July 15, 1924. 1,501,354

D. G. MARKS

PIPE CLEANING DEVICE

Filed Oct. 21, 1922

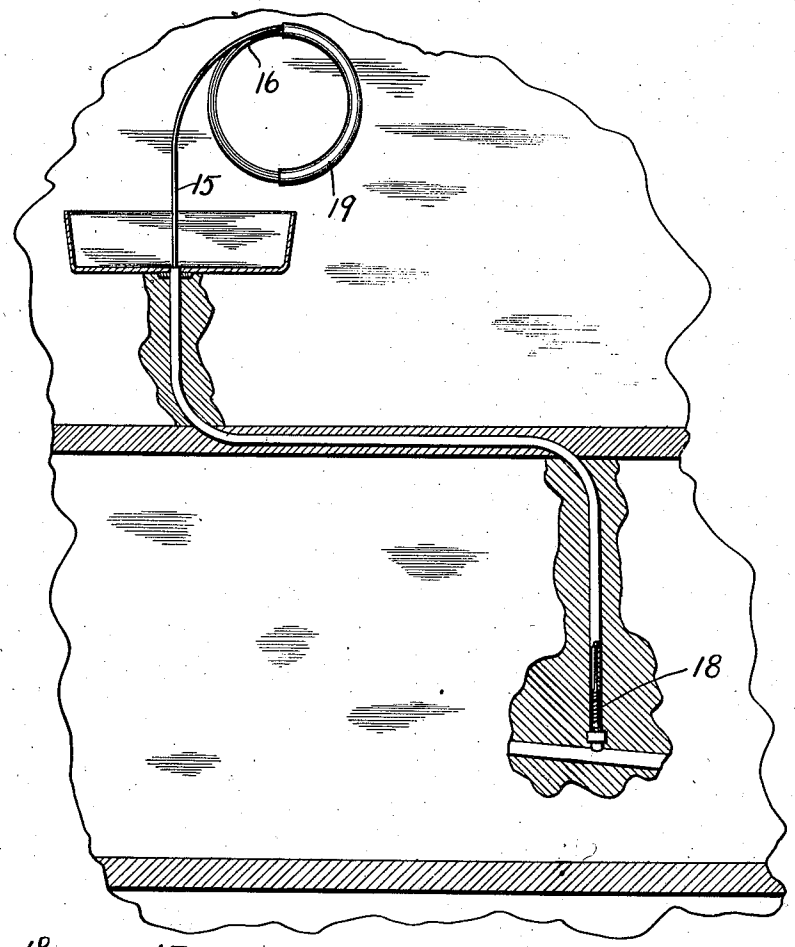


Fig. 1.

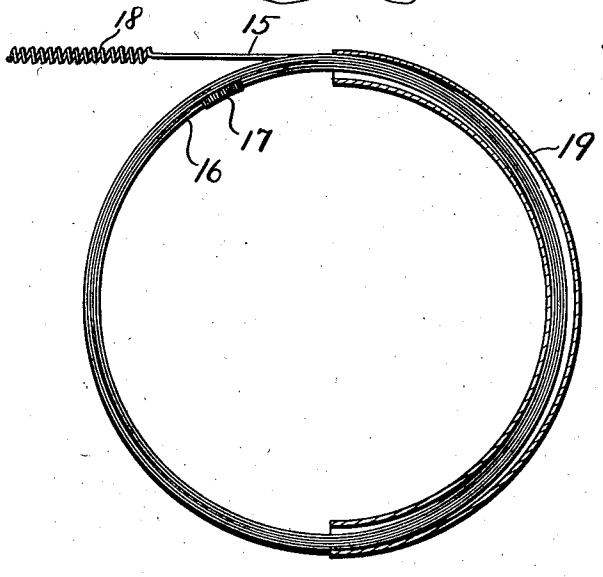


Fig. 2.

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UNITED STATES PATENT OFFICE.

DANIEL G. MARKS, OF LOS ANGELES, CALIFORNIA.

