

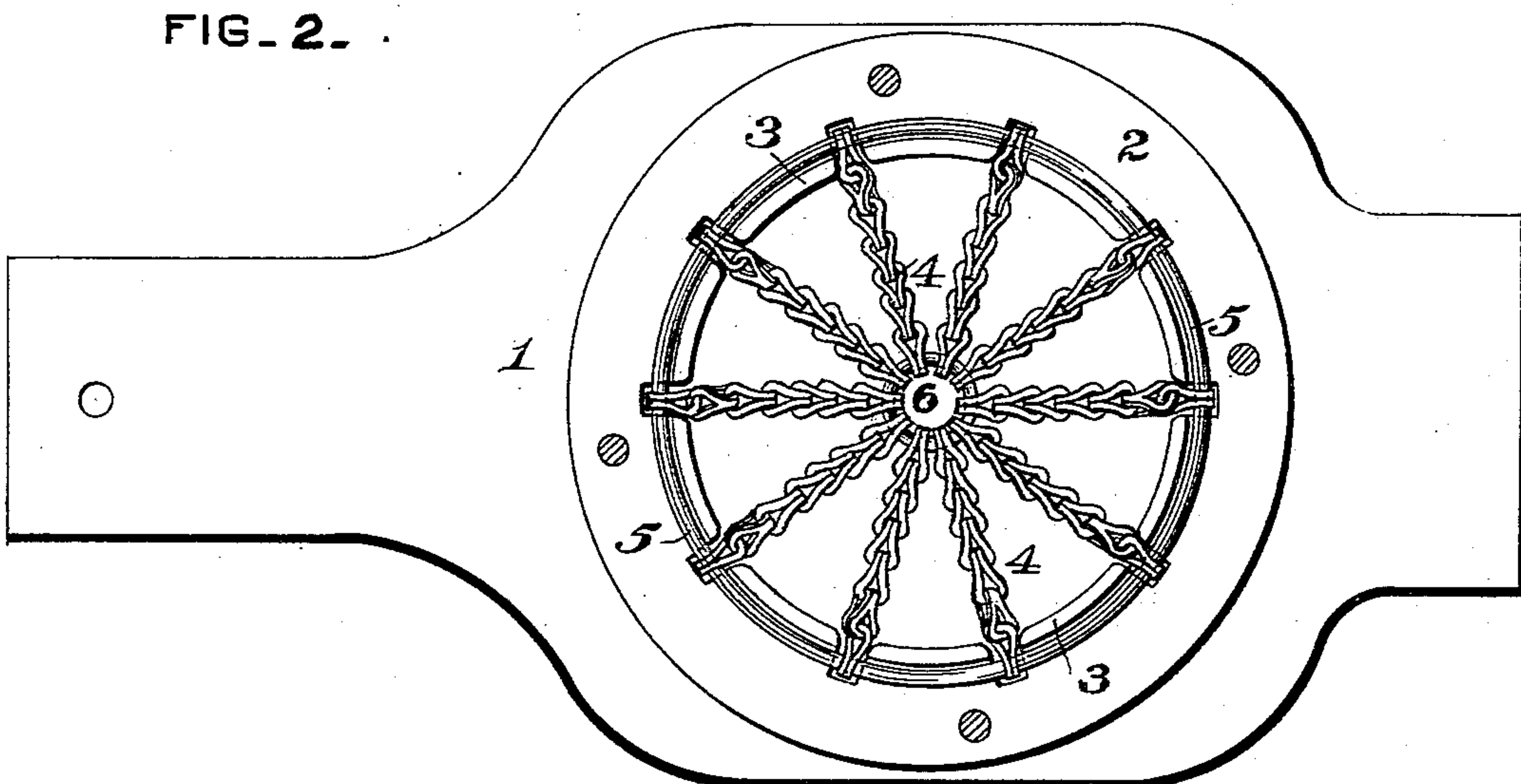
