

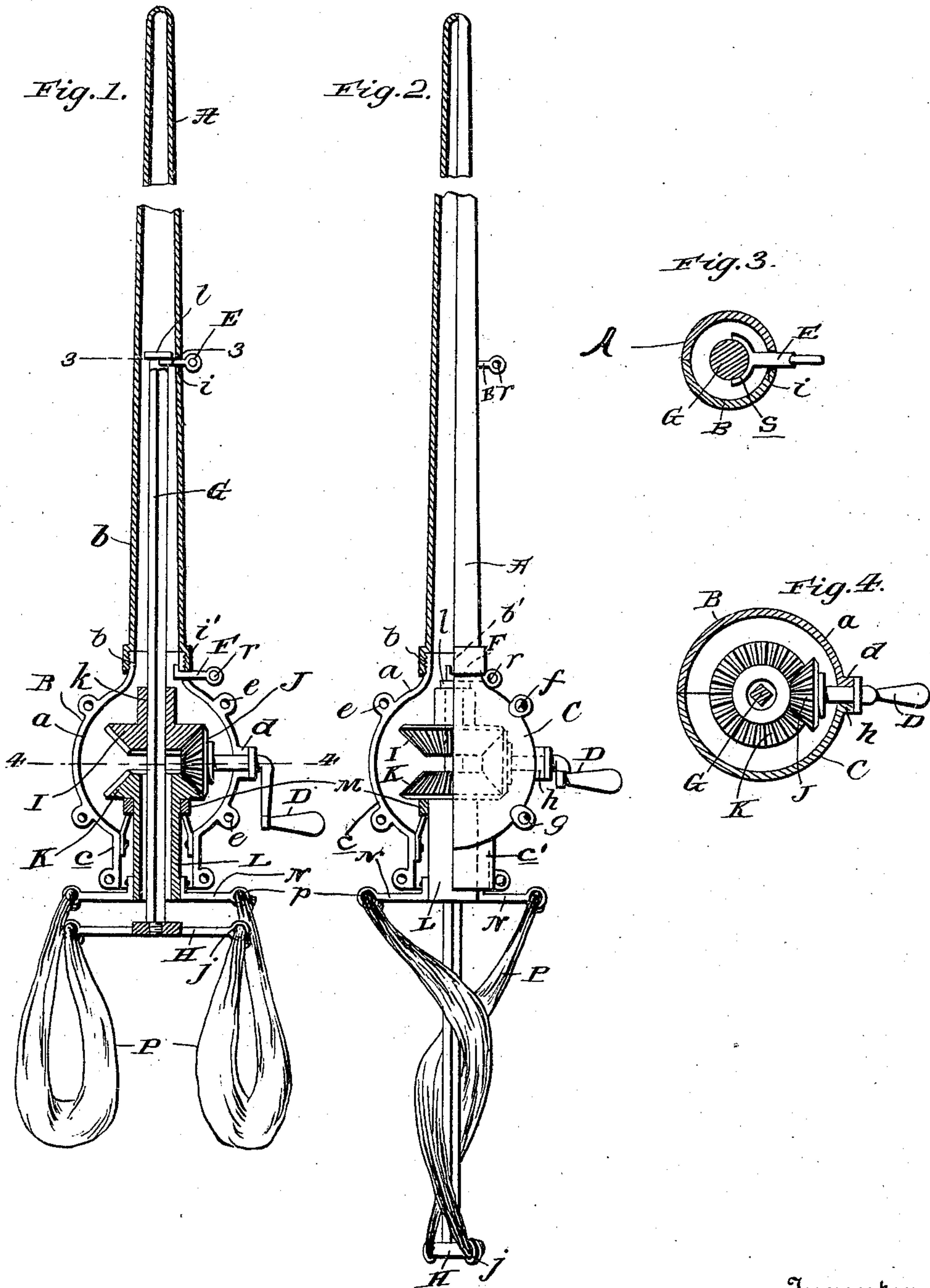
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Patented Oct. 8, 1901.

C. E. SHAW.
COMBINED MOP AND MOP WRINGER.

(Application filed Aug. 3, 1901.)

(No Model.)



Witnesses
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CHARLES E. SHAW, OF SPOKANE, WASHINGTON.

COMBINED MOP AND MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 684,115, dated October 8, 1901.

Application filed August 3, 1901. Serial No. 70,750. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. SHAW, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented new and useful Improvements in a Combined Mop and Mop-Wringer, of which the following is a specification.

My invention relates to mops, and has for its general object to provide a combined mop and mop-wringer which is at once simple and inexpensive in construction and easy of operation both when used as a mop and as a wringer for removing water from the mop proper or mop-cloths.

With the foregoing in mind the invention will be fully understood from the following description and claims when taken in conjunction with the accompanying drawings, in which—

Figure 1 is a view, partly in elevation and partly in diametrical section, illustrating my improved device with one of the casing-sections removed and the adjustable parts in the positions in which they are secured when the device is to be used as a mop. Fig. 2 is an elevation of the device with one-half of one casing-section in its proper operative position and the adjustable parts in the positions in which they are secured when the device is to be used to wring the mop-cloths. Fig. 3 is an enlarged transverse section taken in the plane indicated by the broken line 3 3 of Fig. 1; and Fig. 4 is a similar view taken in the plane indicated by the line 4 4 of Fig. 1, with the crank and the beveled gear thereon in plan.

