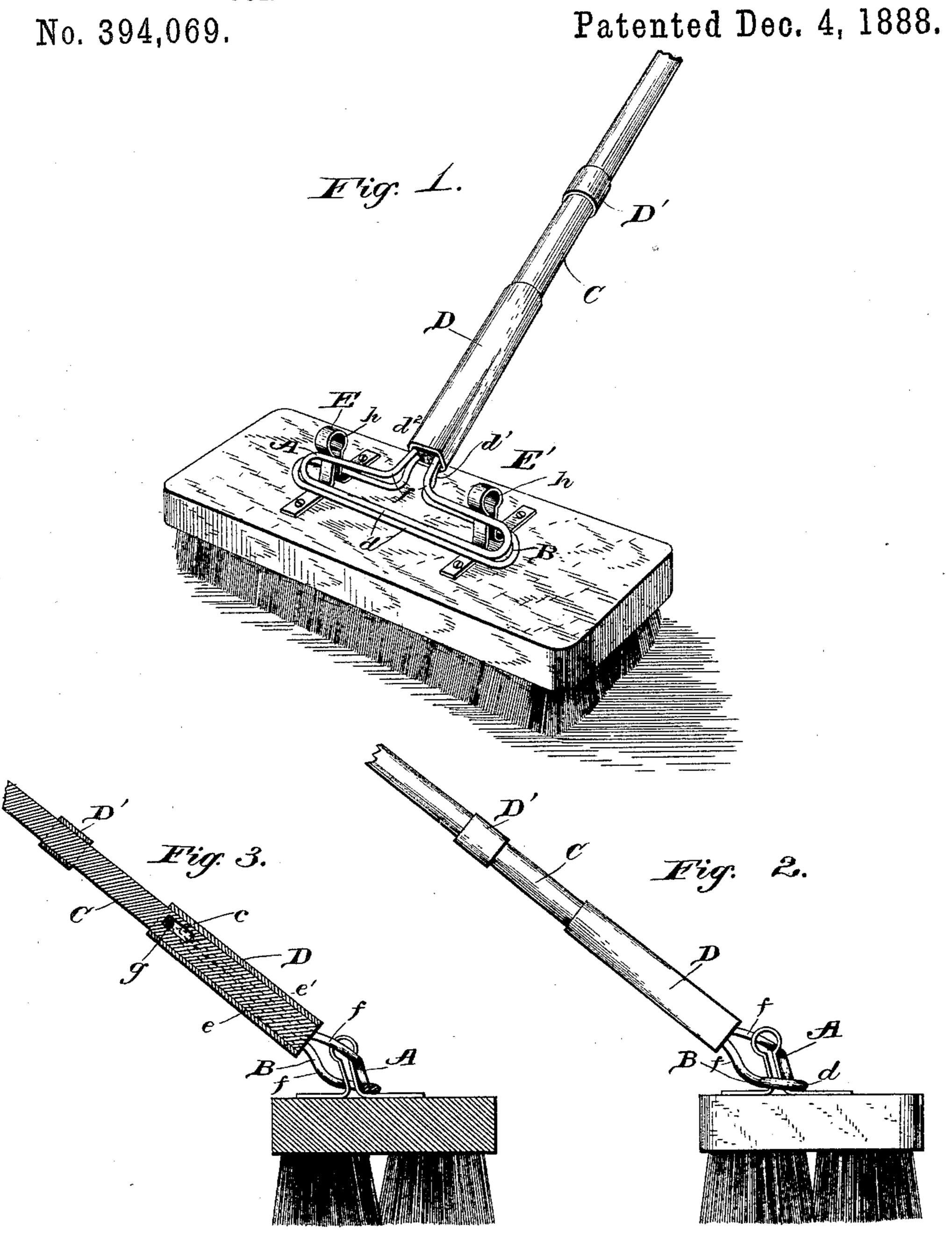
C. L. FORTIN.

CONVERTIBLE MOP OR BRUSH HOLDER.



WITNESSES,

Strukard

Enterners.

INVENTOR.

