said test, and the result of said test shall be recorded in the office. If the work is not found to be satisfactory, two days' notice shall be given, and if the work is not made satisfactory the penalty clause shall be endorsed forthwith.

6. After a plan or specification has been approved of, no alteration or deviation from the same shall be allowed except on a written application of the owner or the agent of the owner to

TILE, PIPE AND CONNECTIONS.

7. Vitrified salt glazed earthenware drain pipes shall be equal in quality to those used for the private drain connections; they shall be laid and jointed with Portland cement or otherwise as shall be specified by the — for the private drain connection contract. The pipes used for surface or weeping drain must be laid around the outside of house walls where practicable and tapped to connect with the rain water leader. They shall have a tap placed on them which shall be easily accessible for flushing. All earthenware drains laid on newly-made ground, or very wet a tap placed on them which shall be easily accessible for flushing. All earthenware drains laid on newly-made ground, or very wet soil, to be placed on a prepared foundation of plank or concrete. No built or mason's traps shall be used, all traps shall be of vitrified salt-glazed earthenware or iron. All drains must be properly connected with a private drain and not covered until inspected. In no case shall drains between walls of a house and street be laid until the private drain from the street line to the spected. In no case shall drains between walls of a house and street be laid until the private drain from the street line to the public sewer has first been laid and completed. All private drains laid by the city are to be taken to the outside of the wall where the buildings are on the street line. No tile shall be run through that the wall of any building.

SOIL PIPE.

SOIL PIPE.

8. All soil pipe within the walls of any building shall be of iron or brass, and shall be continued at least three feet above any opening in the roof and three feet above any opening in an adjoining building, when such building is within 10 feet of such pipe, and left open so that the whole of the inside drainage may be thoroughly and constantly ventilated. (Approved tile may be used under ground; if, however, the house is drained by a continuous iron pipe from the outer connection with the house drain at least three feet outside the wall to the opening above the roof, as hereinbefore provided, the trap and the fresh air inlet may be dispensed with). After the passing of this by-law, no privy sinks, pan closets or any other water closets having any mechanism in connection with the bowl forming a mechanical seal, and no closet or other convenience which allows the escape into the house of gas which has been confined in any part of it or to the drain or soil pipe or which allows the accumulation of filth in or about it, shall be fitted up or used. When a soil or drain pipe (which in all cases must be of iron) passes through a wall it shall not be built in solid, and shall have at least two inches clearance, and the opening shall be covered by arch or line lintel. Earthen or iron water closets having traps above the floor using lead connections must have a cast brass flange not less than ½ inch thick, soldered to the lead and bolted to the trap of the closet, the joint being made perfectly air-tight.

Siphon jet, washouts and flushing rim hopper closets only will

Siphon jet, washouts and flushing rim hopper closets only will be allowed, and they must be fitted with flushing tanks, automatic or otherwise, of approved character and design.

No pipe shall weigh less than the following for length of 5 feet: 6 inch diameter. 100 lbs.
5 " 85 "
4 " 45 "
3 " 20 "

All pipes, traps and fittings shall be of good quality, and shall be free from flaws or defects and shall be of uniform thickness.

CESS PITS AND VENTS.

To. All connections with cess pits shall be made in same manner as for sewer, with the addition that the cess pit must be ventilated independently with separate pipe of not less than 4 inches diameter and 10 feet high, so placed that the drain pipe from the trap outside the wall to the extreme end shall have free and uninterrupted access to the atmosphere at each end.

FITTINGS.

11. No tees shall be used, but Y connections and $\frac{1}{8}$ inch bends, or the combination of the two in one fitting, shall be used where practicable. MAIN TRAPS.

12. Between the house and the public sewer or drain at the lower end or foot of the vertical stack of soil pipe and between the stack and the public sewer, inside the wall of the building which it serves, there shall be placed a ventilation hand hole trap of approved description and make.

CLEANING OUT SCREWS.

13. The pipe to have two cleaning-out screws of not less than four inches in diameter, one located about 42 inches above and in front of the bend in the basement floor, the other to be located between the said bend and the outer wall of the house. The first-mentioned above cleaning-out screw shall be provided with a connection of the proper size to admit of the testing apparameters. atus being attached.

SEWER VENT.

14. On the sewer or street side of said soil pipe trap a ventilation pipe shall be placed of the same size and kind as the soil pipe and carried above the roof, as hereinafter specified for soil pipe. FRESH AIR VENT, INLET.

15. Above the said trap there shall be connected with the main soil pipe an inlet pipe not less than four inches in diameter for the admission of fresh air. This pipe shall be brought up to 5 feet

above grade, and if for detached building and on outer wall may be carried above the roof with the same diameter of galvanized iron pipe properly hooked to the wall every eight feet. In all cases where the above pipe cannot conveniently be carried on the outside wall, then it shall be run up inside the wall and carried through the roof in the same manner as specified for main soil pipe, provided in all cases that the fresh air pipe shall be stopped at a point three feet lower than the main stack or soil pipe, the mouth of which shall be left open, or covered with basket if required. if required.

if required.

