

W. SEVERNS.

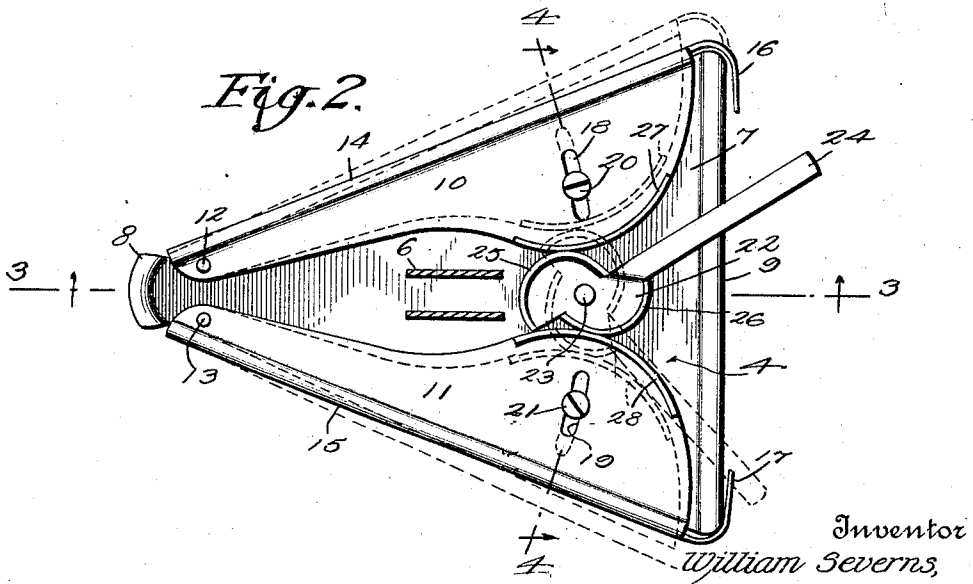
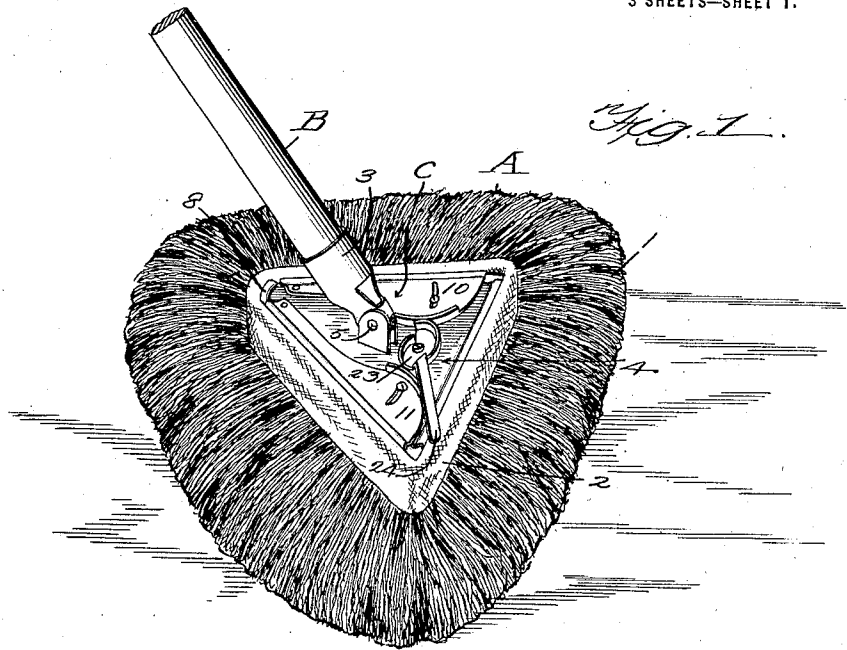
MOP.

APPLICATION FILED DEC. 31, 1919.

1,362,900.

Patented Dec. 21, 1920.

