

No. 820,145.

PATENTED MAY 8, 1906.

J. S. SHOBE.
COMBINED MOP HEAD AND WRINGER.
APPLICATION FILED JUNE 23, 1905.

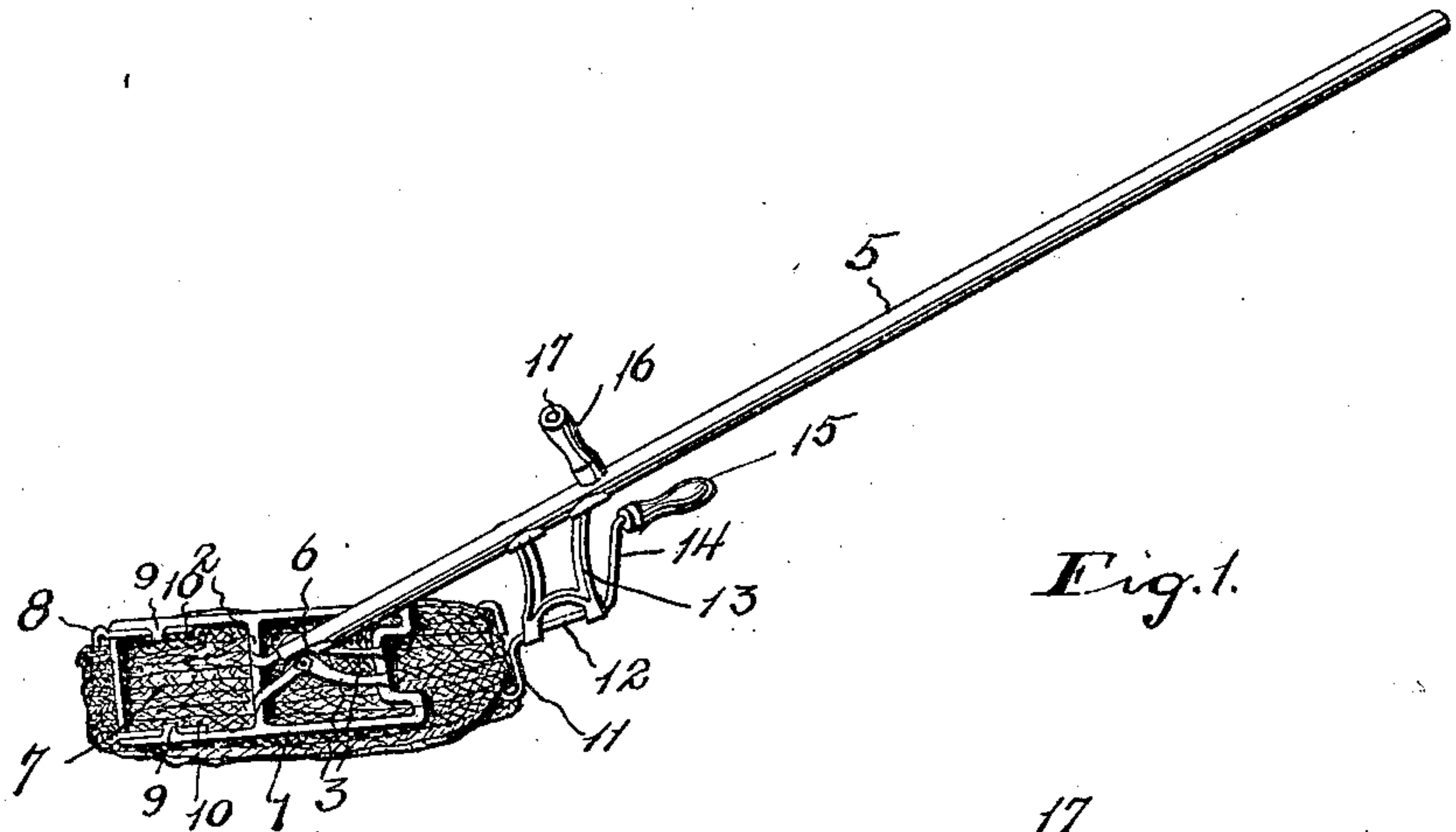


Fig. 1.



Fig. 6.

