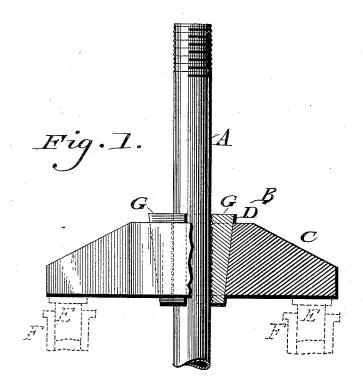
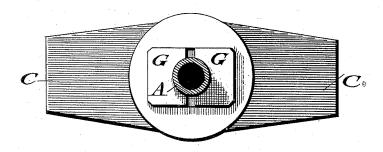
(No Model.)

## J. MUIRHEAD. PIPE CLAMP.

No. 456,769.

Patented July 28, 1891.





WITNESSES: O. Fr. Lagles. L. Douville.

ATTORNEY.

## UNITED STATES PATENT OFFICE.

JOHN MUIRHEAD, OF PITTSTON, PENNSYLVANIA.

## PIPE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 456,769, dated July 28, 1891.

Application filed December 16, 1890. Serial No. 374,912. (No model.)

To all whom it may concern:

Beit known that I, JOHN MUIRHEAD, a citizen of the United States, residing at Pittston, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in Pipe-Clamps, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a novel pipe-clamp, to substantially as hereinafter described.

It further consists of the combination of parts hereinafter set forth and claimed.

Figure 1 represents a partial side and partial sectional view of a clamp embodying my invention. Fig. 2 represents a top view of the device.

Similar letters of reference indicate corre-

sponding parts in both figures.

Referring to the drawings, A designates a pipe or other tubing used in drilling a hole in the ground, and B a clamping device adapted to grasp the same for abstracting or withdrawing it from said opening or hole.

The device B consists of a bar or block C, of greater length than breadth, having the central portions of its sides enlarged and provided with a central opening D, the walls of which are inclined and angular in horizontal section. The ends of the said bar are adapted to rest on the heads of the plunger E of the hydraulic jacks F, said jacks being of any usual construction.

G designates wedges having a corrugated or roughened inner face of semicircular form for contact with the pipe and outer inclined faces, angular in horizontal section for con-

tact with the bar C.

In using the device the block or bar C is placed on the pipe A with its ends resting on the plungers or pistons E of the hydraulic jacks. The wedges G are then inserted in the openings D on the sides of the pipe, so as to clamp or bind the latter firmly to the block. The hydraulic jacks are then operated, whereby the plungers E are raised, lifting the blocks C, thereby drawing the pipe out of the

ground. When the jacks have been operated to the extent of the plungers, the operation is stopped, and taps or blows are given upon the block C, which cause the same to become 50 disengaged from the wedges and pipe, so that it will drop along with the plungers, the wedges being disengaged from the pipe. The wedges are again inserted and the jacks operated for a further lifting of the pipe. During the dropping of the block and plungers the pipe is ordinarily held in place by its frictional contact with the sides of the opening from which it is being drawn; but if this is not sufficient any suitable support may be 60 used.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. A pipe-clamp consisting of a bar of 65 greater length than breadth and having a central vertical opening, the central portions of its sides adjacent to said opening being enlarged and rounded, and inclined wedges angular in cross-section, adapted to fit in opposite sides of said opening from the top thereof and tightly grasp an inserted pipe, the ends of said bar being adapted to loosely rest on means adapted to raise the same, said parts being combined substantially as described.

2. The combination of two hydraulic jacks with plungers, a block or bar having its ends adapted to rest on said plungers and provided with an opening, the side walls of which are inclined from top to bottom and angular 80 in cross-section, and wedges with inner corrugated concave faces adapted to grasp an inclosed pipe and outer faces inclined from top to bottom and angular in cross-section, coinciding with the side walls of the opening in 85 the bar, said parts being combined substantially as described.

JOHN MUIRHEAD.

Witnesses:

W. I. HIBBS, F. H. KYTE.