

No. 690,736.

Patented Jan. 7, 1902.

H. W. JUDEVINE.

BROOM HEAD.

(Application filed May 22, 1901.)

(No Model.)

Fig. 1.

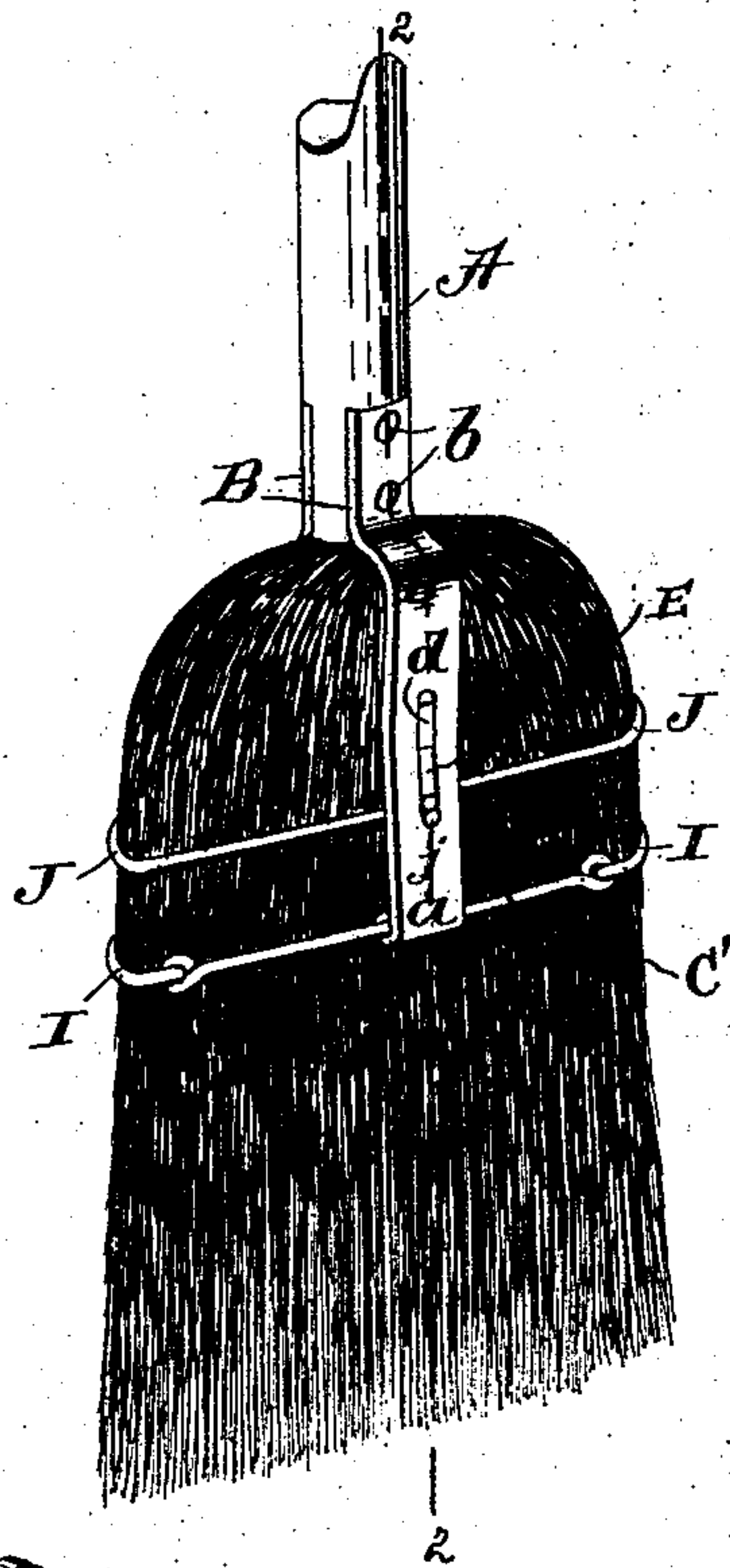
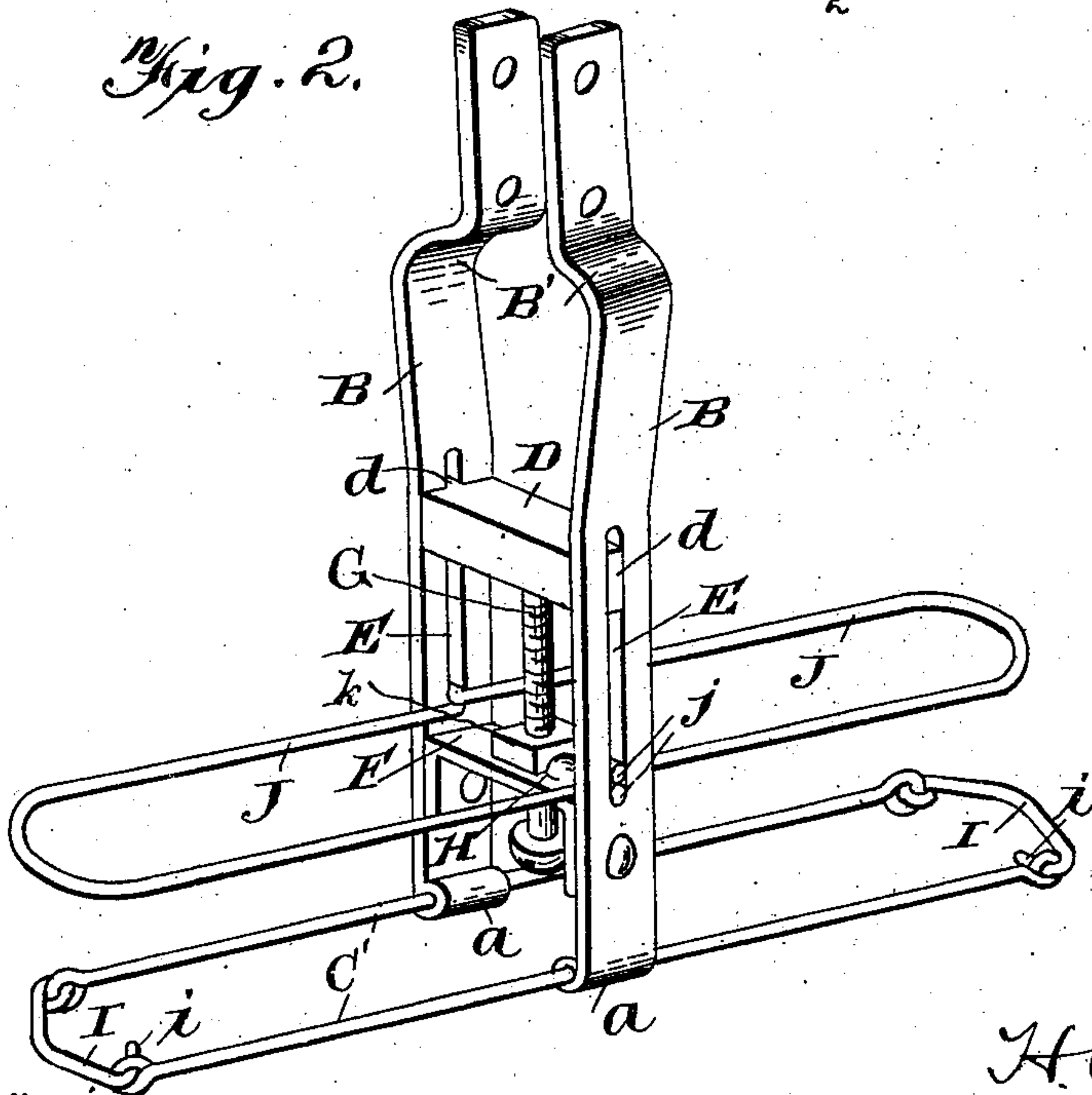