16. Trap vent pipes may be of cast iron, lead or brass; sheet metal will not be allowed. All traps and fittings shall be equal, in quality and thickness, to the pipe to which they are attached.

17. No lead, waste or vent pipes shall weigh less than the following: 1½ inches in diameter, 8 lbs. per yard; 2 inches in diameter, 10½ lbs. per yard; 2½ inches in diameter, 13½ lbs. per yard; 3 inches in diameter, 16½ lbs. per yard; 4 inches in diameter, 24 lbs. per yard.

18. Every water cock, bibb tap or hydrant attached to any water service or pipe, connected with and supplied from the water works system of the —, shall have legibly stamped thereon, in a conspicuous place, the name of the maker, and the same is to be properly tested both as to strength and weight before being so attached.

19. All water supply pipes shall be laid with due regard to danger from freezing, properly laid with a fall to a stop and waste cock placed in the cellar or other convenient place where they can be entirely drained off. Each consumer in a tenement building shall be supplied with a separate stop and waste cock on the service pipes inside the building unless metred.

TRAPS.

20. All drains and plumbing fixtures of every house or other building shall be supplied with sufficient traps and vents to prebuilding shall be supplied with sufficient traps and vents to prevent gas from the sewer, drain or other waste pipes escaping into any apartment, and every such fixture shall have its own trap with sufficient vent. No fixture shall drain through more than one trap (main trap excepted.) The ventilation pipes from the traps of any fixture shall be of the same size and weight as traps they serve, up to and including 1½ inches in diameter. For sizes over 1½ inches in diameter, one size less may be used, and for length as hereinafter specified. No vent to be used of less than 1¼ inches in diameter. than 11/4 inches in diameter.

TRAP VENTS.

where it passes through the roof. The rule for soil terminus, as hereinbefore mentioned, shall govern said vent pipe. Vents from water closet traps to be two inches for a length of 20 feet, and for a greater length three inches in diameter. Closet vents into which other vents are connected to be 3 inches in diameter.

AUTOMATIC VENTS.

22. Approved automatic vents may be substituted when necessary or advisable on special permit of the inspector.

OVERFLOW.

OVERFLOW.

23. No safe waste, range boiler or cistern overflow shall be allowed to connect to any drain. All rain water and leaders shall be trapped, said trap to be connected with outside drain.

24. Wherever safes are placed under fixtures, the safe waste shall be run separately to the basement or cellar and be closed by a hinged brass flap valve of approved device to prevent cellar air from rising through the pipe. Urinal platforms shall not be provided with safe wastes vided with safe wastes.

25. The enclosing of water closets in wooden casings is prohibited. Water closets should never be placed in an unventilated room or compartment. In every case the compartment must be open to the outer air or be ventilated by means of an air shaft not used to ventilate any living or sleeping room and having an area of at least one square foot and an opening at the roof to the external air of an area equal to the area of the shaft. nal air of an area equal to the area of the shaft.

26. Wooden laundry tubs and wooden sinks are prohibited. All such fixtures shall consist of non-absorbent material.

FERRULES.

FERRULES.

27. Every connection between lead and iron pipes shall be made with brass thimbles or ferrules having properly wiped joints, and the ferrules shall be properly gasketted, leaded and caulked into the said pipe. Ferrules for 4-inch pipes shall weigh not less than 2½lbs.; for 3-inch pipes, not less than 1½lbs., and for 2-inch pipes not less than 1½lbs., each ferrule not to be less than 4 inches in length. All lead pipes to have properly wiped joints. Where the trap to closet is above the floor, the said connection of the same to soil pipe shall be made of brass and rubber.

SINKS.

28. Each house or building must have its own separate soil pipe and drain, and such soil pipe or drain shall be so placed as to be always readily inspected without destruction to walls, and the plumber shall be responsible for the connection of his work with the system of drainage, which connection shall be made by a cast-iron bend and three feet of pipe extending horizontally from the vertical soil pipe, and no two comercions or buildings. from the vertical soil pipe, and no two or more houses or buildings shall have drain in common until each separate drain shall have passed outside the walls of the house or building which it serves.

REFRIGERATOR WASTES.

29. Refrigerator wastes shall be supplied with properly ventila-

29. Refrigerator wastes shall be supplied with properly ted traps and be disconnected and have drip basin.
30. For water works pressure no lead pipe shall weigh less than the following: 3/8 inch internal diameter, 4 lbs. per lineal yard; 1/2 inch internal diameter, 6 lbs. per lineal yard; 3/8 inch internal diameter, 8 lbs. per lineal yard; 3/4 inch internal diameter,