PROMINENT CANADIAN CONTRACTORS.

MR. GEORGE E. MILLS.

The presentation of a portrait and brief biography of Mr. George E. Mills, the well-known contractor of Hamilton, Ont., fittingly serves to continue our series of sketches of Canadian contractors. Mr. Mills has for many years been prominently connected with the building trade in Hamilton. He was born in Iron Acton, Gloucestershire, England, on the 25th of June, 1849, and commenced work with his father and two brothers, who conducted business as tilers, plasterers, masons and bricklayers combined. In 1868 he removed to Aymesbury, where he worked for two years as journeyman, at the end of which time he formed a partnership with his elder brother as contracting plasterers. The arrangement, however, proved unsatisfactory, and the subject of our sketch resolved to seek his fortune in America.

Arriving in Hamilton on August 3rd, 1871, Mr. Mills obtained employment for a time as mason with Mr. John Taylor. A year later, when Mr. J. Beer



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commenced contracting, he was engaged with him as an improver at bricklaying, and afterwards as foreman for the late Mr. Andrew Tindall. From 1874 to 1891 he had full charge and management of Mr. Beer's business, and upon his death in the latter year assumed the business himself.

Among the principal buildings with which Mr. Mills was connected in earlier years may be mentioned the Hamilton Hub Works, Copp Bros.' four story building, the Cannon, Hess and Queen Victoria schools, the Wesley, Gore, Simcoe and Hannah street Methodist churches, opera house, hospital, the Y.M.C.A. and the Free Library buildings. Since contracting on his own account, he has built, among other works, the Hamilton Power house, Wood, Vallance & Co.'s warehouse, the Sophia street school, Toronto, Hamilton & Buffalo railway railway station, the power house at the Beach, addition to St. Joseph's hospital and convent, and remodelled the cotton mills. He has now in course of construction the Grand Trunk car shops at London, for which he was given the entire contract, estimated at \$100,000, sub-letting the carpenter work, plumbing, painting, galvanized iron and slating. Work was commenced on the first of October last, and nearly the whole building is now ready for the roof.

MANAGEMENT OF WATER BACKING THROUGH HOUSE DRAINS.

We illustrate herewith an arrangement for the management of water backing through house drains into cellars, which is liable to occur in low and flat towns, and to generate an intolerable nuisance. The method was designed and carried out in Croydon, England, by Mr. T. Walker, an engineer of that town. The description of it was first printed in The Surveyor, London, whence it has been copied into Domestic Engineering, (October). The method seems simple and feasible, and worthy of a place among appliances for the sanitation of dwellings.

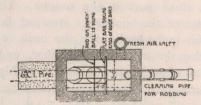


FIG. 1. PLAN OF MAN HOLE.

Fig. 1 shows the plan and Fig. 2 the sectional elevation of a man-hole chamber receiving the drainage of four houses through a 6-inch cast iron pipe, delivering downwards; it is arranged to receive a stout rubber ball, fastened to a chain and arranged so as to

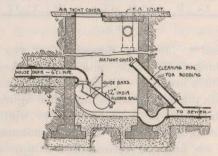


Fig. 2. Section of Man Hole.

find a seat at the mouth of the trap when water backs up through the sewer. The ball is lifted by the water and forced by guide bars to its seat. These guide bars are shown in detail in Fig. 3. Fig. 4 shows the position of

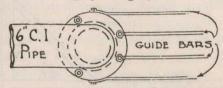
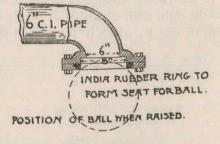


FIG. 3. DETAIL OF GUIDE BARS.

the ball when raised. No turther description is needed to explain the action. The chamber receives all the back water, while the drainage acquiring a small head in the house drain will force its way past the rubber



SECTION.

FIG. 4. SHOWING THE BALL RAISED.

ball valve and into the chamber, passing thence into the sewer. Of course proper care must be exercised in constructing the chamber or cistern, which should be proof against leaking; otherwise there will simply be the substitution of one nuisance for another.