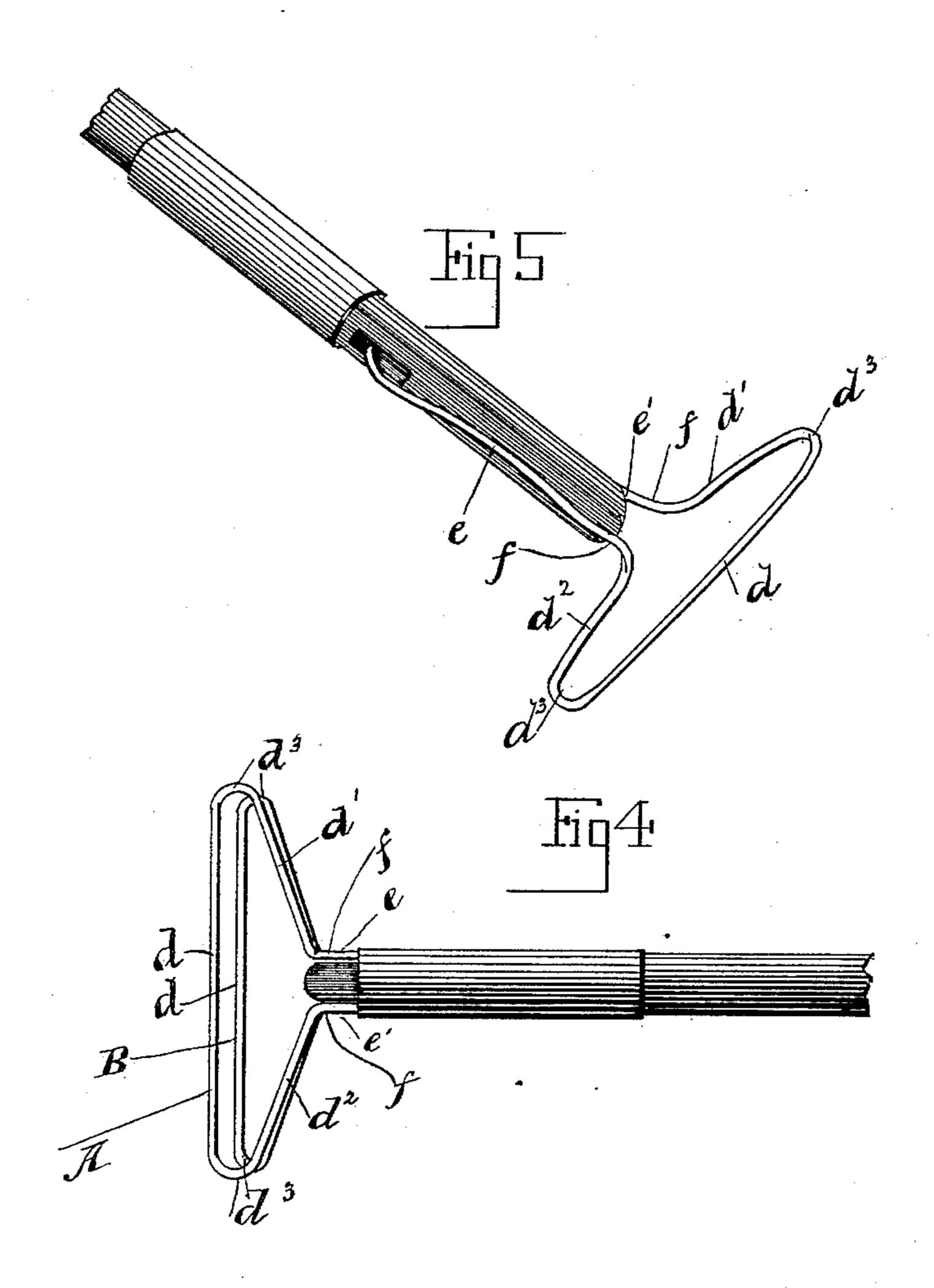
By Enterners.

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CONVERTIBLE MOP OR BRUSH HOLDER.

No. 394,069.

Patented Dec. 4, 1888.



Witnesses. Edw. H. Berry, H. Beruhard,

Ehas L. Fortin.

By his Ottorneys

Standbrown

United States Patent Office.

