(No Model.) 2 Sheets—Sheet 1.

W. F. GREENE.

LIFTER.

No. 537,608. Patented Apr. 16, 1895.

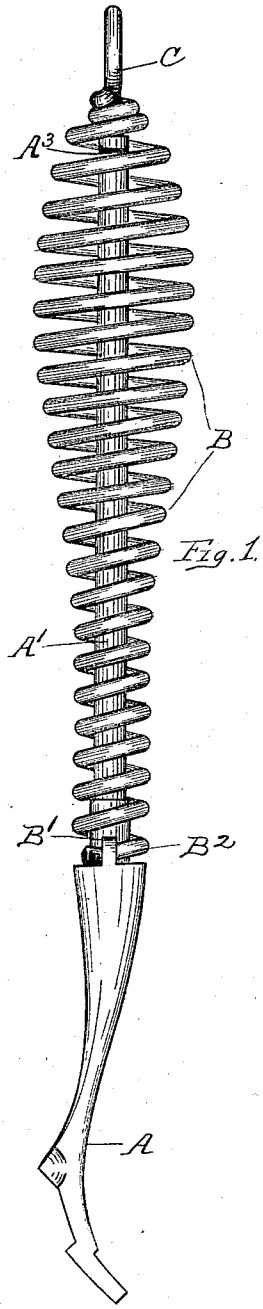

Fig. 1.

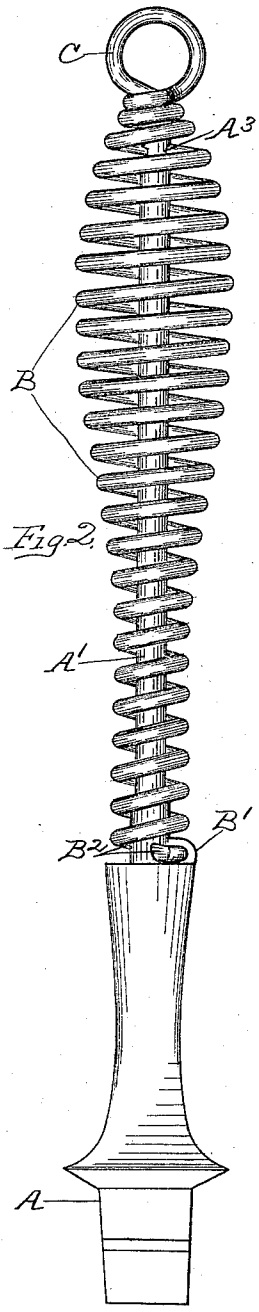

Fig. 2.

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G. H. Curtis
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William F. Greene
by Mosher & Curtis
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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

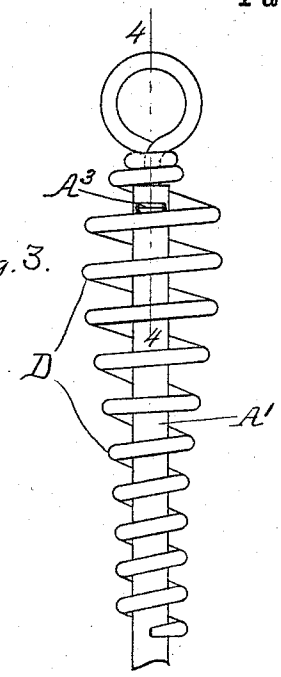


Fig. 6.

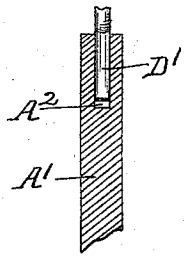


Fig. 5.

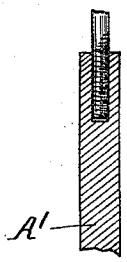
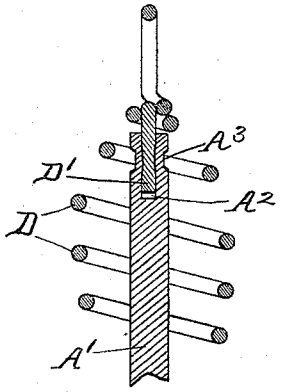


Fig. 4.



Witnesses:
G. H. Curtis.
D. Nolan

Inventor:
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UNITED STATES PATENT OFFICE.

WILLIAM F. GREENE, OF TROY, NEW YORK.

LIFTER.

SPECIFICATION forming part of Letters Patent No. 537,608, dated April 16, 1895.

Application filed December 18, 1894. Serial No. 532,156. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. GREENE, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Lifters, of which the following is a specification.

The invention relates to such improvements and consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is an edge view of the lifter. Fig. 2 is a side view of the same. Fig. 3 is a view similar to that shown in Fig. 2, exhibiting a modification. Fig. 4 is a central longitudinal vertical section taken on the broken line 4—4, in Fig. 3. Fig. 5 is a similar view of a portion of the device showing modification. Fig. 6 is a similar view showing the shape of parts during the process of construction.

