

(No Model.)

C. L. TRAVIS.

WASH BOARD.

No. 335,977.

Patented Feb. 9, 1886.

Fig. 1

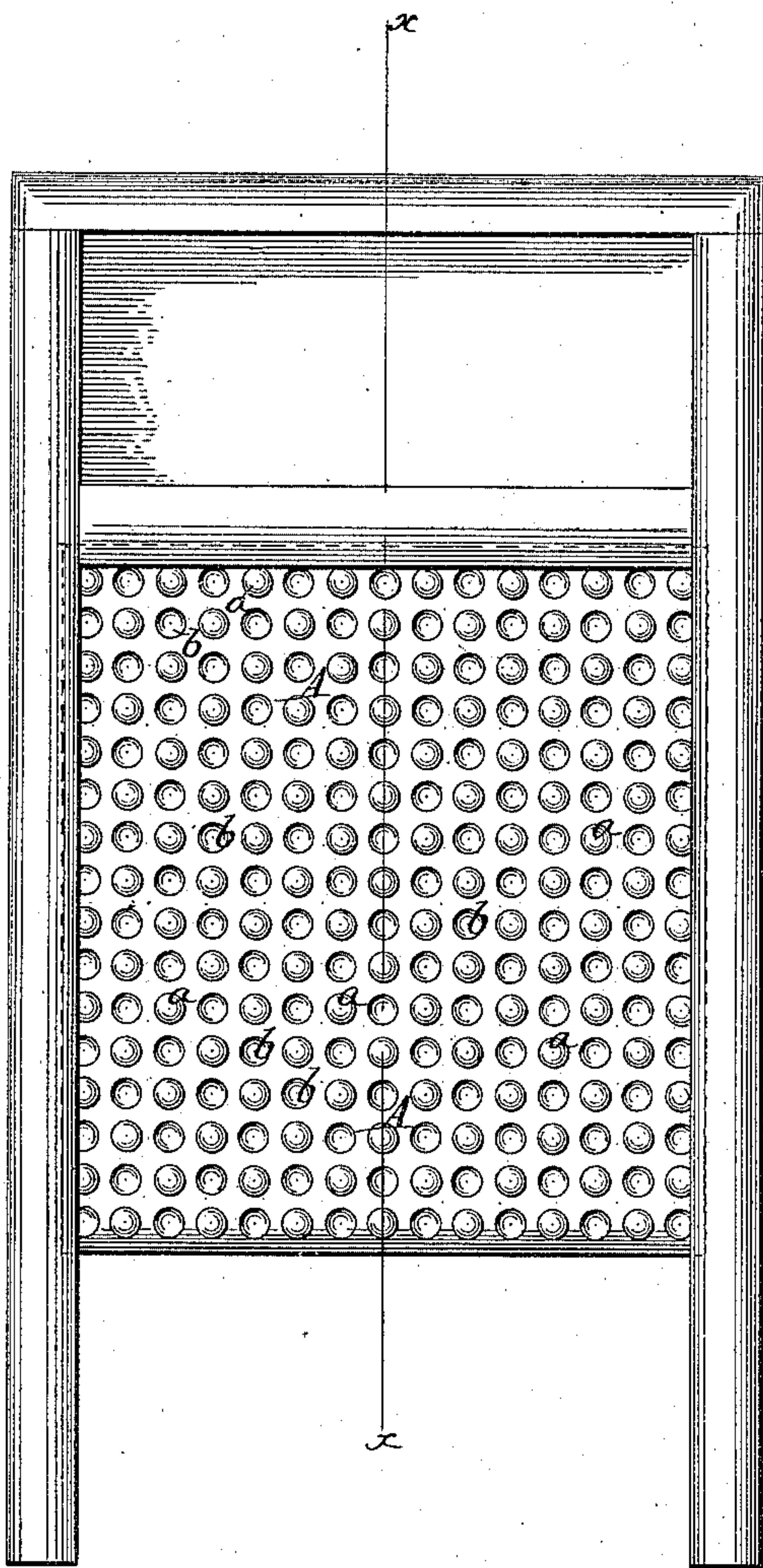
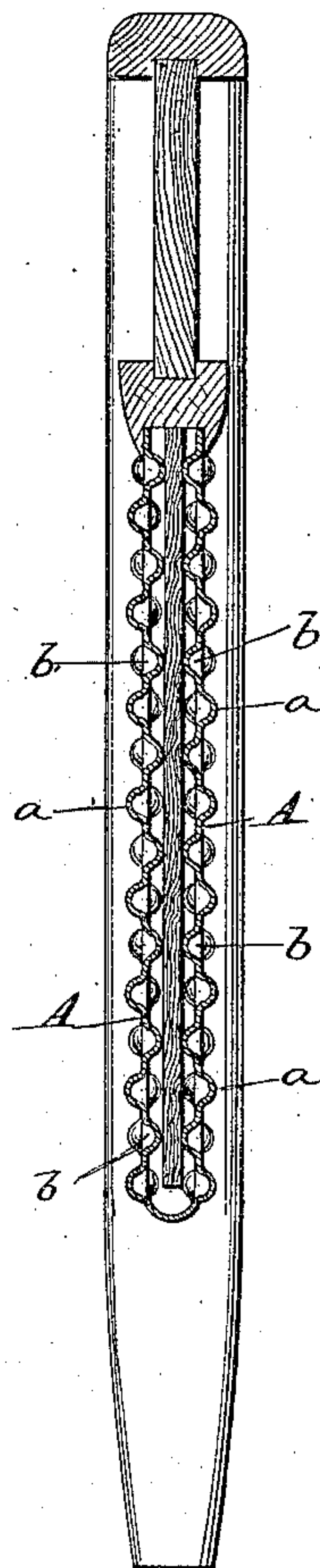


