Dec. 11, 1934. E. J. BROOKS 1,983,790

SEWER ROD BOOSTER

Filed Nov. 24, 1933

Fig. 1.

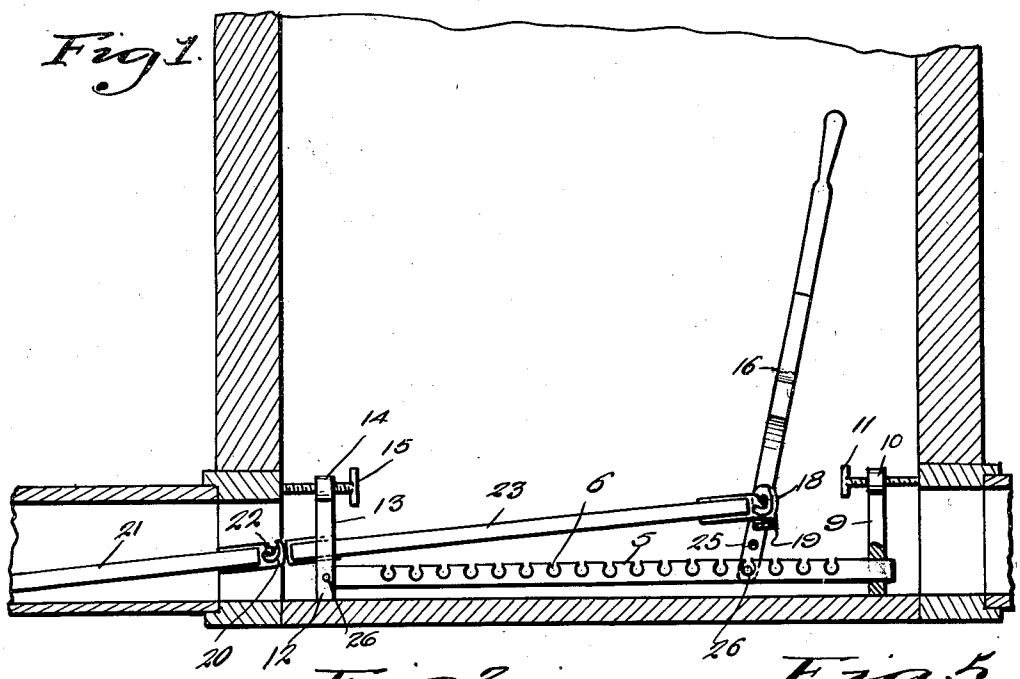


Fig. 3.

Fig. 5.

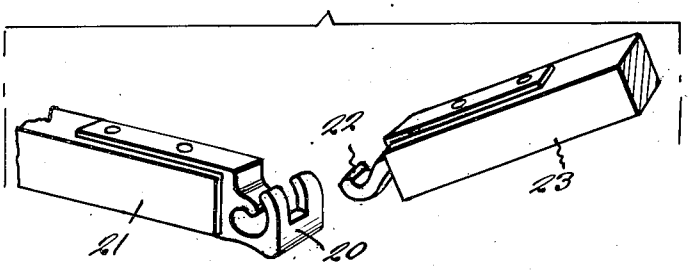


Fig. 4.

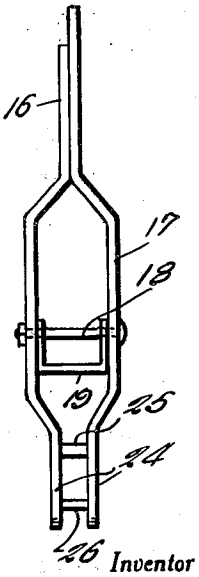
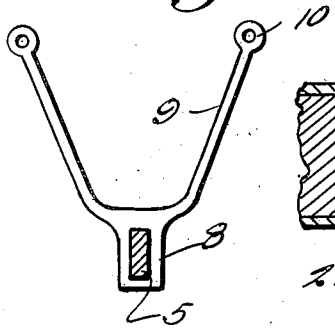
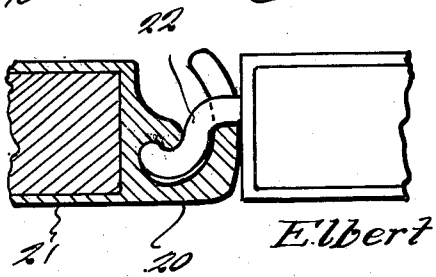


Fig. 2.





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SEWER ROD BOOSTER

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Application November 24, 1933, Serial No. 699,595

2 Claims. (Cl. 15—104.30)

The present invention appertains to new and useful improvements in actuating means for sewer cleaning rods.

The principal object of the present invention is to provide a booster which can be operated in an easy and convenient manner and which will afford step by step advancement of the rod line.

Another important object of the present invention is to provide a booster which can be more quickly assembled for use than those types now in use.

Other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawing:—

Figure 1 represents a vertical sectional view through a manhole showing the novel apparatus in place.

Figure 2 is a detail view on an enlarged scale, partly in section and partly in side elevation illustrating the coupling between two sewer rods.

Figure 3 comprises disconnected perspective views of the adjoining ends of sewer rods.

Figure 4 is a detail view taken at right angles to Figure 1 and showing the base bar and transverse section and showing in elevation the Y-shaped member that is not fixed to the base bar.

Figure 5 is a view at right angles to Figure 1 and showing only the lever and the saddle carried thereby.

