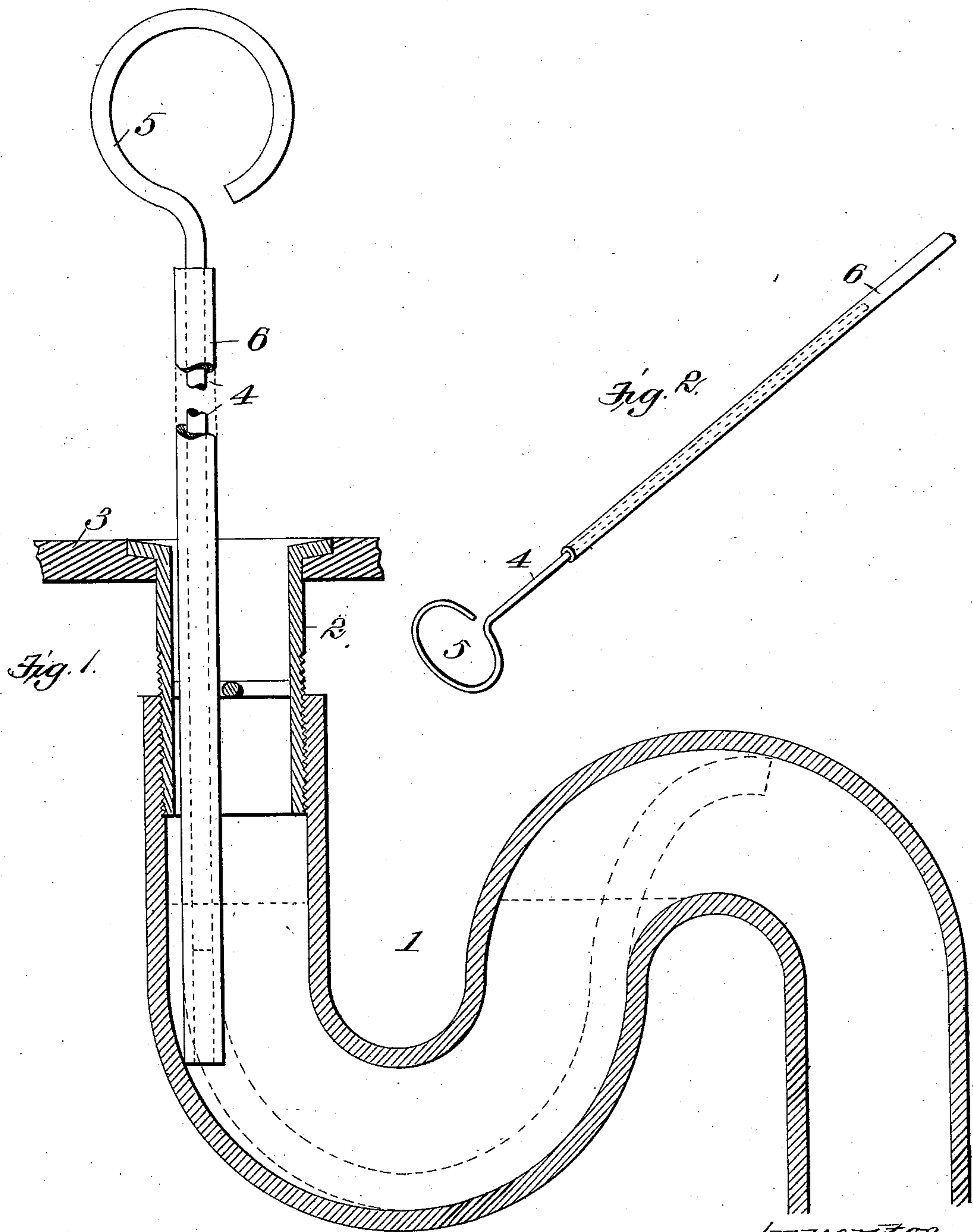


(No Model.)

E. HELFENSTELLER, Jr.
WASTE PIPE TRAP CLEANER.

No. 507,435.

Patented Oct. 24, 1893.



Witnesses
J. P. Cornwall
Hugh H. Wagner.

Inventor,
Ernest Helfensteller, Jr.
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UNITED STATES PATENT OFFICE.

ERNEST HELFENSTELLER, JR., OF ST. LOUIS, MISSOURI.

WASTE-PIPE-TRAP CLEANER.

SPECIFICATION forming part of Letters Patent No. 507,435, dated October 24, 1893.

Application filed June 23, 1893. Serial No. 478,612. (No model.)

