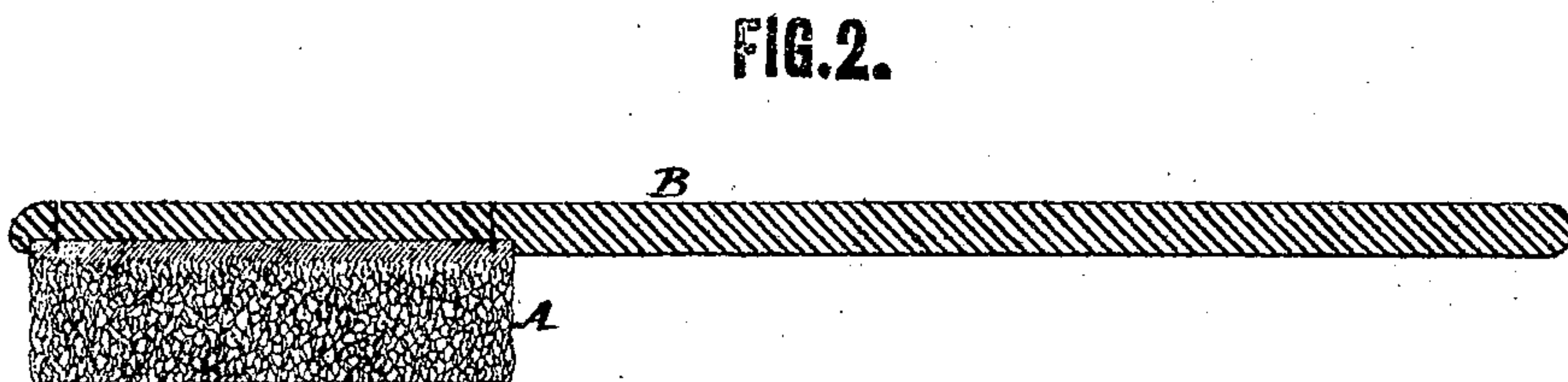
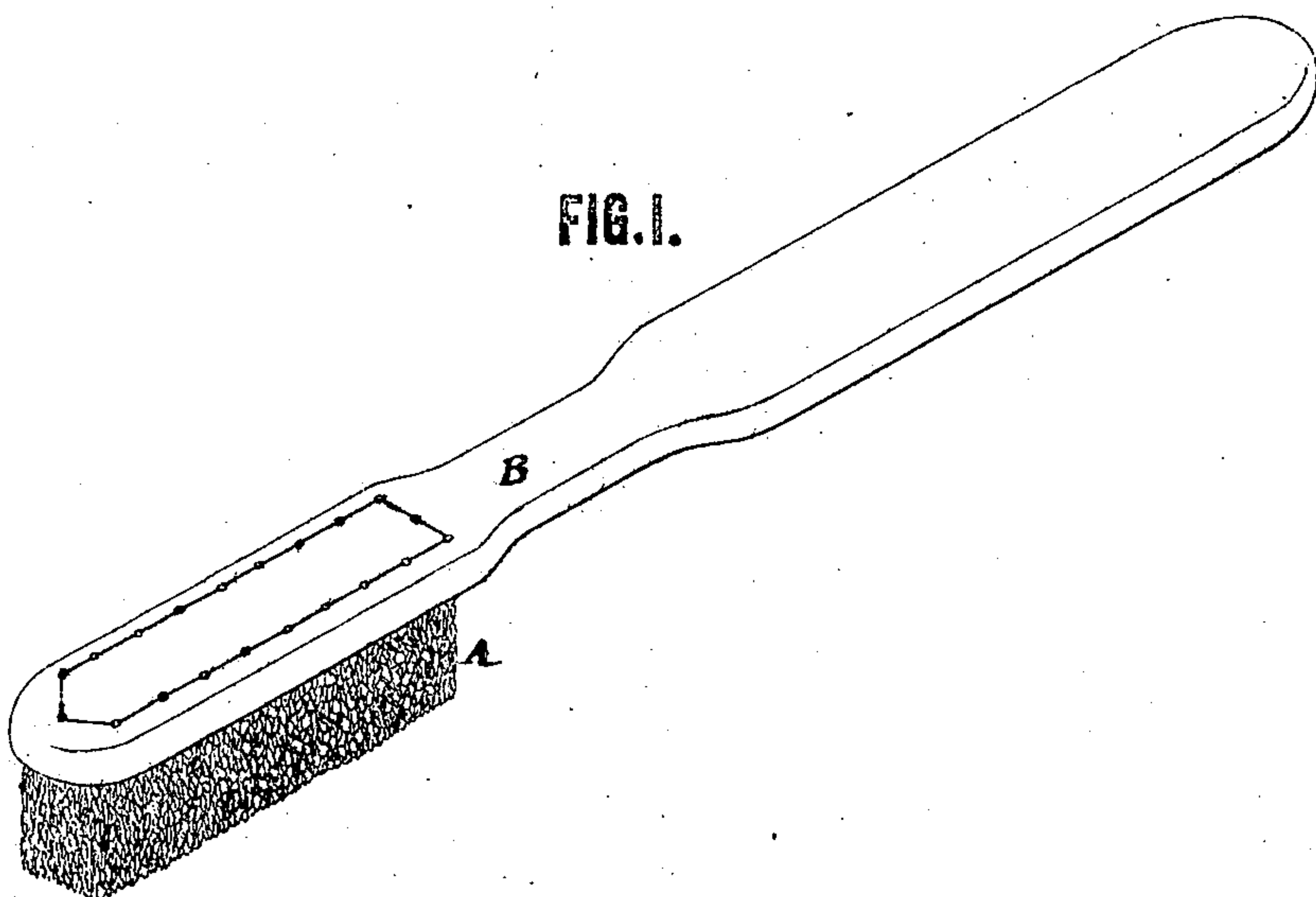


