(Model.)

C. J. CRONIN.

APPARATUS FOR USE IN CONNECTING AND DISCONNECTING DRILL RODS IN ARTESIAN WELLS.

No. 306,588. Patented Oct. 14, 1884.

Fig. 1.

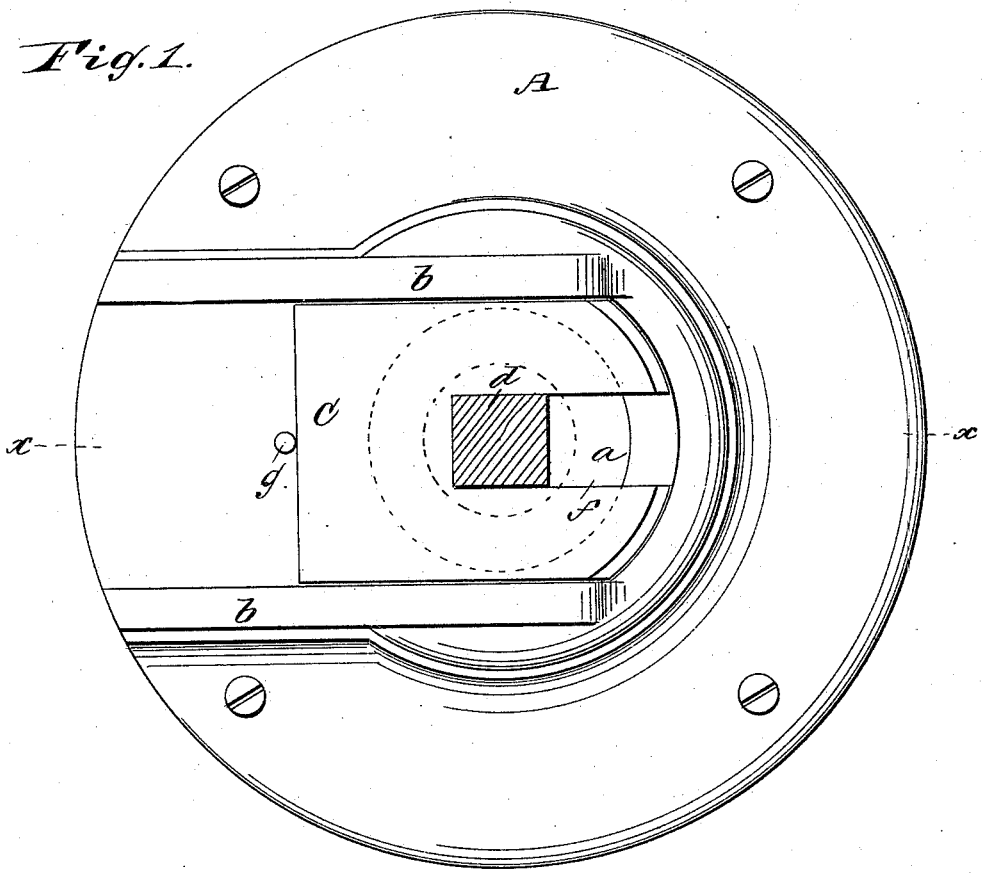
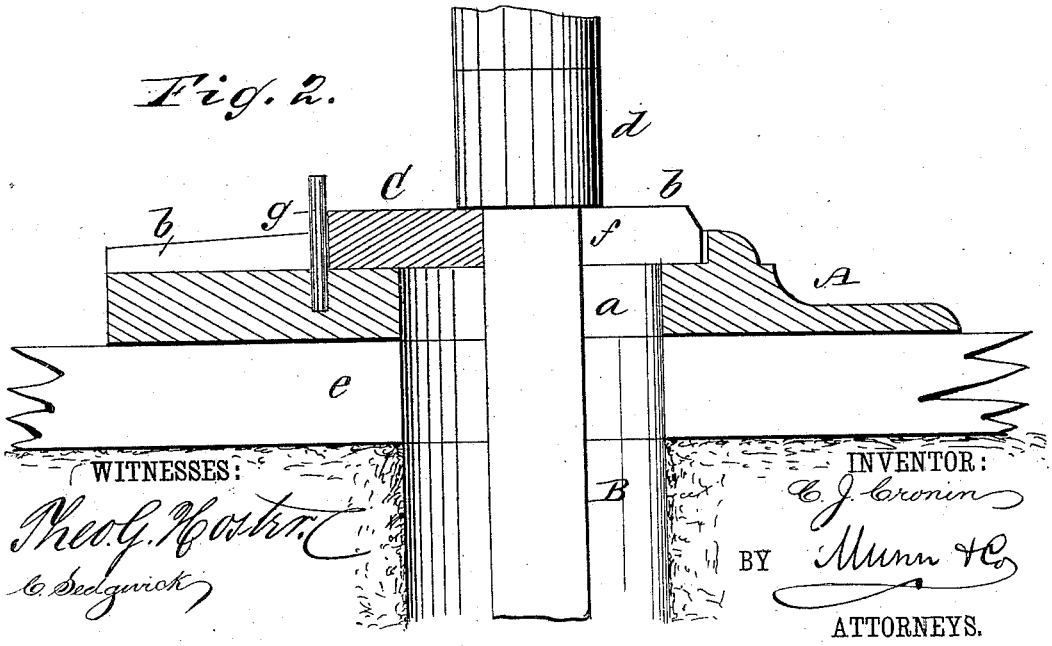


