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JACK.

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## UNITED STATES PATENT OFFICE.

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## JACK.

952,130.

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To all whom it may concern:

Be it known that I, Oscar B. Mueller, a citizen of the United States, and a resident of New Rochelle, county of Westchester, and 5 State of New York, have invented certain new and useful Improvements in Jacks, of which the following is a specification.

My invention relates to improvements in jacks and is particularly adapted for use in connection with pipes into which it is de-

sired to force cleaning devices, etc.

In the drawings, I have shown a preferred form of my jack adapted for use in connection with pipe cleaning devices, in which—

Figure 1 represents my improved jack in position. Fig. 2 represents a view of Fig. 1 from the right, and Fig. 3 represents a view from the left of Fig. 1, showing my im-

proved jack.

In the drawings, A represents the bedplate of the jack having a lug A', through which bed-plate A the screw B is adapted to pass back and forth by rotation of the screw. In conjunction with this form of my 25 jack I preferably use a pipe fitting in which on the inner diameter of the lower part of the pipe there is an opening E into which the adjustable pin or lug D of the bed-plate A is adapted to rest. In the preferred form 30 of my invention, as shown in the drawings, I use a pipe fitting provided with an opening extending through half of its circumference, of sufficient length to introduce the jack and such other device as I desire, to 35 feed into the pipe line by means of the jack. The pipe fitting may be either a permanent part of the pipe line or a portion of the pipe line may be removed and the pipe fitting inserted. Where the fitting is a permanent part of the pipe line, I provide a suitable cover for the opening, so that fluid will pass through the pipe without escaping through the opening. At the top of the fitting I provide a shoulder H. On the under side 45 of the bed A of the jack I also provide lugs A<sup>2</sup> and A<sup>3</sup>, the object of lug A<sup>2</sup> being to hold the bed-plate from movement so that the adjustable pin D is prevented from coming out of the slot or cavity E. The lug A<sup>3</sup> 50 has at its farther end an opening through which the set screw F is adapted to pass so that when the bed-plate is in position, as shown in Fig. 1, and the set screw F screwed

into the position shown the bed-plate A is

55 immovable with relation to the pipe fitting

G. At the outer or upper end of the screw B I provide the square or rectangular portion B', the object of which is to permit of the use of a wrench as a means for rotating the screw B. At the upper end of the screw 60 B I provide the head B2 which may be of any desired shape but which in the drawings I have shown round. This head B may be used either with or without the ordinary cap, commonly used with jacks, as desired. 65 Mounted in the lug A<sup>2</sup> on the bottom part of the bed-plate I provide two adjustable screws I, I which in conjunction with the adjustable stud or pin D permits the adjustment of the bed-plate for different sizes 70 of pipe.

The operation of my improved jack is as follows: When the jack has been adjusted to fit, and placed in the pipe or pipe fitting, as shown, the pipe cleaning device or similar 75 apparatus which it is desired to insert within the adjacent section of pipe is placed in front of the head B2, and by means of a wrench mounted on the rectangular portion B' of the screw B, the screw is rotated so 80 as to force forward the head B2, thereby pushing the apparatus or cleaning device

into the pipe section as desired.

In the drawings, I have shown the preferred form of my invention but I do not 85 wish to be limited to the specific form shown as many modifications and changes might be made without departing therefrom.

What I claim as new and desire to secure

by Letters Patent, is:

1. In a jack, a bed-plate, means for holding said bed-plate in position, a movable member adapted to move substantially parallel to a pipe, and means for moving said member in relation to the bed-plate.

2. In a jack, a bed-plate, means for holding said bed-plate within a pipe fitting, a movable member for said jack, and means

for moving said member.

3. In a pipe fitting, a jack, a bed, means 100 for holding said bed in position within said fitting, and a movable member for said jack.

4. In a pipe fitting, an opening therein, a jack the movable member thereof adapted to move substantially parallel to the pipe, 105 and means for holding said jack in position.

5. In a pipe fitting, a jack the movable member thereof adapted to move substantially parallel to the pipe, and means for holding said jack in position.

6. In a pipe fitting, a bed-plate at an angle thereto, a movable member connected therewith adapted to move substantially parallel to the pipe, and means for moving said member.

7. In a jack, a bed-plate adapted to be adjusted to fit different sizes of pipe, means for holding said bed-plate within a pipe fitting, a movable member for said jack, and means

10 for moving said member.

8. In a jack, an adjustable bed-plate adapted to be adjusted to various sizes of pipe, and means for holding said bed-plate within a pipe.

9. In a pipe fitting, a jack, an adjustable bed, means for holding said bed within said fitting, and a movable member for said jack.

10. In a pipe fitting, a jack, means located within the pipe for holding said jack in position.

11. In a jack, a bed-plate adapted to be

fitted to various sizes of pipe, a movable member for said jack adapted to move substantially parallel to said pipe, and means for moving same.

12. In a jack, a bed-plate, a movable member for said jack, means for adapting said bed-plate to fit various sizes of pipe, so that said movable member may be retained in the center of said pipe.

13. In a jack, a bed-plate, a movable member for said jack, means connected with said bed-plate for holding same within pipes of

different size bore.

In testimony whereof, I have signed my 35 name to this specification, in the presence of two subscribing witnesses.

OSCAR B. MUELLER.

Witnesses:

CLINTON INGLEE, Jos. L. PIERCE.