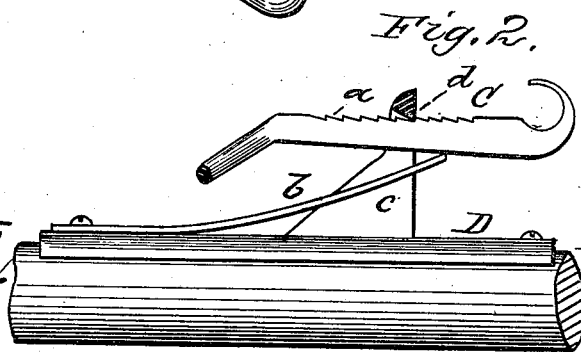
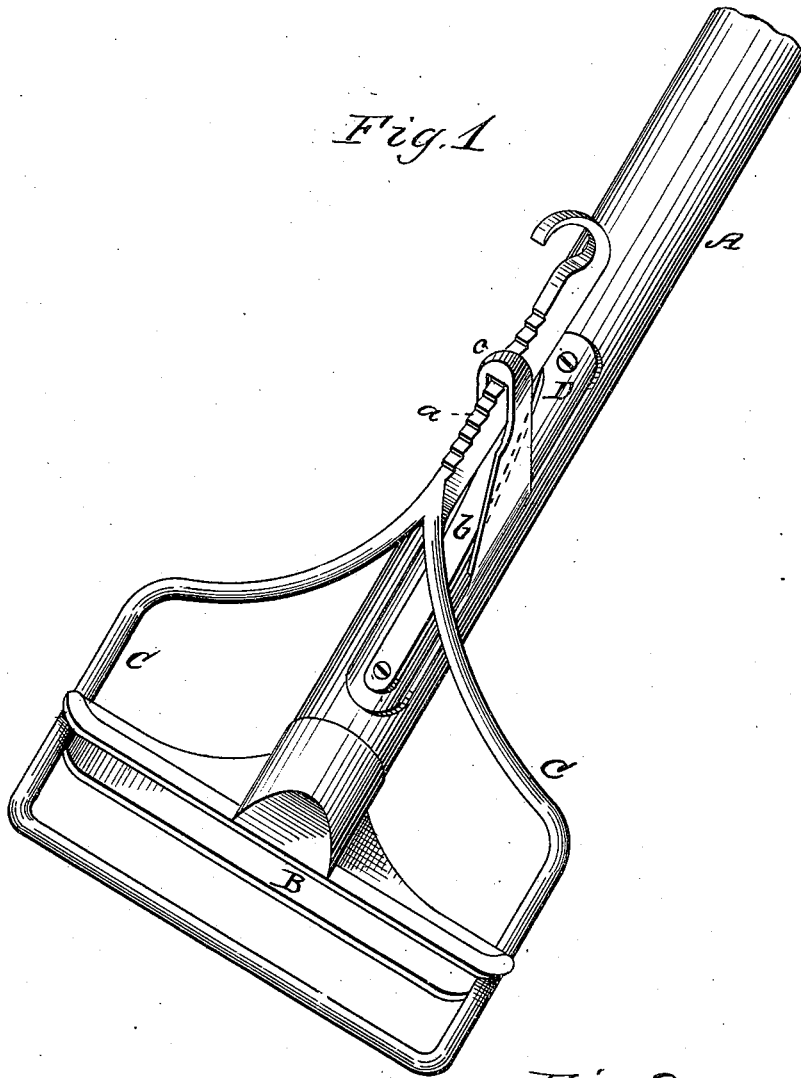


H. MURCH.
Mop-Head.

No. 212,489.

Patented Feb. 18, 1879.



WITNESSES

Nat. E. Oliphant
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per
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UNITED STATES PATENT OFFICE,

HARVEY MURCH, OF LEBANON, NEW HAMPSHIRE.

IMPROVEMENT IN MOP-HEADS.

Specification forming part of Letters Patent No. **212,489**, dated February 18, 1879; application filed January 6, 1879.

To all whom it may concern:

Be it known that I, HARVEY MURCH, of Lebanon, in the county of Grafton and State of New Hampshire, have invented a new and valuable Improvement in Mop-Heads; 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 representation of a perspective view of my invention. Fig. 2 is a detail view, with a portion of the device broken away.

This invention has relation to that class of holders in which the mop-cloth or brush is clamped between a cross-head and a rigid binder, and is designed as an improvement upon my patent bearing date June 14, 1853, No. 9,781.

The present invention has for its object to prevent, as far as possible, the working loose of the staple-catch by the pressure of the spring upon the binder, and from other causes, the construction of my improvement being hereinafter described, and subsequently pointed out in the claim.

In the accompanying drawings, A represents the handle, to one end of which is secured, by any suitable means, a cross-head, B. The cross-head B is grooved at the two ends to guide and steady the binder C, which has its two ends united, so that a single fastening will hold the whole binder in place, compressing or clamping the rags, pieces of rope, or fibers between it and the cross-head. The end of the binder C is notched at *a*, and is pressed by a spring, *b*, against the catch *d* of the staple *c*.

These several parts, as above described, are

the same as those embraced in my former patent, hereinbefore referred to. The great difficulty, however, with the staple-catch previously used was the great danger of its working loose, caused by the continued pressure of the spring upon the notched end of the binder. This evil, it is thought, is wholly removed, and is accomplished by casting the staple *c* and its catch *d* in one piece with a plate, D, and securing said plate by screws to the handle A.

The same bolt or screw that secures one end of the plate D to the handle also secures one end of a flat spring, *d*, the other end bearing up against the under side of the notched end of the binder C.

It will readily be seen that as the staple *c*, with its catch *d*, is cast with or forms a part of the plate D, there is no possibility of its getting loose by any upward pressure of the binder. The spring also is much firmer and less liable to become loose, as the same bolt or screw serves the purpose of securing both the plate and the spring.

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

The mop attachment herein described and shown, consisting of a plate, D, having a spring, *b*, said plate being in one piece with the staple *c*, the latter provided with a catch, *d*, for use with a sliding notched mop-binder, as set forth.

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

HARVEY MURCH.

Witnesses:

F. P. FLYNN,
W. P. LISCOMB.