

O.S. & J.G. Garretson,

Mop Head.

No. 107,897.

Patented Oct. 4, 1870.

Fig. I.

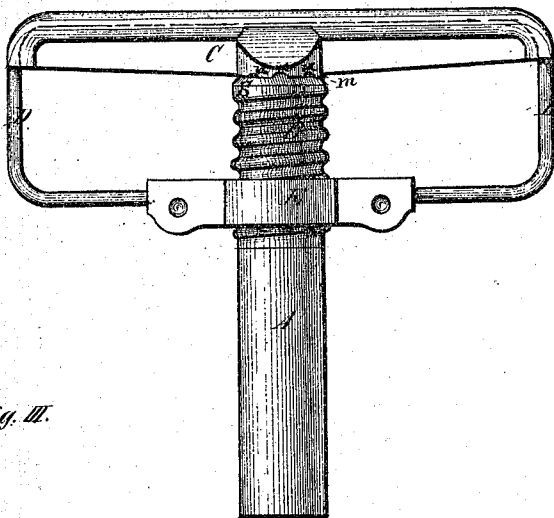
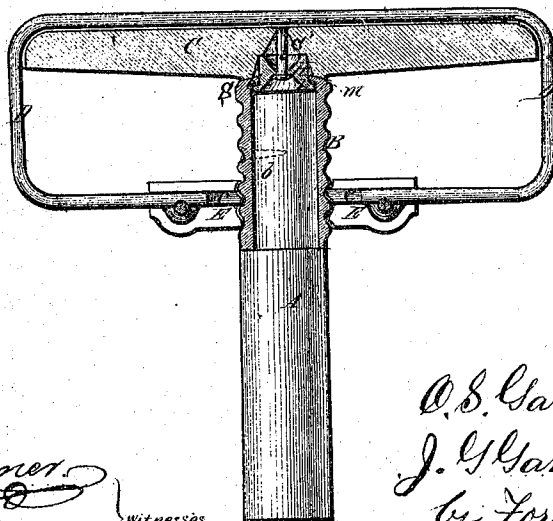


Fig. III.



Fig. IV.

Fig. II.



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Letters Patent No. 107,897, dated October 4, 1870.

IMPROVEMENT IN MOP-HEADS.

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

We, OLIVER S. GARRETSON and JOEL G. GARRETSON, of the city of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Mop-Heads, of which the following is a specification.

Our improvements relate to that class of mop-heads in which the movable jaw or binder, the ends of which are attached to an intervening nut, is operated in clamping or releasing the mop-cloth, by means of a tubular screw fitted on and immovably secured to the end of the handle so as to rotate with the latter, and cause the said nut to traverse up and down thereon.

In this kind of mop-head the end of the handle is commonly united to the stationary jaw or cross-head by means of a loose rivet or pivot pin.

The rotation of the handle, in adjusting the movable binder, causes considerable friction and wear between the head of this rivet and the cross-head, which loosens, and not unfrequently destroys the connection of the latter with the handle.

With this kind of mop-head it is also necessary to employ some means to prevent the handle unscrewing and releasing the mop-cloth while the mop is being used.

Our invention consists—

First, in connecting the handle to the stationary jaw by means of a pivot or bearing-block, one end of which fits and is retained by a flange in the contracted end of the tubular screw, while the opposite end fits in the socket of the jaw or cross-head, to which it is immovably riveted, whereby the friction and wear comes on the enlarged surface of this block within the tubular screw instead of on the head of a small rivet.

Second, in constructing the end of the tubular screw, and the surface of the cross-head in contact therewith, the one with teeth or slight projections, which, fitting in corresponding indentations formed in the other, form a partially rigid lock, and prevent the handle from turning while operating with the mop, the spring or elasticity of the binder and mop-cloth being sufficient to permit of the disengagement of the interlocked surfaces and the rotation of the handle when required for releasing or adjusting the mop-cloth.

In the accompanying drawing—

Figure I is a view in elevation of our improved mop-head.

Figure II is a section thereof.

Figures III and IV are plans, respectively, of the stationary cross-head, and of the end of the tubular screw which engages therewith.

Like letters of reference designate like parts in each of the figures.

A is the wooden handle.

B, the tubular screw or sleeve, fitted and secured on the end of the handle by means of a pin or rivet, *b*, and provided with an external thread, as shown.

C is the stationary jaw or cross-head.

D, the movable jaw or binder; and

E, the nut or yoke which connects the two ends thereof. This nut may be cast entire, or in halves, which are afterward united by rivets, that also secure the ends of the binder in place, as shown.

The cross-head is cast with a longitudinal groove, *c*, to receive the binder in the usual manner.

H is the pivot-block or friction-bearing, immovably secured in the socket *c'* of the cross-head by a rivet, *i*. Its connection with the tubular screw is maintained by an inwardly-projecting flange, *b'*, at the end of the screw, which engages with the outwardly-projecting flange *h* of the bearing, as clearly shown in Fig. III, whereby the separation of the parts is prevented, while the screw is left free to turn around the flanged head of the bearing during the adjustment of the movable jaw.

m is the indented surface of the cross-head surrounding the socket *c'*, and *u u* are a number of teeth or projections at the end of the tubular screw, designed to fit in and engage with these indentations.

In putting up our improved mop-head, the bearing-block H is first inserted in the tubular screw, and then riveted to the cross-head. The handle is now fastened in the screw, and the nut arranged on the screw, and the ends of the binder secured thereon.

The mop-cloth being clamped between the cross-head and binder, by revolving the handle and tubular screw within the nut E in the usual manner. The serrated connection between the end of the screw and cross-head prevents the handle from unscrewing and releasing the cloth during the ordinary use of the mop.

When the cloth is required to be released or adjusted, the application of a greater or lesser force, according to the tightness with which the cloth was clamped, will overcome this fastening, and cause the teeth *u* to slide over the indented surface *m* as the handle is revolved, the binder, which operates as a spring, yielding sufficiently to permit of this partial separation and movement.

Instead of securing the tubular screw to the cross-head, as hereinbefore described, an inferior connection between the two parts may be made by casting the cross-head with a short stem, which, by projecting in the end of said screw, will form a pivot for it to turn around in actuating the binder. In such case, as the parts are not riveted together, the cross-head will separate from the screw as the binder is released.

To prevent the handle from being entirely with-

drawn from the nut, we make the thread of the screw to terminate before it reaches the end of the screw, so as to leave a bead or stop, *s*, to arrest the movement, as clearly shown.

What we claim as our invention is—

1. The flanged pivot-bearing *H*, immovably riveted to the cross-head, and arranged with the contracted opening of the tubular screw *B*, substantially as and for the purpose hereinbefore set forth.

2. The arrangement, in a mop-head, in which the movable jaw is operated by the threaded shank of the handle, which screws through the nut or yoke that connects the ends of the movable binder, of serrations

m u, formed, respectively, in the cross-head or stationary jaw and end of the said threaded shank, as and for the purpose hereinbefore described.

3. The arrangement of the bead or stop *s* at the outer end of the threaded shank *B*, and with the cross-head *O*, the nut and yoke *E*, and movable binder *D*, as and for the purpose hereinbefore set forth.

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