

1,033,531.

Patented July 23, 1912.

Fig. 1.

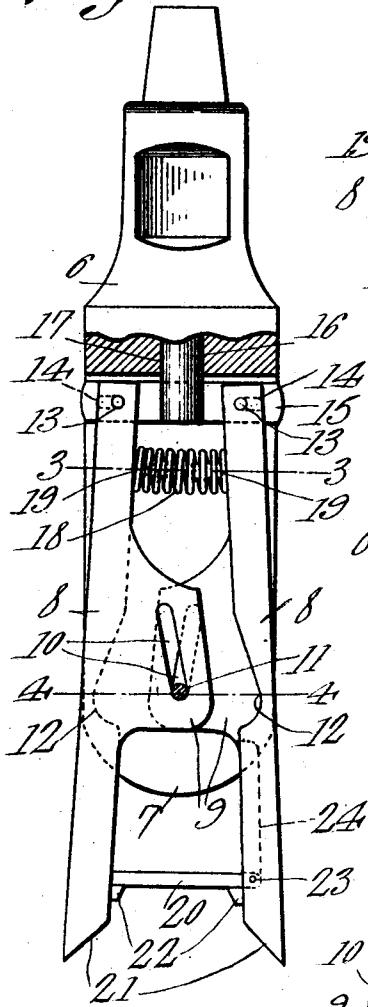


Fig. 3.

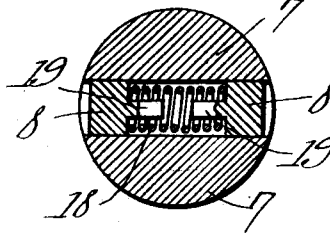


Fig. 4.

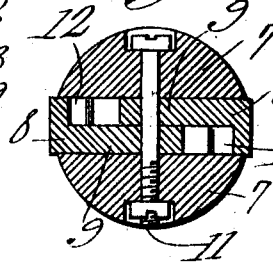


Fig. 2.

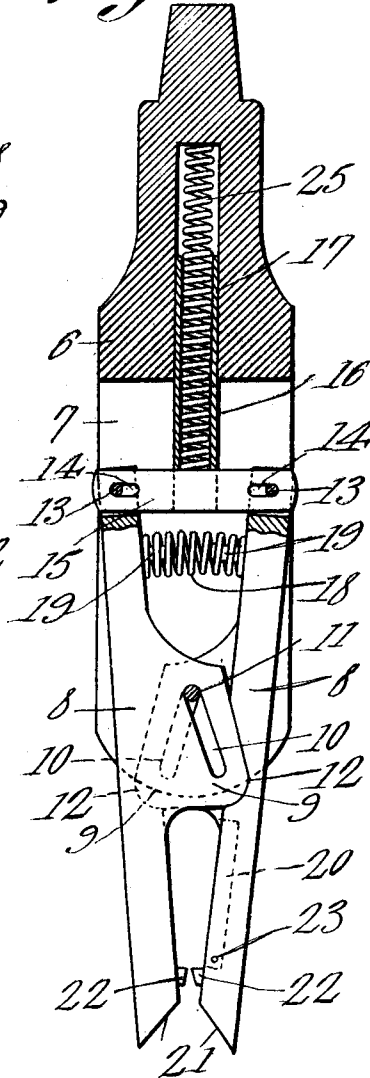
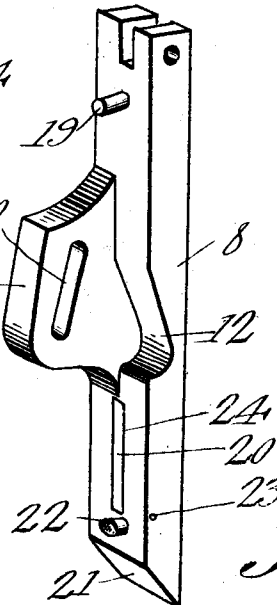


Fig. 5.



Witnesses

J. P. Dineen
L. F. W. H. H. H.

Jacob S. Brown,
Inventor

by

C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE

JACOB S. BROWN, OF LOS ANGELES, CALIFORNIA.

FISHING-TOOL.

1,033,531.

Specification of Letters Patent.

Patented July 23, 1912.

Application filed October 24, 1911. Serial No. 656,427.

To all whom it may concern:

Be it known that I, JACOB S. BROWN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Fishing-Tool, of which the following is a specification.

This invention relates to tools for fishing drill bits and other implements from wells. The object of the present invention is to provide an improved device of this character which, upon being lowered into the well is adapted to engage the drill bit or other object whereby the same may be removed from the well.

A further object is to provide a novel means for fulcruming the levers for engaging the drill bit or other object in the well to permit the levers to swing conveniently within the encompass of the well.

To the above ends this invention resides primarily in a stock and a pair of levers slidable longitudinally and laterally on a fulcrum member in the said stock to permit the levers to readily swing within the encompass of a well.

In its specific embodiment the invention embodies a stock having a fulcrum member, levers having overlapping ears with diagonal slots therein through which the fulcrum member extends, the cross bar having a sliding engagement with the inner ends of the levers, a spring tending to spread the inner ends of the levers, and a compression spring disposed between the stock and the said cross bar.

