

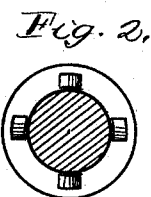
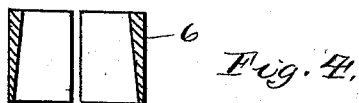
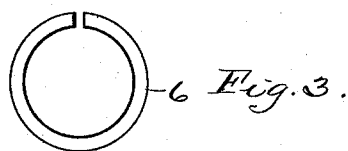
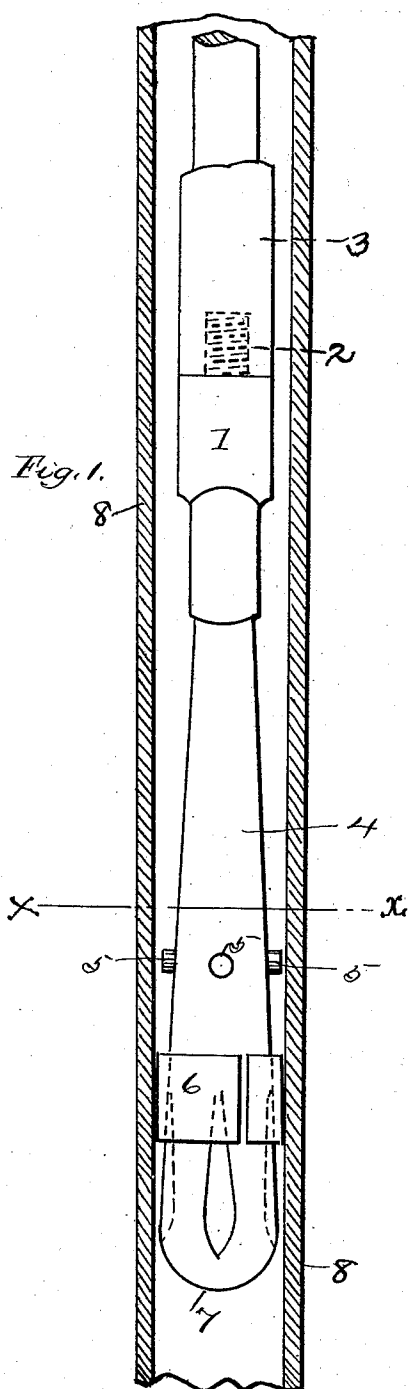
(No Model.)

D. BOWEN.

DEVICE FOR DRAWING CASINGS FROM DEEP WELLS.

No 505,262.

Patented Sept. 19, 1893.



Witnesses:

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UNITED STATES PATENT OFFICE.

DAVID BOWEN, OF BUTLER, PENNSYLVANIA.

DEVICE FOR DRAWING CASINGS FROM DEEP WELLS.

SPECIFICATION forming part of Letters Patent No. 505,262, dated September 19, 1893.

Application filed February 13, 1893. Serial No. 462,174. (No model.)

To all whom it may concern:

Be it known that I, DAVID BOWEN, a citizen of the United States, residing at Butler, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Drawing Casings from Deep Wells; 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved device for drawing casings from deep wells, and consists in certain details of construction, and combination of parts as will be fully described hereinafter.

In the accompanying drawings Figure 1 is a sectional elevation of the casing of an oil or other deep well, showing my improved means for drawing the same arranged therein. Fig. 2 is a sectional plan view on the line $x-x$. Fig. 3 is a plan view of the tapering ring used on my device. Fig. 4 is a sectional elevation of the same.

To put my invention into practice I provide a tapering cylindrical bar 4 having a means 2 for attaching the same to a string of drilling tools 3. Operating on this tapering bar 4 is a split ring 6 the inner surface of which is tapered the reverse of that of the bar 4, and the movement of the said ring upward limited by short projecting pins 5.

To draw the casing with this device it is only necessary to lower the same into the

casing 8, to any point it is desired to take hold. At the upward movement of the device, the ring 6 moves down or remains stationary while the tapering bar is drawn upward, thereby expanding the said ring 6 and taking a frictional hold on the sides of the casing 8.

To release the hold of this device, the same is lowered to the bottom of the casing 8, and when the ring 6 is free from the same may be drawn over the end 7 of the tool, and allowed to remain in the bottom of the well.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The herein described device for drawing casing from deep wells, consisting of the tapering bar or mandrel, a means substantially as shown for attaching the same to the drilling tools, the tapering split ring operating along the length of the said mandrel, and the radially arranged pins projecting from the sides of the said mandrel, occupying a position above the said split ring, whereby a frictional hold may be taken at any point of the casing by an upward movement of the apparatus, and released by lowering the same below the casing to remove the tapering ring therefrom, substantially as described.

In testimony that I claim the foregoing I hereunto affix my signature this 5th day of October, A. D. 1892.

DAVID BOWEN.

In presence of—

ALBERT J. WALKER,
M. E. HARRISON.