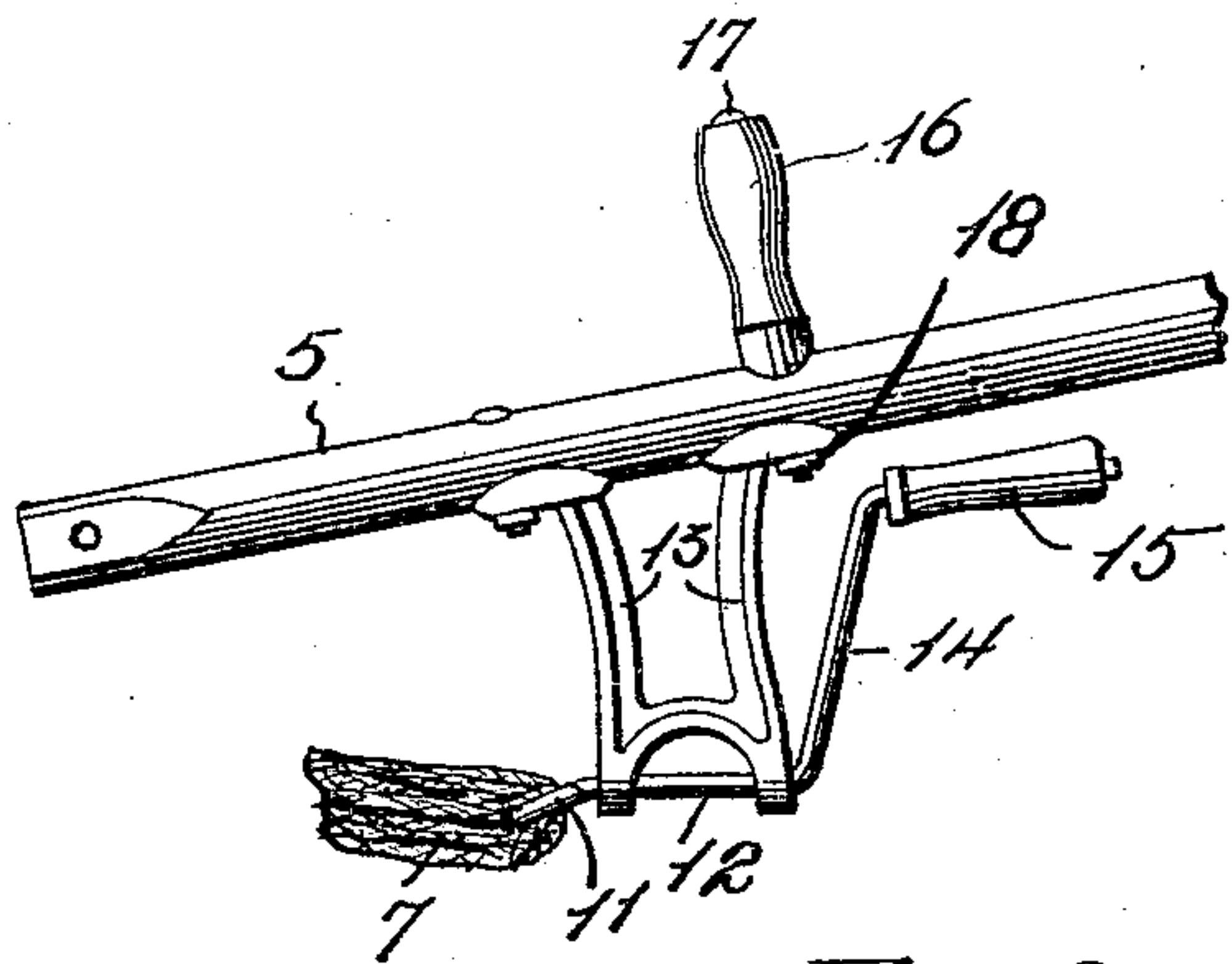


Fig. 2.