The invention is illustrated in the accompanying drawings, wherein similar reference characters indicate similar parts, and wherein.—

Figure 1 is an elevation of the tool, parts broken away. Fig. 2 is a longitudinal section thereof. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is a section on the line 4—4 of Fig. 1. Fig. 5 is a perspective view of one of the levers.

Referring in detail to the drawings, the stock of the tool is designated at 6 and has the lower end thereof bifurcated as designated at 7—7. The upper end of this stock is adapted to be secured to the cable of a drilling machine to be lowered into the well, or the same may be lowered into the well in any other suitable manner. A pair of levers 8 are disposed within the bifurcation of the stock, having their lower ends pro-

jecting or protruding therefrom, and these levers are provided with overlapping ears 9 which have diagonal slots 10 therein through which the fulcrum member 11 extends. This fulcrum member constitutes a bolt or pin extending through the bifurcated portion of the stock. The respective levers 8 have the recessed portion 12 on the inner side thereof for receiving the opposite ears 9. The upper or inner ends of the levers 8 are bifurcated to receive the ends of a cross bar 15, which cross bar is slidably engaged thereto by means of pins 13, which extend through the bifurcated ends of the levers and through the slots 14 in the ends of the cross bar. A tubular guide 16 is secured to the cross bar 15 and projects upwardly into a recess or socket 17 in the upper end of the stock 6 and a coiled compression spring 25 is disposed within the tubular member 16 and bears at its ends against the stock 6 and against the cross bar 15, thus giving an outward tension to the levers. Between the upper or inner ends of the levers 8 is disposed a compression spring 18, the levers being provided with studs or lugs 19 extending into the ends of the said spring to retain the same in position.

The lower ends of the levers 8 are beveled to present faces 21 which diverge outwardly and spuds 22 are secured to the lower ends of the said levers above the said beveled faces. One of the levers 8 is provided at its lower end and inner side with an elongated socket 24 and a prop 20 is pivoted at one end in the lower end of the socket, by means of the pin 23. This prop is arranged to swing into the socket and when swung outwardly is arranged to spread the outer or lower ends of the levers and retain the same in spread position.

In the use of the tool, the tool is first set by forcing the levers inwardly against the tension of the spring 25 and the outer ends thereof are spread against the tension of the spring 18, the prop 20 being swung to stand between the outer ends of the levers 8 to retain the outer ends of the levers in spread position. The tool is then lowered into the well and upon the drill bit or other object in the well striking the prop 20, the same is swung upward on its pivot thus freeing the levers whereupon the spring 25 forces the levers outwardly to shift the levers 8 longitudinally on the fulcrum member and to bring them closer together, and

the spring 18 forces the inner ends of the levers apart, thus swinging the outer ends of the said levers together to grip or engage the drill bit or other object, the levers being swung and slid simultaneously. The prongs 22 are provided for engaging the drill bit or other object whereby upon raising the tool, the drill bit may be raised from the well.

10 By providing the levers 8 which are movable longitudinally and laterally upon the fulcrum member, it will be seen that a novel arrangement for swinging the levers within the encompass of the well is provided, which
15 could not be attained by pivoting the levers whereby the fulcrum points of the levers remain stationary with respect to the stock. The levers in being forced outwardly bring the fulcrum points thereof closer to the
20 upper or inner ends thereof, and at the same time bring the levers closer together. This then, provides for a combination between a parallel and a swinging movement of the levers with respect to each other to engage
25 the object in the well.

It is understood that this invention is susceptible of alterations in its details within the scope of the appended claims, without departing from the spirit of the invention.
30

What is claimed as new is:—

1. A fishing tool comprising a stock, a fulcrum member, levers slidable longitudinally on the fulcrum member, and springs
35 for sliding and swinging the levers.

2. A fishing tool comprising a stock, a fulcrum member, levers slidable longitudinally and laterally on the fulcrum member, and springs for simultaneously swinging
40 and sliding the levers.

3. A tool of the character described comprising a stock having a fulcrum member, levers having overlapping ears with diago-

nal slots therein through which the fulcrum member extends, and means for simultaneously sliding and swinging the levers. 45

4. A fishing tool comprising a stock, a fulcrum member, levers having overlapping ears with diagonal slots therein through which the fulcrum member extends, means
50 for forcing the levers longitudinally, and means for swinging the levers.

5. A fishing tool comprising a stock, a fulcrum member, levers slidable longitudinally and laterally on the fulcrum member, means for forcing the levers longitudinally
55 in the stock, and means for swinging the levers on the fulcrum member.

6. A tool of the character described comprising a stock having a fulcrum member, levers having overlapping ears with diagonal slots therein through which the fulcrum member extends, a spring tending to spread the inner ends of the levers, and a spring
60 tending to force the levers outwardly, the outer ends of the levers being adapted to be spread apart by a prop.

7. A tool of the character described comprising a stock having a fulcrum member, levers having overlapping ears with diagonal slots therein through which the fulcrum member extends, a cross bar having a sliding engagement with the inner ends of the levers, a spring tending to spread the inner
75 ends of the levers, and a compression spring disposed between the stock and the said cross bar, the outer ends of the said levers being arranged to be spread apart by a prop.

In testimony that I claim the foregoing
80 as my own, I have hereto affixed my signature in the presence of two witnesses.

JACOB S. BROWN.

Witnesses:

F. O. CORNELIUS,
N. TREOSH.