

(No Model.)

L. C. RICHARDSON.  
BROOM.

No. 454,792.

Patented June 23, 1891.

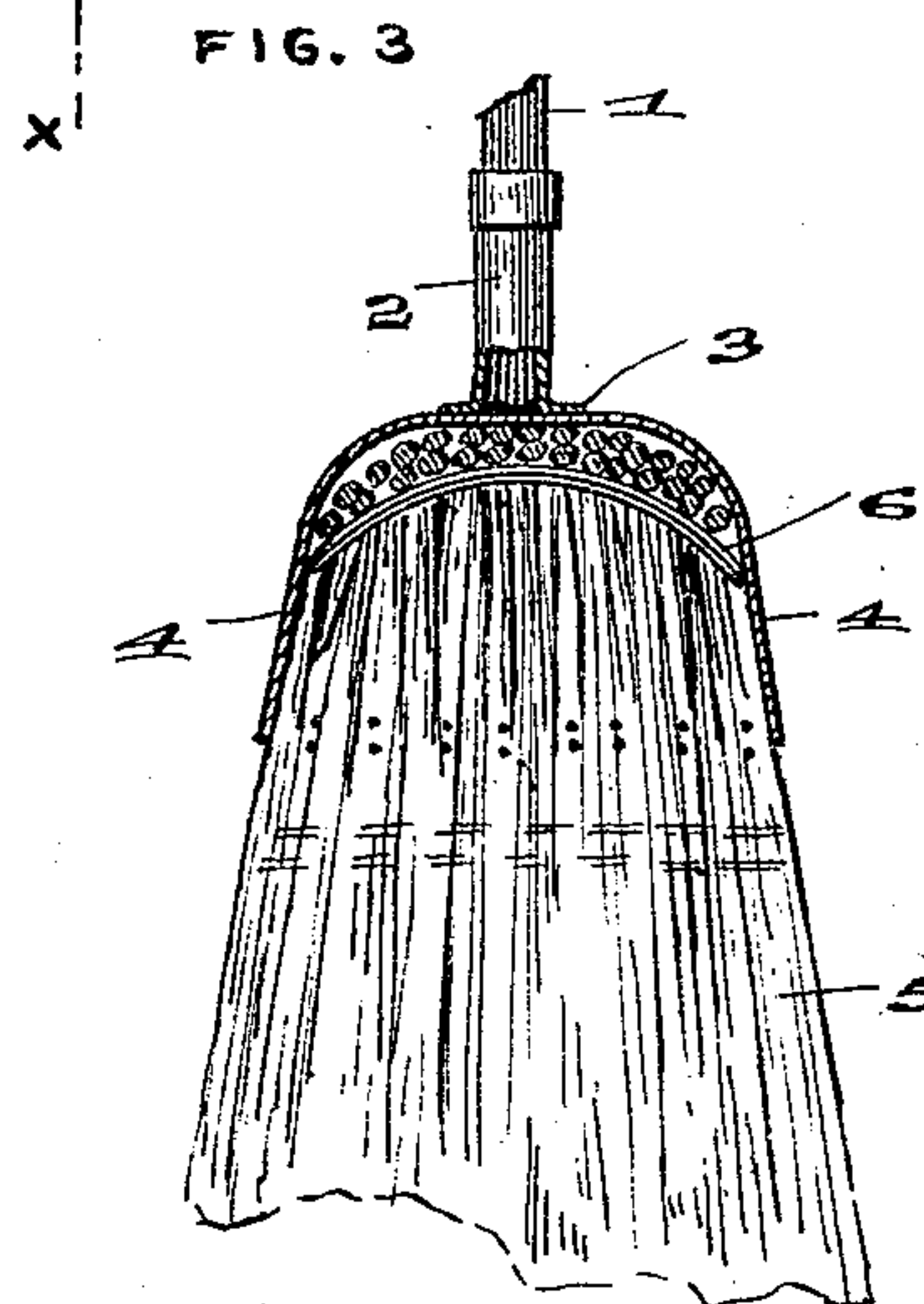
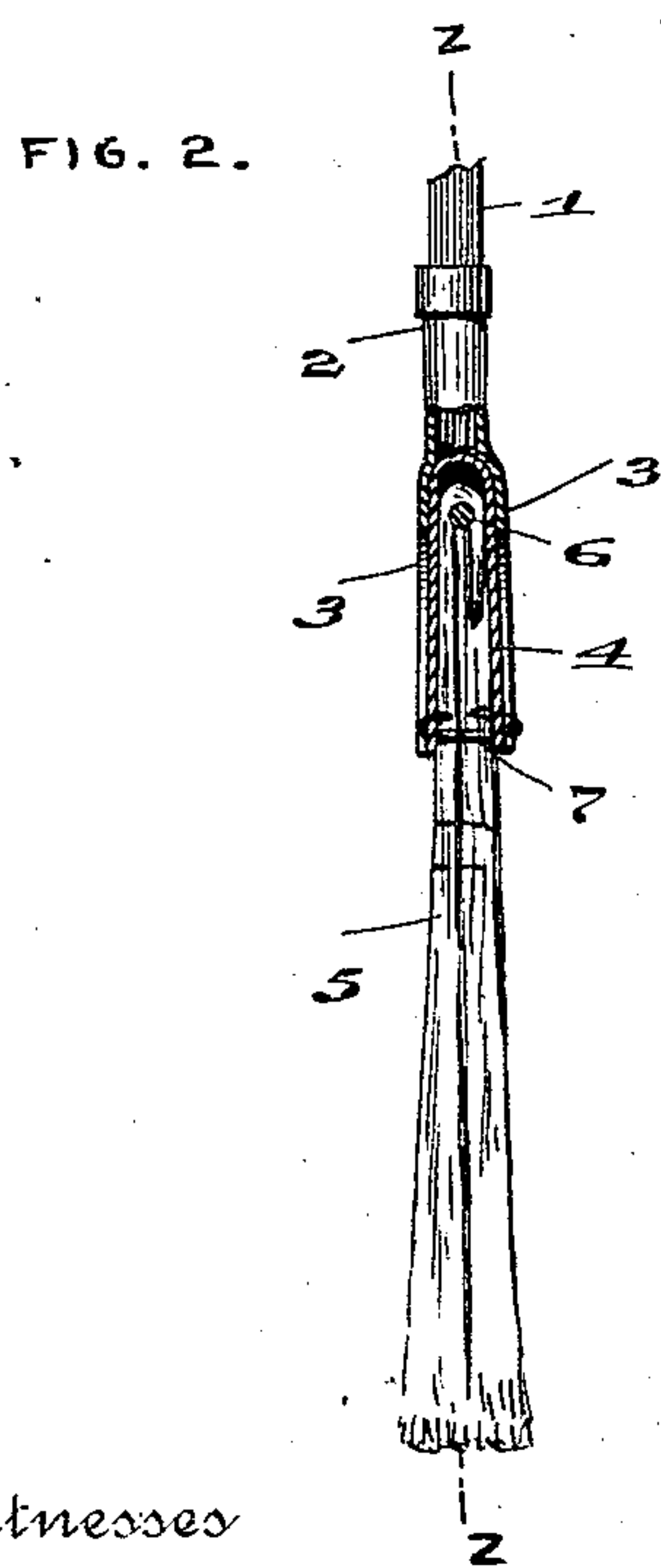
