

DESIGN FOR CITY RESIDENCE, COSTING \$2,800.

City Cottage.

Description of Cottage.—The first and second floor plans show the internal arrangement. On the first floor are parlor, dining-room, and kitchen. The parlor and dining-room each contain a fine semi-octagonal bay-window; that of the parlor affording a view through the street in either direction, and that of the dining-room giving the latter an exposure to the front street as well as in other directions. Under the main stairs is the dining-room china-closet, and the pantry dividing the dining-room from the kitchen contains the stairs to the cellar. A capacious kitchen store-room is provided, and wash-trays are fitted up in the kitchen, the dimensions of the latter affording ample room for laundry as well as for culinary purposes. The kitchen is fitted up with range, boiler and sink, and the several fire-places of the first floor are placed in the best positions for utility and effect. The sliding doors dividing the parlor and dining-room are finished with elliptical head, and trussed arches of the same form span the bay-windows.

The second floor contains four sleeping-rooms and a bath-room, the former being each provided with closet and wash-basin. The bath-room is fitted up with bath-tub and water-closet, cased and trimmed up in hard wood. A close flight of stairs leads to the attic, which is very spacious, is well floored, and would afford fine bedrooms.

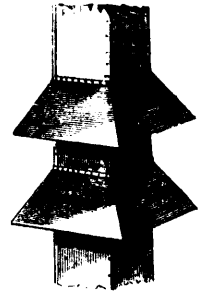
The slopes of the roofs are covered with Chapman roofing slates, with ornamental courses of colored slates in cut butts, as shown. The deck roof, valleys, and gutters are tinued. The house is finished in a manner far superior to brick filling, the materials and workmanship the very best, and many novel details have been introduced which it is not practicable here to show.

THE FORMATION OF MINERAL VEINS.—Meunier has communicated to the French Academy of Sciences some observations on the formation of mineral veins, based on the fact that the native sulphids effect the reduction of metals from their solutions. Galena placed in a solution of chlorid of gold is at once covered with gilding, and in a solution of nitrate of silver arborescent growths are formed. Other sulphids, including those which are most commonly associated in veins, iron and copper pyrites, blende, cinnabar, stibene, and even the sulphid of soda found in mineral waters, produce similar effects. Nor is the action confined to the sulphids. Some selenids, antimonids, arsenids, and tellurids also behave in the same way. Meunier therefore points out that if sea-water, which always contains silver, filters into a vein of galena, all the silver will be reduced and concentrated in the vein, and this action explains the presence of the native silver so often found in galena. When this has taken place, and the liberated sulphur does not recombine with the silver, we have the super-sulphuretted galena, sometimes so rich as to take fire in a flame. But commonly the silver is transformed into a sulphid.

ADULTERATION OF BREAD.—A baker in London, England, was recently arrested for selling bread adulterated with alum so as to be injurious to health. The defendant plead guilty, but urged that the adulteration was not like water added to milk, made to increase the bulk—that the alum made no difference in the bulk of the loaf. The court however called his attention to the fact that the charge was that of adulteration to the injury of health. Although the defendant said he “did not mind taking alum in his,” he was fined forty shillings and costs.

Ventilator for a Cess-Pool.

A correspondent from Dodge Co., Neb., sends a sketch and description of a ventilator for a cess-pool. It consists of a square wooden pipe, sufficiently high to catch the wind and reaching down into the vault. To cause a draft upwards through the pipe, caps of tin, sheet iron, or wood, are placed as shown in the engraving, beneath which there are several holes through which the draft passes into the pipe. The draft starts and keeps up a current of air, which carries off the noxious gases from the vault.



VENTILATOR.

GOOD FOR THE FUTURE.—The American *Manufacturer* says: At no time has so much attention been given to the rearing of young men for fitness in special branches of trade. Our scientific institutions are furnishing us with young men of excellent technical education, who enter their profession with a valuable stock of knowledge, which enables them to at once become useful and indispensable aids in the prosecution of our great industrial enterprises.

TO KEEP TOOLS CLEAN.—When tools are clean and bright, they may be kept so by wiping, before putting them away, with a cloth dipped in melted paraffine. If they are rusted they may be cleaned by soaking in kerosene oil, and then rubbing with an oily rag dipped in fine emery powder.