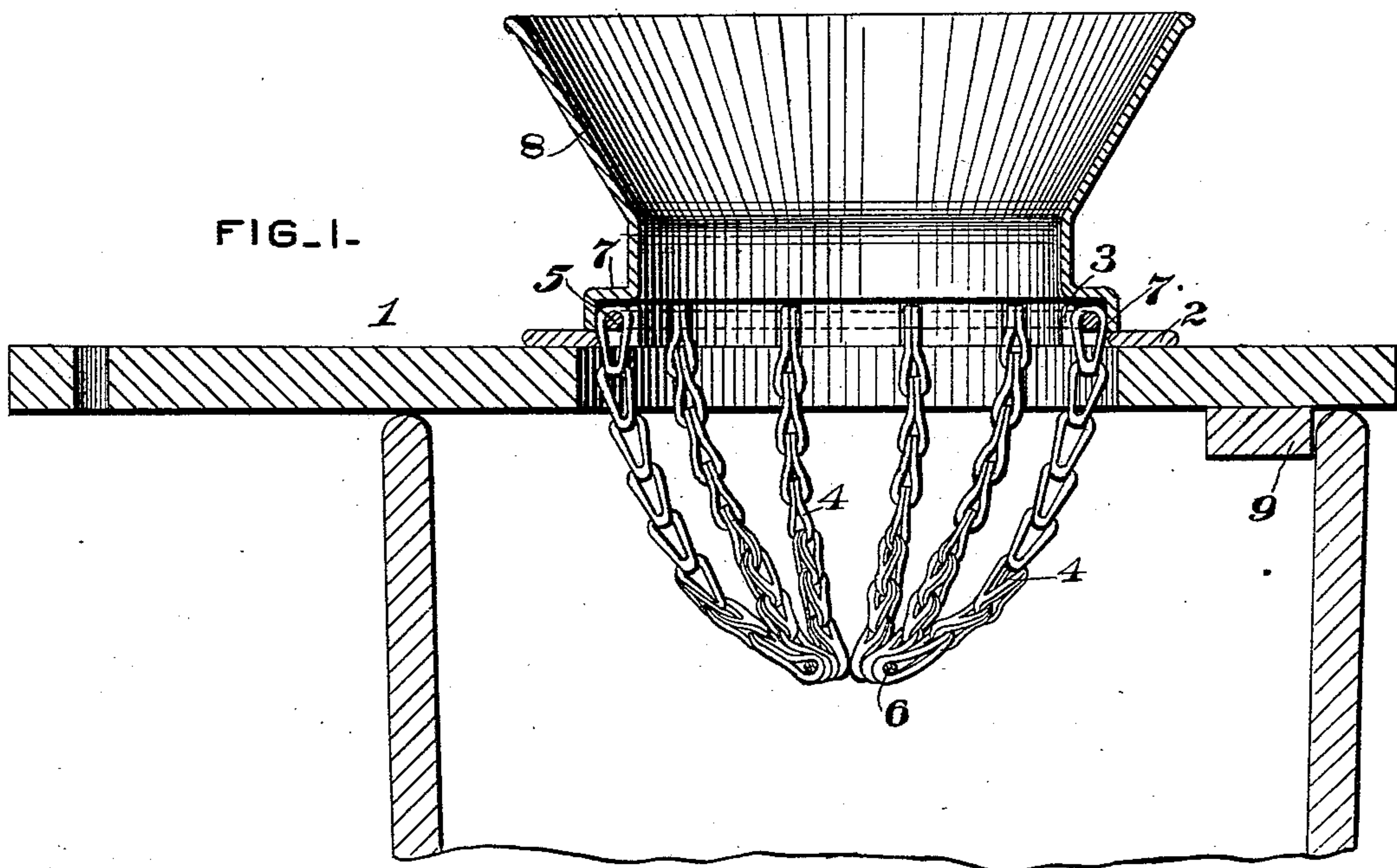
(No Model.)

