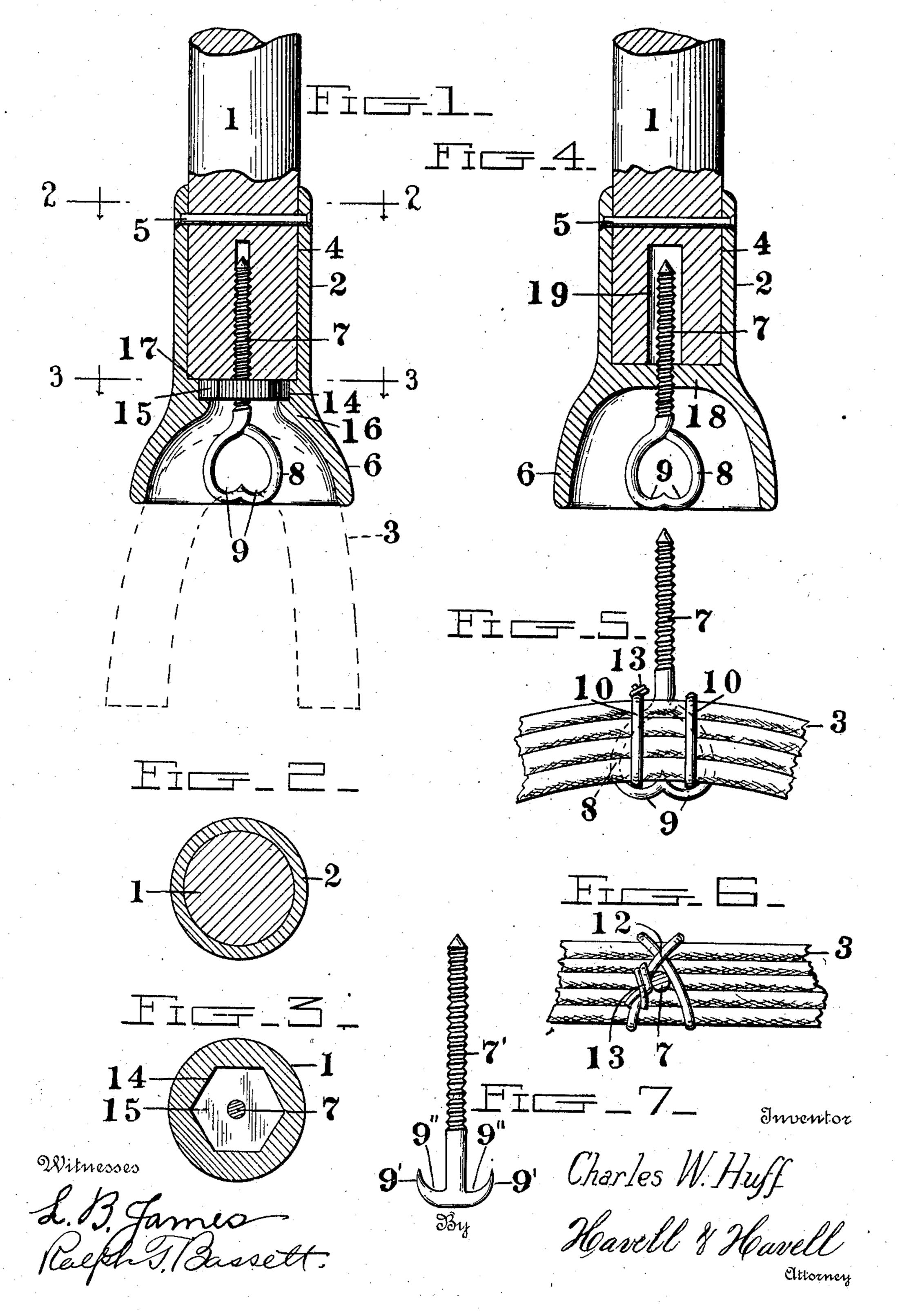
## C. W. HUFF.

MOP.

APPLICATION FILED SEPT. 13, 1909.

963,566.

Patented July 5, 1910.



## UNITED STATES PATENT OFFICE.

CHARLES W. HUFF, OF PITTSBURG, PENNSYLVANIA.

## MOP.

963,566.

Specification of Letters Patent.

Patented July 5, 1910.

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To all whom it may concern:

Be it known that I, Charles W. Huff, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Mops, of which the following is a specification.

This invention relates to certain new and

useful improvements in mops.

The object of the invention is to provide adjustable means for securely holding the mop-yarn during the mopping operation, and from which means the mop yarn can be easily and readily detached.

Another object of the invention is to provide the mop yarn with the attaching means whereby it is held in the mop handle instead of providing the handle itself with said at-

taching means.