S. W. Francis,

Tooth Brush.

No. 92298.

Patented July 6, 1869.



WITNESSES.

Samuel Ward Francis
by his attorney

A. F. W. R.

W. Bailey

Wm. H. M. Baker

United States Patent Office.

SAMUEL WARD FRANCIS, OF NEW YORK, N. Y.

Letters Patent No. 92,298, dated July 6, 1869.

IMPROVEMENT IN INDIA-RUBBER TOOTH-BRUSH.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, SAMUEL WARD FRANCIS, of New York, in the county and State of New York, have invented certain new and useful Improvements in India-Rubber Tooth-Brushes; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a tooth-brush made in accordance with my invention.

Figure 2 is a longitudinal vertical section of the same.

The nature of my invention consists in making a tooth-brush of what is known as "rubber-sponge," in lieu of the bristles of which it is ordinarily formed.

This material, while having the cellular formation and porosity of sponge, possesses an inherent elasticity which ordinary sponge cannot have, and which fits it admirably for the uses herein specified. Moreover, it is not affected by water, or acid, or alkaline liquids, as is well known, and its yielding as well as elastic properties, enable it to fit around and come in close contact with the teeth, so as to remove all impurities.

No hairs can come off from it, as frequently happens when a bristle-brush is employed, nor does it push back, or cut or injure the gums, as the latter brush is liable to do. And it thus possesses all the requisites to adapt it to be used for tooth-cleansing purposes.

In the drawings, I have represented the rubber-sponge A, applied to an ordinary handle, B.

The sponge is formed on a rubber sheet, which may be held to the handle by wires, in the manner usually employed in ordinary tooth-brushes, or other known means may be employed with equally good effect, my invention consisting, not in the manner of attaching the sponge, but in the use of the material itself, for the purpose named.

The sponge may, for instance, be cemented to the handle, or if the handle be made of hard rubber, the two compositions of which the article is to be composed, may be shaped and put together while in the plastic state, and afterwards vulcanized, so as to be solidly united.

The brush may be of any ordinary or suitable shape, and the face of the sponge may be notched or corrugated, as seen in ordinary bristle brushes; and any variation in its size or formation can be made as circumstances require.

Having now described my invention and the manner in which the same is or may be carried into effect,

What I claim, and desire to secure by Letters Patent, is—

A tooth-brush, made of vulcanized-rubber sponge, substantially as herein described.

In testimony whereof, I have signed my name to this specification, before two subscribing witnesses.

SAML. W. FRANCIS.

Witnesses:

THO. SADLER,

THOS. SADLER HESLAP.