(No Model.)

H. VEDDER.

CLOTHES LINE TIGHTENER.

No. 589,877. Patented Sept. 14, 1897.

FIG. 1.

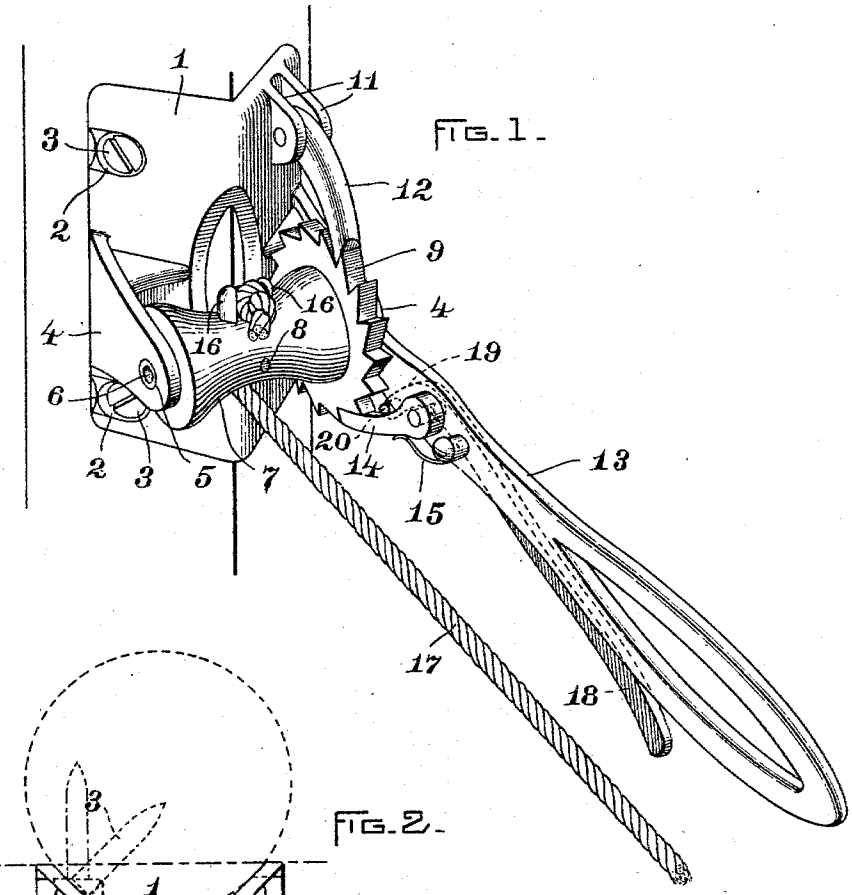


FIG. 2.

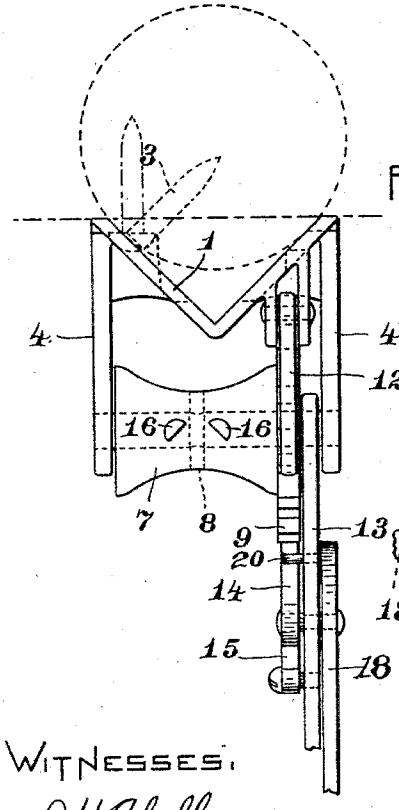
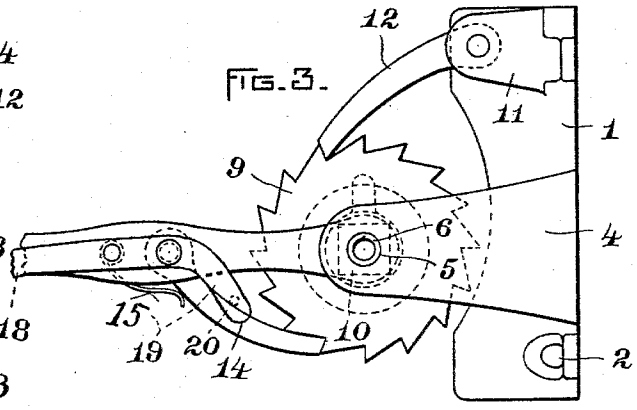


FIG. 3.



WITNESSES:

A. H. Abell.

M. M. Emerson.

INVENTOR:

Herman Vedder

By E. W. Cady

atty

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

UNITED STATES PATENT OFFICE.

HERMAN VEDDER, OF SCHENECTADY, NEW YORK.

