Feb. 16, 1926. 1,572,983

W. A. BARRIER

CASING PULLING DEVICE

Filed Nov. 12, 1923

Fig. 1.

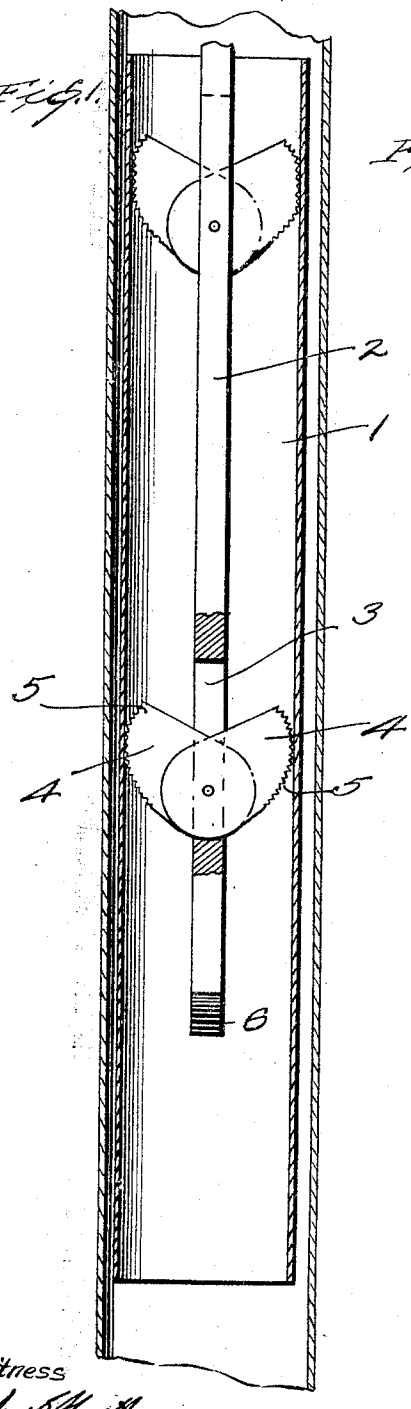


Fig. 2.

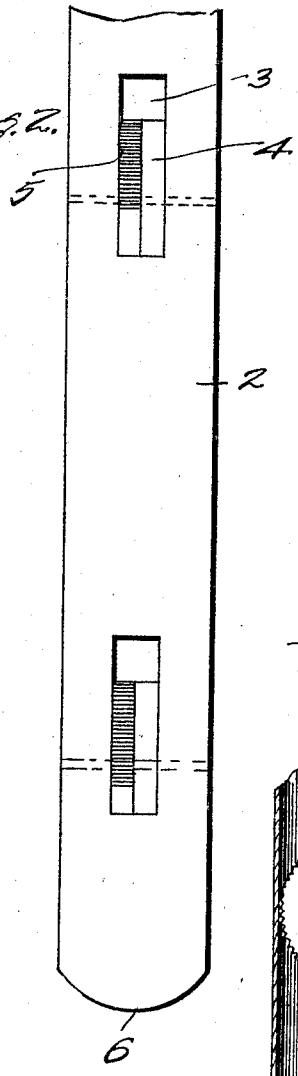
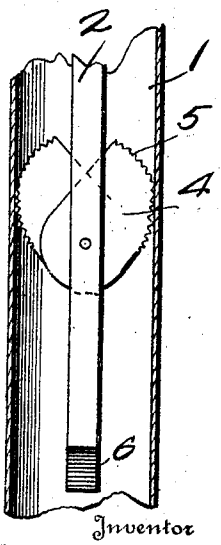


Fig. 3.



Witness

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UNITED STATES PATENT OFFICE.

WILLIAM A. BARRIER, OF FREDERICK, OKLAHOMA.

CASING-PULLING DEVICE.

Application filed November 12, 1923. Serial No. 674,299.

To all whom it may concern:

Be it known that I, WILLIAM A. BARRIER, a citizen of the United States, residing at Frederick, in the county of Tillman and State of Oklahoma, have invented certain new and useful Improvements in Casing-Pulling Devices, of which the following is a specification.

The present invention relates to a casing pulling device used in extracting cases from wells particularly oil wells and the principal object of the invention is to provide a device of this nature of simple, compact and durable construction, of such conformation as will permit of its being lowered into a well casing without being obstructed in its descent by irregularities or bends in the casing, and which will, when in operative position, engage the casing with such tenacity as to insure its proper operation.

Another important object of the invention is to provide a device of this nature which is durable, reliable in operation, inexpensive to manufacture, and well adapted for the purpose for which it is designed.

With the above and numerous other objects in view as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawings:

Figure 1 is a sectional view through a casing showing my device associated therewith;

Figure 2 is an elevation of the lower end of the device; and

Figure 3 is an elevation of the lower end of the device taken at right angles to that shown in Figure 2.

Referring to the drawing in detail it will be seen that 1 designates a casing in which this grappling device is to be inserted in order that the casing may be withdrawn from the well. The device includes a bar 2 provided with a plurality of slots 3. In each slot 3 there are pivoted two pawls 4. The edges 5 of these pawls are provided with teeth and are cam-shaped in formation so that they will engage the casing upon the bar 2 being lifted. The pawls are freely movable so that when the device is lowered into the casing the pawls will ride freely over the walls thereof, and when raised will automatically grip the walls so as to make the device and the casing relatively stationary. The lower end of the bar 2 is rounded as at 6 so that it may be more easily inserted into the end of the casing. It is evident that as many slots 3 may be utilized as desired and that there should be two pawls in each slot extended in opposite directions.

What is claimed is:

In a casing pulling device, an elongated plate having a downwardly curved lower end edge and provided with a pair of longitudinally spaced and aligned transverse slots in the lower end portion thereof, a horizontal pivot pin carried by the bar and extending across each slot parallel with the plane of the plate, and a pair of oppositely projecting pawls having their inner ends in contiguous side by side relation and pivoted on the intermediate portion of each pivot pin within the slots thereof so as to be freely swung upwardly and toward each other upon lowering of the plate into a well casing by engagement with the latter and to be caused to swing apart and downwardly into gripping engagement with the inner surface of such casing when the plate is elevated.

In testimony whereof I affix my signature.

WILLIAM A. BARRIER.