April 23, 1929. B. A. SEBRING ET AL 1,710,273

SLIP

Filed June 4, 1928

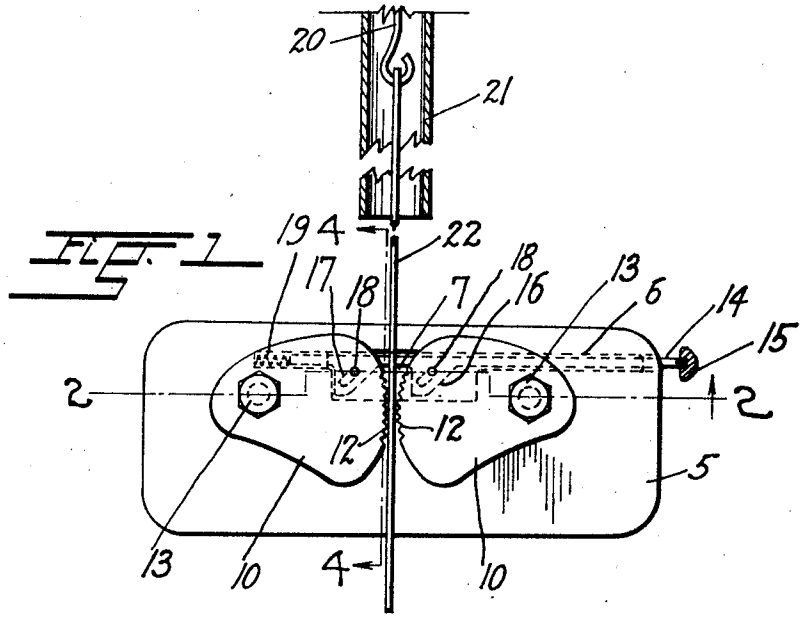


FIG. 1

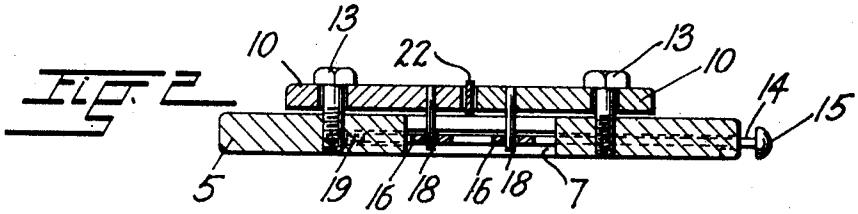


FIG. 2

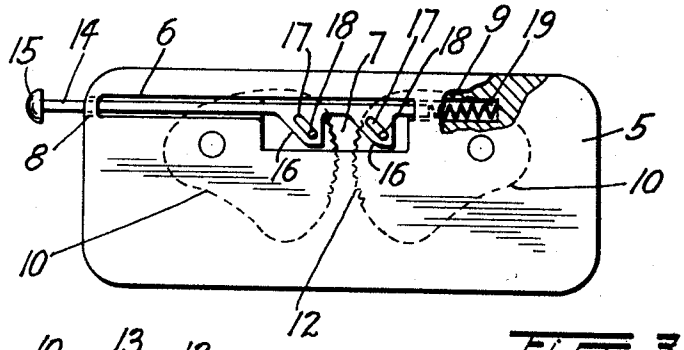


FIG. 3

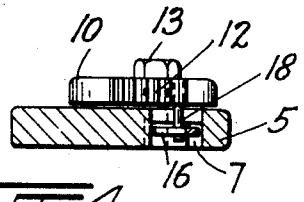


FIG. 4

INVENTORS.
Bert A. Sebring
Myron Bailey
BY
ATTORNEY.

Patented Apr. 23, 1929. 1,710,273

UNITED STATES PATENT OFFICE.

BERT A. SEBRING AND MYRON BAILEY, OF DENVER, COLORADO.

SLIP.

Application filed June 4, 1928. Serial No. 282,830.

Our invention relates to devices for drawing wires and other parts through conduits in which they are subsequently housed.

In building construction, it is a common expedient to build pipes into the walls thereof for the purpose of housing electrical wiring; and it has heretofore been difficult to thread the wires through the pipe without means other than the bare hand for handling the so-called fish-lines by means of which the wires are drawn from one end of the pipe to and through the other end.

