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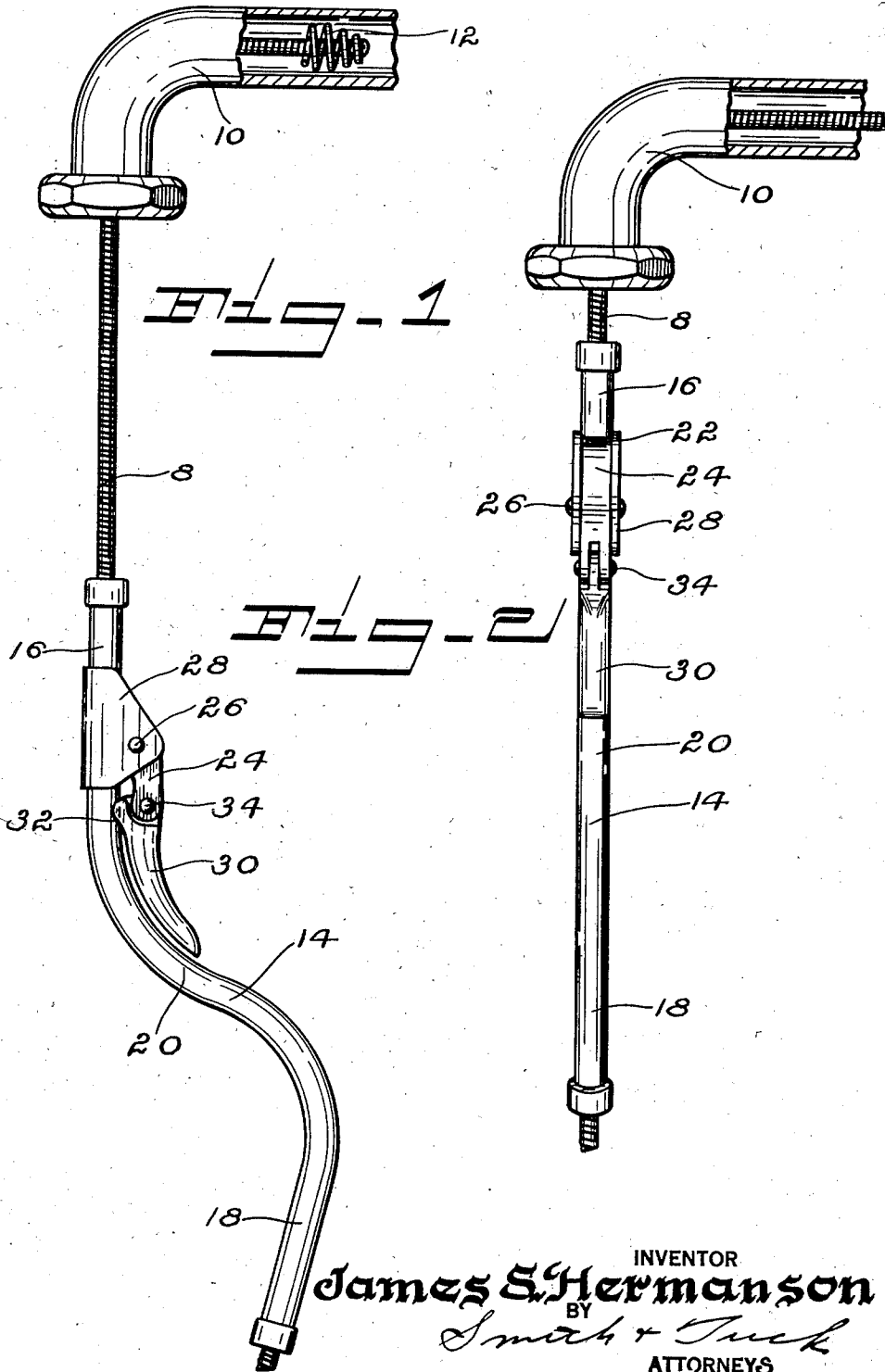
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SNAKE HANDLE

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2 Sheets-Sheet 1



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2,044,848

SNAKE HANDLE

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Refile for abandoned application Serial No.
500,532, December 6, 1930. This application
May 18, 1934, Serial No. 726,342

2 Claims. (Cl. 24—134)

My present invention relates to the art of plumbing tools and more particularly to a snake handle for use particularly in plumbing work. This application is based on applicant's abandoned application Serial Number 500,532, filed December 6, 1930. While I choose to describe my device as being particularly a plumber's tool there are many other trades in which my device will prove to be very helpful.

One of the problems that confronts the average plumber constantly is that of cleaning out obstructions which have occurred in plumbing which has been installed and in use for some time. The most common obstacle is that which occurs in what is commonly known as traps. These are places where either by intent or accident low places occur in pipe lines which normally fill up with liquid at such a height that it entirely fills and seals the pipe. Most all sewer connections have traps near their point of usual use so as to prevent sewer gases and the like feeding backward, and being discharged where they are not wanted.