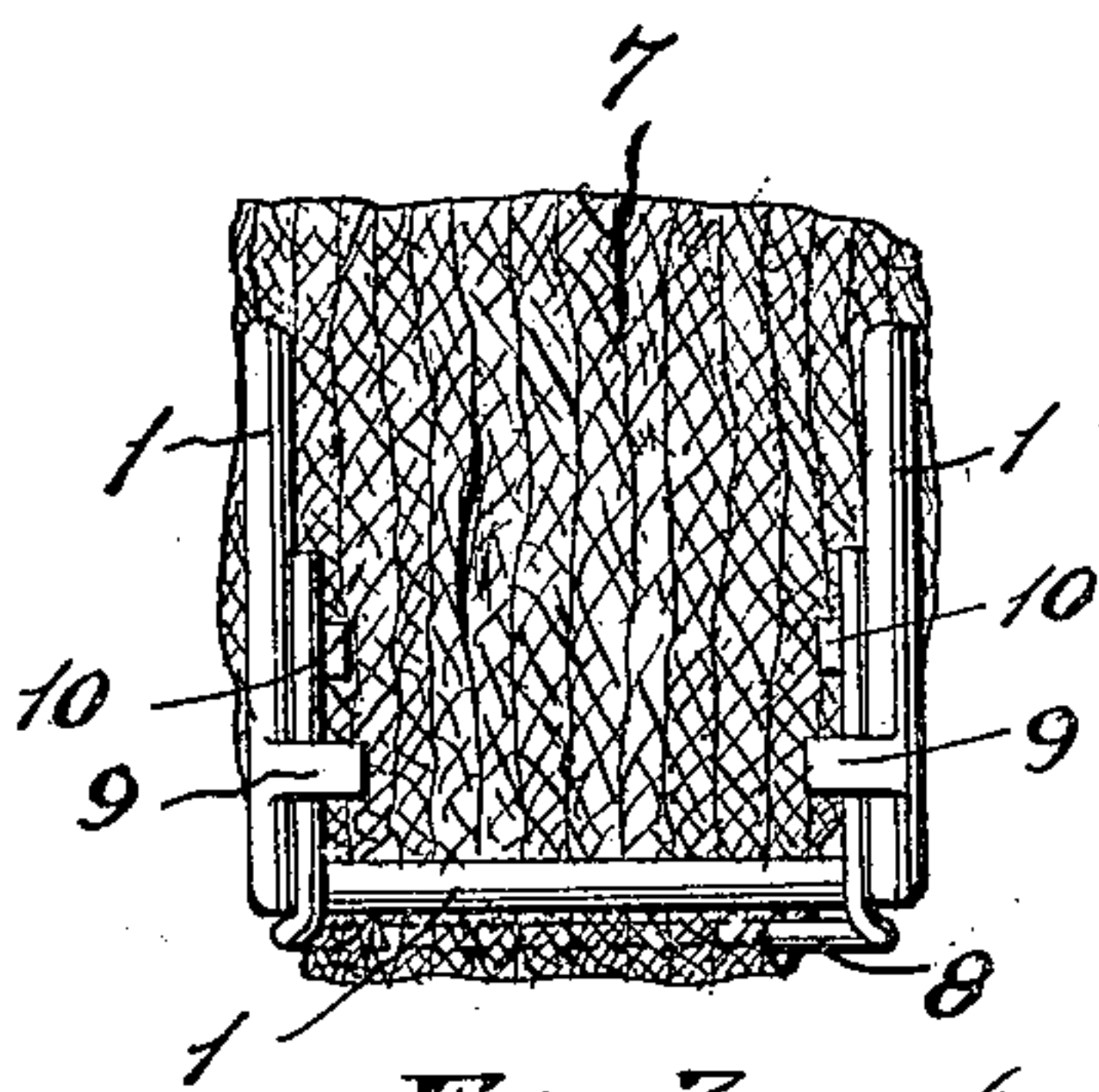


Fig. 3.