Reference will be had to the accompanying drawings forming a part of this specification and wherein like numerals of reference designate corresponding parts throughout

the several views, in which:

Figure 1 is a vertical sectional view showing only a fragment of the handle and with the mop yarn illustrated in dotted lines, Fig. 2, is a transverse sectional view taken on line 2—2 of Fig. 1, Fig. 3 is a similar view taken on line 3—3 of Fig. 1, Fig. 4, is a view similar to Fig. 1 of a modified form, Fig. 5 is a side elevation of the mop yarn with the attaching bolt wired thereto, Fig. 6, is a top plan view thereof, and Fig. 7 is a view in elevation of a modified form of bolt.

Reference numeral 1 designates the mop stick or handle which is of wood, 2 the malleable iron head, and 3 the mop yarn. 40 The head 2 is provided with a cylindrical socket 4 in which the handle 1 is secured by means of a cross-pin 5. The lower end of the head is expanded to form a bell 6 which ! receives the mop yarn 3 and to conceal the 45 attaching means. The said attaching means consists of a screw 7, the lower end of which is provided with an eye forced inwardly from the bottom to the center of the bolt thereby forming a heart-shaped member 8 50 with two seats or sockets 9. The attaching screw 7 is passed through the mop-yarn 3 as illustrated in Fig. 5, the heart-shaped eye portion 8 is embedded and concealed within the yarn and the eye 8 disposed lengthwise

of the mop-yarn. The yarn is then bound 55 to the attaching screw by means of a binding wire 10 wound transversely around the mop-yarn 3, two times. A portion of each loop or wrap of the binding wire 10 is seated in one of the seats or sockets 9 of the screw 60 eye 8 as illustrated in Fig. 5 and is held thereby from displacement. The binding wire is necessarily crossed at 12 as illustrated in Fig. 6 and embraces the shank of the attaching screw 7, the free ends or ter-65 minals of the binding wire being twisted together as at 13.

In the modified form, illustrated in Fig. 7, the attaching screw 7' instead of being provided with an eye, is formed with oppo- 70 site lateral extensions 9' providing seats or sockets 9'' for the binding wire as in Fig. 5, the seats or sockets 9'' serving the same as the seats or sockets 9 of the heart-shaped

eye form.

In Fig. 1, the malleable head 2 is formed with a socket 14 in which is held a nut 15, the socket conforming to the shape of the nut to prevent the latter from turning. The nut rests on an annular shoulder 16 and is 80 held in its socket by the lower end of the handle 1, the handle itself seating upon a shoulder 17 formed on the head 1. The nut 15 is provided with a central threaded aperture through which the threaded shank of 85 the attaching screw 7 is screwed; the projecting end of the screw shank is then screwed into the wood handle.

In Fig. 4, instead of employing a separate nut, a web portion 18 is cast integral with 90 the head and provided with a threaded aperture into which the threaded shank of the attaching screw 7 is screwed in the same manner as in the form illustrated in Fig. 1, except that the projecting end of the screw 95 7 is not screwed into the handle 1, the latter being bored out as at 19, however, it is immaterial as to whether or not the screw

screws into the handle 1 or not.

The mop yarns are furnished from the 100 factory with the attaching screws 7 wired in place as illustrated in Fig. 5, and when the consumer receives the same, all that is necessary is to screw the attaching screw into the nut 15 of the form shown in Fig. 1, 105 or the web-portion 18 of the form shown in Fig. 4 and the device is then ready for service.

It will be seen that when the attaching screw is screwed home into the head that the mop-yarn will be drawn into the bell-6 as illustrated in Fig. 1 to entirely conceal the 5 attaching screw and binding wire. It will also be noted that when the attaching screw is screwed entirely into the head that the upper portions of the binding wires 10 will engage the upper wall of the bell and the 10 binding wire thereby pressed firmly downwardly upon the mop-yarn, the socket portions 9 of the screw meanwhile pressing the binding wires upwardly upon the mop yarn, thereby doubly clamping the yarn against 15 displacement, and serving as a frictional locking device against unscrewing of the attaching screw.

The device presents a neat appearance; and is cheap, clean and durable; and being constructed of malleable metal is not likely to break; and the construction is such that it will not mar the surface to be cleaned.

Having fully described the invention, what

is claimed as new and useful and desired to be secured by Letters Patent is:—

1. In a device of the character described, a mop-yarn, a screw for attaching the mop-yarn to a mop-head; said screw being provided with an eye formed with a plurality of oppositely disposed socket or seat portions, and a wire embracing the mop-yarn and passing through the said eye and seated in the said socket or seat portions thereof.

2. In a device of the character described, a mop-yarn, a screw for attaching the mop- 35 yarn to a mop-head, said screw being formed with a pair of oppositely disposed seat or socket members, and a binding wire embracing a portion of the mop-yarn and being seated in the said seat or socket members.

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

CHARLES W. HUFF.

Witnesses:

AGNES LUTHERS, HOMER N. YOUNG.