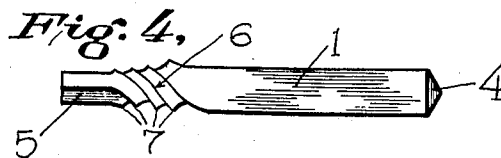
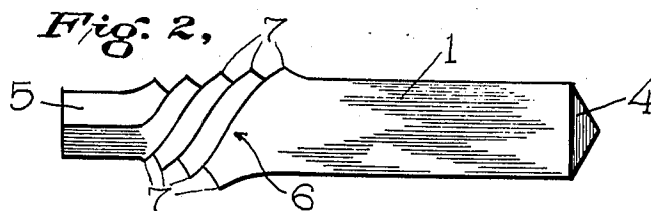
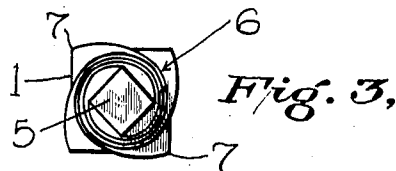
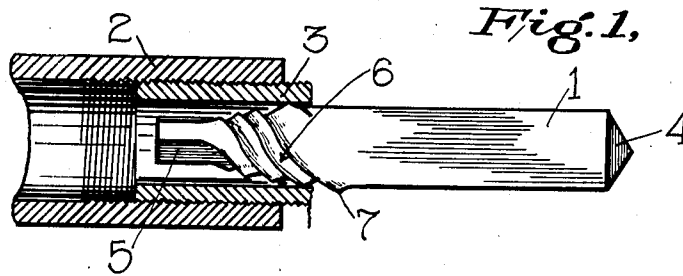


L. L. ZIHLER.
STUB PULLER.
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1,108,059.

Patented Aug. 18, 1914.



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Witnesses

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UNITED STATES PATENT OFFICE.

LÉON L. ZIHLER, OF BUFFALO, NEW YORK.

STUB-PULLER.

1,108,059.

Specification of Letters Patent.

Patented Aug. 18, 1914.

Application filed March 4, 1914. Serial No. 822,503.

To all whom it may concern:

Be it known that I, LÉON L. ZIHLER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Stub-Pullers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in devices for removing pieces of broken pipe from sockets and similar pipe fittings, and has for its object to provide a device which may be easily and quickly inserted in a piece of broken pipe and which will bite into the metal thereof to provide a means for holding the same to be unscrewed.

Another object of this invention is to provide a device which may be easily and cheaply made of a bar of rectangular material which will be simple in operation and effective in use.

With the above and other objects in view, the invention consists in the novel combination and arrangement of parts which will be fully set forth in the following specification and accompanying drawings, in which,

Figure 1 is a side view in elevation of a tool constructed in accordance with this invention showing the same in position to remove a broken piece of pipe from a socket or similar connection. Fig. 2 is a front end view of a tool constructed in accordance with this invention, Fig. 3 is a side view in elevation of a tool constructed in accordance with this invention and showing the same with the twist in the opposite direction so that the device may be used for right and left hand threads, and Fig. 4 is a side view in elevation of a tool constructed in accordance with this invention to show the range of sizes which may be employed.

Referring now to the drawings by characters of reference, the numeral 1 designates the main body portion or stock from which the device is constructed, while the numeral 2 designates the pipe from which the nipple or broken end of pipe 3 is being extracted.

The stock 1 above referred to, is provided with the beveled end 4 which is used to elimi-

nate any sharp edges. The end of the stock 1 opposite the end 4 is reduced as at 5 and the portion intermediate the stock 1 and the reduced portion is twisted as at 6 to form a plurality of ribs 7 which engage the interior of the nipple or broken piece of pipe which is to be withdrawn and bite into the walls thereof to form a gripping element by means of which the pipe may be turned and unscrewed from the socket or other fitting in which the broken pipe is extending. The tool may be varied as will be clearly seen upon comparing Figs. 1 and 3, both in size and the direction in which the twist is made as often times left hand, as well as right hand, threads are employed and these tools are constructed for use in both instances.

It will be evident that in use, the reduced end of the device is inserted in the nipple or broken piece of pipe which is to be removed and upon revolving the same, it will be evident that the shoulder 7 will bite into the soft metal of the pipe or nipple and upon turning the device in the direction to unscrew the pipe, it will be evident that rotary motion will be transmitted to the nipple or broken pipe and the same may be easily and quickly removed.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that such changes may be made in the combination and arrangement of parts as will fall within the spirit and scope of the invention as claimed.

Having thus described my invention, I claim:

A device of the character described comprising a stock, said stock being preferably rectangular in cross section, a reduced rectangular end formed on the stock, a tapering twisted portion formed intermediate the reduced end and the stock, shoulders formed by the twisted portion, said shoulders being adapted to bite into the soft metal of a nipple to remove the same from a pipe fitting.

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

LÉON L. ZIHLER.

Witnesses:

ALEXES LUTENERGES,
CHARLES F. BACHE.