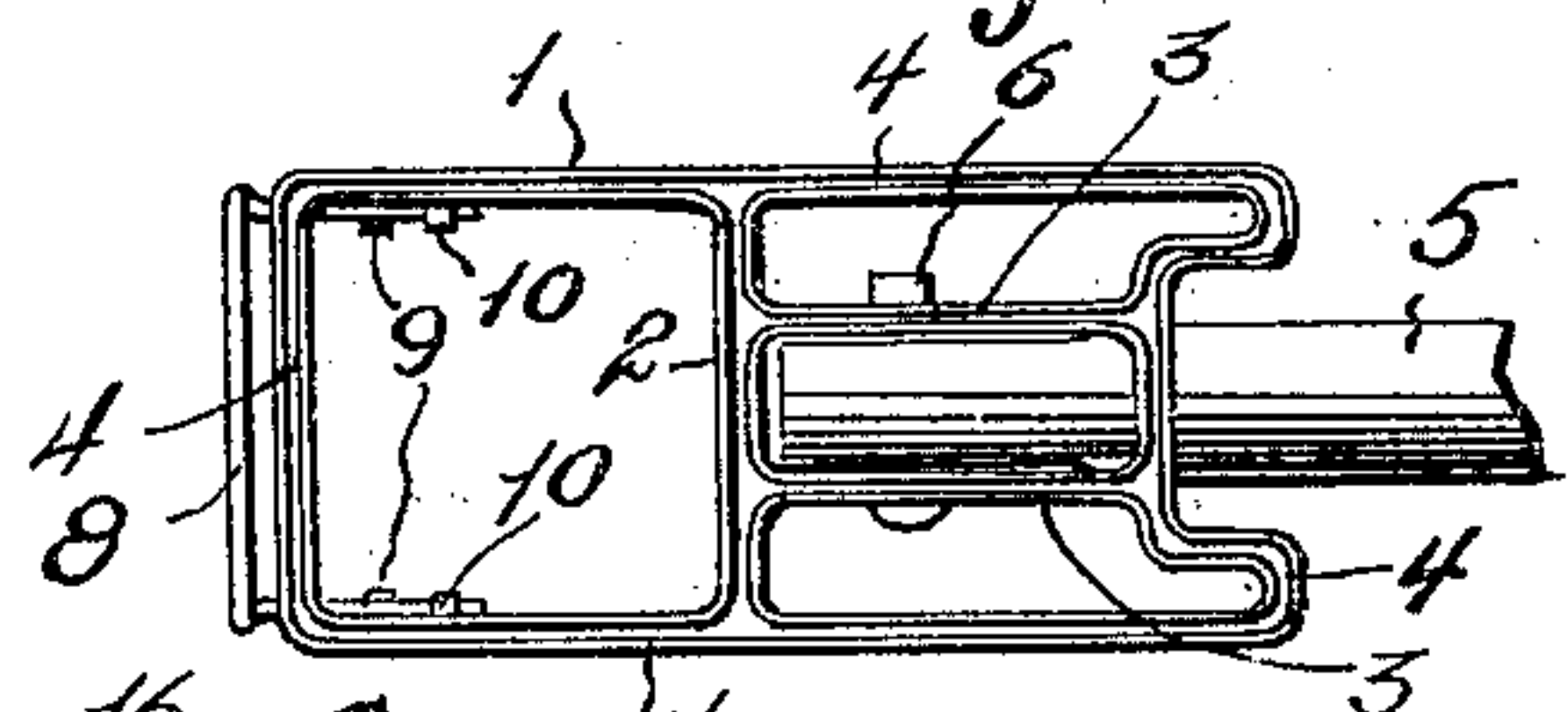


Fig. 5.