2 Sheets—Sheet 1.

M. A. MICHALES.
MOP WRINGER.

No. 560,144.

Patented May 12, 1896.



WITNESSES:

Danin S. Wolcott
D. E. Hunt.

INVENTOR,

Moses A. Michalos
by George H. Christie
Att'y.

(No Model.)

2 Sheets—Sheet 2.

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MOP WRINGER.

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FIG. 3.

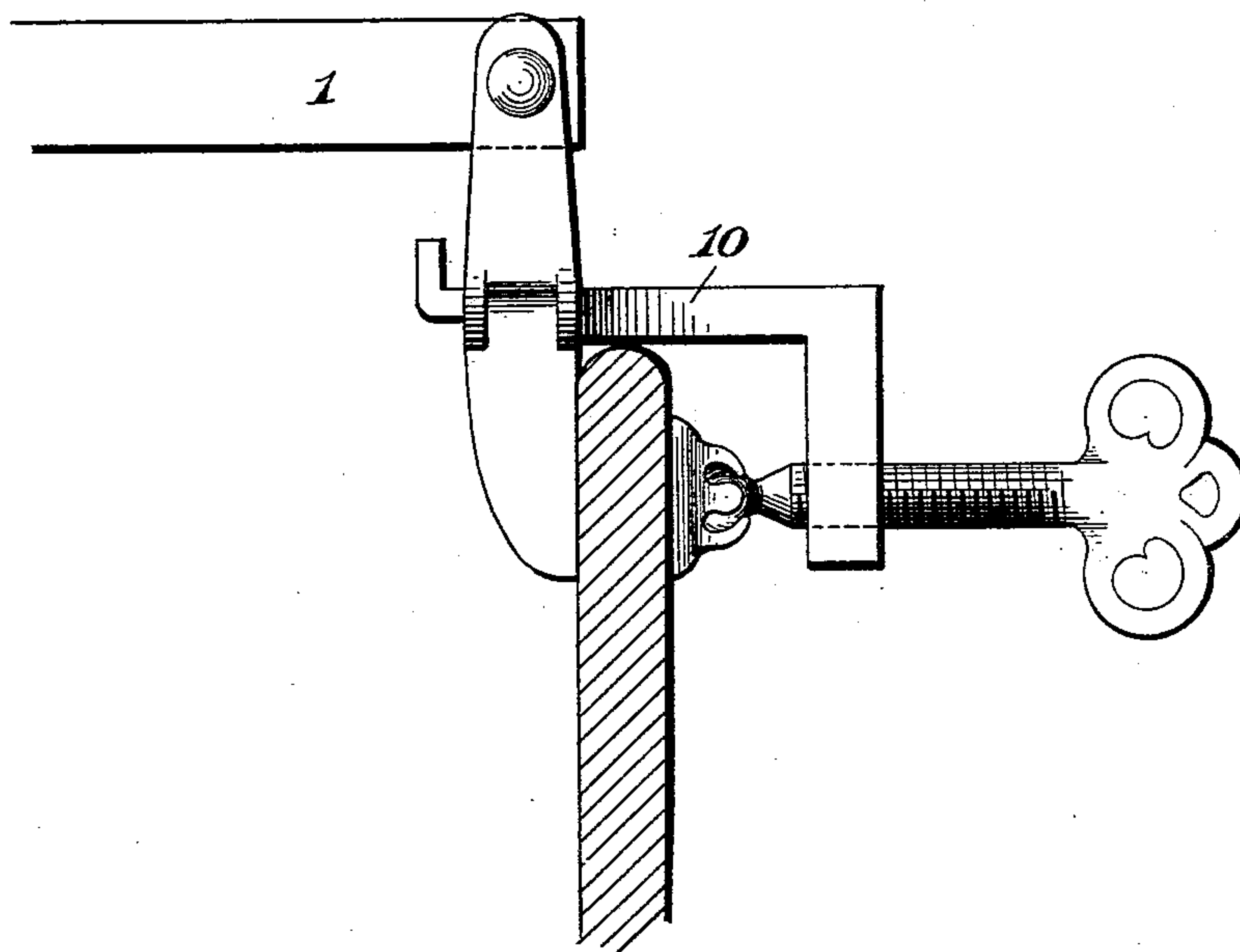
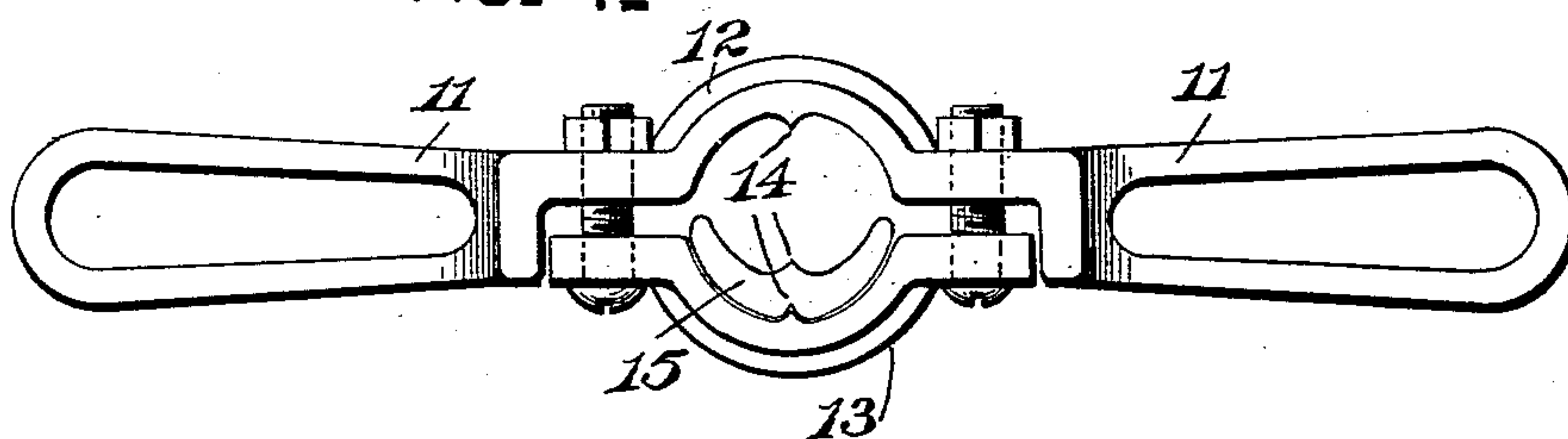