All difficulties heretofore experienced are eliminated by the use of our invention which provides an efficient and practical means for pulling a wire through a conduit in a positive manner, and it is an object of the invention to provide a device of simple construction capable of being secured to the wire or its fish-line at any point thereof, by a simple and readily accomplished manual operation.

In the accompanying drawings, in which like parts are similarly designated in the several views

Figure 1 represents a face view of an embodiment of the invention;

Figure 2, a section taken on the line 2—2 of Figure 1;

Figure 3, a face view of the opposite side of the device shown in Figure 1, and

Figure 4, a section taken on the line 4—4 of Figure 1.

Referring more specifically to the drawings, the device consists of a body-part composed of a plate 5 of small proportions so that it may be held in the hand of the user.

The plate is grooved lengthwise as at 6, for the purpose of mounting an operating member hereinafter to be described. The groove extends into an enlarged opening 7 and it is alined with an aperture 8 at an end of the plate and with a socket 9 at the end of the opening 7 opposite to that at which it connects with the groove.

Pivotally mounted upon a face of the body by means of bolts 13, are two clamping jaws 10, the opposite edges 12 of which are curved eccentrically with relation to their pivotal axes and roughened or serrated to more firmly grip upon a needle placed between them.

The operating member hereinbefore referred to comprises a bar 14, slidably supported in the alined aperture 8 and socket 9, and loosely extending through the groove 6 between the same. The end of the bar projecting beyond the opening is provided with a head 15, and the portion of the bar within the enlarged opening 7 has two projections 16 provided with parallel slots 17 that extend at an angle to the direction of its sliding motion. The slots cooperate with pins 18 on the two jaw members to cause the latter to turn simultaneously about their axes of rotation in opposite directions, when the bar is moved lengthwise into the socket by pressure upon its head. A coiled spring 19 in the socket yieldingly opposes the inward movement of the bar and returns the parts to their normal position when the head of the bar is disengaged by the user.

From the above description, the operation of the device will be readily understood.

A wire 20 to be drawn through a pipe 21 is fastened at its forward end to a fish-line or needle 22 by any suitable means such as a loop at the end of the line. The fish-line is placed between the two clamping jaws while they are in their normal separated position indicated in Figure 3 of the drawings. The operator holds the device in the hand and by inward movement of the bar causes the jaws to clampingly engage the line, as shown in Figure 1. The plate 5 thus secured provides a convenient handle for drawing the line and the wire attached at the end thereof, through the pipe, and it is readily adjusted to a different part of the line while the latter is held against retrograde motion by the operator so that the operation of pulling the wire through the pipe, may be accomplished by a series of intermittent movements of the fish-line.

It is to be understood that the clamp jaws may be normally held in engagement by the spring acting upon the sliding bar, and separated by pressure upon the head of the bar by merely reversing the position of the slots or the position of the pins with relation thereto and that other modifications in the construction and arrangement of the parts of the device may be resorted to without departure from the scope of the invention.

What we claim and desire to secure by Letters Patent is:

1. A device of the character described comprising a body part, pivoted jaw-members having cooperative gripping-edges eccentric to their axes of rotation, and a sliding operating member, having slots transverse to the direction of its movement, the

jaw-members having pins cooperative with the slots to cause simultaneous movement of the jaw-members in opposite directions by a sliding movement of the operating-member.

2. A device of the character described comprising a body part, pivoted jaw-members having cooperative gripping-edges eccentric to their axes of rotation, and a sliding operating member having parallel slots slanting transverse to the direction of its movement, the jaw-members having pins cooperative with the slots to cause simultaneous movement of the jaw-members in opposite directions by a sliding movement of the operating-member.

3. A device of the character described comprising a body-part having a socket, pivoted jaw-members having cooperative gripping-edges eccentric to their axes of rotation, a sliding bar extending into the socket of the body, in operative connection with the jaw-members, and a spring in the socket opposing inward movement of the bar.

4. A device of the character described comprising a body part, pivoted jaw members having cooperative gripping edges eccentric to their axes of rotation, and a sliding operating member for the operation of the jaw members, the jaw members and the sliding member having cooperating pins and slots to cause simultaneous movement of the jaw members by movement of the sliding member.

5. A device of the character described, comprising a body part, pivoted jaw members having cooperative gripping edges eccentric to their axes of rotation, a sliding operating member for the operation of the jaw members, and a spring resisting movement of the sliding member and disposed to open the jaws automatically when the sliding member is released.

In testimony whereof we have affixed our signatures.

BERT A. SEBRING.
MYRON BAILEY.