

(No Model.)

J. D. CAMERON.

TEMPER SCREW BOX FOR OIL WELLS.

No. 255,591.

Patented Mar. 28, 1882.

Fig. 1

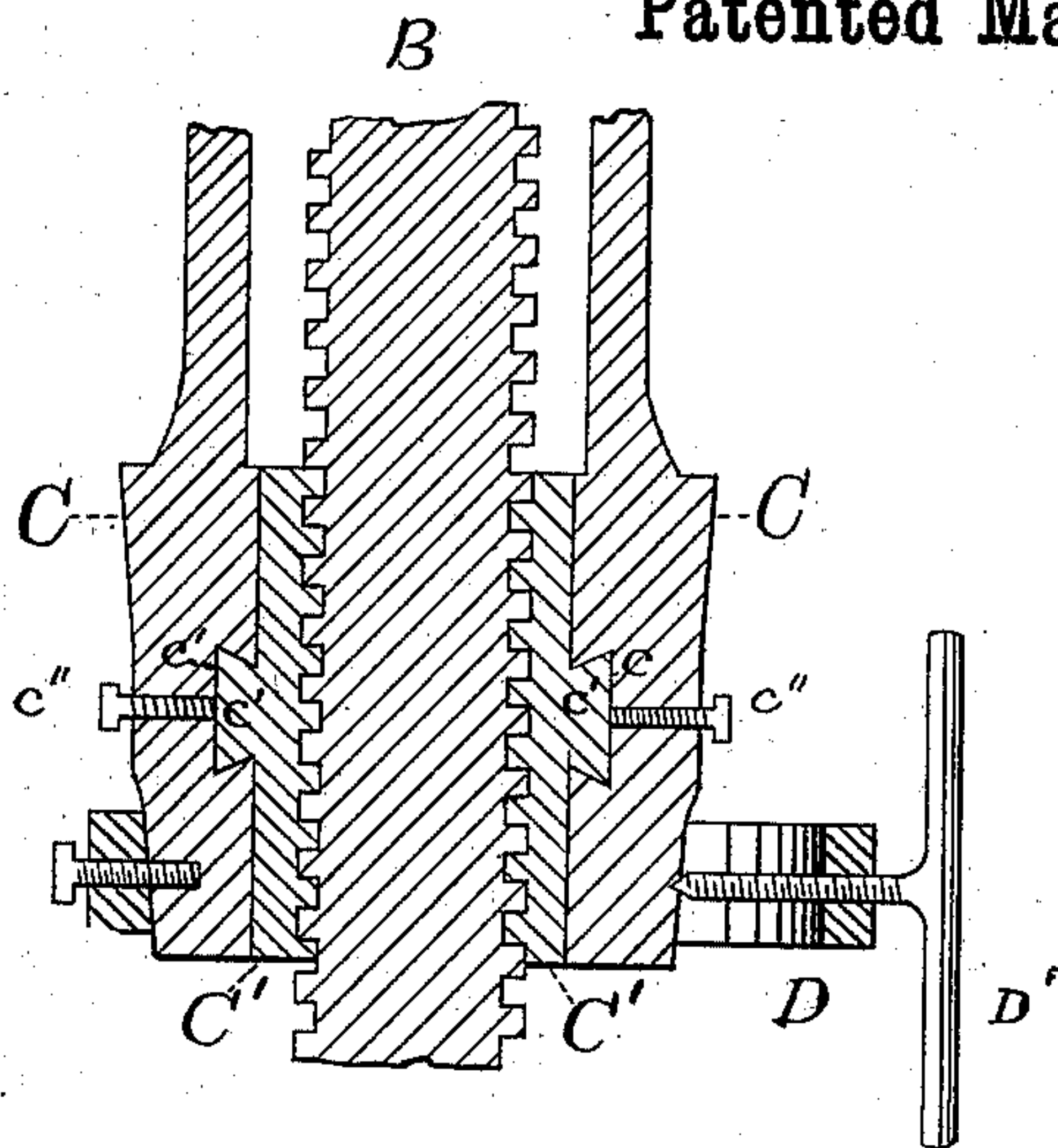


Fig. 2

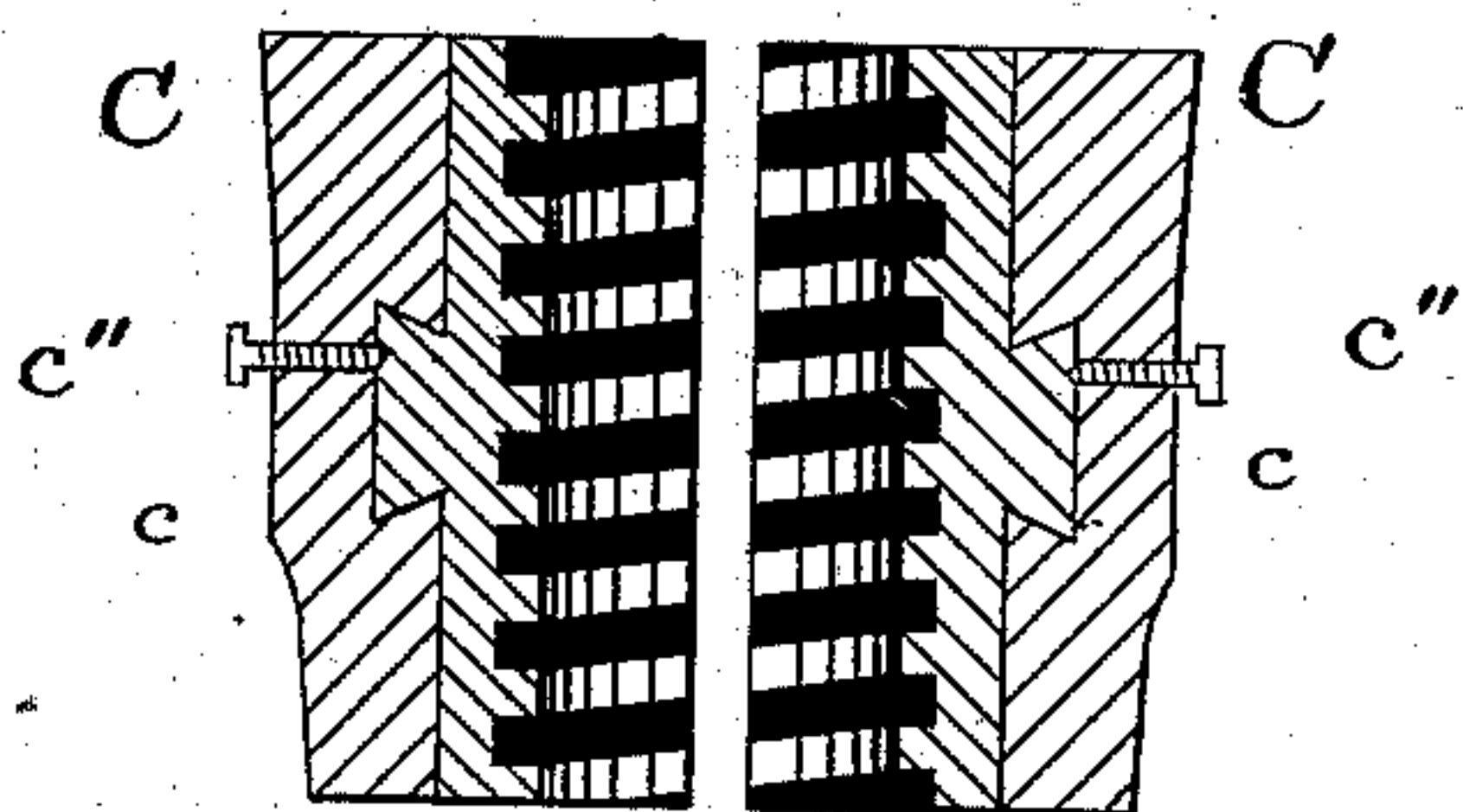
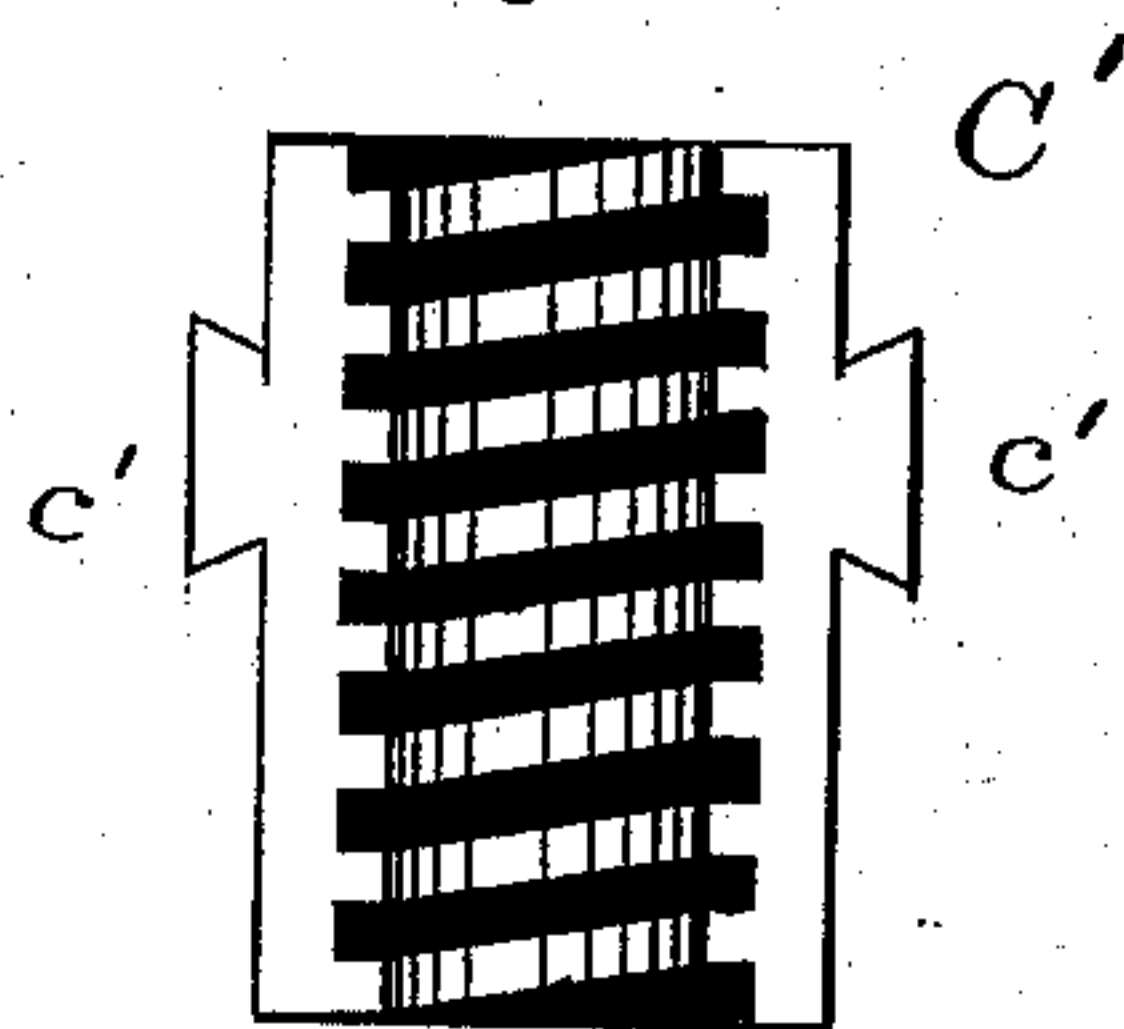