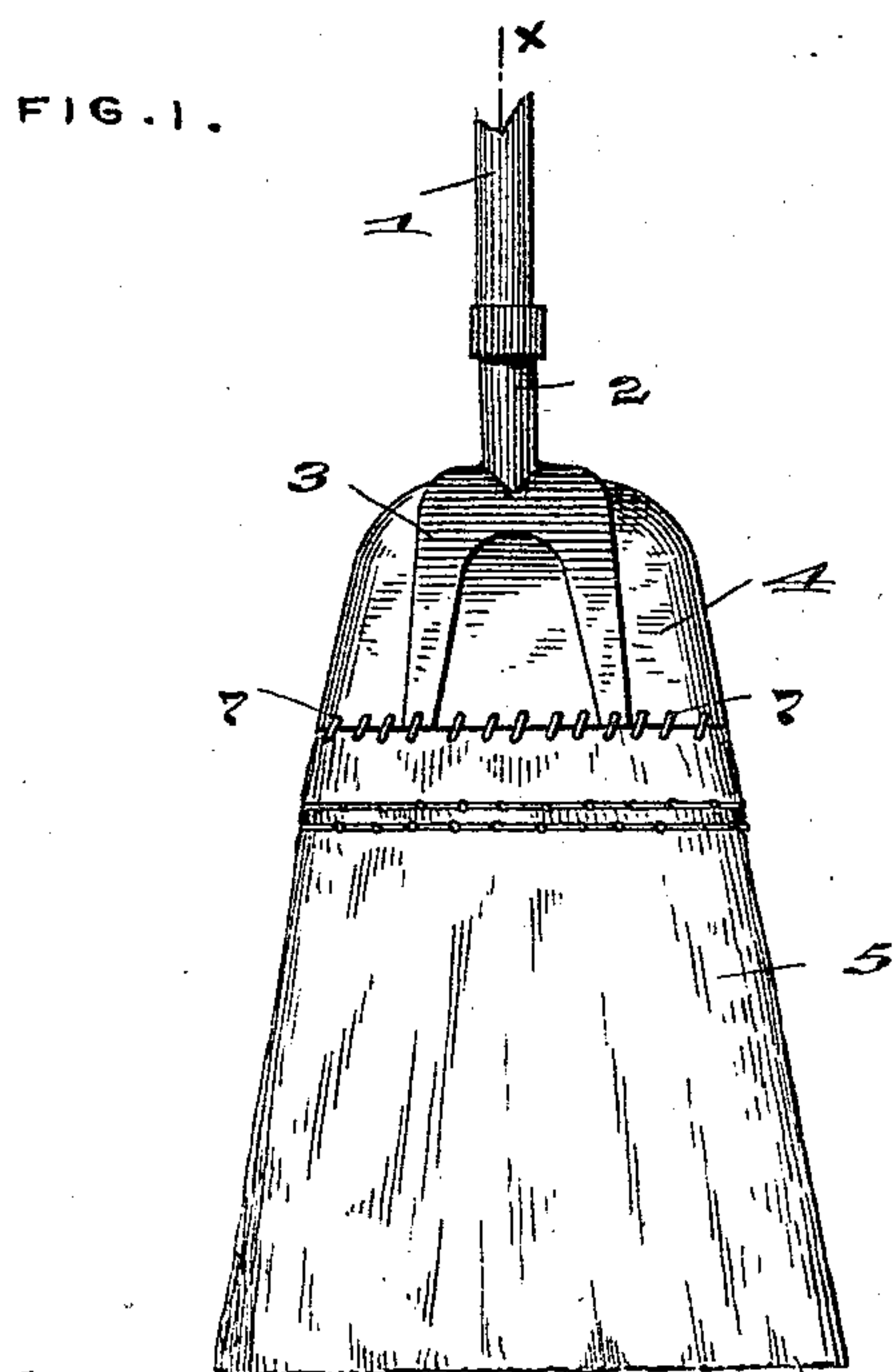
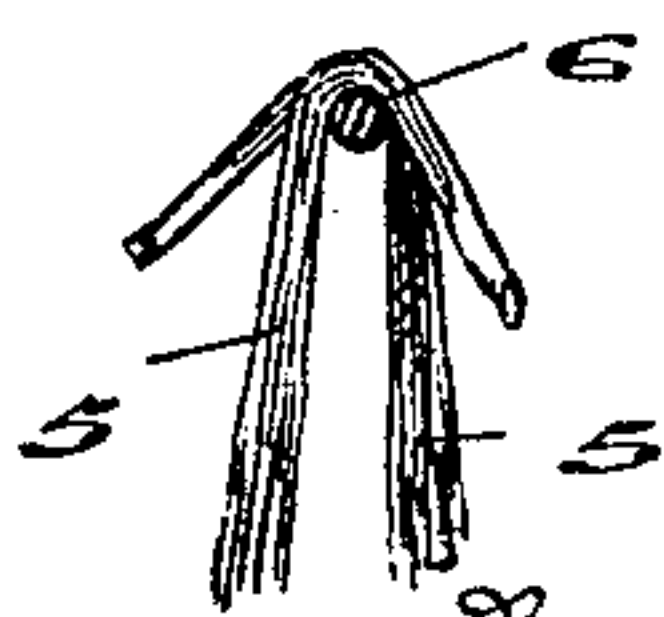


