

follows: Kennedy & Wade, \$16,515; McQuillan & Co., \$19,351.13; Langford & Hogue, \$17,095; P. Sheehy, \$24,700.10. The council have accepted the tender of Messrs. Kennedy & Wade for construction work only of sections one and two at \$9,916, of the Rathbun Company for cement and of the Ontario Sewer Pipe Co. for sewer pipes. Mr. Kennedy is a resident of Owen Sound and Mr. Wade of Peterboro.

FLAT SLATE ROOFS.

Builders and roofers generally regard slate as adapted only for roofs having a high degree of pitch, and that sheet metal is the proper material for all classes of roofs of low pitch, or entirely flat. This opinion is based on the past experience in roofing, says a writer in an English contemporary, but has no foundation in fact. A flat roof may be constructed of slate, having all the advantages of any other slate roof. The slate, instead of being split into thin slabs and cut in various sizes of ordinary roofing, is sawed into large blocks of any convenient size, with square corners and straight edges, and split into slabs varying in thickness from one-half inch to two inches, according to the strength of roof required. The edges of these slabs are carefully smoothed and jointed, so as to fit closely, and placed side by side so as to form a plain smooth surface, instead of lopping. The joints or edges are laid in cement, which unites the pieces and renders them water tight. The slabs are kept in position by their own weight, or may be fastened to their supports by galvanized iron or copper bolts or screws. A roof of this construction requires no painting and very little repairing. It has a decided advantage over sheet metal, in that expansion and contraction from heat and cold are practically inappreciable in slate. By using iron trusses or beams as supports, a perfectly fire-proof roof may be constructed in this manner, a want long felt but never fully realized in the erection of fire-proof buildings.

HOLLOW BRICKS.

Hollow brick, it is said, are coming into more general use in Eastern cities, and quite a number of large buildings have been built with them. They crush at 30,

000 pounds, or about the pressure which the best solid brick will stand. They are made 8 x 8 x 12, with walls one inch thick. It is claimed that they cost one-third less than the regular form, making walls proof against fire, moisture and frost, being warm in winter and cool in summer. They require a peculiar clay in their manufacture, one that will not shrink when dried or burned. The bricks are set on end, thus making a wall hollow from top to bottom.

An experiment in the way of a substitute for paint is being tried on railway cars on one of the American lines. This substitute is known as oxidized copper, and is put on in thin sheets, which can be made in any color. The claim is made that it will wear much longer than paint, and that it can be put on in less time than paint and varnish.

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