3 SHEETS—SHEET 1.



Inventor

William Severns,

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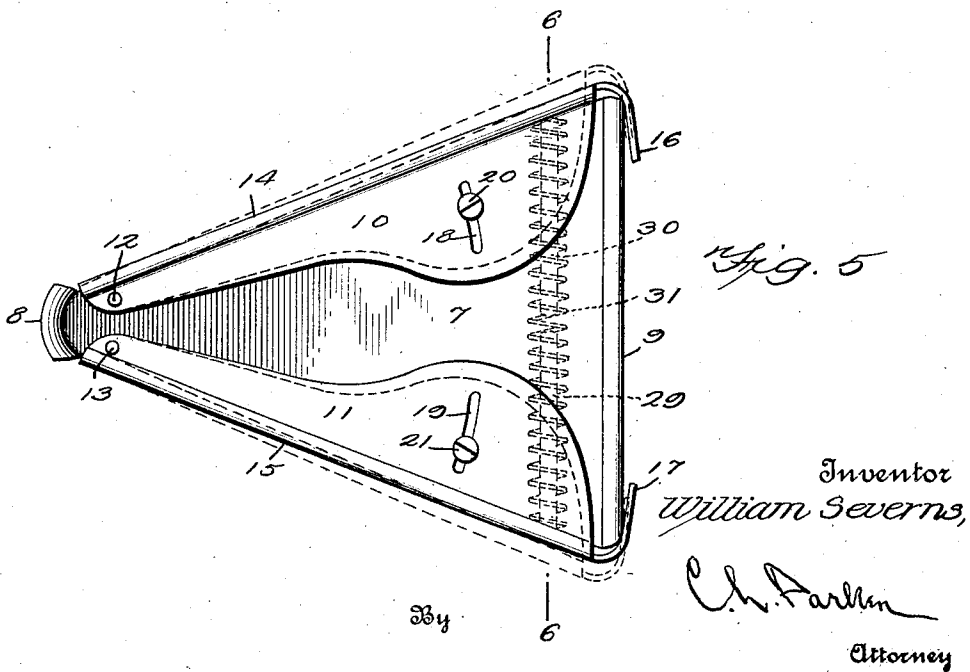
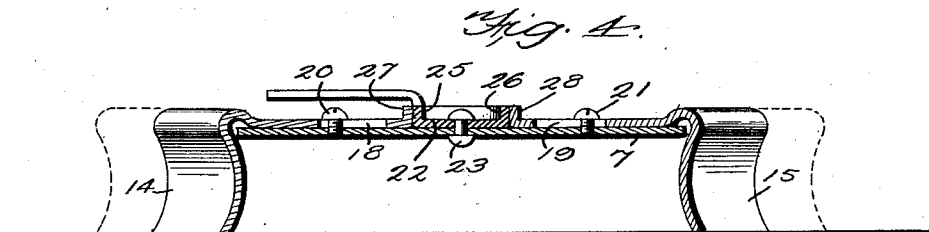
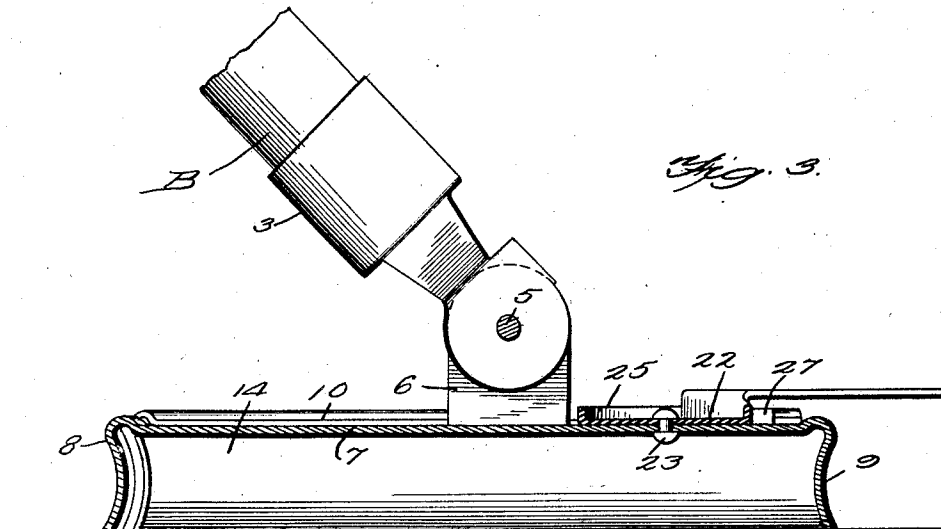
Ch. Parker

