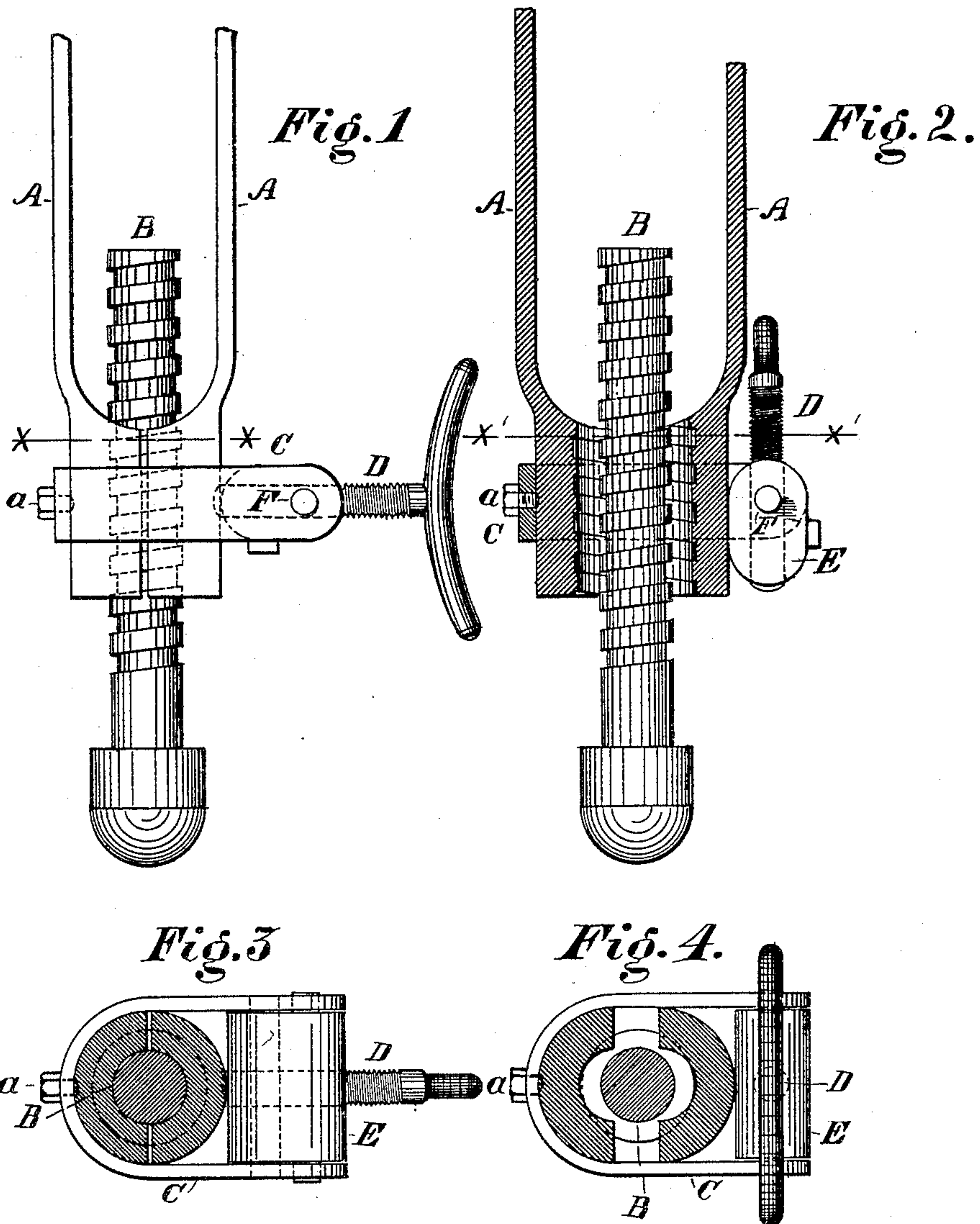


(No Model.)

E. T. SUTLEY & W. H. NICHOLSON.
TEMPER SCREW.

No. 467,866.

Patented Jan. 26, 1892.



WITNESSES

L. L. Little
H. Stevenson

INVENTORS:

Earnest T. Sutley
William H. Nicholson
By J. H. Stevenson Atty.

UNITED STATES PATENT OFFICE.

EARNEST T. SUTLEY AND WILLIAM H. NICHOLSON, OF WASHINGTON,
PENNSYLVANIA.

TEMPER-SCREW.

SPECIFICATION forming part of Letters Patent No. 467,866, dated January 26, 1892.

Application filed April 14, 1891. Serial No. 388,939. (No model.)

To all whom it may concern:

Be it known that we, EARNEST T. SUTLEY and WILLIAM H. NICHOLSON, citizens of the United States, residing at Washington, in the county of Washington and State of Pennsylvania, have invented or discovered a new and useful Temper-Screw, of which the following is a specification.

The object of our invention is a temper-screw for use in oil-well drilling, &c.

In the accompanying drawings, Figure 1 shows the frame closed about the screw. Fig. 2 shows the frame open about the screw, so that the latter may be passed through the former without engaging the same. Fig. 3 is a cross-section of Fig. 1, taken at the line $x\ x$; and Fig. 4 is a cross-section of Fig. 2, taken on the line $x'\ x'$.

A A represent the metallic frame of our temper-screw, being in two sections, and threaded so as to correspond with the thread cut on the screw B.

a is a bolt.

C is the yoke, which fits tightly around the frame A A, and in it is the bolt a to steady the same.

D is a set-screw passing through the cam E on pivots F. This cam is fixed in the yoke C. In Fig. 1 it will be seen that the set-screw has drawn the two sections of the frame A A tightly together, while in Fig. 2 these sections are released by changing the position of the cam E.

In drilling a well the screw B gradually works down through the frame A A as the

drilling progresses, and when the screw has gone about through, it is again passed up through the frame, the two sections being open, as seen in Fig. 2, for this purpose. To release the screw from the two sections of the frame A A, we have only to give the set-screw a turn to release it and then the screw D may be thrown up, as seen in Fig. 2. Without the use of this set-screw D and cam E much more time is required to release the screw B from the frame A.

Having thus described our invention, what we claim, and desire to secure by Letters Patent of the United States, is—

1. In a temper-screw, the frame fitted on the screw, the yoke around the frame, the bolt in said yoke arranged to bear against the frame, the cam pivoted in the yoke, and the set-screw operating longitudinally through the cam to bear on the frame, substantially as described.

2. In a temper-screw, the frame made in sections and fitted on the screw, a yoke surrounding the frame, the cam pivoted in the yoke and adapted to bear against the frame, and the set-screw in said cam, substantially as described.

In testimony whereof we have hereunto set our hands.

EARNEST T. SUTLEY.
WILLIAM H. NICHOLSON.

Witnesses:

JOHN H. CRATTY,
WM. P. RAPP.