No. 742,656. PATENTED OCT. 27, 1903.

E. HORSEY.

HOSE CUT-OFF COMPRESSOR.

APPLICATION FILED JUNE 1, 1903.

NO MODEL.

FIG. 1.

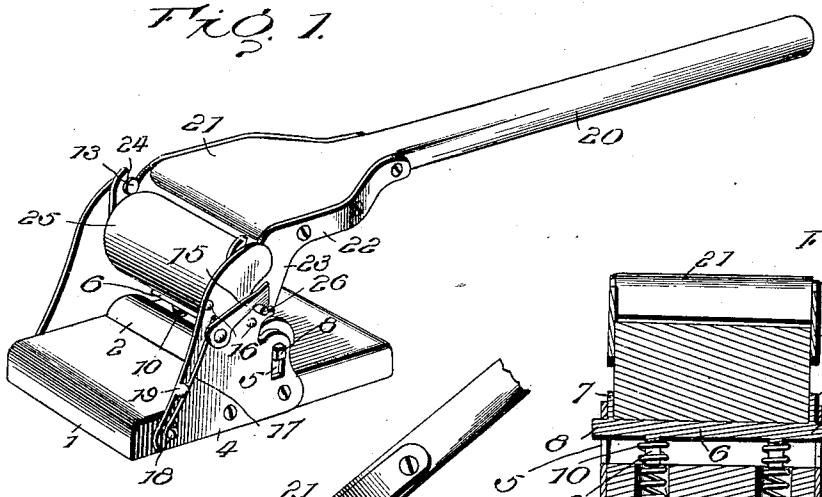


FIG. 4.

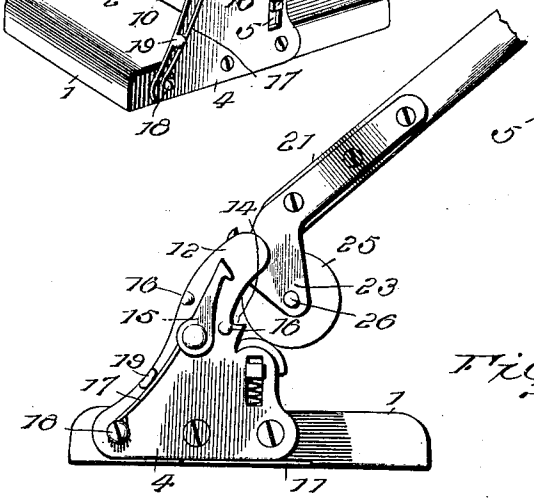


FIG. 2.

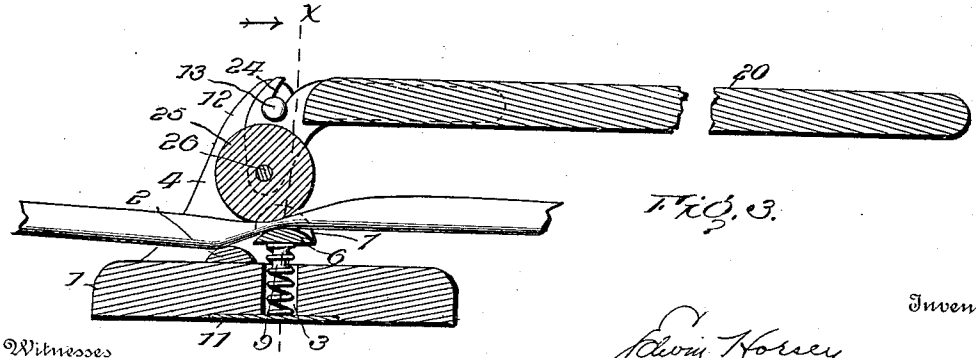


FIG. 3.

Witnesses

Harold Ewid

Inventor

Edwin Horsey

By Knight Bros

Attorneys

THE NORRIS-PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 742,656. Patented October 27, 1903.

UNITED STATES PATENT OFFICE.

EDWIN HORSEY, OF KINGSTON, CANADA.

HOSE CUT-OFF COMPRESSOR.

SPECIFICATION forming part of Letters Patent No. 742,656, dated October 27, 1903.

Application filed June 1, 1903. Serial No. 159,584. (No model.)

To all whom it may concern:

Be it known that I, EDWIN HORSEY, a subject of the King of Great Britain, residing in the city of Kingston, in the county of Frontenac, in the Province of Ontario, in the Dominion of Canada, having invented certain new and useful Improvements in Hose Cut-Off Compressors, of which the following is a specification.

This invention has for its object to compress a fire-hose transversely when necessary to replace a burst section in a line of hose in service to stop the flow of water therethrough and avoid having to close a hydrant serving other branches of the hose in connection therewith.

My invention consists of two sections which straddle the hose, both sections connected by fulcrum hooks and pins, one section having a base and a fixed or yielding compression-bar attached thereto and side arms or standards carrying fulcrum-pins and the other section having a hand-lever provided with a compression-roller, so that when both sections are connected and a line of hose between them the roller by manipulation of the lever will crush or flatten the hose, so that water cannot pass through it.

