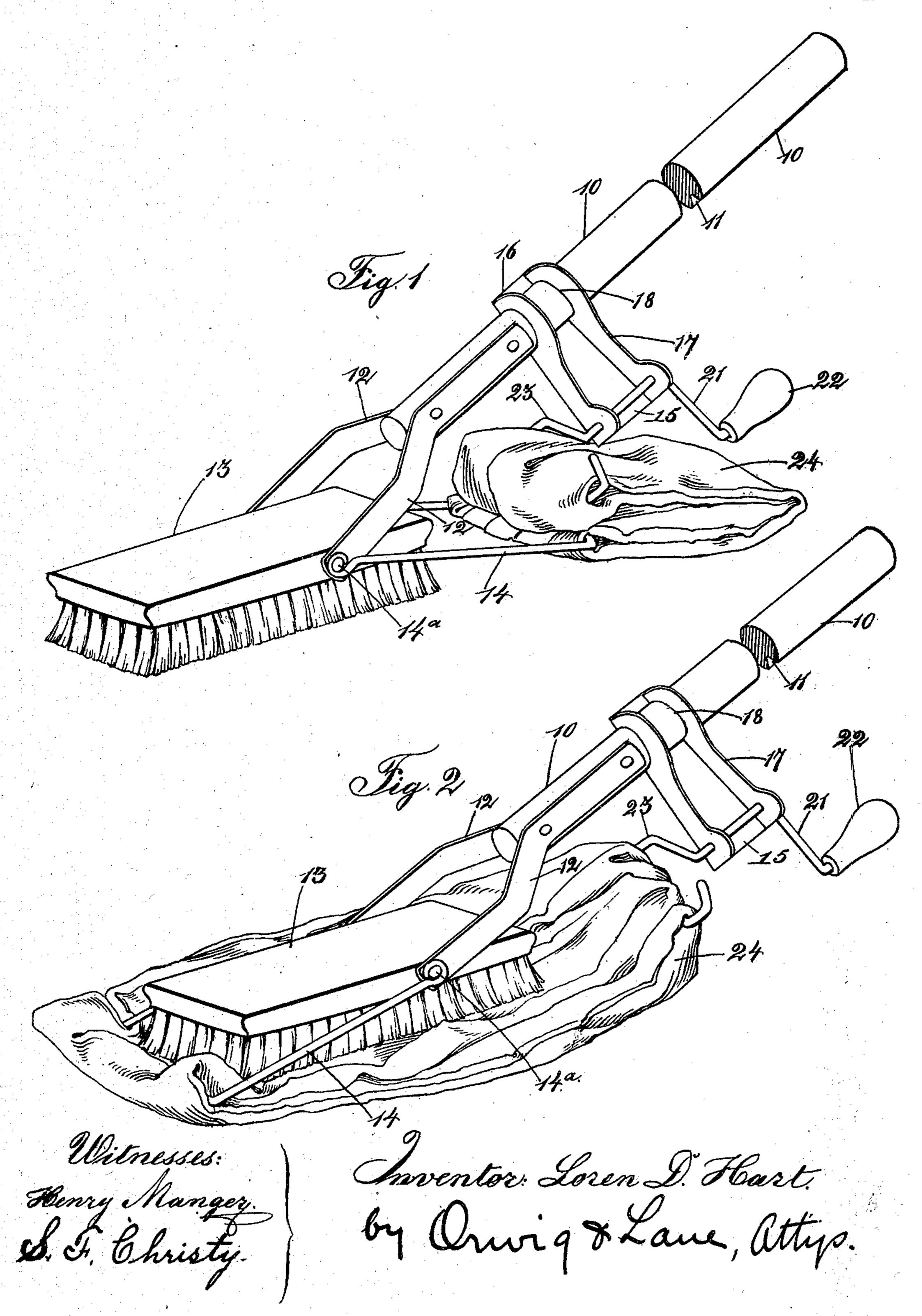
## L. D. HART. MOP WRINGER AND BRUSH. APPLICATION FILED MAY 17, 1902.

NO MODEL.