Referring to the drawing wherein like numerals designate like parts, it can be seen that numeral 5 represents a bar having a plurality of openings 6 or notches equally spaced along one longitudinal edge thereof, each opening being provided with a narrow inlet throat 7.

One end of the bar 5 is snugly disposed in the depending portion 8 of the Y-shaped member 9 which is provided with internally threaded heads 10—10 at the upper ends of its arms through which the set screws 11 are feedable.

At 13 is a Y-shaped member having a depending portion 12 which receives and is fixed at 26 to the opposite end of the notched bar 5 and the arms of the upper ends of this member 13 are provided with interiorly threaded enlargements 14 through which the set screws 15 are feedable. With the bar 5 in the position shown in Figure 1, the set screws 11 and 15 are fed through the enlargements 10 and 14, respectively, to bind against the bottom portion of the manhole wall.

Numeral 16 represents the actuating lever which is provided with a frame-like portion 17 at its lower portion across which the bolt 18 is removably disposed and this bolt supports the U-shaped saddle 19 which supports the hook end 20 of the primary sewer rod 21. The remaining rod sections are connected together by a conventional type of coupling generally referred to by numeral 22, as shown in Figures 2 and 3, the rod sections being denoted by numerals 21—23. One of the bars included in the handle portion of the lever is extended above the other bar, by preference, as shown in Figures 1 and 5.

The lower portion of the frame 17 is constricted and provided with a pair of depending leg portions 24—24. The leg portions are connected at their upper ends by a member 25, while a pin 26 bridges the legs adjacent their lower ends and this pin 26 is seatable selectively in the notches 6 of the bar 5.

It can now be seen that with the device positioned in the manner shown in Figure 1, the lever 16 is started toward the left end of the bar 5 (as shown in Figure 1) and as advancement is necessary, the pin 26 can be engaged step by step with the notches 6 and in this way advancement can be made.

At all times, the lever will be free to operate.

Incidental to the installation of my novel apparatus, the Y-shaped member 9 is moved on the bar 5 to fit the apparatus to the particular manhole in which the apparatus is to be operated, and as soon as pressure is applied on the screws complementary to the member 9, the said member 9 clamps the bar 5 and the latter is securely held in the desired position, it being understood that the screws complementary to the member 13 bear against the opposite portion of the manhole as shown in Figure 1. The screws complementary to the two members 9 and 13 are adjustable to the rough manhole walls and afford a four point anchorage that precludes rolling of the bar 5. The Y-shape of the members 9 and 13 and the mounting of the screws in the ends of the arms thereof is also advantageous inasmuch as the screws are enabled to engage the masonry wall of the manhole at points not aligned with the sewers. The notches 6 in the bar 5 characterized by the contracted mouths 7 are advantageous inasmuch as they are calculated to hold the lever in engagement with the bar 5 and to enable the operator to pull as well as push sewer rods in an efficient manner through the medium of the lever. When the lever 16 is attached to a sewer rod coupling member, Figure 1, the lever may be advanced or moved in the opposite direction together with the sewer rod by simply lifting the lever out of the notch in the bar 5 and placing the lever in

another notch or opening of said bar 5, this being done without disconnecting the sewer rod from the lever. By comparison of Figures 1 and 5 it will be noted that the saddle 19 is mounted in the open portion of the lever 16, and the pin 18 carried by the lever is engaged with the rear coupling of a sewer rod, said coupling or coupling member resting in and on the saddle and the construction being such that the connection of the coupling member to the lever may be expeditiously effected without removal of the pin 18 of the lever. As shown in Figure 3 the bill of the coupling member 20 is bifurcated to receive a tongue on a complementary coupling member, the tongue being designated by 22, and the coupling 20 is provided opposite the bifurcation in its bill with a projection under which the tongue 22 of the other coupling member is adapted to engage. The Y-shaped member 13 fixed to the bar 5 in the manner shown or in any other appropriate manner is stationary and affords a shoe for the sewer rods to slide on as they are pushed into the sewer.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

What is claimed is:—

1. An apparatus for use in a manhole for the manual movement of a sewer rod or rods, comprising a base bar having openings with contracted mouths in its upper edge, Y-shaped members having divergent arms with threaded openings in their outer portions and screws bearing in said openings and adapted to be set against the masonry of a manhole to hold the base bar against rolling; one of said members being secured adjacent one end of the base bar, and the other member having an opening in its lower portion receiving the base bar, whereby said member when canted by action of its screws will be clamped to the base bar, a lever having a portion removably arranged in one of the openings of the base bar and also having an open intermediate portion, a saddle in said intermediate open portion of the lever and adapted to seat a coupling member on a sewer rod, and a cross pin connecting the saddle and lever and adapted to engage the coupling member of a sewer rod for the movement thereof by the lever, said saddle being pivoted on said cross pin.

2. An apparatus for use in a manhole for the manual movement of a sewer rod or rods, comprising a base bar, Y-shaped members having divergent arms with threaded openings in their outer portions and screws bearing in said openings and adapted to be set against the masonry of a manhole to hold the base bar against rolling, one of said members being secured adjacent one end of the base bar, and the other member having an opening in its lower portion receiving the base bar, whereby said member when canted by action of its screws will be clamped to the base bar, a lever fulcrumed on the base bar, and means establishing engagement between the lever and a sewer rod whereby rocking of the lever will be attended by endwise movement of the sewer rod.

ELBERT J. BROOKS.