FIG. 4.



Witnesses

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Inventor

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By his Attorney

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# UNITED STATES PATENT OFFICE.

LEWIS C. RICHARDSON, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO CHARLES D. SHELLABERGER, OF SAME PLACE.

## BROOM.

SPECIFICATION forming part of Letters Patent No. 454,792, dated June 23, 1891.

Application filed December 17, 1890. Serial No. 375,030. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS C. RICHARDSON, of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Brooms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

My invention relates to improvements in the construction of brooms, and will be understood from the following description.

In the drawings, Figure 1 is a side view. Fig. 2 is a section on the line  $xx$  below the ferrule. Fig. 3 is a section on the line  $zz$ , Fig. 2. Fig. 4 is a detail view showing how the ends of the straws are folded over the pin.

In detail, 1 is the broom-handle, set in a socket 2, provided with lateral pieces 3, extending downward on each side of the broom-head, the socket and the parts 3 being formed in halves soldered together and held by the ferrule at the top.

4 is the broom-head, which is hollow for receiving the straw.

5 is the broom-straw.

6 is a pin or rod, made of wood, over which the ends of the straws are bent and folded, as shown in Fig. 4. The socket 2 is soldered to the top of the hollow-head 4.

7 are wires or nails driven into holes and through the broom-head and the parts 3 from side to side, the ends of these wires being clamped down and turned through the metal into the straw, and below the head are the usual rows of stitching, as shown in Fig. 1.

The broom is made in the following manner: The socket 2, with its prongs 3, is first soldered to the metal head 4, and the latter is then turned bottom side up, and held in any suitable machine. The ends of the broom-straws are laid in opposite directions across the open mouth of the head 4, and the pin 6, which is made of elastic material and longer

than the transverse diameter of the cap-opening, is then laid across the straws, and by means of any suitable follower device the pin, with the straws beneath, is thrust down into the socket of the head 4 until they take the position shown in Fig. 3, the pin by this operation being bent. When the follower is withdrawn, the elasticity of the pin forces its top downward and its ends outward, so as to act as a brace against the inside of the broom-head 4, and this prevents it from falling or being drawn out. Holes are then punched through the metal head and the wires or nails 7 inserted, and the whole flattened in a press by which the ends of the wires or nails are turned inward, giving the final shape to the broom, and the handle is then inserted in the socket.

What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. A broom provided with a hollow metal head 4 for receiving the straw, the latter laid with reversed ends across the opening, an elastic pin 6 placed upon the straw, and the whole pressed into the socket of the head, whereby the pin is curved and its ends forced outward by its own tension against the walls of the head, and wires or nails passed through the parts and clamped down, substantially as shown and described.

2. A broom comprising a socket-piece 2, having side pieces 3, a hollow metal head 4, broom-corn 5, the ends of the straws set over the opening in the head, a pin 6 laid upon such straw, and all forced down into the metal head, the parts united by clamping-nails and stitches, in combination with a handle, substantially as shown and described.

In witness whereof I have hereunto set my hand this 10th day of December, 1890.

LEWIS C. RICHARDSON.

Witnesses:

H. D. NEALY,  
E. B. GRIFFITH.