To all whom it may concern:

Be it known that I, ERNEST HELFENSTELLER, Jr., a citizen of the United States, residing at St. Louis, in the State of Missouri, have
5 invented a certain new and useful Improvement in Waste-Pipe-Trap Cleaners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, wherein—

10 Figure 1 represents a sectional view taken through a waste pipe trap, illustrating the use of my improved cleaner. Fig. 2 is a detail view of the cleaner.

As is well known, the traps in waste pipes,
15 often become clogged or choked, by the deposit of hard foreign substances, or sediment, which, being heavier than water, sinks in the first bend of the trap or water seal, immediately beneath the opening leading from the
20 sink or basin, as the case may be.

Traps or water seals have been made with a screw plug closing an opening at the bottom of the first bend, which plug, when removed gives access thereto, permitting the removal
25 of such sediment. But there are many traps in use in which this plug is absent, and when they become choked, it has often been found necessary to entirely remove them, by reason of the inaccessibility of any thing to start the
30 sediment moving, which if once done, the water itself, if there be head enough, would cut the remaining sediment, and by so doing flush and clear the trap.

The object of this invention is to provide
35 means whereby traps of this latter description, and in fact traps of all kinds, may be cleared of this objectionable sediment, and consists, generally stated, in an extensible rod, composed of a stiff or normally unyield-
40 ing section, and a yielding or flexible section, which latter is adapted to be inserted into the trap, and by a step by step movement, communicated thereto through the medium of the reciprocation of the unyielding section,
45 is forced to accommodate itself to the bends of the trap, and in so doing, it dislodges the sediment, which is then disgorged by outflowing water, being materially assisted by the movement of the flexible section the while,
50 which agitates the dislodged foreign sub-

stances, and, to a certain degree, disintegrates, or breaks it up into smaller portions, which are easily carried off by the water.

In the drawings 1 indicates a waste pipe trap, having the usual connection, through 55 the means of the hollow drain plug 2, with the sink or basin 3, (a portion only of which is shown,) all of which parts are old and of well known construction.

My device for cleaning the trap, consists, 60 as before stated, of an extensible rod, composed of two sections, one an unyielding or stiff section, 4, which may be provided with a ring or eye 5 at one end for convenience in handling the same or hanging it up, and the 65 other, a yielding section 6, which is hollow and receives the rod 4.

When it is desired to clean a trap the parts operate as follows:—The yielding section 6, being slipped over the rod 4, both are inserted 70 into the vertical portion of the trap, which leads into the basin or sink, until they strike the lower curve of the first bend, as shown in full lines in Fig. 1. The yielding section 6 is then held stationary with one hand, while 75 the rod 4 is slightly retracted, slipping through the section 6 for the distance of about one half an inch, more or less. Both sections are then forced forward again, and the yielding section which is comparatively stiff immedi- 80 ately beyond the rod, is forced to follow the curve of the first bend. This is continued until the end of the yielding portion comes into contact with the foreign substance in the trap, at which time both sections are held 85 firmly and reciprocated, which, by the impact of the blows, derived from the contact of the end of the yielding section, will loosen the sediment and by continued agitation, break it up, when it may easily be flushed off. 90

Should the trap be so choked or clogged, as to entirely stop the passage of the water therethrough, it is obvious, that, as the sediment is soggy, by reason of constant immersion, when the flexible section makes a pas- 95 sage therethrough, as shown in dotted lines, Fig. 1, such passage will be at the bottom of the bend and when completed the flushing water passing therethrough, will loosen the surrounding sediment, which will fall into 100

the way formed by the portion 6 at the bottom of the bend, where it can readily be forced out by a second insertion, and so on.

It will be obvious, that should the flexible section be introduced into the bend without the stiffening, afforded by the rod, it would bend or double up, and have no effect at all upon the sediment, but by combining the two parts, telescopically, that, by the step by step movement being communicated to the flexible section, it will readily force its way by the repeated reciprocations imparted to it.

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

1. A device for cleaning water seals or waste pipe traps, comprising two sections, one

an inflexible or unyielding section, and the other a flexible or yielding section, which, when combined, form an extensible rod, substantially as described.

2. A device for cleaning water seals or waste pipe traps, comprising two sections, one, a rod 4 having a ring or handle 5 at one end, and the other, a flexible tube or pipe which surrounds said rod and is adapted to slide thereon, substantially as described.

In testimony whereof I hereunto affix my signature, in presence of two witnesses, this 20th day of June, 1893.

ERNEST HELFENSTELLER, Jr.

Witnesses:

F. R. CORNWALL,
HUGH K. WAGNER.