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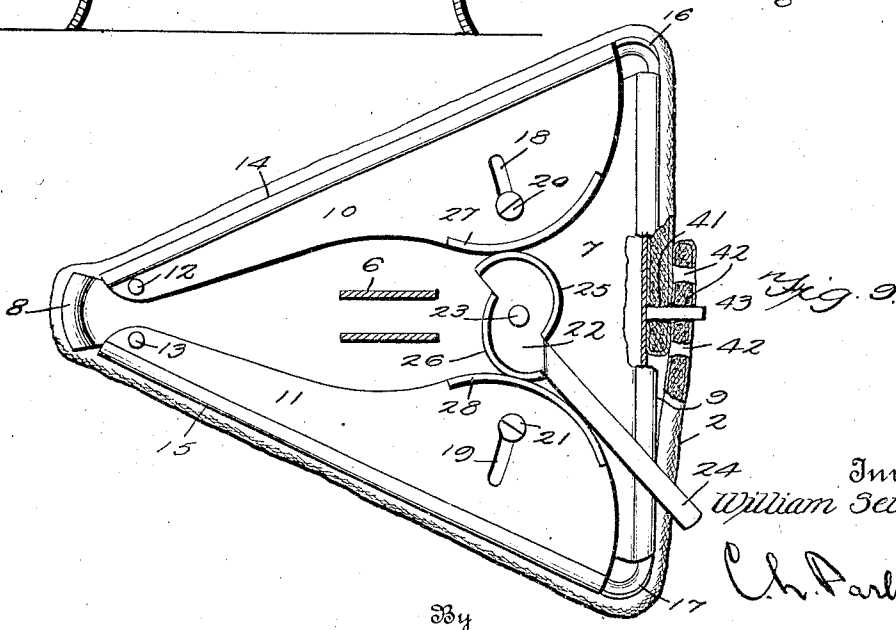
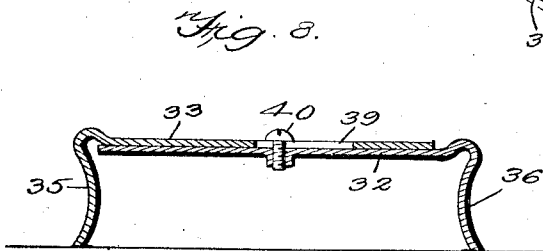
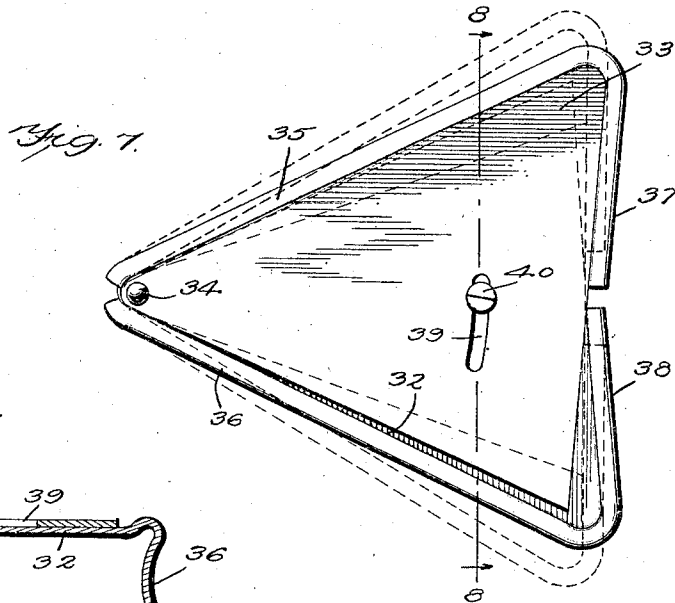
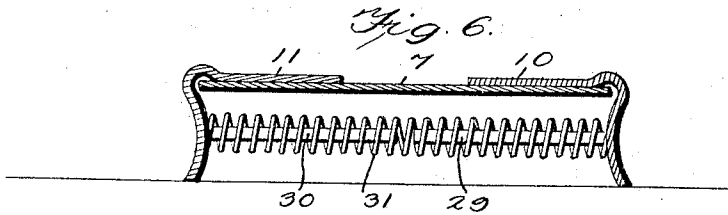
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3 SHEETS—SHEET 2.



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3 SHEETS--SHEET 3.



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UNITED STATES PATENT OFFICE.

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MOP.

1,362,900.

Specification of Letters Patent.

Patented Dec. 21, 1920.

Application filed December 31, 1919. Serial No. 348,620.