CLOTHES-LINE TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 589,877, dated September 14, 1897.

Application filed April 22, 1897. Serial No. 633,313. (No model.)

To all whom it may concern:

Be it known that I, HERMAN VEDDER, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Clothes-Line Tighteners, of which the following is a specification.

This invention relates to devices for tightening clothes-lines, and has for its object to provide a clothes-line tightener by means of which a clothes-line may be easily and efficiently tightened, the device readily secured in position for use, and which will be durable and economical.

The invention consists in a clothes-line tightener constructed and arranged as hereinafter described and claimed.

Referring to the accompanying drawings, Figure 1 is a perspective view of a clothes-line tightener constructed in accordance with this invention and shown in position for use. Fig. 2 is a plan view thereof with the operating-lever broken away. Fig. 3 is a side view.

In the construction of this invention I provide a base so constructed as to fit and be secured to an angular or flat surface support.

1 is the base, of a V or angular shape to fit the corner of a building or an angular post and provided with means for attaching it, interchangeably, to an angular or flat surface—as, for example, by means of countersunk holes 2 in the sides of the base 1, through which can be inserted screws 3, either in a straight direction rearward to engage a flat or angular surface or straight through and at a right angle to each side of the base 1, the two positions being shown in dotted lines in Fig. 2. The base 1 is provided with the arms or brackets 4, preferably cast in one piece with the base 1 and each having a perforation 5, in which is inserted an end of the shaft 6 of a drum 7, to which the end of a clothes-line is secured and upon which the line is wound as it is tightened.

The drum 7 is secured to the shaft 6 by means of a pin 8, shown in dotted lines in Fig. 2, and extending through the drum and the shaft 6. The drum 7 is provided at one end with the ratchet-wheel 9, either formed in one piece therewith or secured thereto in any suitable manner. As shown, one end of the drum 7 is formed with a square boss or projection 10, as shown in dotted lines in Fig. 3, and the ratchet-wheel 9 with a transverse square opening which permits the ratchet-wheel to be firmly mounted on the projection 10.

Cast in one piece with the base 1 are ears or lugs 11, in which is pivoted a detent-pawl 12, arranged to hang down and rest upon and engage the ratchet-wheel 9 and prevent the drum 7 from turning back when the line is wound and tightened thereon.

To operate the drum, I provide a suitable lever 13 of considerable length, so as to be readily reached when the tightener is secured in an elevated position and also to afford a good leverage. The lever 13 is preferably loosely mounted on the shaft 6 to swing thereon and is formed with an eye or hole in its inner end, through which the shaft 6 extends. The shaft 6 is mounted in position and removed by forcing it through the holes in brackets 4 and a hole in drum 7, and is secured to drum 7 by forcing in the removable pin 8.

The lever 13 has pivoted thereto on its inner side a pawl 14, engaging the ratchet-wheel 9 and held in engagement therewith by a spring 15, mounted on lever 13.

By means of the foregoing construction the operation of the lever 13 causes the pawl 14 to slide over the teeth of ratchet-wheel 9 in one direction and to engage and operate the wheel 9 in the opposite direction.

The drum 7 may be provided with any suitable means for securing thereto the end of a line, and as here shown is provided with two pins 16, located at the center of the drum and adapted to engage a knot in the end of a line 17, as shown in Fig. 1.

The operation of the device will be readily understood. The line 17 requiring to be tightened, the lever 13 is reciprocated, and in its downward swings by the successive engagement of the pawl 14 with the successive teeth of ratchet-wheel 9 the drum is turned to wind the line and tighten it, the pawl 12 dropping behind each tooth of the ratchet-wheel as it revolves and holding the drum from turning backward. When it is desired to slacken the line 17, the pawls 12 and 14 are released from the ratchet-wheel 9, which

leaves the drum 7 free to turn and unwind the line.

In order to mechanically release the pawl 14 from the ratchet-wheel 9, there is preferably employed the lever 18, having the bent end 19, the lever 18 being pivoted on the outside of the lever 13 at the angle of the bent end 19 at the pivotal point of the pawl 14. The end of the bent portion 19 is provided with a pin 20, projecting laterally across the pawl 14, and the handle end of lever 18 normally stands off at an angle to the lever 13, so that when it is desired to release the pawl 14 the lever 18 is drawn toward the lever 13, which causes the pin 20 to release the pawl 14 from ratchet-wheel 9.

Having described my invention, I claim—

A clothes-line tightener, consisting of an angular base provided with means for securing it to an angular or flat support, a drum and ratchet-wheel mounted thereon, a detent-pawl engaging said ratchet-wheel, an operating-lever loosely fulcrumed on the drum-shaft and having an operating-pawl engaging the ratchet-wheel, and a lever mounted on the said operating-lever and having its handle adjacent to the handle of the latter, and engaging the operating-pawl to release the same, as set forth.

In witness whereof I have hereunto set my hand this 21st day of April, 1897.

HERMAN VEDDER.

Witnesses:
E. W. CADY,
H. ONDERKIRK.