No. 839,638. PATENTED DEC. 25, 1906.

W. M. PRICE.

PIPE HOLDER.

APPLICATION FILED MAY 8, 1906.

Fig. 1.

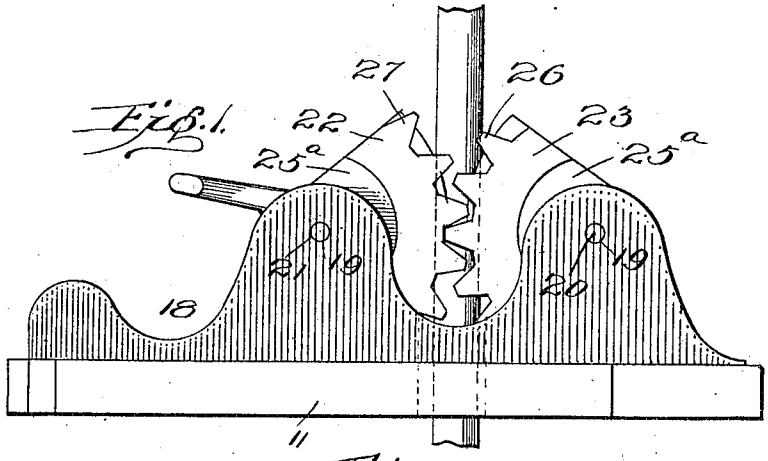


Fig. 2.

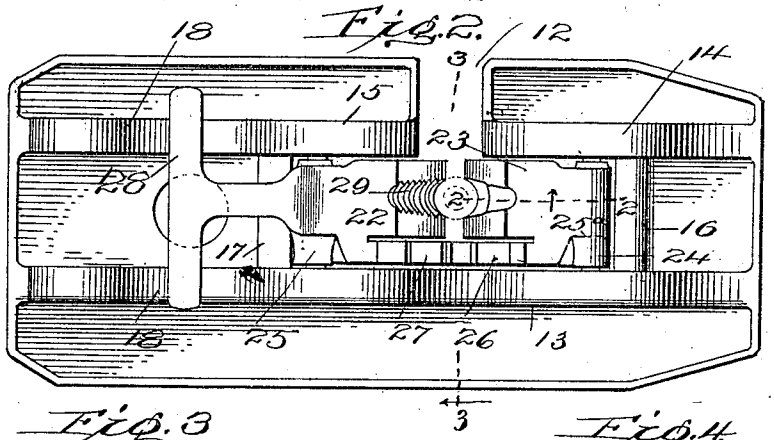


Fig. 3

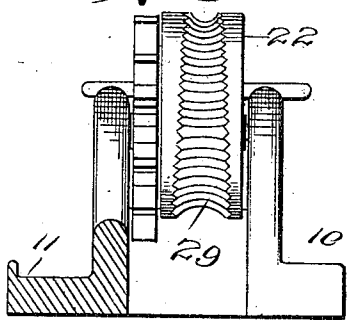


Fig. 4.

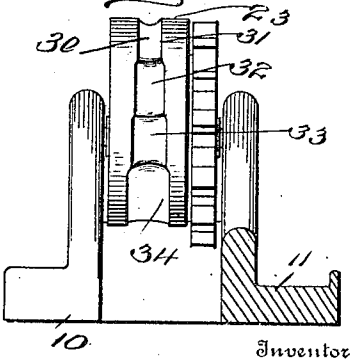
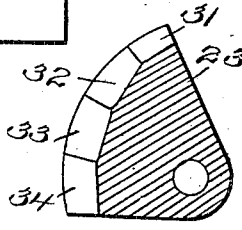


Fig. 5



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WILLIAM M. PRICE, OF OSHKOSH, WISCONSIN.

PIPE-HOLDER.

No. 839,638. Specification of Letters Patent. Patented Dec. 25, 1906.

Application filed May 8, 1906. Serial No. 315,839.

To all whom it may concern:

Be it known that I, WILLIAM M. PRICE, a citizen of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented new and useful Improvements in Pipe-Holders, of which the following is a specification.

My invention relates to pipe-holders, and has for an object the provision of a pipe-holder embodying two curved pivoted jaws adapted to automatically engage the pipe to be held.

A further object of the invention is to provide a pipe-holder with curved pivoted jaws, the pipe-engaging faces of which are grooved, so as to adjust themselves to grasp pipes of different diameters.

A further object of the invention is to provide a pipe-holder either of whose grooved jaws is formed with concaved semicylindrical surfaces adapted to permit of flat engagement of said jaw with the pipe being held, while the grooved surface of the other jaw is corrugated, so as to permit of its firmly gripping the pipe and binding it tightly against one of the flat surfaces of the opposite jaw.

A still further object of the invention is to provide a pipe-holder of the class described with grooved surfaces, said grooves being tapered, so as to permit of their engaging pipes of different diameters.

With these and other objects in view the invention consists of certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter more fully described and claimed.