In the said drawings similar letters designate corresponding parts in all of the several views, referring to which—

A is the handle of my improved mop and mop-wringer, which is hollow, as shown, and interiorly threaded at its lower end, and B is one of the casing-sections. The said casing-section is of the shape shown—that is to say, it comprises an enlarged portion *a*, a threaded portion *b*, projecting upwardly therefrom, and a reduced portion *c*, depending from the enlarged portion. It is provided on its enlarged portion *a* with a lateral projection *d*, having a groove of semicircular form in cross-section in its inner side, and is also provided

with lateral apertured ears *e*, the latter to receive bolts *f*, which take through similar ears *g* on the casing-section C and serve to connect the same to the section B. The section C corresponds in shape to the section B and is provided with a lateral projection *h*, which has a semicircular groove in its inner side and is adapted, in conjunction with the projection *d* of said section B, to form a journal-bearing for a crank D, as best shown in Fig. 4. Said casing-section C is also provided with a depending reduced portion *c'*, designed, in conjunction with the portion *c* of section B, to form a tube, and is further provided with an upwardly-extending threaded projection *b'*, which, in conjunction with the projection *b* of section B, is designed to form a threaded stud for the engagement of the lower threaded end of the handle A. I desire it understood, however, that the handle A may be detachably connected to the casing in any other approved manner without departing from the scope of my invention.

E F are upper and lower latches, which are movable inwardly and outwardly in apertures *i i'*, formed in the handle and casing, respectively, and G is an endwise-movable shaft arranged in the casing and equipped at its lower end with a T-head H, having apertures *j* at its ends. The said shaft G is of angular form in cross-section, so as to enable it to turn with and move endwise through a beveled gear I, having a bore *k* of similar shape, and it is provided at its upper end with a head or enlargement *l* for the engagement of the latches E F, as presently described.

J is a beveled gear fixed on the inner end of the crank D and intermeshed with the beveled gear I, and K is a beveled gear disposed below the beveled gear I and also intermeshed with the beveled gear J. Said gear K is carried at the upper end of a shaft L, which is tubular in form and surrounds the shaft G and depends a slight distance below the lower end of the casing, as illustrated. The gear K and sleeve L are supported by a collar M, disposed below the gear, as best shown in Fig. 1, and the sleeve is provided at its lower end with oppositely-directed lateral arms N, having apertures *p* at their outer ends.

In the practice of my invention the mop-cloths (designated by P) are secured at their ends in the eyes of the T-head H and arms N, and the shaft G is secured in its retracted position through the medium of the upper latch E. The device is then ready for employment as a mop and may obviously be used with the same facility as the ordinary mop. When it is desired to wring the mop-cloths, the latch E is disengaged from the head I of the shaft G, and the said shaft is then extended to the position shown in Fig. 2 and secured in such position through the medium of the latch F. When this is done and the crank D is rotated, the shaft G and the sleeve L will be rotated in opposite directions and the mop-cloths wrapped about the extended portion of the shaft G, with the result that the said cloths will be thoroughly wrung and freed of water.

The latches E F are preferably provided at their outer ends with eyes or finger portions *e*, and the latch E is also preferably provided at its inner end with a yoke S, said yoke being adapted to straddle the round portion of the shaft G immediately below the head thereof, after the manner illustrated in Fig. 1.

In assembling the parts of my improved device the gears I J K are first properly placed in the casing and the shaft G is passed downwardly through the gears I K, after which the shaft is inserted in the handle A and said handle is connected to the casing and the bar H is connected to the lower end of the shaft.

It will be readily appreciated from the foregoing that my improved combined mop and mop-wringer is simple and inexpensive and is susceptible of being readily converted from a mop into a mop-wringer, and vice versa, also that the gearing is inclosed by the casing, and consequently there is no liability of the mop-cloths being caught and entangled in the same.

I have entered into a detailed description of the construction and relative arrangement of parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my claims.

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

1. In a combined mop and mop-wringer, the combination of a casing provided with a handle, a shaft movable endwise in the casing and handle, and having a portion adapted for the connection of a mop-cloth, a sleeve ar-

ranged in the casing around said shaft and also having a portion for the connection of a mop-cloth, a crank journaled in the casing, and gearing intermediate of said crank and the shaft and sleeve.

2. In a combined mop and mop-wringer, the combination of a casing provided with a handle, a shaft of angular form in cross-section movable endwise in the casing, and having a head at its outer end for the connection of one or more mop-cloths, a beveled gear having a bore of angular form in cross-section receiving the shaft; said gear being inclosed by the casing, a sleeve arranged in the casing around the shaft and having one or more portions at its outer end for the connection of one or more mop-cloths, and also having a beveled gear at its inner end, a crank journaled in the casing and having a beveled gear interposed between and intermeshed with the gears on the shaft and sleeve, and means for securing the shaft in its extended and retracted positions.

3. In a combined mop and mop-wringer, the combination of a hollow handle, a casing detachably connected to the handle and comprising detachably-connected sections, a shaft of angular form in cross-section movable endwise in the casing and having a head or enlargement at its inner end and also having a T-head at its outer end provided with apertures, a beveled gear arranged in the casing and having a bore of angular form in cross-section receiving the shaft, a sleeve arranged in the casing around the shaft and having a beveled gear at its inner end disposed below the first-named gear, and also having lateral projections or arms at its outer end provided with apertures, a crank journaled in the casing and having a beveled gear interposed between and intermeshed with the gears on the shaft and sleeve, and latches movable endwise in the handle and casing at right angles to the shaft for engaging the head or enlargement at the inner end of the shaft and thereby securing said shaft in its extended and retracted positions.

4. In a combined mop and mop-wringer, the combination of a handle, a shaft and a sleeve surrounding the shaft, carried by the handle and having portions for the connection of a mop-cloth; one of said elements being movable endwise with respect to the other and the handle, a crank carried by the handle, and gearing intermediate of said crank and the shaft and sleeve.

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

CHARLES E. SHAW.

Witnesses:

CALEB M. SANGER,
DANIEL T. ROBISON.