No. 612,451. Patented Oct. 18, 1898.

E. ANDERSON.

DEVICE FOR SUSPENDING STOVE LID LIFTERS.

(Application filed Nov. 2, 1897.)

(No Model.)

Fig. 1.

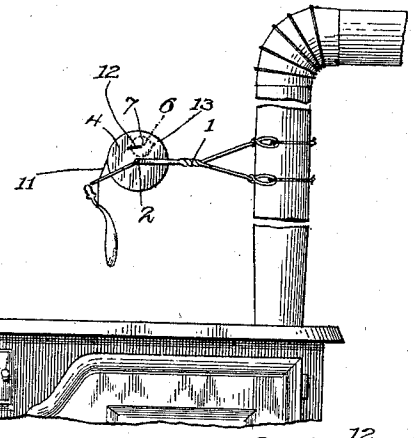


Fig. 2.

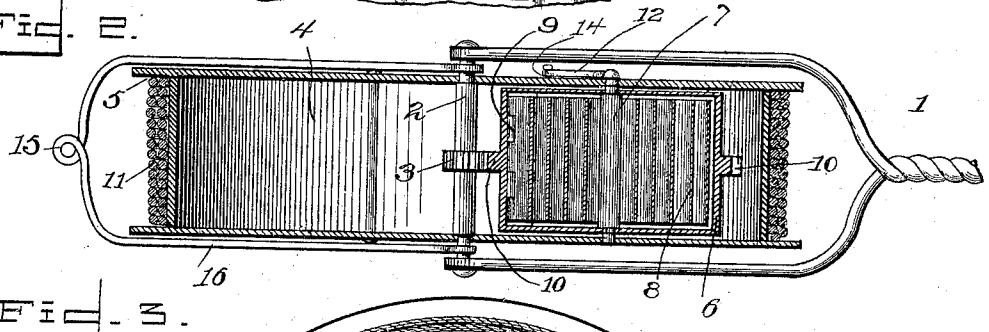
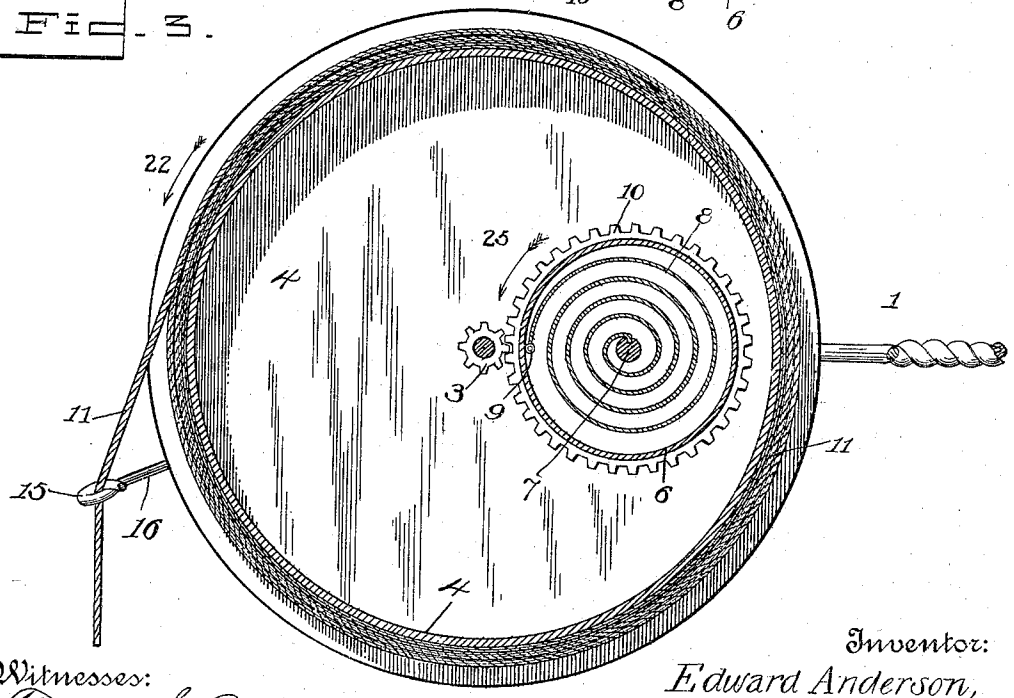


Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWARD ANDERSON, OF SUNDANCE, WYOMING, ASSIGNOR OF ONE-HALF TO J. F. C. ROBINSON, OF SAME PLACE.