To all whom it may concern:

Be it known that I, WILLIAM SEVERNS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Mops, of which the following is a specification.

This invention relates to mops, and more particularly to means for securing a mop to a handle and it comprises an expansible frame of suitable shape, the frame being of a size to conveniently enter the mop, when contracted, and being adapted to rigidly hold the mop when expanded, said frame comprising a body portion, means for securing the mop handle thereto, expansible sections pivotally secured to said body portion, said sections being provided with downwardly extending flanges adapted to be received by the mop and to securely hold the mop when expanded, and means upon the body portion for maintaining said sections in expanded position; all as more fully, hereinafter set forth, and as claimed.

In the construction of mops for oiling and scrubbing floors, dusting walls, etc., it is the usual practice to provide a mop having a tape or head at the top and to provide some means for fastening this mop to a handle. Means whereby a mop may be easily attached and detached are very much desired in the art.

In this invention I have devised means for fastening a mop to a handle wherein the mop may be readily removed from the handle by the operation of a simple lever mechanism, or some other equally simple means. The present invention comprises means for holding a mop which will expand and which is provided with means for maintaining the holder or mop head in an expanded position. To attach or detach the mop from the mop head, the mop head is contracted which permits it to freely enter, or be removed from the mop. After the mop head has been placed in position with the head of the mop surrounding it, it is expanded and is held in expanded condition, securely holding the mop in place, by the means maintaining the mop head in the expanded condition.

In the drawings, I have shown several advantageous embodiments of this invention. In the drawings,

Figure 1 is a perspective view of a mop showing one form of the mop head in position and showing a portion of the handle.

Fig. 2 is a plan view of the mop head shown in Fig. 1, showing the mop head in contracted position and showing cam operated means for maintaining at an expanded condition.

Fig. 3 is a longitudinal vertical sectional view on the line 3—3 of Fig. 2.

Fig. 4 is a transverse sectional view on the line 4—4 of Fig. 2.

Fig. 5 is a plan view showing spring operated means for maintaining the mop head in expanded position.

Fig. 6 is a transverse sectional view on the line 6—6 of Fig. 5.

Fig. 7 is a plan view of a modified form.

Fig. 8 is a transverse sectional view on the line 8—8 of Fig. 7, and

Fig. 9 is a plan view similar to Fig. 4 showing means for fastening a modified form of mop.

Referring to Fig. 1 of the drawings, the letter A designates a mop having a handle B, the mop being secured to the handle by a mop head generally designated by the letter C. The mop consists of a plurality of fibers, threads, or strings 1 and a tape or head 2 to which the threads or fibers are secured. The handle is provided with the sleeve 3 upon its end and is adapted to be secured to the body portion 4 of the mop head by a bolt or pivot 5 passing through the end of the sleeve and received in ears 6 on the body portion.

As shown in detail in Figs. 2 to 4, the body portion consists of a substantially triangular shaped plate 7 provided with a downwardly extending convex flange 8 at the tip of the triangle and a similar flange 9 at the base of the triangle. A pair of pivoted sections 10 and 11 are carried by the body portion, pivoted thereto at 12 and 13. These pivoted sections are provided with downwardly extending flanges 14 and 15 extending along the sides of the triangle formed by the mop head. These flanges, and the flanges on the body portion, may advantageously be slightly curved to more securely receive the tape or head of the mop, and thus hold the mop more securely. The ends of the sections are curved to overlap the body portion, as shown at 16 and 17. The pivoted sections are adapted to be swung upon their pivots to expand the mop head, the expanded position of the pivoted sections being indicated by the dotted lines in Fig. 2 of the drawings.

The pivoted sections are provided with slots 18 and 19 through which pass bolts or

screws 20 and 21 to limit the outward movement of the pivoted sections.

A cam 22 is secured to the body portion by pivot 23 and is provided with an operating lever 24. The cam is provided with vertically disposed flanges 25 and 26, which engage similar flanges 27 and 28 carried by the pivoted sections.

In the form shown in Figs. 5 and 6 of the drawings, the construction of the body portion and the pivoted sections is the same as in Figs. 1 to 4, but different means are illustrated for the purpose of holding pivoted sections in expanded position. In these figures, the same reference numerals are employed to designate parts that are shown in Figs. 1 to 4. As shown, laterally projecting posts 29 and 30 are arranged on the downwardly extending flanges of the body portion near the base of the mop head and in alinement with each other. Expanding coil spring 31 is placed over these posts, said spring being adapted to force the pivoted sections outwardly and thus hold the mop head expanded.

