## Patrick O'Brian.

Impt, in Scrubbing Brushes.

116346

PATENTED JUN 27 1871

Fig.R.

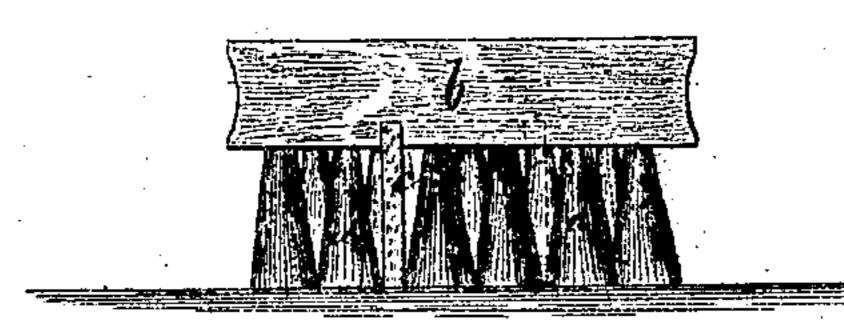
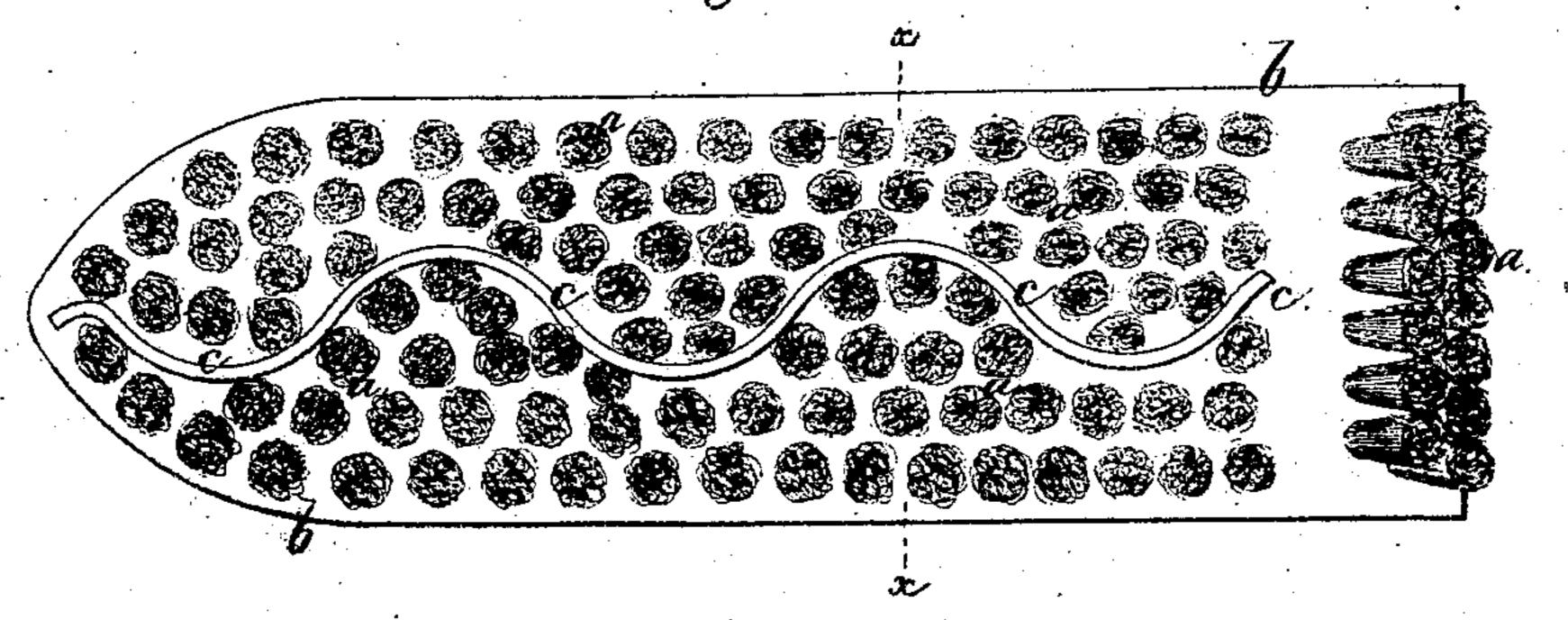


Fig. 1.



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Lemuel W. Serrell atty

## UNITED STATES PATENT OFFICE.

PATRICK O'BRIAN, OF NEW YORK, N. Y.

## IMPROVEMENT IN SCRUBBING-BRUSHES.

Specification forming part of Letters Patent No. 116,346, dated June 27, 1871; antedated June 15, 1871.

To all whom it may concern:

Be it known that I, Patrick O'Brian, of the city, county, and State of New York, have invented and made a certain new and useful Improvement in Scrubbing-Brushes; and the following is hereby declared to be a correct description of the same:

A scrubbing-brush has heretofore been made in which straight strips of rubber were placed edgewise between the rows of bristles and lengthwise of the brush, to give greater stiffness to the brush, and to form "scrubbers," to aid the bristles to more effectually remove the dirt from the floor or other surface being scrubbed. Brushes have also been made in which the scrubbers were composed wholly of rubber strips, said strips being secured edgewise in suitable heads or clamps and arranged in either straight or zigzag lines. A brush in which rubber strips are employed, in connection with bristles, is preferable to one composed wholly of rubber strips; but when the rubber strips are arranged in straight lines, as aforesaid, they are liable to bend sidewise when pressure is applied to the brush, and hence the greater part of the wear comes upon the bristles, and the object of their use is defeated. My invention, as distinguished from those above mentioned, consists in a scrubbing-brush in which a zigzag rubber strip is placed edgewise between the rows of bristles and running lengthwise of the brush, so as to form corrugations in said strip and give greater stiffness to the same, and, consequently, lessen the tendency of the strip to bend over when pressure is applied to the brush in scrubbing,

thus not only relieving the bristles, but scrubbing with greater efficiency, because the corrugated or zigzag strip has a scraping action when the brush is moved in any direction.

In the drawing, Figure 1 is an inverted plan of my improved brush, and Fig. 2 is a cross-section

of the line x x.

a represents the bristles of the brush, and these are to be arranged as most convenient, and introduced into the stock b in any usual or desired manner. c is the rubber strip, placed edgewise between the rows of bristles, and secured at its upper edge in a groove in the stock b; and said strip runs lengthwise and centrally of the stock b, in a wavy or zigzag line, as shown in Fig. 1. The bends or corrugations given to the rubber strip stiffen the same and prevent its bending over as easily as if placed in a straight line, and the strip passing in and out among the rows of bristles presents a large extent of scrubbing edge, and at the same time supports the bunches of bristles contiguous to it, and hence causes the wear to be more evenly divided over the whole surface of the brush.

I claim as my invention—

The scrubbing-brush made with a zigzag elastic strip passing lengthwise of the brush between the bristles, as and for the purposes set forth.

Signed by me this 7th day of December, A. D. 1870.

Witnesses:

P. O'BRIAN.

CHAS. H. SMITH, GEO. T. PINCKNEY.