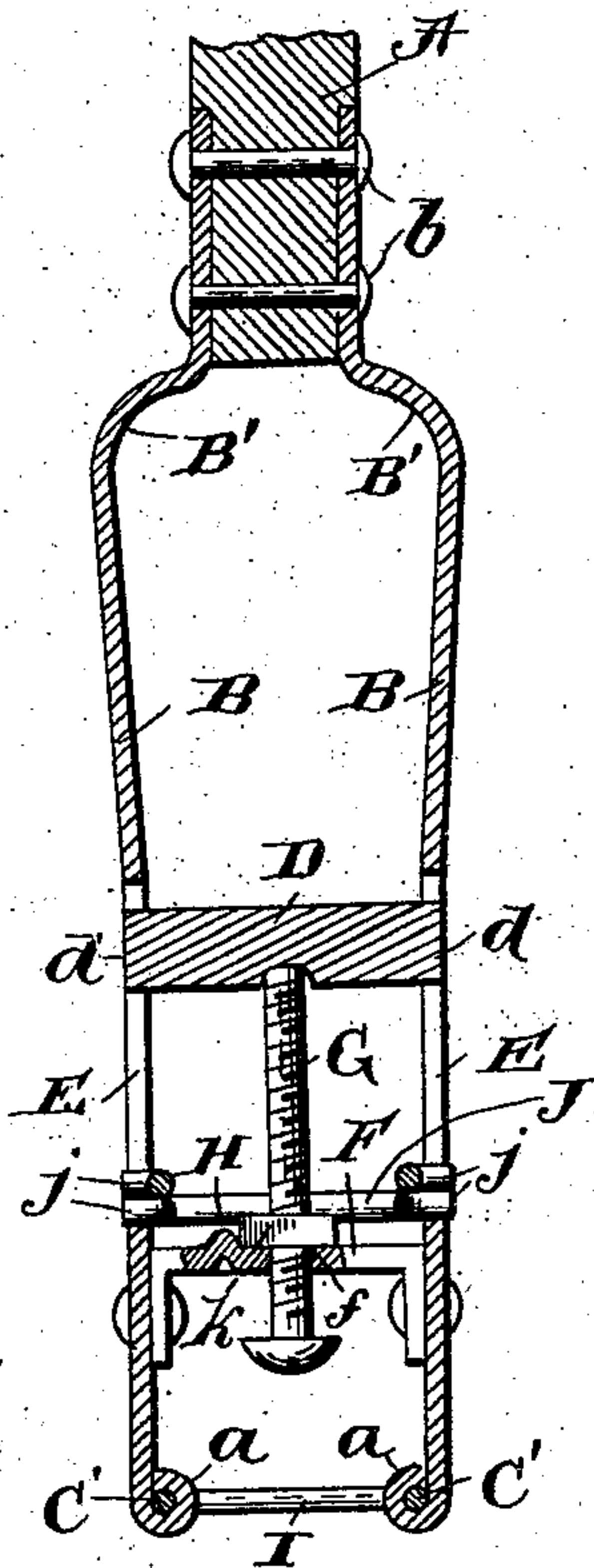
Fig. 2.



Witnesses

Geo. C. Truch.
Chas. A. Wright.

Fig. 3.



Inventor

H. W. Judvine,

By

A. S. Pattison

Attorney

UNITED STATES PATENT OFFICE.

HENRY W. JUDEVINE, OF EDGAR SPRINGS, MISSOURI.

BROOM-HEAD.

SPECIFICATION forming part of Letters Patent No. 690,736, dated January 7, 1902.

Application filed May 22, 1901. Serial No. 61,434. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. JUDEVINE, a citizen of the United States, residing at Edgar Springs, in the county of Phelps and State of Missouri, have invented new and useful Improvements in Broom-Heads, of which the following is a specification.

My invention relates to improvements in broom-heads, and pertains more particularly to detachable heads.

The object of my invention is to provide a head in which the straw can be readily removed when it is worn out and new straw inserted and firmly held therein, whereby a new broom is practically made at a great reduction in cost.