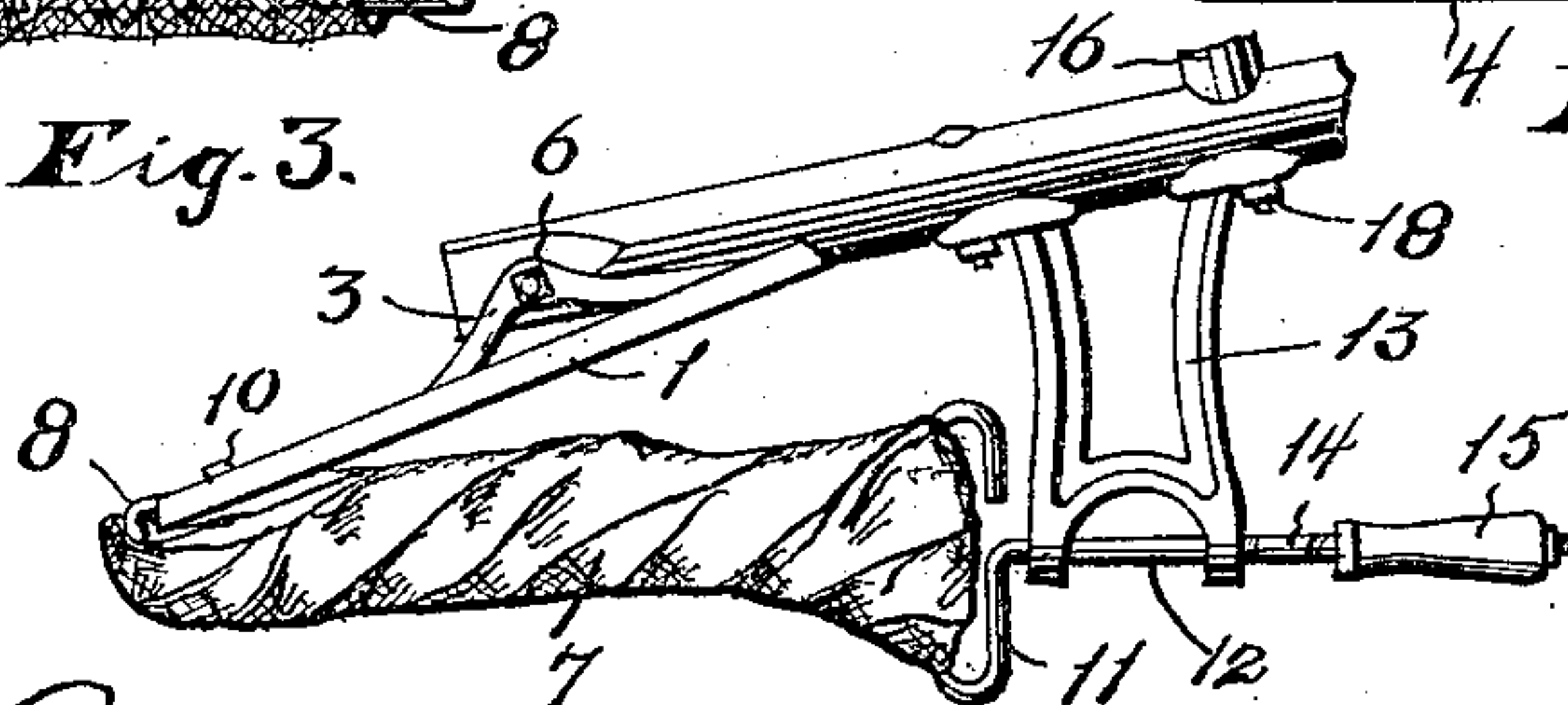


Fig. 4.

WITNESSES:
Carl Stoughton
M. J. Schuy

INVENTOR
Jacob S. Shobe

BY
Shepherd & Parker
ATTORNEYS

UNITED STATES PATENT OFFICE.

JACOB S. SHOBE, OF COLUMBUS, OHIO, ASSIGNOR TO WILLIAM S. S. RODGERS, OF COLUMBUS, OHIO.

COMBINED MOP HEAD AND WRINGER.

No. 820,145.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed June 23, 1905. Serial No. 266,589.

To all whom it may concern:

Be it known that I, JACOB S. SHOBE, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in a Combined Mop Head and Wringer, of which the following is a specification.

My invention relates to a new and useful improvement in combined mop heads and wringers.

The primary object of the invention is to simplify the construction, so as to greatly reduce the cost of manufacturing and at the same time increase the sanitary properties by the omission of numerous joints, crevices, and contacting surfaces likely to catch and retain dirt and filth.

Another feature resides in the improved and simple means for holding the mop-cloth, whereby the same is removably and reversibly supported.

Still another feature lies in the peculiar construction of the crank-shaft and mop-supporting loop whereby the mop acts to hold the crank-handle up in position near the mop-handle, thus preventing the same from coming in contact with projections or flopping around and interfering with the successful operation of the mop.

Finally, the object of the invention is to provide a device of the character described that will be strong, durable, and efficient and one in which the several parts will not be liable to get out of working order.

With the above and other objects in view the invention consists of the novel details of construction and operation, a preferable embodiment of which is described in the specification and illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view showing the mop-frame and mop pressed downward and the crank-handle swung upward, the positions the parts occupy during the mopping operation. Fig. 2 is a side elevation of the crank-shaft, its hanger, and a portion of the mop-handle. Fig. 3 is a plan view of the forward portion of the mop and mop-frame. Fig. 4 is a side elevation showing the mop twisted when the crank-handle is turned to wring the same. Fig. 5 is an under side view of the mop frame or head; and Fig. 6 is a transverse sectional view through one of the

bars of the frame, showing its grooved under side.

