

have ever given a prescription for a tooth-powder (such a matter is beneath their notice), and the selection of the ingredients for the various powders and pastes in vogue for the purpose of beautifying and cleansing the teeth is left entirely in the hands of those who certainly should not know better than medical men. I have frequently trespassed on this debatable ground, and recommended a particular dentifrice. In view of the extremely important part the teeth play in the economy of life, I never hesitate occasionally to inquire as to the attention they receive.

A tooth-powder should possess certain characteristics; it should be antiseptic, cooling, agreeable to taste and smell, and have no injurious action on the teeth. After use, it should leave the teeth white, and a sensation of freshness and cleanliness in the mouth. As an antiseptic in this connection nothing can displace boric acid. For years I have used the following powder, and can recommend it: Boric acid, finely powdered, 40 grs.; chlorate of potassium, 3ss; powdered guaiacum, 20 grs.; prepared chalk, 3i; powdered carbonate of magnesia, 3i; attar of roses, half a drop. The boric acid in solution gets between the teeth and the edges of the gums, and there it discharges its antiseptic functions: the chlorate and guaiacum contribute their quota to the benefit of the gums and mucous membrane generally; the chalk is the insoluble powder to detach the particles of tartar which may be present, and the magnesia the more soluble soft powder which cannot harm the softest enamel.

It is only right to say that boroglyceride (Barff) can replace boric acid in almost all the forms of administration I have enumerated; it is efficacious, slightly, and pleasant to the taste.—*British Medical Journal*.

### TESTING HOUSE-DRAINS.

At a conference in connection with the Building Exhibition held in London under the auspices of the Society of Architects, Mr. R. K. Burton described methods used by himself in testing the soundness and arrangement of house-drains. Three questions, he said, were to be decided: (1) Is the drain water-and-gas-tight? (2) Is it self-cleansing? (3) Is it disconnected from the sewer? The first point is best decided by a test; but it is well to observe the appearance of the joints before taking the trouble to apply any test, as such may at once reveal the fact that the drain is leaking. In more cases than those who have not made many inspections would imagine, it will be found that there is absolutely nothing in the joints of the tile-drain. In others it will be found that there is clay only, and he had never known a clay-jointed drain to be water-tight. In still other cases it may appear, from looking at the tops of joints, that they are carefully made with cement; but when a rod of

iron or a chisel is plunged into the earth underneath them, it comes up wet and black with sewage. It is only when none of the appearances described are to be seen that it is worth while applying a test. The best undoubtedly is the water-test. In this the drain is opened by the removal of a pipe, and is plugged.

It will be found impossible to fill more than perhaps about one out of three drains, except in houses which have been very recently remodelled, and that it is necessary to avoid pouring too much water into a leaky drain. If the drain does fill up the running water is stopped, and it is observed whether the water in the gullies or surface-traps remains at a constant level. The test next in efficiency to that by water is the smoke-test. The next question is as to whether the drains are self-cleansing or not. As in the case of the water test, an opening must be made; but it is not needful to remove a whole pipe. It is sufficient to chip a round hole in the top of one. If no deposit appears just under the opening, water is allowed to run into the drain at the upper end, and the flow is observed at the opening. If the water runs briskly and clear past the opening all is right. If, however, it comes tardily, and carrying deposit with it, it is a question of ascertaining the cause. A drain, if well laid, should, with a fall of one in sixty, clear itself. A house-drain should seldom or never be larger than six inches; four inches is large enough for very small houses, and if five inches were the size generally made, it would probably be better than either four inches or six inches for the majority of houses. Now as to whether the drain is disconnected from the sewer or not. To make absolutely sure whether or not there is a concealed trap on the drain, if the opening does not reveal this, the only plan is to pass rods down the drain. One may, however, have evidence approaching to certainty by burning a match in the drain, and observing whether or not there is any current of air through it. If there is, it may be assumed that there is no trap on the drain. It is necessary to test each branch for self-cleansing properties. The material for soil-pipes should be ascertained by removing the wooden casings which generally cover them. If an internal soil-pipe is made up of light cast-iron pipes (rain-water pipes), and lead junction-pipes for the closets it may be condemned without any further investigation. The best test for a whole-drainage system is undoubtedly the smoke-test. This test consists essentially in filling the drainage system with smoke at some pressure, and observing whether or not it issues at any place other than the openings intended for ventilation.

Smoke-rockets are no largely used by those who have to make inspection of sanitary arrangements. These consist of paper cases, filled with a composition which gives off a vast quantity of smoke at