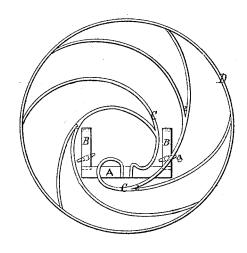
H. L. Ennez,

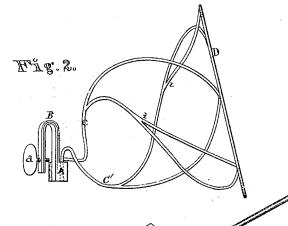
Mot Minger.

NO. 109307.

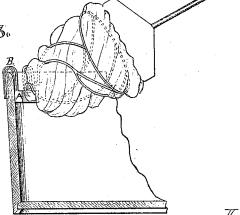
Fatented Nov. 15. 1870.

Fig.I.





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## Anited States Patent Office.

## HOMER L. ENNES, OF BIRMINGHAM, OHIO.

Letters Patent No. 109,307, dated November 15, 1870.

## IMPROVEMENT IN MOP-WRINGERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HOMER L. ENNES, of Birmingham, in the county of Erie and State of Ohio, 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 drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a top view of my mopwringer.

Figure 2 is a transverse central section of the same. Figure 3 is a perspective view of the same.

My invention has relation to means for wringing mops without the direct application of the hands thereto; and

It consists in the construction and novel arrangement of spiral forked wire in such a manner as to form a conical recess, into which the rags of the mop are to be pressed with a twisting motion, and which will not only squeeze the body of the mop, but all the loose ends of the rags thereof, in an efficient manner.

The letter A of the drawing designates a curved bar, arranged to suit the bend of the inner wall of a pail or tub, and provided with the hooks B B and setscrews a, whereby the wringer is designed to be secured firmly to the vessel at its upper edge.

C C' represent spiral wires, usually two in number, which are securely attached to the bar A, and at its middle portion.

These wires are quite close together at their commencement, and, as they proceed, they diverge from each other until they terminate at the ring D, which marks the base of the conical recess and bounds the mouth thereof.

The wires C C' fork at different points, z z, in their length, the branches usually bending off from the outside of the spirals. It is in these forks that the ends

of the rags are caught and squeezed. Those forks which lie nearer the ring will catch the shorter rags, and those which are nearer the apex of the recess will catch the ends of the longer rags.

The wire C', which, in the commencement of its spiral, is arranged to bend upward or from right to left, is first bent into a small depressed elbow, e, in which the ends of the main rags which compose the body of the mop are squeezed.

This bend may be duplicated in the wire C, but in general it is preferred to give this wire the spiral curve up to its junction with the bar A, as it therefore has a tendency to guide the ends of the longest rags into the bend e of the wire C'.

This wringer is readily attached and removed. When attached, its connection with the pail is firm and steady. When this wringer is used it is unnecessary to select rags of the same length in forming a mop, as it will wring all, whether long or short. Hence, better and cheaper mops may be employed.

It is preferred to use galvanized iron in the construction of this wringer, but I do not desire to confine myself to the use of any particular material.

## Claims.

1. In combination with the ring D and an attaching device, the forked and spiral wires C C', substantially as specified.

2. The curved bar A, with the hooks B and setserews a, in combination with the ring D, the forked spiral wire C, and the forked spiral wire C', having the initial band e, as specified.

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

HOMER L. ENNES. Witnesses:

Burton Parsons, Miles M. Thompson.