In the drawings, Figure 1 is a view in side elevation of one embodiment of my invention. Fig. 2 is a top plan view of the same. Fig. 3 is a cross-section taken on the line 3 3 of Fig. 2 looking in the direction of the arrow. Fig. 4 is a cross-section taken on the line 3 3 of Fig. 2, but looking in the direction opposite that taken in Fig. 3. Fig. 5 is a detail section of one of the pipe-engaging jaws, taken on line 2 2 of Fig. 2 looking in the direction of the arrow.

Like characters of reference designate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, 10 indicates the base or carriage as a whole, which carriage may be of any preferred construction. The carriage shown consists of a rectangular bottom 11, cut away, as at 12, to permit of the ready introduction of the pipe to the pipe-gripping jaws, as will be hereinafter explained. Mounted upon the bottom 11 are upright supports 13, 14, and 15, the upright 13 extending the entire length of the bottom 11, while the upright 14 extends from one end of said bottom to where it is cut away at 12, and the upright 15 extends from the opposite end of said bottom to where it is cut away. Braces 16 and 17 connect uprights 13 and 14 and 13 and 15, respectively, to add strength to the device as a whole, and uprights 13 and 15 are so cut away, as at 18 18, as to permit of the free swinging of the operating T-shaped treadle 28 to be hereinafter described. The uprights are perforated, as at 19 19, to serve as bearings for the axles 20 and 21, upon which are pivoted the curved pipe-engaging jaws 22 and 23 now to be described.

Jaw 23 is of the same general conformation as its fellow jaw 22; but the groove 33 on its pipe-engaging surface is formed with concaved semicylindrical surfaces 31, 32, 33, and 34, which are adapted to flatly engage different sizes of pipe and hold such pipe securely against downward vertical movement. The concaved semicylindrical surfaces are positioned at such an angle with respect to the pivotal point of the jaw 23 as to present an elongated contact-surface, which is adapted to snugly fit and contact throughout the entire surface thereof with various sizes of pipes being gripped. The weight of the jaws will automatically bring into position the particular sized concaved surface that is necessary for gripping any pipe that may be operated upon.

In use the operator by exerting pressure upon the treadle 28 directly or through one of the ends of the T portion of the treadle causes the jaw 22 to move about its axle, and in so moving the cogs of the gear 27 engage the cogs of the gear 26 and cause jaw 23 to simultaneously move about its axle, thus bringing the pipe-engaging surfaces of said jaws to their uppermost and widest position. The treadle 28 is preferably formed with a T or cross-arm on its outer end, as clearly seen in Fig. 2 of the drawings. The operator may operate the jaws either by directly exerting pressure on the end of the treadle or on one of the cross-arms or T portions of the outer end. If the pressure is exerted on one of the arms, the operator may operate the jaws from either side of the device, as the

arms or T portions extend to one side of the standards 13 and 15, and thus permit such operation. The pipe to be operated upon is then introduced between the jaws, the operator releases the pressure from the treadle, and the jaws will by gravity automatically lower themselves until the pipe is engaged firmly by the appropriate "perpendicular" of jaw 23 and the proper and corresponding portion of the corrugated groove on jaw 22. It will readily be seen that with the pipe engaged flatly by one of the perpendiculars on jaw 23 and firmly pressed thereagainst and clutched by the corrugations on the cooperating jaw 22 the pipe will be positively held against a downward movement.

While I have shown and described my invention as embodying specific features, it will be obvious that certain changes may be made in the details of construction and operation without departing from the spirit of my invention.

What I claim is—

1. A pipe-holder comprising a base, upright supports mounted on said base, and curved opposing jaws of varying diameter pivotally mounted upon said supports and formed with grooves, one of said grooves being provided with transverse corrugations along its entire length and the other of said grooves being provided with concaved semicylindrical surfaces.

2. A pipe-holder comprising a base, upright supports mounted on said base, and curved opposing jaws pivotally mounted upon said supports, one of said jaws being provided with a groove of varying diameter and corrugations along its entire length, and the other of said jaws being provided with concaved semicylindrical surfaces of different sizes.

3. A pipe-holder comprising a base, upright supports mounted on said base, curved jaws provided with segmental coacting gears, said jaws being pivotally mounted on said supports, one of the same being formed with a groove of varying diameters and the other of said jaws being formed with concaved surfaces of different sizes for gripping pipes of varying diameters, and T-shaped means formed integral with one of said jaws for releasing said jaws, said means being adapted to be operated from either side of the base.

4. A pipe-holder comprising a base, upright supports mounted on said base, and curved jaws provided with segmental gears, said jaws being pivotally mounted upon said supports and formed with opposing grooves, one of said grooves being provided with corrugations along its entire length and the other of said grooves being provided with concaved semicylindrical surfaces.

5. A pipe-holder comprising a base, upright supports mounted on said base, and curved jaws provided with segmental gears, said jaws being pivotally mounted upon said supports and formed with opposing grooves of varying diameters, one of said grooves being provided with corrugations along its entire length and the other of said grooves being provided with concaved semicylindrical surfaces.

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

WILLIAM M. PRICE.

Witnesses:

H. B. VOSBURGH,

A. R. WATERHOUSE.