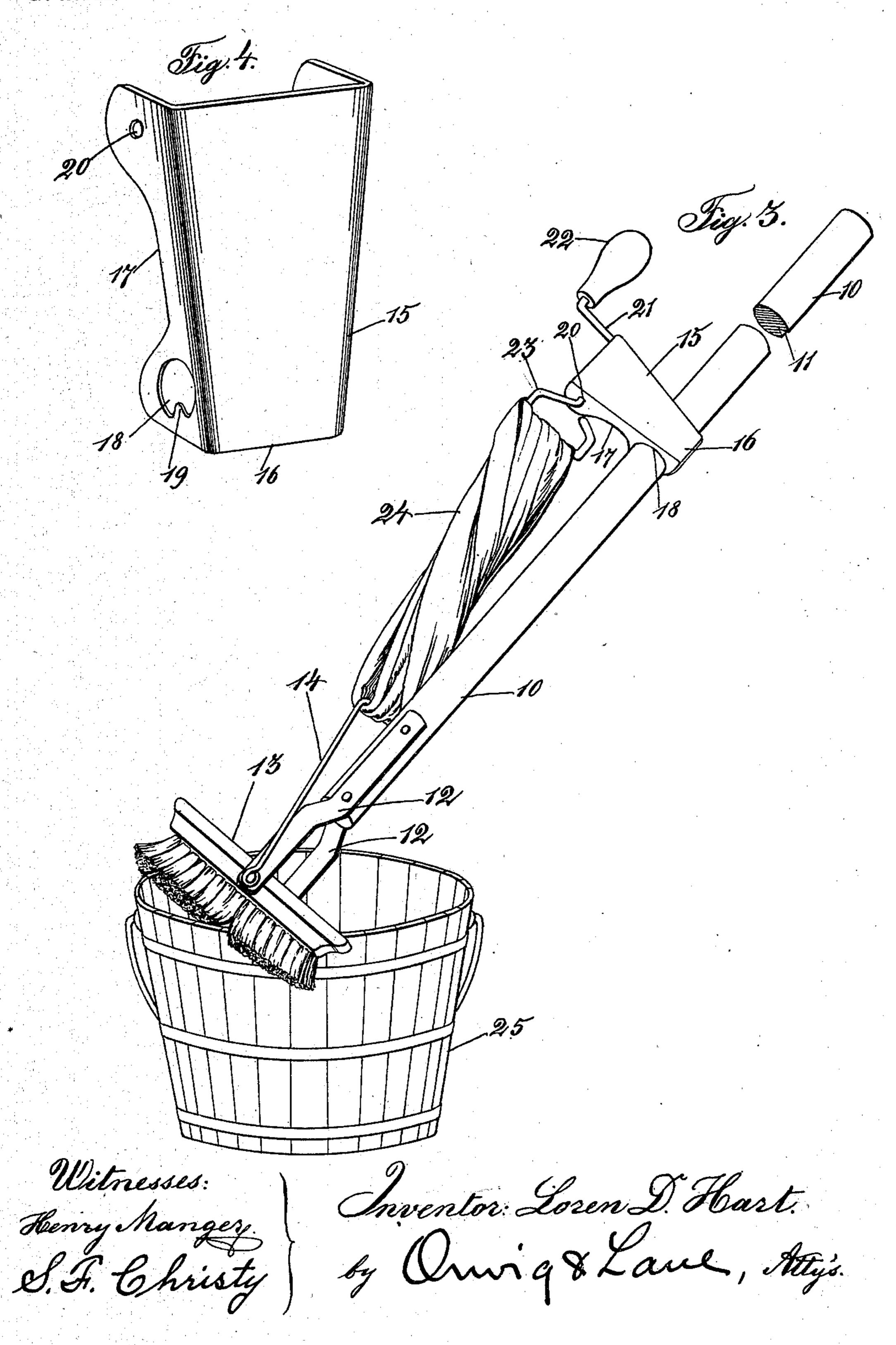
2 SHEETS-SHEET 1.



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2 SHEETS-SHEET 2.



## United States Patent Office.

LOREN D. HART, OF NORA SPRINGS, IOWA.

## MOP-WRINGER AND BRUSH.

SPECIFICATION forming part of Letters Patent No. 731,680, dated June 23, 1903. Application filed May 17, 1902. Serial No. 107,874. (No model.)

To all whom it may concern:

Be it known that I, LOREN D. HART, a citizen of the United States, residing at Nora Springs, in the county of Floyd and State of 5 Iowa, have invented certain new and useful Improvements in Mop-Wringers and Brushes, of which the following is a specification.

The objects of my invention are to provide a device of the class described which can re be manufactured at a minimum expense and which is of simple and durable construction.

A further object is to provide a mop-wringer which can be easily adjusted on the handle of a mop and which obviates the necessity of 15 having mechanism attached to the pail.

A further object is to provide a slide which when mounted on the handle will be held firmly in a position to which it is adjusted on the handle.

A further object is to provide a mop and brush which can be used at the same time, and thus accomplish the double purpose of scrubbing and mopping.

