be relieved of its terror. It is now known that a small member may be amputated painlessly, without general anæsthesia, by injecting cocaine in two or three places around the limb near the line of incision.

For relief in extracting teeth, cocaine applied to the gums has been generally voted a failure. I would suggest a trial of it by injecting a drop or two into the gum on each side of the tooth, believing it will greatly diminish the pain. Use only the very thin needle named above, for one might as well suffer the operation as the use of such *crow bars* as I have seen physicians employ.

I venture the hope that cocaine may soon be more generally used in this way.

Very respectfully,

ALMON CLARKE, M.D.

Sheboygan, Wis., January 6, 1887.

LOCAL ANÆSTHESIA.

Dear Sir:—In an article in *THE JOURNAL* of October reference is made to a suggestion of Dr. Franklin H. Martin, of Chicago, who utilizes the properties of the galvanic current discovered by Haertner, who ascertained the valuable fact that particles in solution would, under the influence of a galvanic current, pass through permeable bodies from the positive toward the negative pole of the battery. This important fact caused the writer to experiment on the best mode of applying it so as to produce local anæsthesia and other influences. I think my plan superior to that adopted by Dr. Martin, although the same principle is involved in both.

I draw on the part to be experimented upon a hard-rubber cup of any size, under which I put a piece of light rubber cloth, pierced by a small brass wire, to which is attached, on the under surface, a brass button. Around this I wind cotton-wool, which, being saturated with a $\frac{1}{4}$ per cent. solution of muriate of cocaine, I place under the cup, and on producing suction the whole appliance is drawn to the part. The rubber cloth, being held by the rim of the cup, makes a nice pressure upon the part to which it is applied. The blood is drawn to it by the suction, and the tissue is thereby made more permeable. The wire is united with the negative pole and the current turned on.

I have in this way produced the most satisfactory results, and at the same time most permanent. Air being excluded from the solution, no evaporation takes place. The appliance is hard to explain without diagrams, but I trust my suggestion will be sufficiently explicit for those who may wish to utilize it. The cup and rubber appliance referred to can be used in many ways in local and surface medication.

Very truly yours, J. W. HARVEY, M.D.

Indianapolis, Ind., December 20, 1886.

MISCELLANEOUS.

TENNESSEE STATE BOARD OF HEALTH.—The Governor of Tennessee pays a well deserved tribute to

the State Board of Health. In his annual message he says: "It is my pleasure to call your attention to this important and steadily-growing valuable branch of the State service. During the past two years, under its auspices, there have been organized eighty-two county boards of health, besides securing to each of the large towns in the State an efficient municipal health board, thus bringing the people of the entire State practically under the most intelligent sanitary supervision and administration, which contemplates the remedy, if possible, of all those causes which produce human sickness, and which intensify and facilitate the ravages of all epidemic diseases. Through instructive circulars, which have from time to time been extensively circulated over the State, the State Board of Health has offered to the people valuable suggestions and advice, based upon the latest developments of science, regarding the most approved methods of preventing or restricting the spread of those domestic plagues which in the past have annually left desolate so many homes in Tennessee. Besides which the Board has issued monthly a 'Bulletin' giving the influence of climate upon diseases, together with the prevailing diseases of the State, month by month, and the death-rate per 1000 population so far as under existing law it can do so. In this connection it is not inappropriate to suggest that there is no law in our State now looking to the continuance and proper connection and preservation of the 'vital statistics' of Tennessee. This Board of Health has done, and is calculated to do, much scientific and practical good, and is most efficient as it is now organized."

TOOTH POWDERS.—Prophylactic medicine is of greater value to the public than curative, although they are slow to give it its due; hence the subject of tooth powders may be of some interest. The necessity of keeping the teeth clean, with a view to the prevention of future trouble, is overlooked by too many, even in the higher classes, sometimes from carelessness, sometimes from ignorance. Now, cannot the medical attendant do a great deal to combat this state of things? The dental surgeon is often asked, "How soon should the first tooth-brush be used?" "As soon as there are teeth to use it upon" should be the reply. An ideal tooth powder should be alkaline, since acids dissolve the tooth substance; finely pulverized, that it may not mechanically abrade; antiseptic, to prevent decomposition of food lodged between the teeth, and perhaps to destroy the microbes which are always found choking the tubules of carious dentine; it should contain nothing irritating to the gums; and, lastly, it should be pleasant to the taste, or it will not be used. Fluid dentifrices do not, as a rule, clean the teeth effectually, unless they contain some ingredient which acts upon the enamel itself; and those preparations which are eulogized as making teeth white or preventing the deposit of tartar, should be avoided. Charcoal was at one time a very popular form of dentifrice, and is even now largely used, but from the amount of silica it contains it will rapidly wear away teeth that are not of exceptional hardness; and, moreover, the gums in