It is common to remove such obstacles by forcing a long flexible device through the pipes so as to break up any obstacles. These devices are ordinarily called snakes, the most usual form being a long coil spring of relatively small diameter, which usually at its leading end has some special device for more speedily effecting the breaking up of any obstruction. Handles have been provided in the past for use with these snakes but they usually require tightening devices which oftentimes seriously damage the snake and which are difficult to use, particularly when the operator's hands have become wet, as is usually the case in a repair job of this kind. Therefore:

The principal object of my invention is to provide a snake handle which permits quicker and more convenient manipulation of the snake.

A further object is to provide a snake handle which will positively engage the snake without damaging the same.

A further object is to provide a snake handle whose clamp means requires no additional tools to operate.

Other and more specific objects will be apparent from the following description taken in connection with the accompanying drawings, wherein:

Figure 1 is a plan view of my device as it is used.

Figure 2 is a similar view with my device revolved 90 degrees. Figure 3 is a fragmentary

sectional view showing my device as applied to the snake but in the released position. Figure 4 is a sectional view similar to Figure 3 but showing my device in its clamped or locked position.

Figure 5 is a cross-sectional view taken along the line 5—5 of Figure 4.

Referring to the drawings throughout which like reference characters indicate like parts, numeral 8 designates the usual plumber's snake, which is shown in Figures 1 and 2 as being used within a frequently encountered fitting 10. Snake 8 is shown in Figure 1 with a coil device at 12 which is used to assist in breaking up obstructions which occur in pipes. My handle proper consists of a tube-like portion 14, having two straight portions 16 and 18, which are joined by the reverse curve 20. At one point the straight portion 16 is provided with opening 22 which provides in opening to the snake for a locking member 24. Locking member 24 is pivotally secured at 26. A pivot support member 28 is provided and is in turn secured to the straight portion 16. A very satisfactory pivot support may be constructed along the lines indicated in which member 28 is formed as a U shaped member which encircles tube 14 and is secured to the same in any convenient manner such as riveting, brazing, welding, etc.

I have so proportioned my device that locking member 24 entirely fills the open end of the U formed by member 28. This is a desirable construction as it lends considerable rigidity to member 24. While any suitable tightening and securing means might be provided to operate member 24, I have found it most desirable to use a toggling cam lever 30 which is provided with a suitable hand grip portion and with a bearing portion 32 which I normally prefer to have slightly grooved. This is pivoted at 34 to member 24. I normally prefer to give bearing portion 32 considerable length in order that it will tend to lock itself when in the closed position without the danger of any one point wearing sufficiently as to make my device inoperative. I further desire that my device may be used on snakes of different construction and to this end I have provided a replaceable engaging portion 36 for my locking member 24. Such materials as iron, steel, brass, solder, lead, bakelite, rubber, etc., might be used.

Method of operation

In operating my device I prefer to thread the snake through my device and to clamp the same to the snake, say, from 8 to 10 inches away from

the opening, much as is illustrated in Figure 1. The operator then places one hand around the straight portion 10 and the other around the straight portion 12 and uses the handle as a sort of auger handle to turn the snake, at the same time forcing it into the tube 10 until it has reached a position much as illustrated in Figure 2. This operation may then be repeated until the obstruction has been cleaned.

10 It will then be apparent, I believe, that my handle might be used to pull the snake out either by a straight pull or by revolving the same as it is being pulled out. It is quite often necessary when the obstruction is reached and finally a hole 15 forced therethrough to work the snake back and forth a good deal so that member 12 can completely clean the pipe at this point and tend to prevent a recurrence of the stoppage. It is under conditions like this that my handle proves unusually effective.

20 The locking handle 30 can be easily operated even though the operator be using gloves which may become wet and slippery and the whole unit is compact and contains in one unit everything 25 necessary to operate the same. For this reason it has proven to be very useful wherever it is desired to force a flexible member through a confined space. This device, I believe it will be apparent, can be used to force a lead wire through 30 conduits or any other similar work.

The foregoing description and the accompanying drawings are believed to clearly disclose a preferred embodiment of my invention but it will be understood that this disclosure is merely illustrative and that such changes in the invention 5 may be made as are fairly within the scope and spirit of the following claims:

What I claim is:

1. The combination with a housing having an opening therein and adapted to receive and clamp 10 a cable, of a clamp-lever having a jaw movable through said opening, said lever having pivot-bearings rigid with the housing, a cam-lever pivoted on the clamp-lever, and said cam-lever having a cam-portion adapted to engage the housing 15 and perform the functions of a fulcrum for the cam lever.

2. The combination with a housing having an opening therein, and adapted to receive and clamp 20 a cable, of a holder mounted on the exterior of the housing and spaced bearing ears rigid with said holder, a clamp lever pivoted in said ears and a jaw on one end of the lever movable through said opening, a cam-lever pivoted at the other end of the clamp lever, and said cam-lever 25 having a grooved cam-portion adapted to engage the housing and perform the functions of a fulcrum for the cam lever.

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