In the drawings the numeral 1 designates the mop frame or head, which is preferably given a general rectangular shape and open construction. Across its central portion a transverse bar 2 is disposed, from which upwardly-projecting bars 3 extend rearwardly to the end of the frame 1, the said bars being formed integral with the frame. The frame, as before described, has an open construction, being formed of narrow marginal and cross bars which are grooved or dished on their under sides, as indicated at 4 in Fig. 6. By such a formation a great reduction in the weight of the frame is had and considerable saving in material is accomplished. The upwardly-projecting bars 3 are spaced far enough apart so as to freely receive the reduced end of an elongated mop-handle 5. The handle 5 is pivotally supported between the said bars upon a pivot-bolt 6. From this it will be apparent that the frame is pivotally supported from the end of the mop-handle 5 nearer its rear end, and thus when the mop is lifted from the floor the forward end being heavier will swing downward, throwing the rear end up against the mop-handle, as shown in Fig. 4, the frame thus being swung out of the way of the mop when the same is being twisted for the purpose of wringing, as hereinafter described.

I provide a mop-cloth 7, preferably of the hank or looped pattern, which is engaged at its forward end about a wire bail 8, bent downwardly so as to project slightly below the forward end of the frame 1 and its extremities passing between lugs 9 and 10, projecting inwardly from the opposite sides of the frame. The lugs are so disposed that the extremities of the bail 8 will pass under the lugs 9 and over the lugs 10, thus being securely held in place, but readily removable. The mop-cloth 7 is extended rearwardly a short distance beyond the rear of the frame 1 and engaged about an open wire loop 11, formed by a continuation of a crank-shaft 12. By reason of the open loop the mop-cloth 7 may be readily disengaged when it is desired to reverse the same. The crank-shaft is supported in the lower end of an open crank-hanger 13, which is securely bolted or fastened to the under side of the mop-handle 5. After passing through the crank-hanger the crank-shaft

12 is continued and bent sharply, so as to form a crank-handle 14, on which is arranged a suitable hand-grip 15. It will be observed that the loop 11 is bent at an angle to the crank-shaft 12, so as to project or incline downwardly when the crank-handle 14 and its hand-grip 15 are in their uppermost position. Thus when the mop-frame 1 is pressed downward during the mopping operation the mop-cloth 7 being drawn taut and pulling on the loop 11 tends to swing the crank-handle and its hand-grip upward, thus holding the hand-grip close to the mop-handle and preventing it from swinging about and catching in obstructions. Attention is directed to the crank-hanger 13, which is formed of narrow bars, reduced in thickness wherever practical to eliminate weight. By its open construction water may readily pass in and about the hanger, thus keeping the same clean and sanitary, which is not possible where gears, clamps, and slides are employed.

For convenience and assisting the operator in wringing the mop-cloth I arrange on the upper side of the mop-handle 5 a fixed supporting-handle 16, which is held in place by a bolt 17, passing through the handle 5 and the upper portion of the hanger 13, thus serving the double function, as a nut 18, screwed on the lower end of the bolt 17, engages with the hanger and draws its end into engagement with the handle 5. When it is desired to wring the mop-cloth, the operator grasps the handle 16 with one hand, thereby supporting the mop-head, and the hand-grip 15 of the crank-handle 14 with the other hand. When the mop is raised upward or lifted, the frame 1 swings upward at its rear end, thus allowing the mop-cloth to sag. The crank-handle 14 now being revolved, the crank-shaft 12 and loop 11 are turned and the mop-cloth twisted as shown in Fig. 4, and thus the wringing operation carried out. It will be noted that the frame being pivoted nearer its rear end the

latter end will be swung upward, as the forward end, having a greater weight, will swing downwardly by gravity. The frame thus automatically moves itself out of the way of the mop, thus obviating the liability of the mop catching on the frame during the wringing operation.

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

1. In a mop head and wringer, an open metallic frame provided with inwardly-extending projections, a mop-cloth-supporting bail removably engaging with the projections, a handle connected with the frame, and means for supporting one end of a mop-cloth and twisting the same carried by the handle.

2. In a mop head and wringer, an open metallic frame provided with inwardly-projecting lugs, a bail for supporting one end of a mop-cloth having removable engagement with the lugs, a handle-bar pivotally connected with the frame, a crank-hanger supported from the handle-bar, and a crank-shaft supported in the hanger having an open looped end adapted to receive and support the other end of the mop-cloth.

3. In a mop head and wringer, the combination with an open metallic mop-frame having a grooved under side and provided with inwardly-projecting lugs and a handle-bar pivotally connected to the frame, of a wire bail removably engaging with the lugs of the metallic frame, an open crank-hanger supported from the mop-handle, and a crank-shaft supported in the hanger and having a loop on its end.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB S. SHOBE.

Witnesses:

A. L. PHELPS,
M. B. SCHLEY.