The head A— of the lifter is provided with a handle-shank A'— preferably integral with the head. The outer end of the shank is provided with an aperture A^2— preferably concentric with the axial line of the shank and about half an inch deep.

B— is a coil of wire which incloses the shank, as shown, and forms a handle for the lifter. Each end of the coil is secured to the shank. To secure the inner end of the coil, I provide the shank with a side-projection or lug B'— having an aperture adapted to receive and fit the end of the wire on the inner turn B^2— of the coil. The aperture is so located that the end of the inner turn of the coil can be forced therein by a rotary movement of the coil on the shank. After the end is projected through the lug, it is secured therein by flattening or bending, or in any known manner, thereby securing the coil and preventing a rotary movement on the shank and a longitudinal movement of the inner end of the coil. As a means for securing the outer end of the coil to prevent its lateral movement relatively to the shank, I introvert the outer end of the wire which extends from the outer turn of the coil, and insert it in the aperture in the outer end of the shank.

When the coil is comparatively short and rigid, the outer end of the wire should be inserted in the shank-aperture before the inner end of the coil is secured to the shank. After the coil has been subjected to considerable heat in use about a hot stove, it loses considerable of its rigidity and unless the outer end is firmly secured to the shank, the inserted end of the wire would have a longitudinal movement in the shank-aperture and possibly be wholly withdrawn in use. To avoid such a contingency and provide the coil with the desired stability, I fasten the inserted wire within the end-aperture in the shank by pinching the shank until the aperture walls are closed upon and grip the inserted wire with sufficient force to retain the inserted end in a fixed position relatively to the shank, as shown at A^3—.

The shank may be pinched by a press or by blows upon a suitable tool or in any known manner.

I also provide a loop C— for supporting the lifter upon a nail or similar support, when not in use.

I am able to form the loop, coil and inserted end all from a single integral wire. The loop connects the outer turn of the coil with the inserted end, which end is passed through the outer turn and inserted in the shank-aperture within the coil, as shown.

As shown in the drawings, the outer turn is made very small, its inner diameter being approximately the same as the diameter of the wire, so that the outer end of the coil is supported laterally by that part of the wire between the outer end of the shank and the loop, and does not come in contact with the shank which is much larger in diameter than the wire, and being integral with the lifter head acquires a high temperature.

The relatively small mass of metal in the wire does not store up so much heat that the hand of the operator cannot safely absorb it, whereas if the coil itself was in contact with the larger shank, sufficient heat might be conducted directly therefrom to burn the hand of the operator.

When desired, the end of the wire may be

screw-threaded and the shank-aperture tapped to receive and fit such threaded end when screwed therein, as shown in Fig. 5.

My invention is applicable to stove-pokers or other implements exposed to excessive heat when in use.

In Figs. 3, 4, and 6, D— is the handle coil, and D'— the introverted outer end of the wire.

By inserting the outer end of the wire in a central aperture in the end-face of the handle-shank, so that the wire projects from the end-face aperture in line with the longitudinal axis of the shank, I am able to make a strong and durable connection between the outer ends of the shank and coil, which precludes the possibility of relative lateral movement in any direction.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a lifter for stove-covers, the combination with the handle-shank having a central aperture in its end-face, and an aperture in a side face, of a shank-inclosing coil of wire having the ends of the wire forming the coil secured respectively in the shank-apertures, the wire projecting from the end-face aperture in line with the longitudinal axis of the shank, substantially as described.

2. In a lifter for stove-covers, the combination with a handle-shank having a central aperture in its end-face, of a shank-inclosing coil of wire, a wire inserted through the outer turn of the coil and secured in the end-aperture of the shank and projecting from such aperture in line with the longitudinal axis of the shank, and a wire loop integral with and connecting the inserted end and outer turn of the coil, substantially as described.

3. In a handle, the combination with a shank having a central aperture in its end-face, of a shank-inclosing coil of wire, an introverted end of wire integral with the coil-wire extending from the outer turn of the coil into the end-aperture of the shank and secured therein, and projecting therefrom in line with the longitudinal axis of the shank, substantially as described.

4. In a handle, the combination with a metal shank having an end-aperture, of a shank-inclosing coil of wire having the outer end of the wire introverted from the outer turn of the coil and secured in the end-aperture of the shank by pinching the shank, whereby the aperture-walls are made to grip the inserted end and prevent its escape therefrom, substantially as described.

In testimony whereof I have hereunto set my hand this 4th day of December, 1894.

WILLIAM F. GREENE.

Witnesses:
GEO. A. MOSHER,
FRANK C. CURTIS.