A further object is to provide a device in 25 which the scrubbing-brush can be used by itself without the mop and in which the mop can be used without the scrubbing-brush coming in contact with the floor, and thus allow the operator to mop the floor without 30 scrubbing it.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are at-35 tained, as more fully set forth, pointed out in my claims, and illustrated in the accom-

panying drawings, in which—

Figure 1 shows in perspective the complete mop-wringer and brush with the mop portion 40 in the rear of the brush and the mop portion of the wringer at its lowest position on the handle, a portion of the handle being cut away. Fig. 2 is a perspective of the same, except the mop is beneath the brush. Fig. 3

45 is a perspective view of my device, showing the mop in position near the handle for wringing and the upper portion of the mopwringer at its limit of movement on the handle away from the brush. Fig. 3 also shows

50 any ordinary pail; and Fig. 4 shows a per-

the handle and forms a top portion of my

wringer.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indi- 55 cate the handle of my device. The handle 10 has a groove 11 in its outer surface running longitudinally of it, said groove commencing at the lower end of the handle and extends about half its length. Firmly attached to 60 the lower end of the handle are the arms 12, designed to receive the brush 13 between them, said brush 13 being pivotally attached to said arms. The wire-holder 14 is made of a single piece of wire, and the side portions 65 of said wire-holder are substantially the same length as the length of the brush. The exterior end portion of the wire-holder connects the side portions and is made integral with them, said exterior end being away from the 70 pivots 14<sup>a</sup>, to which the wire-holder is attached.

Slidingly mounted on the handle 10 is the slide 15, comprising the back portions 16 and the side portions 17, extending substantially at right angles to the back portion, said side 75 portions having perforations 18 in them, through which the handle is placed. There is a slight triangular projection in each side portion 17 extending into the circular perforations 18. This triangular projection is de- 80 signed to slide longitudinally of the groove 11 in the handle and hold the clamping-lever 15 in position on said handle. Near the outer edge of the sides 17 of the slide 15 I have provided a circular perforation 20, and ro- 85 tatably mounted in said clamping-lever and extending through the perforations 20 of the sides 17 is the crank-shaft 21, having a handle 22 on one end thereof and a loop 23 on the opposite end thereof, the wire in said loop be- 90 ing separated at its top portion so that the mop-cloth can be removed easily therefrom.

Attached to the wire-holder 14 and the loop 23 is the mop 24, designed to be used as shown in Fig. 1, and also as shown in Fig. 2. The 95 mop-cloth can also be drawn into the position shown in Fig. 3, and the brush alone can be used. I have used the reference-numeral 25 to designate an ordinary pail used in connection with my mop-wringer and brush.

In practical use and assuming that the spective of my slide, which is adjustable on I mop-cloth has been attached to the wireholder 14 and the loop 23 of the crank-shaft 21, the operator desiring to use the device simply as a mop dips the mop-cloth into the pail of water and extends the wire-holder 14 into position shown in Fig. 2 and the clamping-lever is at its lower limit of movement on the handle 10. The operator then desiring to wring his mop-cloth simply draws the slide upwardly on the handle in the position shown in Fig. 3. The sides of the clamping-lever being in engagement with the handle form a

being in engagement with the handle form a clamp when it is drawn to its limit of movement and the outer end of it being pulled downwardly by the weight of the mop. The

grasping the handle 22 and the mop is easily wrung. It will be clearly seen that the more the mop is twisted the tighter the slide will be held in its position on the handle. The

device can be used as a combined brush and mop when the wire-holder is extended rearwardly from the brush and the clamp device is at its lower limit of movement, as shown in Fig. 1. The brush can also be used alone by drawing the slide which is connected with the mop upwardly on the handle 10, as shown

in Fig. 3.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

30 ent of the United States therefor, is—

1. In a device of the class described, the combination of a handle having a longitudinal groove therein, arms attached to the lower end of said handle, a holder pivotally attached to said arms, a slide, a back portion in said slide, a side at each edge of said back

portion of said slide, having perforations through them through which the handle extends, a triangular extension in the sides and extended into said perforations, said triangular extension being designed to move longitudinally in the longitudinal groove of the handle, said triangular extension being designed to prevent the slide from rotating on said handle, a crank-shaft rotatably mounted in the sides of said slide, a loop on one end of said crank-shaft, and a handle on the other end of the said shaft, said handle being on the opposite side of said slide, and a mopcloth attached to said loop and to said holder, 50 substantially as and for the purposes stated.

2. In a device of the class described, the combination of a handle having a longitudinal groove therein, arms attached to the lower end of said handle, a holder pivotally 55 attached to said arms, a slide, a back portion in said slide, sides substantially at right angles to said back portion having perforations therein through which the handle extends, a triangular extension on said sides extending 60 into said perforations for engaging the sides of said groove and preventing the slide from horizontal movement on said handle, a crankshaft rotatably mounted in the sides of said slide, a mop-cloth attached to said holder and 65 to said crank-shaft, substantially as and for the purposes stated.

LOREN D. HART.

Witnesses:

D. W. HAYNES, ALEX. MARSHALL.