Another object of my invention is to provide a simple, cheap, and durable broom-head which will most effectually accomplish the above result.

In the accompanying drawings, Figure 1 is a perspective view of my broom-head with the straw in place. Fig. 2 is an enlarged detached perspective view of the clamping device. Fig. 3 is an enlarged vertical sectional view taken on lines 2-2, Fig. 1.

Referring now to the drawings, A represents the ordinary broom-handle having at its lower end on either side downwardly-extending flat bars or arms B. The said bars or arms B are secured to the broom-handle, preferably by rivets *b*, passing through the handle and the plates. The upper portion of the bars adjacent the handle are bulged outwardly, as shown at B', for the purpose of receiving the enlarged doubled end of the straw. The extreme lower ends of said bars B have loops *a*, and rigidly secured within said loops are transversely-extending bars or wires C', for a purpose hereinafter more fully described. The said downwardly-extending arms B are provided with longitudinally-extending oppositely-arranged slots E. Between said bars, adjacent the slots, is a clamping-block D, having at its outer ends outwardly-projecting elongated studs *d* of a length considerably less than that of the slots E and resting within said slots, whereby the clamping-block is held between said arms and adapted to slide within said grooves. The said bars are also connected with each other at a point between the slots and the transverse

arms or bars carried thereby by a metal plate F, having its outer ends bent at right angles thereto, and said ends are riveted to the bars B. Centrally located in said plate F is an opening *f*, through which the screw or bolt G loosely passes and by means of which the block D is forced up against the straw and by means of which the straw is securely clamped between the block and the lower end of the handle. The said bolt or screw is provided with a nut *k* between the transverse bar and the clamping-block, and said nut rests against the plate F. The said plate is provided with a projection H, adjacent the opening and against which the outer edge of the nut is adapted to strike, thus holding it from turning when the screw or bolt is turned for forcing the clamping-block in place. The said projection is preferably formed by punching the metal outwardly, as will be readily understood.

Connecting the outer ends of the transverse bars or wires C' are links I, which are slightly curved outward, and each end is provided with hooks *i*, which are adapted to enter the eyes of the transverse bars C' and hold the straw against outward movement. Elongated U-shaped loops J extend around the straw above the laterally-extending arms and have the extreme outer ends bent outwardly at right angles thereto and are adapted to straddle the edges of the broom, and the ends extend under the bars B, and the outwardly-extending projections enter longitudinally-extending openings therein and firmly hold the straw from moving outwardly.

From the above description it will be understood that the members C' and the links I constitute straw-embracing members rigidly connected with the arms B and that the U-shaped members J constitute detachable straw-embracing members located at a point above the said rigidly-supported embracing members and that the detachable embracing members J are movable in a direction longitudinal the broom proper.

The operation of my device is as follows: The straw is first placed in between the side plates between the end of the handle and the clamping-block and the screw screwed up, forcing the block forward and firmly clamp-

ing the straw therein. The straw is then bent down between the transverse extending bars, the loops are then secured in the eyes carried thereby, and the U-shaped spring-clamps are then applied and the broom is complete.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

10 1. A broom-head comprising a handle, longitudinally-extending arms, a straw-embracing member rigidly connected with the lower portions of said arms, and a longitudinally-movable straw-embracing member located at
15 a point between the handle and said rigid embracing member, substantially as described.

2. A broom-head comprising a handle, downwardly-projecting arms carried thereby
20 and adapted to receive the straw, a clamping member between said arms, means for forcing said member against the straw, transverse bars rigidly secured to the lower ends of said arms, and adapted to receive the straw, and
25 links passing around the straw and connecting the outer ends of said transverse bars, substantially as described.

3. A broom-head comprising a handle, downwardly-extending arms carried thereby
30 and adapted to receive the straw and having elongated openings therein, a clamping member sliding within said openings, means carried by the arms for operating the said clamping member, U-shaped clips passing around
35 the straw and having outwardly-extending ends adapted to enter the elongated openings in the arms, and transverse bars rigidly secured to the lower ends of the said arms.