Fig. 2.



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CORNELIUS J. CRONIN, OF KNAPP'S CREEK, NEW YORK.

APPARATUS FOR USE IN CONNECTING AND DISCONNECTING DRILL-RODS IN ARTESIAN WELLS.

SPECIFICATION forming part of Letters Patent No. 306,588, dated October 14, 1884.

Application filed May 27, 1884. (Model.)

To all whom it may concern:

Be it known that I, CORNELIUS J. CRONIN, of Knapp's Creek, in the county of Cattaraugus and State of New York, have invented a new and Improved Apparatus for use in Connecting and Disconnecting Drill-Rods in Artesian Wells, of which the following is a full, clear, and exact description.

The object of my invention is to facilitate the work of connecting and disconnecting the drilling-tools at oil and other wells. The usual method is to use heavy wrenches placed one on the upper and the other on the lower shank of the joint, and turn them in opposite directions; but as the wells are generally eight or more inches in diameter the tools sway and the operation is laborious and inconvenient on account of the plunging about of the parts. With my improved devices a firm grip on the tool is got by means of a bed-plate and slide, so that they are held firmly while a single wrench is used to disconnect the joint, as hereinafter more particularly specified.

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

Figure 1 is a plan view of my improved apparatus, and Fig. 2 is a vertical section of the same as applied to a well.

A is the bed-plate, having an aperture, *a*, as large or larger than the conductor or well-hole B.

C is a slide fitted between guides *b b*, that are formed on plate A at the sides of the aperture and extending to the edge of the plate at one side. In slide C is an oblong slot, *f*, extending from one end to near the mid-length of the slide, and of a width to receive snugly the lower square shank of the tool *d*.

The bed-plate A is to be fastened down to mud-sills *e* or to the flooring by means of spikes or screws, and while the drill is in use slide C is to be drawn back or removed entirely. When tools are to be disconnected, they are raised until the joint is above the bed-plate, and the slide then slipped in place, so that the lower shank passes into slot *f*. In this position the tools are kept from turning, besides being held firmly, so that they cannot sway, and a wrench can readily be applied to the upper shank to unscrew the connection, leaving the tools supported by the slide. Connection can be make in the same manner and the slide then pushed back, so as to leave the tools free for work. A lever is to be suitably connected to the slide C, so that the operator can move it with his foot, and when moved inward the slide is held by a pin, *g*, inserted in plate A.

I prefer to make the plate of iron and the slide of steel; but they may be of any suitable material, and I do not limit myself to the special construction shown.

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

1. The apparatus consisting of bed-plate A and slotted slide C, combined for use at wells in connecting and disconnecting drilling-tools, substantially as described.

2. The combination of bed-plate A, provided with guides *b*, and slide C, provided with slot *f*, substantially as described, and for the purpose specified.

CORNELIUS J. CRONIN.

Witnesses:
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