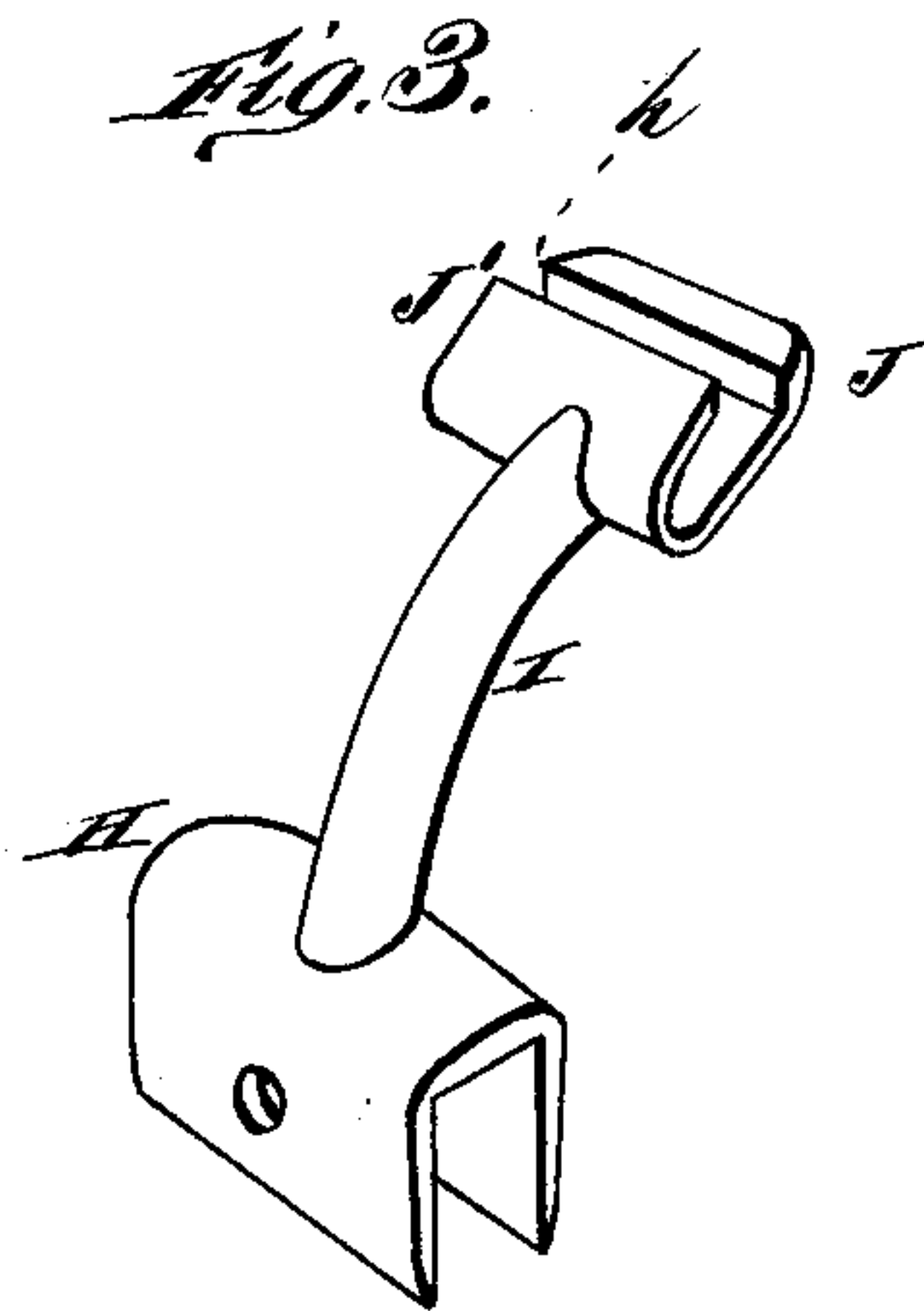


Patented March 5, 1878.



UNITED STATES PATENT OFFICE.

LAVINA GRUBE, OF LIBERTY MILLS, INDIANA.

IMPROVEMENT IN CLAMPS FOR ATTACHING MOP HEADS AND WRINGERS TO PAILS.

Specification forming part of Letters Patent No. **201,005**, dated March 5, 1878; application filed December 29, 1877.

To all whom it may concern:

Be it known that I, LAVINA GRUBE, of Liberty Mills, in the county of Wabash and State of Indiana, have invented a new and valuable Improvement in Mop-Wringers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side view of my mop-wringer, showing how applied. Fig. 2 is a plan view, and Fig. 3 is a perspective detail of the same.

The nature of my invention consists in the construction and arrangement of a combined mop-head and mop-wringer, with a clamp for holding the same to a tub or bucket, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

The frame of my combined mop head and wringer is composed of two parallel side pieces, A A, connected at their outer ends by a cross-bar, B, and their inner ends are curved inward and united, forming a shank, *a*, in the center, upon which is secured a socket, C. This socket is for the insertion of the handle of the mop-wringer; but said socket may be dispensed with and the shank *a* extended to be inserted in the end of the handle.

In the side bars A A are inserted the journals of two rubber rollers, D D', which are geared together by means of cog-wheels *b b* at one side, as shown.

The journals of the roller D pass through corresponding holes in the side bars, while the

journals of the roller D' pass through slots in said side bars, so as to allow said roller to yield to the thickness of the mop. The roller D' is pressed against the roller D by means of a spring, E, arranged substantially as shown.

The mop G is held between the rollers D D' while mopping, and also while the water is being wrung out of the same.

For the purpose of wringing the mop I use a clamp, H, fastened to the edge of the bucket by a set-screw, *d*. From this clamp extends a curved arm, I, which is formed upon its outer end with an outer large jaw, J, and an inner small jaw, J'. The jaw J is on its inner side, near the outer end, provided or formed with a shoulder or offset, *h*.

When it is desired to wring the mop the cross-bar B of the mop-head is placed between the jaws J J', and a crank, K, is applied upon the projecting journal of one of the rolls. The mop G hangs down in the bucket, and by turning the crank K the water is soon wrung out of the same. The jaws J J' hold the mop-head while the mop is being wrung.

What I claim as new, and desire to secure by Letters Patent, is—

In combination with a combined mop-head and mop-wringer, the clamp H, arm I, and jaws J J', substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LAVINA GRUBE.

Witnesses:

MELISSA J. B. COMSTOCK,
CALLIE DRAWBAUGH.