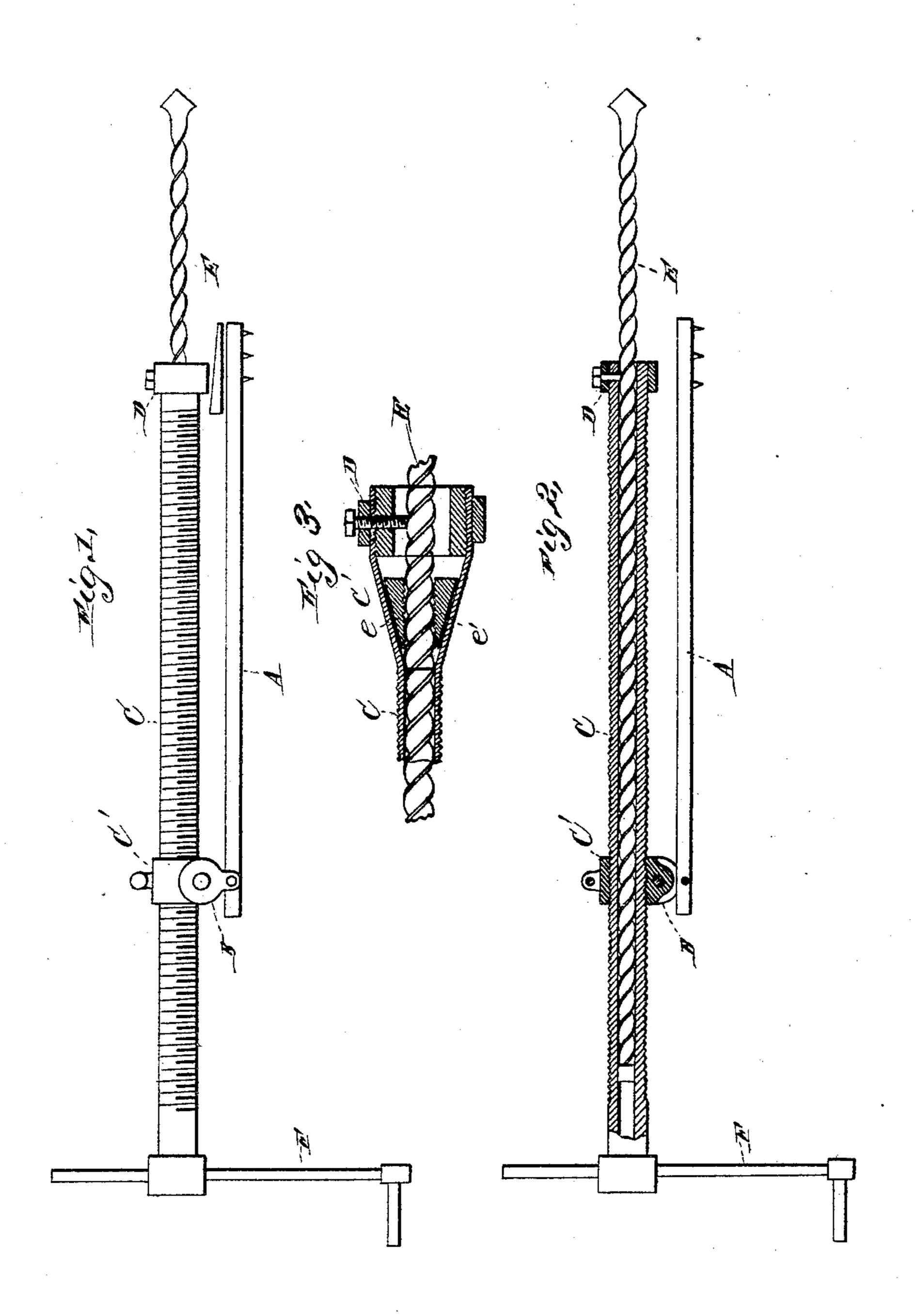
(No Model.)

W. BULLUCK. COAL DRILL.

No. 462,199.

Patented Oct. 27, 1891.



Chas Hong for, T Millellasi. INVENTOR
William Bulluck

BY

G.W. Anderson
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## United States Patent Office.

WILLIAM BULLUCK, OF CENTRALIA, PENNSYLVANIA.

## COAL-DRILL.

SPECIFICATION forming part of Letters Patent No. 462,199, dated October 27, 1891.

Application filed March 28, 1891. Serial No. 386,729. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BULLUCK, a citizen of the United States, and a resident of Centralia, in the county of Columbia and 5 State of Pennsylvania, have invented certain new and useful Improvements in Coal-Drills; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side view. Fig. 2 is a longitudinal sectional view. Fig. 3 is a sectional view of a modification.

This invention has relation to certain new and useful improvements in coal-drills; and it consists in the novel construction and combination of parts hereinafter described, and pointed out in the claim.

In the accompanying drawings, the letter A designates the drill-bar and wedge, which may be of any well-known form, hung in the

C is the drill-rod, which, instead of the solid screw heretofore used, consists of a gas-pipe threaded on the outside and having an aper-ture large enough to permit the passage therethrough of the drill, as shown, in which it is held by means of the clamp D. The pipe C works through the clamp or guide nut C', carried by the swing B.

F is the operating-handle. By this arrange- 35 ment when the rod E has been worked to the end of its screw the clamps C' and D may be loosened and the pipe slipped back on the drill, leaving the drill in the same position and thus practically doubling its length.

In Fig. 2 I have shown a special form of the holding-clamp D, wherein the pipe C is shown as swelled to form the conical section C', in which are inserted the tapering corrugated clamping wedges e e'. When these are 45 clamped against the drill, they will effectually prevent its turning.

This improvement may be applied to nearly if not all of the drills of this character now in use.

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

The drill mechanism comprising the hollow guide C, having the swelled conical section at 55 its lower end and the drill held therein and clamped by clamping wedges, said hollow guide having an external thread working in a threaded clamp-nut carried by the swing, and an operating-crank connected to the end 60 of said guide, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM BULLUCK.

Witnesses:

J. B. Lynch, James Madden.