4. A broom-head comprising a handle,
40 downwardly-extending arms carried thereby, a clamping member slidable between said arms, a plate rigidly secured between the lower ends of said arms and having an opening therein, a screw loosely passing through
45 said opening and engaging the clamping member, a nut on said bolt between the clamping member and the plate, and means carried by said plate for preventing the nut from turning, substantially as described.

50 5. A broom-head comprising a handle, downwardly-projecting arms carried thereby, a sliding clamping member between said arms, a plate rigidly secured between said arms below the clamping member, having
55 an opening therein, a screw loosely passing through said opening and engaging the clamping member, a nut on said bolt between the clamping member and the plate, and an upwardly-depressed portion carried by the plate
60 adjacent the opening, whereby the nut is prevented from turning, substantially as described.

6. In a broom-head, the combination with a handle, downwardly-extending arms carried
65 thereby and having elongated openings therein, transverse rods rigidly secured to the lower end of said arms, links connecting the

outer ends of said rods, a clamping member between said arms and having outwardly-projecting portions sliding in said elongated
70 openings, a plate secured between the lower ends of said arms, and having a transverse opening therein, a bolt passing loosely through said opening and engaging said clamping member, a nut on said bolt between
75 the clamping member and said plate, and U-shaped clips having outwardly-extending ends adapted to enter the openings in said arms, substantially as described.

7. A broom-head comprising a handle,
80 downwardly-projecting arms carried thereby and adapted to receive the straw, a straw-clamping member supported by the arms, transverse bars rigidly secured to the lower ends of said arms, and connecting-links for
85 the ends of said rigid bars, substantially as described.

8. A broom-head comprising a handle, downwardly-projecting arms carried thereby
90 and adapted to receive the straw, a straw-clamping member supported by the said arms, and oppositely-extending U-shaped clips passing around the straw and having their inner ends connected with the said
95 downwardly-extending arms, substantially as described.

9. A broom-head comprising a handle, downwardly-extending arms carried thereby
100 and adapted to receive the straw, U-shaped clips passing around the straw and extending in opposite directions from said arms, the inner ends of the clips detachably connected with the arms, substantially as described.

10. A broom-head comprising a handle,
105 downwardly-extending arms carried thereby and adapted to receive the straw, said arms having longitudinally-arranged openings, a clamping member supported by the said arms, U-shaped clips passing around the
110 straw and having their inner ends engaging the walls of the said longitudinally-extending openings in said arms, substantially as described.

11. A broom-head comprising a handle,
115 downwardly-extending arms adapted to receive the straw between them, transversely and parallel arranged bars intermediately connected with the lower portion of said arms, connecting members for the ends of said arms, and a straw-clamping member supported by
120 the said arms at a point between the said bars and the handle, substantially as described.

12. A broom-head comprising a handle,
125 downwardly-extending arms adapted to receive the straw between them, transversely and parallel arranged straw-embracing members supported by the said arms, one located at a point above the other, and a longitudinally-adjustable straw-clamping member engaging the said arm at a point between the
130 innermost straw-embracing member and the said handle, substantially as described.

13. A broom-head comprising a handle, downwardly-extending arms connected with

the handle and adapted to receive the straw
between them, a straw-clamping device car-
ried by the said arms and at a point above
their lower ends, and a straw-embracing mem-
5 ber connected with the said arms at a point
below the straw-clamping member, substan-
tially as described.

14. A broom - head comprising a handle,
downwardly-extending arms connected there-
10 with and adapted to receive the straw between
them, a straw-embracing member extending
transverse the arms and connected therewith,

and a longitudinally-adjustable straw-clamp-
ing member extending between the said arms
in a direction transverse the said straw-em- 15
bracing member, substantially as described.

In testimony whereof I have hereunto set
my hand in the presence of two subscribing
witnesses.

HENRY W. JUDEVINE.

Witnesses:

BERT SPOON,
D. M. GREEN.