judges, have awarded the first prize to the drawings by "Ghost"—Mr. W. B. Van Egmond, of the office of Mr. G. A. Harvey, Toronto; the second prize to "Colonial"—Mr. S. Douglas Ritchie, of the office of Messrs. Finley & Spence, Montreal; and the third prize to "P"—Mr. Gordon M. West, of the office of Mr. Geo. W. Gouinlock, Toronto.

The authors of the several designs describe their materials and the judges criticize the design, as follows:—

"GHOST."

DESCRIPTION—Brick to be common hard red, laid with $\frac{1}{2}$ " white mortar joint. Half timber work to be of white pine stained a dull chocolate, and plaster to be white roughcast. Cornice, windows and pergola to be painted a cream white. Roof to be covered with shingles stained olive green; ridge to be galvanized iron. Brackets under cornice to be $\frac{1}{2}$ " $\times$ $1\frac{1}{2}$ " iron, painted black. Outside doors to be batten of V sheeting. Drainage to run into cesspool and overflow to be distributed in garden. Interior finish: Dining room—Georgia pine stained dark green, Burlap panels, and coved stucco ceiling. Halls and staircase—Georgia pine, stained. Dado. Drawing room—white pine, enamel finish. Bedrooms—white pine, painted white. Kitchen—white pine, painted grey.

CRITICISM—These drawings by "Ghost" are presented in a neat and workmanlike manner, and show taste and thought.

The plan is well arranged; the handling of the stairs and the placing of the dining and drawing rooms being particularly happy.

The service from the kitchen to the front door is well taken care of, the servant being able to get from one to the other with despatch.

The elevations are well treated, and show a pleasing combination of brick and stucco. A bad feature is the treatment of the angle over the main entrance.

"COLONIAL."

DESCRIPTION—Brickwork to be Flemish Bond, dark blue headers, with large white joints. Shingled roof stained a silver grey. Exterior and interior wood work to be painted white.

CRITICISM—In the design submitted by "Colonial," the general idea of placing a rectangular building in a rectangular lot so as to divide it in two nearly equal parts is not very interesting. The ground floor plan might be criticised in giving exactly the same importance and expression to the kitchen as to the three principal rooms, and also in having no exit to the garden except through the serving pantry, which has a very low ceiling.

The colonial style is carried out simply and in good taste, the side elevation being inferior to the other two elevations in proportion. The drawings are neatly and well presented.

(They do not appear so well presented in our illustration sheet as, in response to the request to have the drawings arranged on a sheet 8" $\times$ 12" or in that proportion, "Colonial" put each plan and elevation on an 8" $\times$ 12" sheet, and the reproducer has been obliged to lift them off by photography and arrange them as best he could.)

"P"

DESCRIPTION—Not returned.

CRITICISM—In the design submitted by "P" the question of the proper aspect of the various rooms has been entirely overlooked. The dining room should have been placed so as to get some east light. It is not satisfactory to bring the main entrance of a house of this size under the stair landing. In this case in all probability not more than 7 ft. 6 in. of head room can be obtained. A dark coat room is unsanitary, as well as being unsatisfactory to use.

On the whole the plan shows thoughtfulness. The exterior is to be commended on account of its simplicity, the rendering, however, could have been much improved upon.

PROVIDING FOR ADDITIONS.

To the other burdens of an architect the Architects and Builders Journal would now add the responsibility, or at any rate a share of the responsibility, for providing for future enlargement. Instance is given of a library building which had to be pulled down and re-erected before it could be made larger. There certainly are some buildings which require provision for growth. Of these libraries are one example. Hospitals also, school buildings and workhouses accommodate a population which tends to increase. These and residences have usually some free ground about them, and may well be placed on the ground with a view to future extension. A suggestion that the addition should be dotted in on the original plans, to be "helpful to future residents and any architect they may employ" will appeal somewhat coldly to the ordinary architect; but, to one who regards his work as his monument, it may appear a measure of safety worth taking into consideration.