CHARLES L. FORTIN, OF WHITEHALL, NEW YORK, ASSIGNOR OF TWO-THIRDS TO FREDERICK H. GAYLORD AND WALTER D. TRAVIS, BOTH OF SAME PLACE.

CONVERTIBLE MOP AND BRUSH HOLDER.

SPECIFICATION forming part of Letters Patent No. 394,069, dated December 4, 1888.

Application filed September 14, 1887. Serial No. 249,693. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. FORTIN, a citizen of the United States, residing at Whitehall, in the county of Washington and State 5 of New York, have invented certain new and useful Improvements in Mop and Brush Holders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art 10 to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in mop and brush holders, as will be hereinafter

fully described and claimed.

The object of my invention is to provide an improved mop-head which is made of spring-20 wire, and is peculiarly constructed to firmly and securely clasp either a scrub-brush or a mop-rag, whereby either device may be securely attached to the handle and used at will. I attain this object by the construction illus-25 trated in the accompanying drawings, in which—

Figure 1 is a perspective view showing a brush clamped to the mop-head. Fig. 2 is an edge view in elevation thereof, and Fig. 3 is 30 a sectional view taken longitudinally through the staff or handle and transversely through the mop-head and brush. Fig. 4 is a top or plan view of the jaws of the mop-head closed together, and Fig. 5 is a detail view of the 35 shaft or handle and one of the spring-jaws to show the peculiar construction of said parts.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A B designate the jaws of 40 the mop-head, and C the handle or staff to which they are pivotally connected. Each of the jaws is formed or bent from a single continuous piece of spring-wire; and it consists of a straight side bar, d, two similar bars, d'45 d^2 , which are of less than one-half the length of the bar d, and shanks or arms e e', arranged at right angles to the bars $d' d^2$, and substantially parallel with each other, these shanks and the inner ends of the bars d' d^2 being 50 separated by an intermediate space of a width

equal to the thickness of the staff or handle C. The wire of which the head is formed is curved or rounded at the ends of the bars d_{\bullet} d', and d^2 , as at d^3 , and at the points where the arms or shanks e e' are joined to the in- 55 ner bars, $d' d^2$, said wire is bent at an obtuse

angle at f to the shanks thereof.

The inner terminals of the shanks e e' of each jaw are bent inwardly toward each other to form short trunnions g, and the shanks of 60 the jaws are all of unequal length, as indicated by dotted lines in Fig. 3, so that the trunnions thereof can be fitted in a longitudinal slot, c, which is formed in the handle or staff C at a suitable point, these trunnions 65 being capable of turning freely therein, so that the jaws can be moved or adjusted easily toward and from each other, as upon a pivot.

The head of the jaw B is made shorter in both width and length than the head of the 70 corresponding jaw A, as clearly seen in Fig. 4, to thereby adapt the outer side bar, d, of the shorter narrower jaw B to easily fit between the rounded end bars and side bars of the jaw A. The shanks of the jaw B are 75 further bent at a greater angle to the head thereof than are the shanks of the larger jaw A to the head of the latter. These peculiar differences in structure between the two jaws of the head cause the end bars, d^3 , of the 80 jaw B to bear against the inner side bars, $d' d^2$, of the jaw A when the jaws are detached from the brush and forced together to clamp a mop-rag between the jaws, the outer side bar of the smaller jaw lying close to and par- 85 allel with the corresponding bar of the larger when said jaws are closed upon a mop-rag, as above described, and shown in Fig. 4 of the drawings.

The jaws are forced or closed together by 90 an endwise-movable sleeve, D, which is fitted snugly over the staff or handle and rides over the shanks of the jaws. The diameter of the sleeve is such that it compresses the two jaws tightly and firmly together as it 95 rides over the inclined or angularly-bent portions of the shanks of the jaws, and the lower end of the sleeve is made substantially square or of other angular form in cross-section to prevent it from turning axially. The up- 100 ward endwise movement of the sleeve on the staff or handle is limited by a fixed collar or sleeve, D', which is placed at a suitable point to stop the sleeve before it exposes the pivotal connection of the jaws A B to the handle, which thereby conceals the pivots at all times and prevents them from being displaced or injured.