FIG. 4.



WITNESSES:

Daniel S. Wolcott
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INVENTOR,

Moses A. Michales
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UNITED STATES PATENT OFFICE.

MOSES A. MICHALES, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE SIMPLEX MOP WRINGER CO., LIMITED, OF SAME PLACE.

MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 560,144, dated May 12, 1896.

Application filed January 5, 1894. Renewed February 8, 1896. Serial No. 578,617. (No model.)

To all whom it may concern:

Be it known that I, MOSES A. MICHALES, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Mop-Wringers, of which improvements the following is a specification.

The invention described herein relates to certain improvements in mop-wringers, and has for its object a construction whereby the device may be easily and quickly applied to a pail or tub of the usual or any suitable construction and adapted to grasp the lower portions of the mop and hold the same while the handle is being rotated, so that the water can be expelled by a twisting movement and consequent compressing action of the mop, as distinguished from a squeezing action as effected by rolls or other similarly-operating devices.

In general terms, the invention consists in the construction and combination hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a sectional elevation showing my improved mop in position upon a bucket. Fig. 2 is a top plan view of the same, the guide-funnel being removed. Fig. 3 is a detail view showing the manner of attaching the wringer-support by a hinge connection to the bucket, and Fig. 4 is a plan view of a handle adapted to be secured to the mop-handle to enable the operator to more effectively wring the mop.

