

No. 820,206.

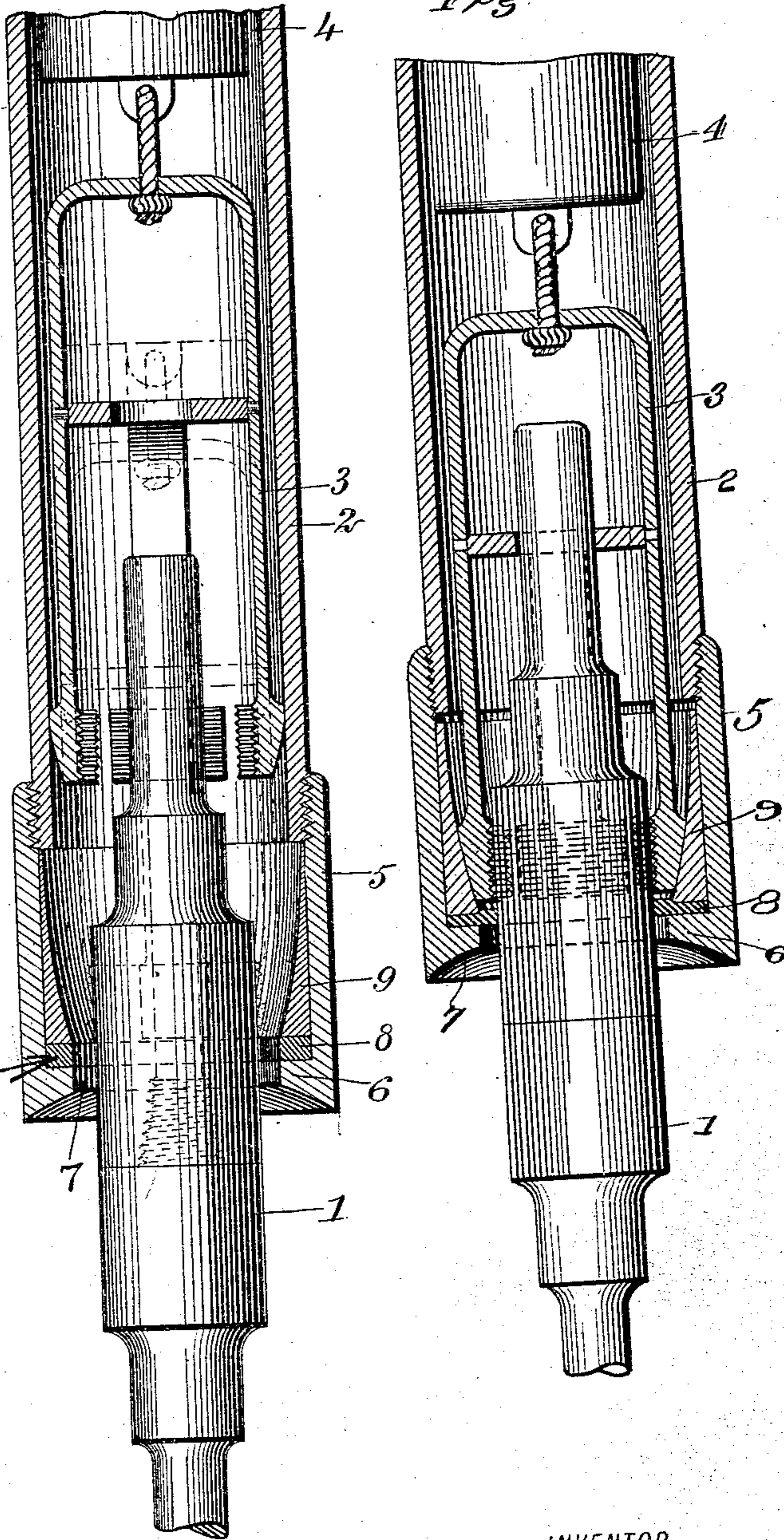
PATENTED MAY 8, 1906.