In adjusting the mop-rag in the head of the mop the sleeve D is moved upwardly on the staff to separate the jaws, the mop-rag is placed across the outer side bar, d', of the jaw A, and, finally, the sleeve D is forced down over the inclined angular portions f of the shanks to firmly and tightly compress the jaws together. The jaws yield or spring slightly when they are compressed together to exert a constantly-uniform clamping action on the mop-rag, which is tightly wedged between the two outer side bars, d d, of the jaws, as is obvious.

I attach especial importance to the peculiar construction and arrangement of the spring-jaws, as specified herein, as I am thereby enabled to produce a simple and inexpensive device, which is thoroughly efficient in holding a mop-rag on the staff or handle and also possesses great durability and strength.

E designates the brush, which, so far as its general structure relates to my invention, is of the ordinary pattern—i. e., it has a rigid unyielding back, in which the bristles are

suitably secured.

To adapt the brush to be quickly and se-35 curely connected to the mop-head in a detachable manner, it is provided with vertically-disposed plates or castings E' E². These castings are bulged or curved outwardly at | their upper ends, as at h, to form two con-40 cave surfaces on opposite sides of the castings, and these concave surfaces, against which the bars of the spring-jaws A B bear, in the manner presently specified, are disposed below the bulged upper extremity 45 thereof. These castings or plates are further provided with lateral flanges or lugs, through which screws or other suitable appliances are passed to secure the castings in a firm and rigid manner to the unyielding back of the 50 brush. The vertical portions of the castings are arranged near one of the side edges of the brush and separated a distance less than the width of the smaller jaw, B, of the mop-head, so that the castings can be inserted or passed 55 through the space between the side bars of the jaw B.

To connect the mop-head to the brush, the sleeve D is moved upward on the staff or handle to release the jaws and allow them to be separated. The larger lower jaw, B, is now adjusted over the vertical castings E E', so that said castings are passed between the front bar, d, and the inner bars, d' d², the front bar, d, of said jaw B lying against the

front faces of both eastings, while the inner 65 bars, $d'd^2$, bear against the rear faces of the castings E E', respectively, and all of said bars of the jaw B resting on the bases of the castings, as clearly shown in Figs. 1 to 3, inclusive. The upper smaller jaw, A, is now 70 adjusted in front of the castings so that all of its bars $d d' d^2$ bear against the front faces of the castings, the bar d of the jaw A lying in close proximity to and within the corresponding bar d of the other jaw, B, and the 75 sleeve D is now forced over the shanks of the two jaws to firmly clamp the castings between said jaws.

It will be observed that when the jaws are closed by the sliding sleeve they bear against 80 the castings at points below the upper bulged extremities of said castings, whereby the jaws are firmly held in their adjusted positions that they cannot become separated to such an extent as to ride over the bulged or enlarged 85 upper ends of the upright vertical portions of the castings when downward pressure is applied to the staff in manipulating the

brush.

Having thus described my invention, what 9° I claim as new, and desire to secure by Letters Patent, is—

1. In a mop and brush holder, the jaws A B, each made from a single piece of wire and having the head and shanks, said shanks being pivotally connected with the handle and each bent at an intermediate point of its length to provide the angular portions f, these bent angular portions f of the upper and lower jaws diverging laterally from each other, in 100 combination with a sleeve fitted over the shanks of the jaws and adapted to ride over the divergent portions f of the same, substantially as described.

2. In a mop and brush holder, the combination, with a brush having the upright fixed castings or plates provided with the enlarged or bulged ends, of two spring-jaws arranged to bind against reverse sides of the castings or plates, a staff or handle to which the jaws 110 are connected, and a sleeve for forcing the jaws together and upon the castings, substantially as and for the purpose described.

3. In a mop and brush holder, the combination of a brush having the bulged castings 115 fixed thereto, a jaw, B, adapted to fit over said castings, another jaw, A, bearing against one side of said castings below the bulged part thereof, a staff or handle to which said jaws are connected, and a sleeve for pressing the 120 jaws tightly upon the castings, substantially as described.

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

CHARLES L. FORTIN.

Witnesses:

WM. C. BLODGETT,
DE WITT C. SMITH.