No. 636,144.

J. HOTCHNER.

(Application filed Dec. 23, 1898.)

Patented Oct. 31, 1899.

BRUSH.

(No Model.)

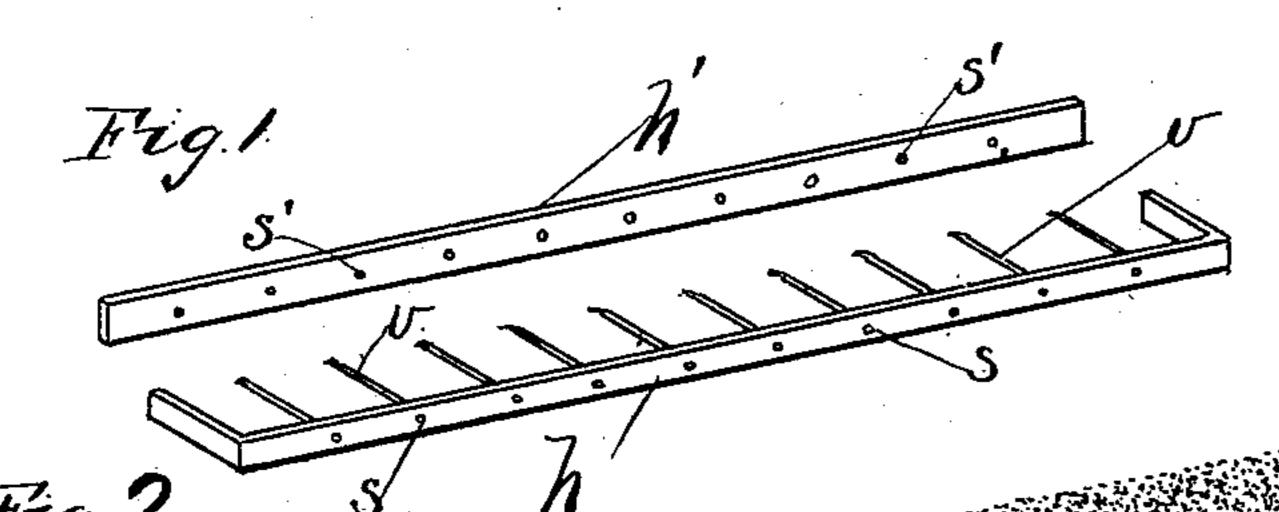
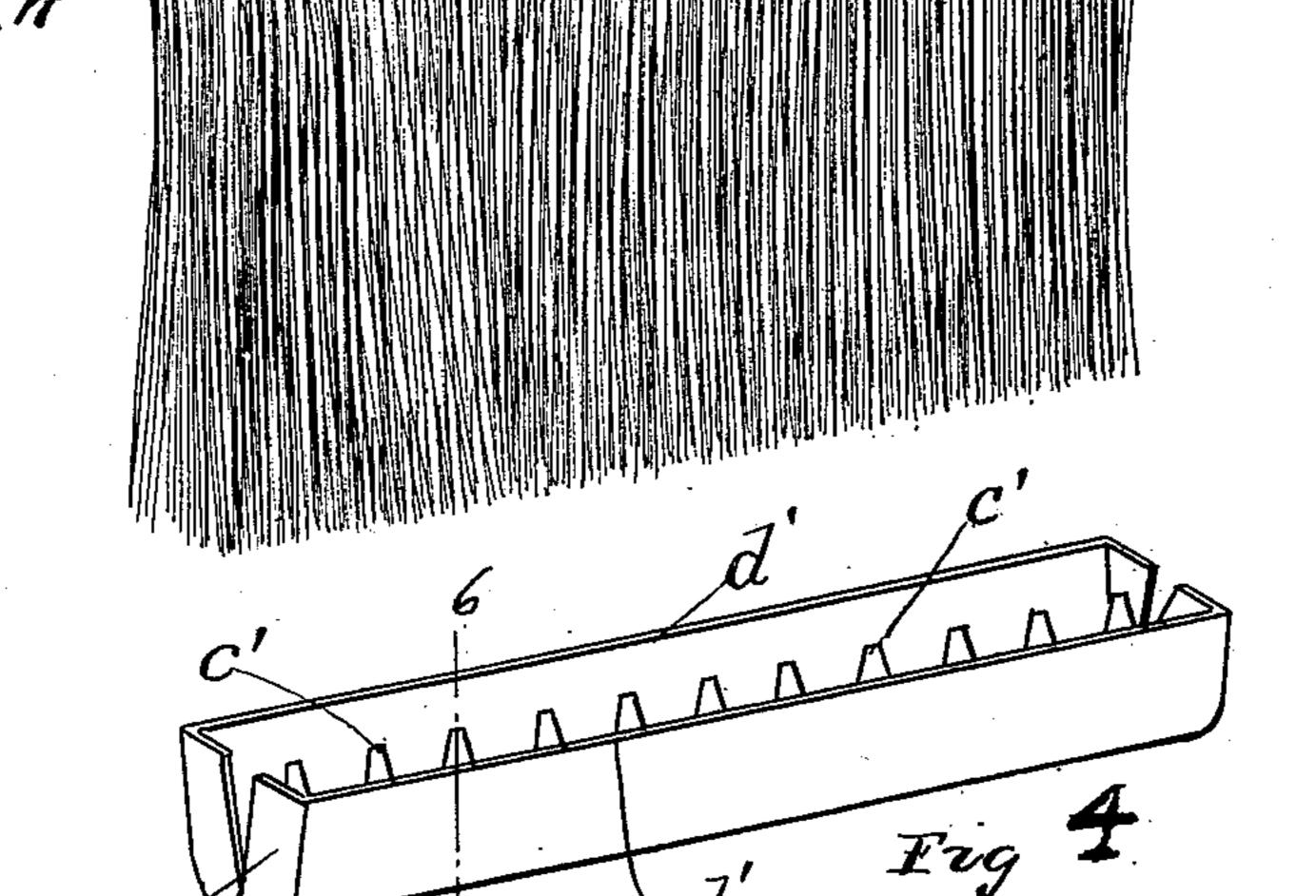