W. H. KESSELMAN.
CASING BOWL.
APPLICATION FILED JULY 1, 1905.

Fig. 1

Fig. 2

*Resilient Packing
Ring*



WITNESSES:

L. Blomquist
A. E. Fay

INVENTOR

William H. Kesselman

BY

Manuel S.

ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM H. KESSELMAN, OF PARKERSBURG, WEST VIRGINIA.

CASING-BOWL.

No. 820,206.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed July 1, 1905. Serial No. 267,897.

To all whom it may concern:

Be it known that I, WILLIAM H. KESSELMAN, a citizen of the United States, and a resident of Parkersburg, in the county of Wood and State of West Virginia, have invented a new and Improved Casing-Bowl, of which the following is a full, clear, and exact description.

My invention relates to improvements in casing-bowls for use with apparatus for removing drilling-tools from oil-wells.

In drilling wells the hole often fills with water many hundreds of feet deep. As the tools then work under an enormous pressure their strokes are very much retarded.

It is the principal object of my invention to provide a packing so that the water can be shut off from the inside of the casing and bailed out to enable the tools to get the full force of the blow in jarring. In casing-bowls as now constructed there is a conical surface which is subjected to a great deal of wear in use.

It is another object of my invention to cushion this surface and to provide for its ready removal and renewal.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both figures.

Figure 1 is a longitudinal sectional view of a device for removing drilling-tools from wells, showing my improvement. Fig. 2 is a similar view showing parts in the position which they assume when in operation.

The drawings shows a rope-socket 1, the lower end of the casing 2, and a clutch-dog 3, suspended from a bailer 4, all of the ordinary construction. A casing-bowl 5 is also provided upon the lower end of the casing. This bowl is provided with a shoulder 6, having a cylindrical surface 7 at a distance from the rope-socket and surrounding the latter. Above the shoulder 6 is mounted a resilient washer 8, preferably in the form of a rubber ring, and the inner surface of this is practically continuous with the surface 7. Above this washer is placed a removable lining 9, having a dished conical surface upon its interior for the reception of the back of the

clutch-dog. This surface is shaped in the usual manner, so that when the clutch-dog comes in contact with its gripping-surfaces will be forced inwardly, as indicated in dotted lines, so as to grip the rope-socket.

It will be readily seen that when this surface is worn out of shape, so that it fails to act properly it can be readily removed and replaced by a new one and also that the rubber washer 8 allows a slight play and cushions the blow with which the parts strike each other.

When the bowl is put in position over the tool and the clutch-dog lowered, the casing is raised until the sleeve 9 is forced down so as to expand the washer and make a water-tight joint between it and the tool or rope socket. It will be seen, therefore, that when the tool is in operative position the washer will act as a packer to shut off water from the inside of the casing and permit the water to be removed from the inside of the casing. The full force of the blows of the tools in jarring can then be utilized, thus greatly adding to the utility of the device.

This casing-bowl can be used without the rubber washer when there is no water in the hole, provided there is nothing to do but pull with the casing.

By my new method I am enabled for the first time, so far as I am aware, to pack the well, shut off the water, and bail it out, thus having a dry hole to work in.

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

1. A casing-bowl having a removable lining provided with an interior concave surface.

2. A casing-bowl having a removable lining provided with an interior concave surface, and resilient means for supporting said lining.

3. In a casing-bowl, the combination of an outer shell having a shoulder at the lower portion thereof, a rubber ring supported by said shoulder, and a removable lining supported above said rubber ring within the outer shell.

4. A casing-bowl having an expansible packing-ring to prevent the passage of water

2

820,206

into the casing when in use, and a lining bearing on the ring to expand the ring and force it against a tool.

5. A casing-bowl having an expansible packing-ring to prevent the passage of water into the casing when in use.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

WILLIAM H. KESSELMAN.

Witnesses:

GEORGE D. WATSON,
A. E. CAMPBELL.