

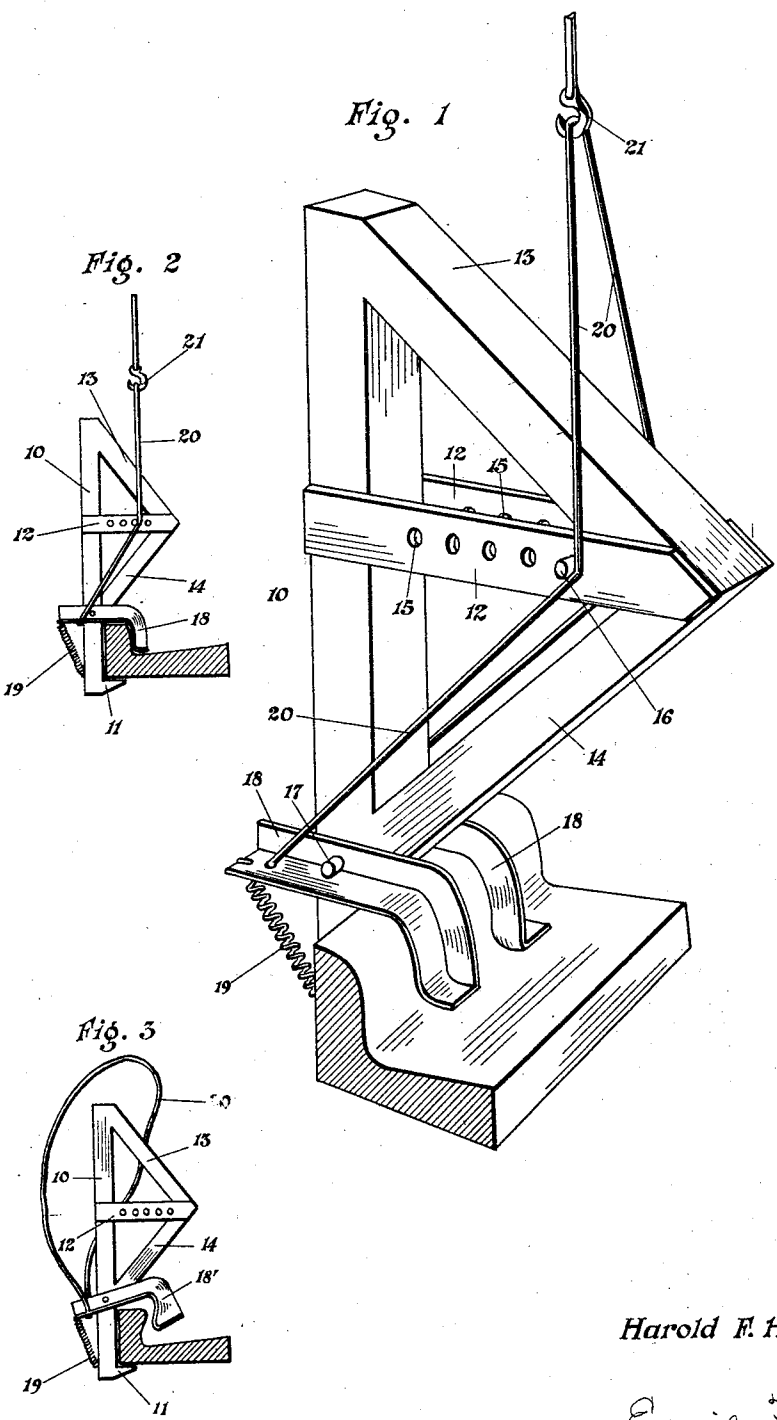
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CURB JACK

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CURB JACK

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My invention relates to curb jacks, its principal object being the provision of a jack for raising a section of curbing to grade so that the space underneath may be filled with sand or other filling material.

An object of the invention is the provision of a curb jack which will operate over the center of mass of the curb section to cause all parts of the curb section to be elevated equally and simultaneously.

Another object of the invention is the provision of an adjustable device for applying the lift at any one of several different points to be determined by the vertical center line of mass of the curb section.

Another object of the invention is the provision of a curb jack having interchangeable jaws for the various types of curbing.

Having in view these objects and others which will be pointed out in the following description, I will now refer to the drawing, in which

Figure 1 is a view in perspective of my curb jack.

Figure 2 is a view in side elevation of the same curb jack on a somewhat reduced scale, the curbing being shown sectioned.

Figure 3 is a view similar to Figure 2 but showing a modification in the pivoted jaw to adapt it to a different shape of curb.

The curb jack includes an upright 10 having a lower jaw 11 projecting inwardly therefrom. The standard 10 is preferably made tubular as by uniting two channel beams and welding them at the meeting edges. The two arms 12 project inwardly, they being welded or otherwise secured at their outer extremities to opposite faces of the standard 10. These arms 12 are braced by means of braces 13 and 14 which are united at their inner extremities into the form of a V. The arms 12 are each provided with a plurality of apertures 15, the apertures of the two arms being in alignment with each other for the reception of a pin 16.