Fig 3



A Fig 6.

Fig 5.

Witnesses.

6. B. Read

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## United States Patent Office.

JOSEPH HOTCHNER, OF PROVIDENCE, RHODE ISLAND.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 636,144, dated October 31, 1899.

Application filed December 23, 1898. Serial No. 700,575. (No model.)

To all whom it may concern:

Be it known that I, Joseph Hotchner, of Providence, in the county of Providence and State of Rhode Island, have invented certain 5 new and useful Improvements in Brushes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked to thereon, which form a part of this specification.

This invention relates to the construction of brushes used for various purposes.

Figures 1 and 2 show the devices for bind-15 ing the bristles in rows of bunches before applying the holder seen in Fig. 4. Fig. 3 represents a row of the bunches of bristles bound together by the devices shown in Figs. 1 and 2. Fig. 4 shows a perspective view of the 20 holder reversed in position. Fig. 5 shows the by the devices seen in Figs. 1 and 2. Fig. 6 represents a cross-section of the holder, taken on line 6 6 in Fig. 4.

The object of this invention is to improve the brush by preventing the bristles from working out of the brush and to make them easier to clean and cost less for construction.

Figs. 1 and 2 show the parts to bind the 30 bristles. They consist of a bar h, which has its ends bent to a right angle, and a row of holes s is made in it at regular distances apart, and pins v v are inserted, one in each hole. (See Fig. 2.) A like bar h, but not 35 having its end bent, has holes s' made in it agreeing with the holes s in the bar h, Fig. 2. The spaces between the pins v are then filled with bristles with their ends projecting out a little way on one side of the bar h, and the 40 bar h' is then put on the ends of the pins and pressed down to compress the bristles, and the ends of the pins that project through the bar h' are bent down on that bar to secure it

and hold the bristles firmly together, as shown

45 in Fig. 3. A cap or holder H is then provided

long enough to inclose the bar h, made of sheet metal bent up into a loop to form teeth c' in the middle, as shown in section in Fig. 6, and the sides d' d' bent up to form a trough, as shown in Fig. 4. The loop has notches 50 made in it to form the pointed teeth c' c', which are at the proper distance apart to go between the pins v in the bars h h'. The bound bristles (shown in Fig. 3) are then reversed in position and the bristles divided 55 lengthwise in the middle. One half of them is then bent down over the bar h, and the other half is bent down over the bar h'. The holder A', Fig. 4, is then reversed and put over the bristles with the points c'c' inserted 60 in where the bristles are parted, and the holder is pushed down over the folded bristles and closed in on each side, as shown in Fig. 5, and pins c c can be inserted through holes made in each side and clenched, if desired, or the 65 holder applied to a row of bunches secured | holder may be depended on to hold the bristles. This method of securing the bristles insures their not coming out, and the points c' c', that are pressed into the center of the folded end, compress the bristles around them 70 much harder against the binding first put on the bunch.

> Having thus described my improvements, I claim as my invention and desire to secure by Letters Patent—

In a brush a holder consisting of a top plate having sides extending down from it, a projection extending down from the top inside between the bristles, in combination with bristles bound together near one end and the long 80 ends turned over said bound ends, substantially as described.

In testimony whereof I have hereunto set my hand this 21st day of December, A. D. 1898.

JOSEPH HOTCHNER.

In presence of— H. E. BARLOW, BENJ. ARNOLD.