

No. 609,528.

Patented Aug. 23, 1898.

A. R. WILSON.

COAL HOD LIFTER AND BOX OR RECEIVER FOR SAME.

(Application filed July 12, 1897.)

(No Model.)

Fig. 1.

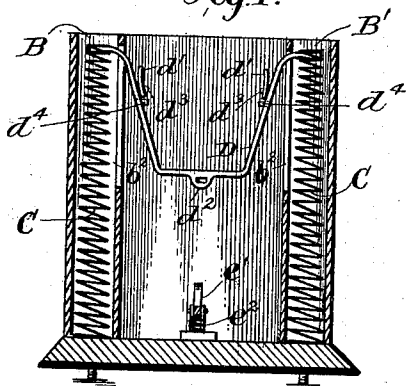


Fig. 2.

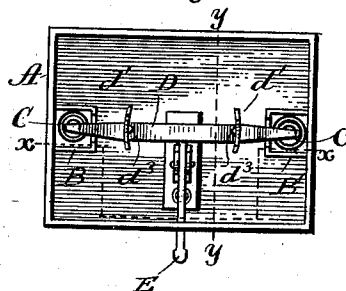


Fig. 3.

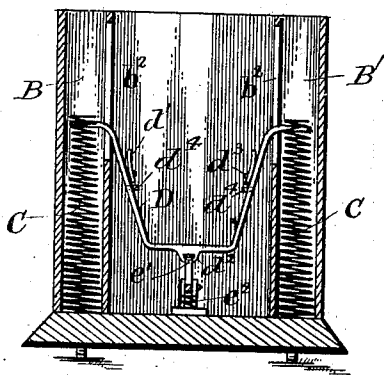
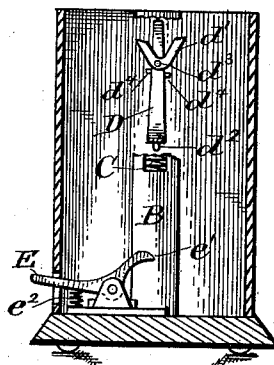


Fig. 4.



Witnesses

W. E. Bowen

Neil R. Perkins.

Inventor

Anna R. Wilson

By John F. Halsted & Son

her Attorneys.

UNITED STATES PATENT OFFICE.

ANNA R. WILSON, OF BRIDGETON, NEW JERSEY.

COAL-HOD LIFTER AND BOX OR RECEIVER FOR SAME.

SPECIFICATION forming part of Letters Patent No. 609,528, dated August 23, 1898.

Application filed July 12, 1897. Serial No. 644,326. (No model.)

To all whom it may concern:

Be it known that I, ANNA R. WILSON, of Bridgeton, in the county of Cumberland and State of New Jersey, have invented certain new and useful Improvements in Coal-Hod Lifters and Boxes or Receivers for the Same; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to means for automatically raising or readily lifting a coal scuttle, bucket, or hod from a box in which it may be placed beside the grate or stove, thus relieving young or delicate persons from the strain of lifting such heavy loads; also to means for holding the hod down in the box.

In the accompanying drawings, Figure 1 represents a vertical section, in the line xx of Fig. 2, of a box or case for receiving and holding the coal-hod and of its interior devices for holding the hod down in the same and also for releasing it that it may rise with its contained coal and be turned to discharge what is needed for the fire; Fig. 2, a plan of the box; Fig. 3, a section similar to Fig. 1, but with the hod-lifter and the springs pressed down as if by the weight of a hod of coal and automatically latched down in this position; and Fig. 4, a vertical section in the line yy of Fig. 2.

A represents a wooden or other box or frame. At two opposite sides within this box or frame may be placed from its top to bottom receptacles $B B'$, which may be of any desired form, to receive spiral springs $C C'$, which are made broader or with larger spirals at their base and which gradually diminish toward their upper ends, as shown. These springs when not compressed reach from the inside of the bottom or base of the box up to or nearly to its top.

The receptacles $B B'$ may be square or round tubes or merely uprights properly supported to be firm, and each has a vertical open slit or slot b^2 , extending as far as the spring can move when compressed or when expanded to its full limit. These slits are for the pur-

pose of admitting the ends of a lifter D , upon which the hod with its coal is placed. This lifter has two V-shaped or other curved ears $d' d'$ near its top, designed to receive the ears or other usual projections at the side of a hod.

The lifter D is preferably made of sheet metal, and its upper ends are narrowed and are secured to the top part of the springs by any suitable bending of these ends upon or in the springs. At the under side of this lifter is an eye d^2 or a hook adapted to be automatically caught and held by the hooked end e' of a spring-actuated lever-latch E , this hooked end being inclined or rounded off toward its point to insure the engagement of the eye upon it. The lifter D , suspended as it is from the tops of the springs, can also sway a little, if need be, so that its eye d^2 shall not fail to ride over the top of the hook and effect an engagement with it. This locking-latch has a spring e^2 , which normally presses upward the outer or exposed end of lever E , which end projects through the box, so that by the downward pressure of a person's foot the hook e' may be raised and instantly released from the eye d^2 to set free the lifter D in order that the coiled springs $C C$ shall force upward the lifter and the hod resting upon it. The ears d' are firmly riveted on pins d^3 , and these pins are held, as shown, in holes in the lifter D , but not so as to be tight therein. Thus the ears are free to swing a limited distance to assist in turning over a hod while still supported by the lifter sufficiently to empty coal from the hod into a grate, stove, &c.

It is advisable to have stops d^4 on the lifter to avoid the swinging of the ears d' too far around.

From the above it will be seen that upon placing a hod with its coal therein on the lifter D the weight, aided by a little downward pressure, if needed, will carry D down against the upward force of the springs $C C$ and that when the eye d^2 has gone down far enough the lifter is latched to and kept down by lever E . The hod is then hidden within the box, provided the top of the box be high enough, and the box may externally be made as ornamental as desired, suitable for parlors or any other rooms.

The box, while it may be cheaply made of

wood, may also be of sheet or other metal, and it may be of any shape in cross-section, such as square, round, oval, octagon, &c.

I claim—

- 5 1. A coal-hod box and lifter, having in combination, a box or case, a spring-supported lifter within the same adapted to hold a hod, and a spring-actuated foot-lever at the base of the box, adapted automatically to engage
10 with such lifter when the latter is lowered sufficiently, and thus to hold down the lifter, all substantially as set forth.

2. In combination with a box or case for a coal-hod, the lifter, springs for supporting
15 and lifting the same, the receptacles for such springs having vertical slits therein to allow the lifter to be lowered and raised, an eye on

the bottom of the lifter, and a latch at the base of the box normally held to place by a spring and adapted to engage itself with such eye, and provided with a projection extending through the box, pressure upon which serves to release the lifter and its hod or load to permit the same to rise automatically.

3. In combination with the box, its lifter
25 and lifter-springs, swing-ears on the lifter as described, serving to permit a hod or scuttle to be turned thereon, and a spring-actuated foot-lever at the base of the box as set forth.

ANNA R. WILSON.

Witnesses:

LORENZO B. ORR,
CHARLES HETZELL.