DEVICE FOR SUSPENDING STOVE-LID LIFTERS.

SPECIFICATION forming part of Letters Patent No. 612,451, dated October 18, 1898.

Application filed November 2, 1897. Serial No. 657,176. (No model.)

To all whom it may concern:

Be it known that I, EDWARD ANDERSON, a citizen of the United States, residing at Sundance, in the county of Crook and State of Wyoming, have invented certain new and useful Improvements in Devices for Suspending Stove-Lid Lifters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to a device for suspending stove-lid lifters.

The object of the invention is to provide a device of this character capable of being supported above the stove either connected to the pipe, wall, or ceiling and adapted to suspend therefrom within convenient reach at all times the stove-lid lifter, whereby after the lifter has been used in removing a lid from the stove it will be automatically raised from the stove-lid and be within convenient reach of the person when it is again needed and will not be heated to such a degree as to burn the hands, as is the case with stove-lid lifters left engaged with the lid.

A further object of the invention is to provide means whereby the tension of the spring may be regulated so as to compensate for the lost tension due to the frequent use of the lifter, and, finally, to provide a device of this character which shall be simple of construction, durable in use, and comparatively inexpensive of production.

With these objects in view the invention consists of certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation illustrating the application of my invention. Fig. 2 is a transverse sectional view through the winding-drum and spring-barrel, and Fig. 3 is an enlarged sectional view taken at right angles to Fig. 2.

In said drawings, 1 denotes a bracket to the forked ends of which is rigidly secured a shaft 2, having fixed thereon a circular rack 3. This bracket may be secured to the stovepipe or any other suitable support; but, as shown in the accompanying drawings, it is illustrated as connected to the stovepipe.

4 denotes a winding-drum having a grooved periphery 5. This winding-drum is mounted upon the shaft 2 to rotate relatively thereto and carries within it a spring-barrel 6. This barrel is mounted upon a rotary shaft 7, journaled in the sides of the drum, and a coiled spring 8 has one end fixed to said shaft 7 and the other end to a stud 9, secured to the barrel. The barrel has upon its periphery a circular rack 10, adapted to engage the circular rack 3, hereinbefore mentioned, thus forming what is known in the art as a "sun-and-planet connection."

11 denotes a cord or rope which is wound around the drum and has one end connected thereto and the other end of which passes through an eye 15, formed in a wire bail 16, fixed to the shaft 2, and is adapted to be connected to the stove-lid lifter or other tool or device adapted to be raised.

In operation it is evident that when the cord is pulled downward the drum will be rotated in the direction of the arrow 22 and the spring-drum 6 will be rotated bodily about the circular rack 3 and axially about the shaft 7, thus winding up the spring in the direction of the dotted arrow 25. (Shown in Fig. 3.) When the cord is released, the spring, having been wound, will exert its energy and will move the barrel in directions the reverse to those just described, thus rotating the drum and winding up the cord.

The constant use or employment of the stove-lid lifter would soon tend to weaken the spring and render the device worthless, and in order to overcome this objection I provide a crank 12, which is connected to the ends of the shaft 7, by means of which the shaft may be rotated for the purpose of setting the spring—that is, for increasing its tension. The side of the drum may be provided with several indentations 13, adapted to receive a stud 14, carried by the crank, which seats in the indentations according to the adjustment of the spring, and thus holds the spring under the adjusted tension.

While I prefer to use the bracket shown, inasmuch as it is lighter in weight and less expensive to manufacture than the ordinary brackets heretofore used and may also be attached to the stovepipe, wall, or other de-

vice, I would have it distinctly understood that I do not wish to be restricted to the precise form, as I contemplate as coming within the scope of my invention any means whatever for supporting rotatably the drum.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination with a fixed shaft provided with a fixed circular rack, of a drum rotatably mounted upon said shaft and provided with a suspending-cord, a rotary shaft journaled in the sides of the drum, a barrel journaled upon said rotary shaft and free to turn independently thereof, said barrel provided with a circular rack to engage the rack on the fixed shaft, a spring, having one end connected to the rotary shaft and the other end to the barrel and a crank for adjusting the tension of the spring, substantially as set forth.

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

EDWARD ANDERSON.

Witnesses:
BENJ. E. COWL,
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