PIPE-CLEANING DEVICE.

Application filed October 21, 1922. Serial No. 595,956.

To all whom it may concern:

Be it known that I, DANIEL G. MARKS, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Pipe-Cleaning Devices, of which the following is a specification.

My invention relates to and has for its purpose the provision of a device capable of being used for the removal of sediment and other solid matter from water or gas pipes, or the training of electrical conductors through conduits.

It is also a purpose of my invention to provide a device of the above described character which includes a length of resilient wire coiled upon itself at one end and provided with an obstruction engaging element at the other end, a holder being designed for rotatably receiving the coiled end of the wire to allow of the coiling and uncoiling of the length of wire in applying and removing the obstruction engaging element from a length of pipe.

Although I will describe only one form of device embodying my invention, it is to be understood that various changes and modifications may be made without departing from the spirit of the invention and the spirit and scope of the appended claims.

In the accompanying drawings,

Figure 1 is a view showing my device in applied position with respect to a length of water pipe;

Figure 2 is an enlarged detail view of the device shown in Figure 1 with the holder in section.

Referring specifically to the drawings, in which similar reference characters refer to similar parts, my invention, in its present embodiment, comprises a single length of resilient wire 15 of suitable length and gauge which is coiled upon itself at one end, as indicated at 16, and with such end secured to the adjacent convolution as indicated at 17. The opposite or free end of the wire 15 carries a member 18 which constitutes an element for removing obstructions from the pipe, this element, in the present instance, being in the form of an elongated coil constructed by coiling the free end of the wire 15.

For receiving the coiled end 16 of the wire 15 so as to allow rotation thereof in effecting a coiling or uncoiling of the remainder of the wire, a holder 19 is provided, such holder, in the present instance, being in the form of a pipe of substantially semi-circular contour. The internal diameter of the pipe 19 is such as to not only rotatably receive the coiled end 16 but to permit of the coiling of the remainder of the wire 15 about the coiled end 16 so that when the wire is not in use it may occupy the coiled position shown in Figure 2.

When employing the device in effecting the removal of sediment or other solid matter from a water or gas pipe, the member 18 is inserted into one end of the pipe and forced through the pipe in the usual manner, the wire 15 being uncoiled during this operation. When the proper cleaning of the pipe has been effected, the wire 15 is withdrawn from the pipe, and during such withdrawal the coiled portion of the wire is rotated within the holder 19, thus effecting the coiling of the wire as it is withdrawn from the pipe. This obviously prevents the sediment-covered wire from spreading to all parts of the room during the removal thereof from the pipe. During the unwinding of the coil, it will be clear that by rotating the coil through the holder the wire can be fed into the pipe.

When employing the device for training conductors through conduits, it will be clear that the conductors can be attached to the element 18 after the wire 15 has been trained through the conduit, so that by removing the wire from the conduit the training of the conductors through the latter can be effected. In coiling and uncoiling the wire during this operation, the holder 19 operates in conjunction with the coiled end of the wire to facilitate the uncoiling of the wire and the recoiling thereof.

I claim as my invention:

1. A device of the character described comprising a length of resilient wire having one end coiled upon itself and secured in coiled form, and means for rotatably receiving the coiled end.

2. A device of the character described comprising a length of resilient wire having one end coiled upon itself and secured in coiled form, and a tubular member of arcuate form for rotatably receiving the coiled end.

3. A device of the character described comprising a coil of wire capable of being partly uncoiled, and a tubular holder having open

ends for receiving the coil to permit coiling or uncoiling thereof.

4. A device of the character described comprising a length of resilient material having one end coiled upon itself and secured in coiled form, and means for rotatably receiving the coiled end.

5. A device of the character described comprising a length of resilient wire having one end coiled upon itself and secured in coiled form, an obstruction-engaging element on the free end of the wire, and a semicircular tubular member for rotatably receiving the coiled end.

In testimony whereof I have signed my name to this specification.

DANIEL G. MARKS.