In Figs. 7 and 8 of the drawings, I have illustrated another embodiment of this invention in which the two pivoted sections are pivoted to each other. In this form, the mop head comprises two substantially triangular plates 32 and 33 which are pivoted to each other at 34. The plates are provided with downwardly extending convex side flanges 35 and 36 on opposite sides and flanges 37 and 38 which are, in reality, continuations of the side flanges formed at the base of the mop head. The upper section is provided with a slot 39 to receive the bolt or screw 40, carried by the lower section which limits the relative movement of the pivoted plates. Any means may be employed for maintaining the plates in expanded position relative to each other. In the drawings, I have not illustrated the expanding means, but it is readily apparent that the expanding means employed in Figs. 5 and 6, for instance, may also be employed with the form of mop head shown in Figs. 7 and 8, or a cam (not shown) may be arranged upon one section of the mop head and engage a flange (not shown) on the other section.

In Fig. 9 of the drawings, I have illustrated a modified form of mop and means for securing this mop to the mop head. The mop shown in Fig. 1 is an endless mop, or mop in which the two ends have been secured to each other. In the form shown in Fig. 9 in the drawings, the ends of the mop have not been secured together, but an eye 41 is made in the tape of one section of the mop, near one end, and a plurality of eyes 42 are provided near the opposite end of the tape. Pin 43 is secured to the downwardly extending flange 9 and this pin is

passed through the eye 41 and one of the eyes 42 to secured the ends of the mop.

The operation of the device is readily apparent. As shown in Fig. 1, the mop head has been arranged within the tape of a mop and the cam lever has been operated to move the cam and expand the pivoted sections to the dotted line position shown in Fig. 2 of the drawings. The section is made of such size relative to the mop that it readily enters it when contracted, but securely holds the mop when expanded. The flanges 26 of the cam, engage the flanges 27 and 28 on the pivoted sections of the mop to maintain it in expanded position. When it is desired to remove the mop from the handle, it is merely necessary to move the cam lever 24 from the position shown in Fig. 1 to the position shown in Fig. 2, contracting the mop head. When the mop head is contracted, the mop is held loosely, and it may be readily removed by pulling it from the mop head.

In the form illustrated in Figs. 5 and 6, the pivoted sections are held in the dotted line position of Fig. 5 by spring 31. When the mop is in the full line position illustrated in these figures, the spring is under compression. In this position, the mop may be readily placed on the mop head or removed therefrom. In order to compress the spring, it is merely necessary for the operator to apply a slight pressure at each side of the mop head near the base.

In the form shown in Fig. 9 of the drawings, one end of the mop is secured to the mop head by passing the pin 43 through eye 41. When the mop head is in a contracted position the mop is then placed around it and one of the eyes 42 is placed over pin 43. A plurality of eyes is provided for the purpose of adjustment. The mop is arranged on the contracted mop head in such a manner that there is a slight slackness which will be taken up when the mop head is expanded.

What I claim is:

1. A mop head comprising a substantially triangular shaped body portion, a vertically disposed flange arranged on said body portion at the base of the triangle, pivoted sections arranged on each side of the body portion and pivoted near the apex of the triangle formed by said body portion, a vertically disposed flange carried by each of said sections, said flanges and said first mentioned flange being adapted to be received within a mop, said pivoted sections being adapted to swing outwardly at the base of the triangle, and means for maintaining said sections in such position.

2. A mop head comprising a substantially triangular shaped body portion, a vertically disposed flange arranged on said body portion at the base of the triangle, pivoted sections

arranged on each side of the body portion and pivoted near the apex of the triangle formed by said body portion, a vertically disposed flange carried by each of said sections, said flanges and said first mentioned flange being adapted to be received within a mop, said flanges being slightly curved to assist in holding the mop thereon, said pivoted sections being adapted to swing outwardly at the base of the triangle, said pivoted sections being provided with curved, substantially vertical flanges on their inner edges, and a cam mounted on the body portion and adapted to engage said flanges to maintain said sections in expanded position. 15

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

WILLIAM SEVERNS.

Witnesses:

O. W. SEVERNS,
E. C. JOHNSON.