the property being built over, the Engineer may allow the gully to be placed inside the building in such position as he may consider necessary, or he may require the gully-trap to be dispensed with, and in such case all sanitary fittings shall be ventilated and connected after the manner provided in these by-laws for a water-closet.

### Gully-traps.

No opening into a drain shall be made or allowed to remain other than such as is provided for the purpose of ventilation or inspection or for a water-closet connection, or slop-sink or urinal connection, as provided in the first part of this section, unless by means of an approved gully-trap. The dishes of all gully-traps shall be surrounded by a brick or cement coping 3 in. thick, and the height of such brick or cement coping shill be not less than 3 in. above the surface of the ground in the immediate vicinity. All gully-traps shall be of the self-cleansing form, and shall have all angles rounded.

### Plumbing-work.

All sanitary fittings shall be placed, wherever possible, against external walls. Such portion of their waste and vent pipes as shall be inside or under any building shall be of drawn lead, or cast iron, or screwed galvanized iron; those same material or of galvanized pipes, shall be made of the subscription of the building shall be made of the outside of the building by the shortest route practicable, and then carried down or up outside the building. No waste or ventilating pipe shall be connected with a rain-water pipe.

All waste pipes and traps shall, wherever practicable, be exposed to view for ready inspection and for convenience in repairing, and whenever placed within walls or buildings or otherwise not exposed to view they shall be covered with woodwork fastened with screws so that such woodwork can be readily removed.

## Refuse not to be put in Manholes.

No person shall cast, throw, or place any solid or liquid matter of any kind in any manhole, lamphole, or inspection-chamber, or other opening of a similar character in any sewer or drain; and in case of any sewer or drain becoming wholly or partially blocked in consequence of any breach of this clause the person offending shall pay the Board the cost of removing such matter by any officer of the Board, and the same shall be recoverable as a debt in any Court of competent jurisdiction.

### Manhole-covers.

No person shall, without the authority of the Council in writing, lift the cover of any manhole, lamphole, or inspec-tion-chamber, or shall in any way interfere with any drain, sewer, tank, or ventilator either on public or private ground.

# Soil-pipes.

All soil-pipes must be connected direct with the drain, and shall not be fixed inside any building, but shall be placed out-side the walls thereof; and the connection with any closet inside shall be made as short and straight as possible. Every soil-pipe shall be ventilated by a pipe carried up above the roof of the building. No soil-pipe shall be less than 4 in. internal diameter, and no connection thereof for ventilation shall be loss than 4 in. internal diameter. Every soil-pipe shall be for lazed stoneware cast iron or lead. shall be of glazed stoneware, cast iron, or lead.

#### Closet Seats

The seats of all water-closets shall be so constructed as to be easily removable, in order that every part of the closet may be inspected with facility. The trap of every closet shall be be inspected with facility. The trap of every closet shall be provided with a ventilating-pipe at least 2 in. in diameter, of 6 lb. lead or galvanized wrought-iron piping, such joint to be made with bitumen. This pipe to be carried up either to a point 3 ft. above roof or connected to the extension of soil-pipe at a point not less than 3 ft. above highest branch from closet.

Where two or more closets are connected to one soil-pipe the ventilation pipes from their traps may be connected to the son-pipe the ventilation pipes from their traps may be connected to a single pipe ventilation, size depending on number of fix-tures. Safes to be fixed under sanitary fittings where directed by the Inspector.

### Fixing Closets.

The proper method of fixing closets, sinks, &c., is shown herein, and sample closets may be seen at the Board's yard. No deviation from these methods will be allowed, and no closet other than those shown may be used unless a sample of the closet has been previously submitted to and approved in writing by the Board.

### Water-pipes to be disconnected.

No pipe leading from the Board's water-mains or from any service pipes connected therewith shall on any pretext what-ever be connected directly with any closet, urinal, trap, drain,

or sewer. Where water-supply is required, the water-pipe must in all cases deliver with a free outfall into an open eistern above the highest water-level of such a stop and such water-pipe shall be provided with a high-pressure stopcock on the supply pipe to the cistern.

#### Radius for Drainage.

Owners and occupiers may be notified to provide water-closets: Whenever there shall be a sewer within 100 ft. from any property on which any building at the time these by-laws come into force is, or which at any future time shall be, erected, and in which building any person shall dwell or be employed, or which building is constructed, or being adapted structed, or being adapted for human habitation or with a view to persons being employed therein, then and in every such case it shall be lawful for the Board, by notice in writing, to require the owner of such building to provide and affir such case it shall be lawful for the Board, by notice in writing, to require the owner of such building to provide and affix a water-closet for the same. An owner served with a notice as aforesaid shall, within thirty days thereafter, cause a water-closet to be provided and affixed in such building or outside the same (but on the private property whereon such building is erected or may be erected). Such water-closet shall be constructed in accordance in every respect with the pro-visions of these by-laws relating to water-closets, and shall have all works, futures, and appliances of every kind rehave all works, fixtures, and appliances of every kind re-quired by these by-laws, and shall be connected with a sewer by a drain, and in manner and in every respect as required by these by-laws

## Proportion of Cost and Rebates.

In any case where a sewer is constructed in a public street or through private property at the sole expense of any person, then it shall not be lawful for any person to connect with the then it shall not be lawnif for any person to connect with the said sewer until a proportionate part of the cost of the sewer has been paid to the Board, such proportionate part being fixed in all cases by the Board. The said proportionate part received by the Board shall be held for the purpose of rebate to the person originally constructing the sewer.

## Old Closets to be removed.

Upon the expiration of the time within which any watercloset is required to be provided and affixed as aforesaid, it shall be the duty of the owner of every property to cause to be removed from his property every privy or earth or other such closet not being a water-closet, in accordance with these by-laws, being thereon.

### Only Water-closets permitted.

After a water-closet shall have been provided for any building erected on property (whether already or to be hereafter provided), it shall be unlawful for the owner of such property or any other person to construct, erect, set up, or provide any privy or earth or other such closet on the said property.

# Lighting and Ventilation of Closets.

Every water-closet erected in a building shall be constructed in such a position that at least one of its sides shall be an external wall; and such external wall shall be provided with a window having an area, exclusive of frame, of not less than 2 square feet, and also with an air-brick or an inlet covered with perforated zinc or galvanized wire netting, having an area of not less than 40 square inches, and such window shall be made to open directly on or communicate directly with the open air throughout at least one-third of its area. case of a fully detached water-closet or one attached to an outhouse, light and ventilation shall be provided as above.

## Urinals and Slop-sinks.

No person shall erect or construct any urinal, and no occupier shall permit any urinal to be used, on his pre-mises unless such urinal is placed, constructed, and fitted as follows

(a.) No urinal or slop-sink shall be erected in any room or closet used for any other purpose than a lavatory or privy.
(b.) Any urinal erected or placed within any building used or partly used as a dwellinghouse, shop, office, factory, or workshop, and any urinal erected or placed within 15 ft. of any such building and not being unroofed and open to the air, shall have a basin or divisions of earthenware or enamelled iron, with a flushing-rim properly supplied with water, and shall be fitted with a waste-pipe of lead, trapped by a lead trap, and caused to discharge over a gully-trap placed outside the building.

(c.) Any urinal erected and placed otherwise than as before mentioned, or in lieu thereof, shall be so constructed as to conduct the urine over impervious channels to a proper gullytrap suitably placed.

trap suitably placed. (d.) The floors of all urinals shall be sloped, channelled, and properly drained, and together with the walls and divisions shall be formed of brick, stone, concrete, or other material impervious to water. No part of the basin or trough or