The standard 10 is provided with a transverse aperture at or near its junction with the brace 14. A releasable pin 17 passes through this aperture and also through the jaw members 18 on opposite sides of the

standard 10. As best shown in Figure 1 the jaw members 18 are each L-shaped in cross section and their form is such as to seat against the curb for which they are shaped. The jaw members 18 have movement on their pivot 17 but they are urged to open position by means of a spring 19 or other tension member which is connected to the jaw member 18 at its outer extremity and to the standard 10 at its lower extremity.

A cable 20 or other suitable flexible device is secured at its opposite extremities to the two jaw members 18. The two parts of the cable pass from their connections with the jaw members first outwardly and upwardly to the projecting end portions of the pin 16 and then upwardly to a hook 21 connected with a hoisting device.

Curbs are made in various types of shoulders but the curb jack as above described is easily adaptable to any curbing. The pivot pin is purposely made removable so that other jaws may replace the jaws 18 depending on the particular type of shoulder for the curb. As shown in Figure 3, the jaw 18' is shaped to conform to the shoulder of the curbing there shown.

In use, the curb jack is placed in position by first excavating at the side of the curbing, this being preferably done with a tiling shovel. The excavation need be only large enough to admit the jaw 11 and the bottom portion of the standard and it must be only deep enough to allow the jaw 11 to enter the space underneath the curbing. The pivoted jaws must conform to the shape of the shoulder of the curbing. The pin 16 is adjusted so that it will be substantially in the center line of mass of the curbing. Any suitable hoisting device is employed, this being placed preferably at the side of the pavement. Lifting power applied through the hook 21 will be transmitted through the cable 20 at the point 16 to lift the curbing uniformly so that it will be in horizontal position throughout its lifting movement. The lift ordinarily is but a few inches in order to bring it to grade. After the curbing has been lifted to grade it is held in that position while any suitable filler material such as sand is forced

into the space underneath the curb section. After the space has been filled the lifting power through the hook 21 is released whereupon the jack may be placed in position to perform the same operation with another section of curbing to be lifted.

The cable 20 enters not only into the lifting action but it also moves the pivoted jaws 18 to curb engaging position. Any tension on the cable 20 is transmitted directly to the jaws 18 to cause these jaws to close down on the shoulder of the curbing. When the tension on the cable 20 is relaxed, the spring 19 moves the jaw 18 to its open position for releasing the engagement of the jaw with the curb.

Having thus described my invention in such full, clear, and exact terms that its construction and operation will be readily understood by others skilled in the art to which it pertains, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A curb jack having a pair of jaws for engaging the curb, and means for applying lifting power in the vertical center line of mass of the curb section to be lifted and for simultaneously actuating said jaws into clamping engagement with the section of the curb to be lifted.

2. A curb jack having a pair of jaws for engaging the curb, and means for applying lifting power in the vertical center line of mass of the curb section to be lifted, said means including an adjustable abutment on said jack for adjustment into the vertical center line of mass of any of the various types of curbing.

3. A curb jack having a pair of jaws for engaging the curb, one of said jaws being movable to curb engaging position, and means for applying lifting power in the vertical center line of mass of the curb section to be lifted, said means including a cable having a connection with said movable jaw for moving said movable jaw to curb engaging position.

4. A curb jack having a pair of jaws for engaging the curb, one of said jaws being pivotally movable to jaw opening or closing position, an abutment in the center line of mass of the curb section to be lifted, and a cable secured to said pivoted jaw and passing underneath said abutment whereby upward movement of said cable will cause said pivoted jaw to move to curb engaging position and then lift the curb section with the center of lift in said abutment.

5. A curb jack having a pair of jaws for engaging the curb, one of said jaws being pivotally movable to jaw opening or closing position, an abutment in the center line of mass of the curb section to be lifted, said abutment being adjustable into the vertical center line of mass of the curb section, and

a cable secured to said pivoted jaw and passing underneath said abutment whereby upward movement of said cable will cause said pivoted jaw to move into curb engaging position and then lift the curb section with the center of lift in said abutment.

6. A curb jack having a pair of jaws for engaging the curb, one of said jaws being pivotally movable to jaw opening or closing position, an abutment in the center line of mass of the curb section to be lifted, a cable secured to said pivoted jaw and passing underneath said abutment whereby upward movement of said cable will cause said pivoted jaw to move to curb engaging position and then lift the curb section with the center of lift in said abutment, and yieldable means for normally urging said pivoted jaw into jaw opening position.

In testimony whereof I affix my signature.
HAROLD F. HOLTZ.