In the practice of my invention an opening of suitable size to permit the passage of the mop is formed in the board 1, and around this opening is secured a flanged annulus 2, the flange 3 thereof being notched at intervals, as shown, said notches extending into the body of the annulus a short distance. A series of chains 4 are arranged upon a ring 5, which is adapted to fit just outside of the flange 3 of the annulus, the chains extending down through the notches hereinbefore described. The lower ends of the chains are connected to a ring 6, thus forming a poke into which the mop is inserted when it is to be wrung. The ring 4 is held in position by

an annular plate 7, secured by screws to the annulus 2 and provided with a conical enlargement or funnel 8 at its upper end, adapted to guide the mop down into the poke. The board 1 is provided with a stop 9, adapted to facilitate the arrangement of the wringer on the bucket and also to hold one end of the board while the wringer is being operated on, the opposite end of the board being held from movement by contact with the leg of the operator.

If desired, one end of the board 1 may be pivotally connected to a clamp 10, which can be secured to one edge of the bucket, as shown in Fig. 3.

In order to enable the operator to rotate or turn the handle of the mop with greater power, I provide handles 11, which are provided midway of their length with a semi-circular socket 12, adapted to fit the handle of the mop and held in position by a semi-circular clamping-piece 13, secured to the handles by bolts and nuts. The socket thus formed is provided on its inner walls with prongs 14, which, entering the handle of the mop, prevent the rotation of the supplemental handle 11 thereon. In order that this supplemental or rotating handle may be applied to mop-handles of different diameters, I provide a concavo-convex liner 15, arranged to fit within the socket and reduce the internal diameter thereof.

In using my improved wringer the lower end of the mop is passed down through the funnel 8 until the ends of the flexible portion of the mop bear upon or pass a short way between the chains forming the poke. The mop-handle is now rotated, thereby causing the chains to be carried around to the limit of their movement and catch between them the lower end of the flexible portion of the mop. As the handle is turned around, after the lower portions of the mop have been grasped by the poke, the flexible portion of the mop is twisted and the water effectually squeezed out, the mop being subjected to the twisting action similar to that employed in wringing out clothes by hand. As soon as the water has thus been squeezed out the mop-handle is turned back, thereby freeing the

lower ends of the mop from engagement with the chain forming the poke.

While it is preferred to employ a poke constructed of a series of chains, such as shown, 5 it may be of any other suitable construction whereby the lower portion of the mop will be grasped and prevented from rotating, while the portions above those grasped are tightly twisted by the rotation of the handle. The 10 principal characteristic of my improvement is the provision of means whereby portions of the mop may be grasped and held stationary while the other portions are being twisted for the expulsion of water. It will be observed 15 that the funnel is considerably larger than the poke and will serve to guide a mop of considerably larger dimensions than the poke into the latter, the handle of the mop being rotated so that the mop is shaped into the form of a 20 cone as it descends into the poke.

I am aware that it is old to construct mop-wringers in the form of a conical frame consisting of resilient wires designed to wrap around the mop and exert a compressive force 25 thereon. In causing such frames to wrap around or compress the mop the latter is somewhat twisted; but the twisting action will cease as soon as the binding action of the frame begins, so that the compressive action 30 of the frame is practically the only effective agent for expelling water, and, further, as the compressive action proceeds from the exterior to the interior of the mop the exterior

portions are so compacted that water cannot readily escape from the interior portions. 35

In my improved wringer the flexible pliant non-resilient poke or bag simply grasps the lower portions of the mop and holds them as against rotation while the upper portions are being twisted, and as this twisting begins 40 simultaneously on the interior and exterior the water is more readily expelled.

I claim herein as my invention—

1. A mop-wringer having in combination a board or support and flexible, non-resilient 45 means for grasping and holding the lower end of the mop stationary as against rotation, substantially as set forth.

2. A mop-wringer having in combination a board or support having an opening there- 50 through and a poke formed of a series of chains arranged below said opening, substantially as set forth.

3. A mop-wringer having in combination a board or support having an opening there- 55 through, a poke formed of flexible or pliant, non-resilient material arranged below said opening and a funnel for guiding the mop into the poke, substantially as set forth.

In testimony whereof I have hereunto set 60 my hand.

MOSES A. MICHALES.

Witnesses:

DARWIN S. WOLCOTT,

F. E. GAITHER.