Fig. 2.

on line x-x



Attest.

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By his atty
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UNITED STATES PATENT OFFICE.

CHARLES L. TRAVIS, OF MINNEAPOLIS, MINNESOTA.

WASH-BOARD.

SPECIFICATION forming part of Letters Patent No. 335,977, dated February 9, 1886.

Application filed December 17, 1884. Serial No. 150,574. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. TRAVIS, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain Improvements in Wash-Boards, of which the following is a specification.

My invention consists in a board the operative surface of which has numerous hemispheric elevations, and also depressions of like form closed at the bottom. I usually construct the body of the board of zinc or other appropriate sheet metal, and arrange the studs irregularly or in lines oblique to the direction in which the fabrics are moved, in order that every portion of the surface may be acted on. The depressions or cavities are closed at the bottom, instead of opening through the metal. This is deemed an important feature, since the cavities are thus adapted to receive and retain the soap and give the same up gradually to the fabric, and are caused through the formation of a vacuum therein by the passing fabric to produce a suction and draw the water through the fabric. In practice it is found that the vacuum thus formed in the numerous cavities aids very materially in causing the dissolution and removal of the dirt and foreign matters.

Referring to the drawings, Figure 1 represents a face view, and Fig. 2 a vertical section, of my improved board.

A represents a metal sheet, provided on its front with the numerous hemispheric protuberances or studs, and with the intermediate cavities or depressions, *b*, also of a hemispheric form. The surface may be formed, as shown, by means of dies, rollers, or other suitable appliances familiar to workers in metal. The studs and cavities may be of any appropriate size, and may be modified slightly in

form; but I recommend the form shown and a diameter of from three-sixteenths to one-fourth of an inch as adapted to give the most satisfactory results. I mount the prepared sheet in a supporting-frame of any suitable character, so that it may be used in the same manner as boards of ordinary construction. To secure the best results, the studs and cavities should be arranged, as shown, so that they will not face in line lengthwise of the board. Thus arranged they tend to urge the fabric sidewise as it is carried up and down over the board, so that every portion is acted upon and in different directions.

I am aware that boards have been provided with hemispheric studs, and also that a board has been provided with studs and intermediate cavities opening through the back of the board, and to such constructions I lay no claim. Perforations through the board are not adapted to retain the water, and will not produce the sucking action peculiar to my board.

What I claim is—

1. A wash-board having its surface provided with a series of hemispheric elevations or protuberances and with intermediate cavities or cells closed at the bottom, substantially as described and shown.

2. The wash-board having the otherwise plain surface provided with the series of rounded protuberances and the intermediate rounded cavities or cells closed at their bases, substantially as and for the purpose described.

In testimony whereof I hereunto set my hand, this 5th day of December, 1884, in the presence of two attesting witnesses.

CHARLES L. TRAVIS.

Witnesses:

A. H. NUNN,
GEO. P. STEARNS.