Fig. 3



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN D. CAMERON, OF BRADFORD, PENNSYLVANIA.

TEMPER-SCREW BOX FOR OIL-WELLS.

SPECIFICATION forming part of Letters Patent No. 255,591, dated March 28, 1882.

Application filed August 22, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. CAMERON, of Bradford, Pennsylvania, have invented new and useful Improvements in Temper-Screw Boxes for Oil-Wells; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters or figures of reference marked thereon.

Temper-screw boxes now in use are made by welding up a mass of metal in the shape of a cylinder, then boring a hole from end to end, cutting screw-threads in this hole to correspond with those in the screw, and finally by sawing the box in two parts on a line parallel to the reins. After the threads in this box become worn out the same process must be passed through to make the temper-screw of any value. This process is both expensive and laborious.

The object of my invention is to do away to a certain extent the cost of renewing the threads in the manner described above, and also produce an article much superior to that now in use.

To that end the nature of my invention consists of parts and combinations of parts that will hereinafter be described and claimed.

In the drawings, Figure 1 represents a vertical section of a temper-screw box having part of the reins and screw attached thereto; Fig. 2, a detail view, showing the box in section; and Fig. 3, an interior view of one of the screw-boxes, showing the dovetails at another point from those shown in Figs. 1 and 2.

A represent the reins; B, the screw; C, the box; C', the removable screw-boxes; and D, the oval ring or strap, which, in combination with the hand-screw D', clamps the parts together.

The box C is formed of two semi-cylindrical pieces having upon their inner faces dovetail grooves *c*. These grooves may be of any desired shape and formed at any point upon the inner faces of the box.

Screw-boxes C' are two semi-cylindrical pieces having screw-threads upon their inner faces to correspond with those upon screw B, and dovetails *c'* upon their outer faces at a point to correspond and to fit within grooves *c* of the box. The manner of attaching these screw-boxes is very simple. The box is spread apart a sufficient distance to allow the end of

one of the dovetails to be inserted in the groove and the screw-box forced around until the ends correspond or are on the same plane as the ends of the box. The other screw-box is inserted in the same manner. To prevent them from slipping, a hand-screw, *c'*, having its point in contact with the dovetail, is inserted through a screw-hole on the side of each semi-cylindrical piece of the box, as shown in Fig. 2.

It can readily be seen by using my improvement that the screw-threads can be renewed by simply removing the screw-boxes from the box and inserting a new set.

I design to sell the temper-screw in the condition partly shown in Fig. 1, and to have sets of screw-boxes on sale in the stores, where they can be had at a very slight cost compared with the cost of making new screws in an old box, as is now the custom. This will be a great saving of time and money, as it is frequently the case that drilling in wells is suspended because the temper-screw is in the shop.

I do not limit myself in attaching my device to the manner shown in the drawings, as it is obvious that they could be attached in many different ways without departing from my invention.

What I claim as new is—

1. A temper-screw box of cylindrical shape, having removable semi-cylindrical screw-boxes supported by means of a flange or half-collar projecting from their bodies, substantially as described, and in the manner set forth.

2. A temper-screw having a box provided with removable screw-boxes attached by means of dovetails, substantially in the manner described.

3. A temper-screw having a box provided with dovetail grooves, in combination with removable screw-boxes having dovetails, substantially as described.

4. A temper-screw box having removable dovetailed screw-boxes fitting within dovetailed grooves, and hand-screws for holding the screw-boxes in place.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of August, 1881.

J. D. CAMERON.

Witnesses:

M. F. HALLECK,
D. L. LEWIS.