In the drawings, Figure 1 is a perspective view of the compressor embodying my invention. Fig. 2 is a side elevation of the same with the parts in position ready for use. Fig. 3 is a vertical section of the device, the parts being in locked position and a hose being shown in elevation clamped in the device. Fig. 4 is a transverse section on the line x x, Fig. 3.

1 is the base, of any approved outline, upon the upper face of which is rigidly secured a rounded projection or rib 2. Said rib may be formed integral with the base.

3 represents openings formed in the base, to be hereinafter referred to.

4 represents arms or standards secured to the sides of the box or base, said arms or standards being provided with an elongated slot 5.

6 is a compressor-bar, having a rounded upper face and provided with guards 7 on each end thereof, beyond which are projecting arms 8, which extend within the slots 5 of the arms 4, said compressor-bar being provided also with depending lugs or pins 9, around which is secured a coiled spring 10, one end of the coil-spring being seated against the bottom of the bar 6, while the other end is seated in the openings 3 in the base-block 1 upon a plate 11, secured to said base-block.

The arms 4 have upward extensions 12, inclined slightly forward and provided with pins 13, extending from their inner face. Said arms are provided with a notch 14, which serves as a journal-bearing, to be hereinafter referred to. 15 is a hook pivotally mounted on one of said arms 4 in a lower plane than the notch 14 and slightly back of the same, lugs 16 limiting the movement of the said hook.

17 is a spring secured to the arm 4 at one end by means of the screw 18, the other end of the spring bearing against the hook 15.

19 is a lug formed integral with the arm 4, under which the spring is passed, said lug forming the fulcrum of the spring.

20 is an operating-handle terminating in a flat broad end 21, to each side of which is secured a strap 22, having a depending portion 23 and a hook 24, said hook being substantially in the plane of the handle.

25 is a compression-roller journaled in the depending ends 23 of the straps 22, as clearly shown in the several views of the drawings. It will be seen from the drawings that the journal 26 of the compression-roller 25 projects beyond the depending ends 23 of the straps 22.

To assemble the parts, the handle 20 is elevated, as shown in Fig. 2, whereupon the hooks 24 are in a position to pass under the pins 13, and by depressing the handle 20 the weight of the handle and the compression-roller 25 is sustained by the compressor-bar 8 by reason of the engagement of the compression-roller therewith, as shown in Fig. 2.

When it is desired to insert a line of hose in the device, the handle and compression-roller are detached from the arms 4. The line of hose is then laid between the arm 4, whereupon the handle and compression-roller are attached to the arms 4, as above described, the lever 20 being rocked upon the pins 13, whereupon the compression-roller 25 rolls over the bar 6, and thus compresses the hose between it and said bar, as shown in Fig. 3.

The parts are locked in this position by snapping the hook 15 over the journal 26 of the compression-roller 25, the extended ends of the journal being seated in the notch 14 of the arm 4, as shown in Fig. 1. While the parts are in this position the flow of water through the hose is stopped and the broken section of the line of hose may be removed and a new section substituted. When the hose is compressed, the depending pins 9 enter the openings 3 in the base-block 1, as clearly shown in Fig. 3.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent—

1. A hose shut-off compressor, comprising two connecting sections, one section consisting of a base-plate, a yielding compression-bar and fulcrum side arms provided with pins, and the other section consisting of a hand-lever, journal-bearing plates secured to said lever and provided with hooks to engage said pins and a compression-roller journaled between said plates below the hooks, substantially as set forth.

2. In a hose shut-off compressor, the combination of two sections hooked together to straddle the hose, one section having a base with side arms and fulcrum-pins and a compressor-bar provided with a spring and guide-pins, and the other section a lever and roller, as set forth.

3. In a hose shut-off compressor, the combination of two sections adapted to straddle the hose and engage one another connectedly, one section comprising a base-plate, side arms with fulcrum-pins and a compressor-bar, and the other section comprising a hand-lever journaled to said side plates provided with hooks to engage said fulcrum-pins, the journals of said roller projecting to stop against said side arms of the base-section, whereby the lever when in use will be locked by the compressor-roller passing over the compressor-bar and the hose.

4. In a hose-compressor, the combination with the base-plate, arms extending upwardly from said plate and provided at their tops with inwardly-extending pins, a yielding compression-bar secured upon said base-plate, of a hand-lever having journal-bearing plates provided with a hook to engage said pin, and a compression-roller journaled between said plate.

5. In a hose-compressor, the combination with a base-plate, arms extending upwardly from each side thereof, pins extending inwardly from the upper ends of said arms, a notch formed in the edge of one of said arms and a hook pivotally mounted back of said notch on the arm in which said notch is formed, said arms being provided with elongated slots, and a compression-bar resiliently mounted upon the base-plate, arms extending from said bar, through the elongated slot of the arms of the base-plate, of a hand-lever having journal-bearing plates, a compression-roller journaled between said plates, hooks formed in the top of said journal-bearing plates, adapted to engage the inwardly-extending pins of the base-plate arm, and an extension formed integral with the journal of said compression-roller, adapted to be engaged by the first-named hook, whereby said extension is locked in the notch of the base-plate arms.

The foregoing specification signed this 21st day of May, 1903.

EDWIN HORSEY.

In presence of—
J. E. HOPKIRK,
S. J. HORSEY.