A. HARCUM.

DEVICE FOR CRIMPING LAMP-CHIMNEYS.

No. 188,626. Patented March 20. 1877.

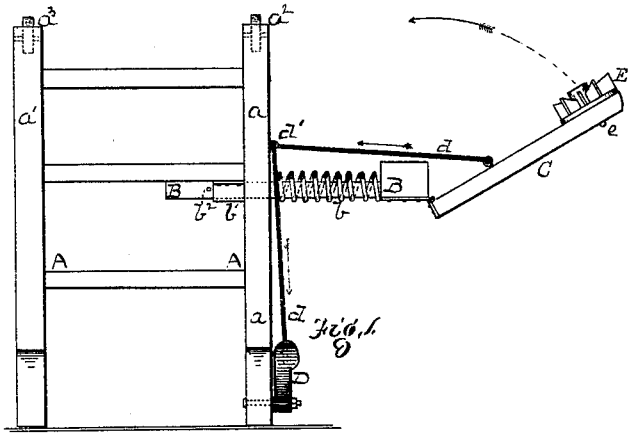

Fig. 1.

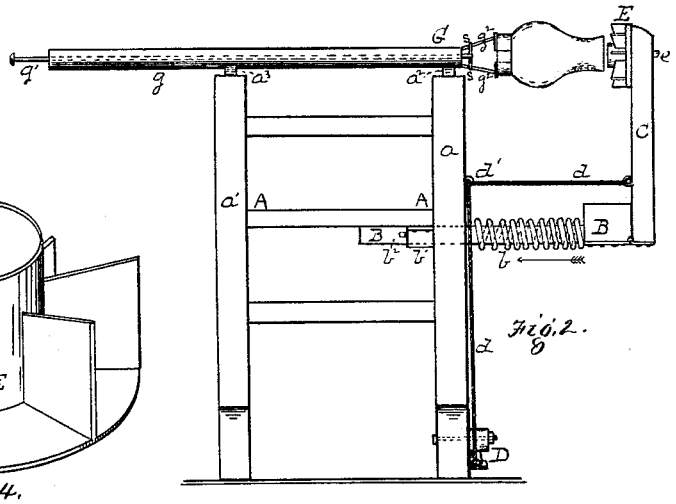

Fig. 2.

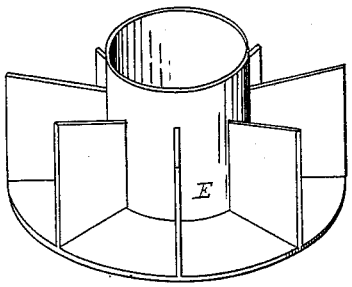

Fig. 4.

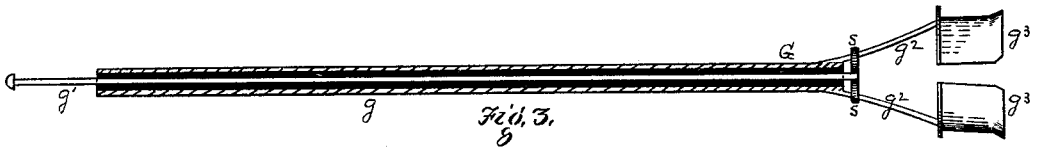

Fig. 3.

WITNESSES.
Robt Hand
Claudius L. Parker

INVENTOR.
Andrew Harcum,
by George H. Christy
his Atty

UNITED STATES PATENT OFFICE

ANDREW HARCUM, OF SCOTT TOWNSHIP, ALLEGHENY COUNTY, ASSIGNOR OF ONE-HALF HIS RIGHT TO JAMES LINDSAY & CO., OF PITTSBURG, PA.

IMPROVEMENT IN DEVICES FOR CRIMPING LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. **188,626**, dated March 20, 1877; application filed February 26, 1877.

To all whom it may concern:

Be it known that I, ANDREW HARCUM, of Scott township, in the county of Allegheny, and State of Pennsylvania, have invented a new and useful Improvement in Devices for Crimping Lamp-Chimneys; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a side elevation of my improved device for crimping chimneys, the hinged arm carrying the crimper being thrown back to allow of the flaring of the chimney. Fig. 2 is a side elevation with the crimping-arm in a vertical position, and nearly in contact with the flared end of the chimney to be crimped. Fig. 3 is a side elevation, partly in section, of my improved snap for holding or clamping the base of the chimney. Fig. 4 is a detached perspective view of the ordinary crimper used in my invention.

My invention consists in an improved apparatus for crimping lamp-chimneys, and also in an improved snap, by which the chimney is held during the flaring and crimping operation.

Like letters refer to like parts wherever they occur.

In the drawing, A represents the frame or stand to which the crimping device is attached. This frame may consists of two standards and suitable cross-pieces. On the top of the two standards *a* a^1 are friction-wheels a^2 a^3, on which the snap-tool rests during the operation of flaring and crimping.

B is a sliding arm, extending horizontally from the standard *a* of the frame A, and is provided with a spring or similar device, *b*, which causes the arm B to return to its primary position after it has been drawn in toward the frame A through the box or bearing b^1. b^2 is a stop, which prevents the arm B from being thrown out of the bearing b^1 by the spring *b*.

D is a lever or treadle, to which is fastened a strap or cord, *d*, which passes up from the treadle to the block, staple, or eye d^1, which block is fastened to the standard *a* of the frame A. The cord thence passes in nearly a horizontal line to the arm C, which is hinged to the outer end of the spring-arm B. At the other extremity of the arm C is fastened the crimper (of the ordinary construction) E, by a screw, *e*. The arm C is provided with a vertical slot, through which the screw *e* passes, thereby getting a vertical adjustment of the crimper E.

G is an improved snap-tool, which consists of a hollow-tube, *g*, through which passes a rod, g^1. At one end of this rod are fastened two rings or eyes, *s*, through which pass the spring-arms g^2. At the outer end these spring-arms are provided with clamping-jaws g^3. The clamping-jaws g^3 may be drawn together by pushing the rod g^1 into the tube *g*. They may then be placed inside of the base of a lamp-chimney, but when the pressure is removed from the rod the spring-arms cause the jaws to separate and press against the inside of the chimney.

I will now proceed to describe my invention, so that others skilled in the art to which it appertains may manufacture and use the same.

After the chimney has been blown, it is placed on the snap G in the manner above described. The snap with the chimney attached is then placed on the friction-bearings a^2 and a^3, upon which it is then rotated, while the chimney is being flared by the ordinary tools. After the flaring operation is finished, the lever or treadle D is pressed by the foot, which causes the arm C to rise up to a vertical position, the crimper E facing the flared end of the chimney. The arm C, being drawn up by the cord *d*, is prevented from passing the vertical position by the face of the end of the rod B, which acts as a stop, and the lever, being further depressed, causes the arm C to press against the end of the arm B, thus moving it in its bearing b', and causing the crimper E to press against the flared end of the chimney, and crimp it. The foot is then removed from the lever D, the spring *b* causes the arm B, which carries the arm C to return to its primary position, and thus the crimper is drawn away from the chimney, and the arm C falls to nearly a horizontal position, as at first. The chimney is then removed from the snap.

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

1. The snap-tool having clamping-jaws attached to spring arms, which press outwardly, in combination with the rod furnished with loops for contracting and releasing them.

2. The combination of the sliding arm with its spring, and the hinged arm carrying the crimping-tool, operated by a lever for the purpose hereinbefore set forth.

In testimony whereof, I the said ANDREW HARCUM, have hereunto set my hand.

ANDREW HARCUM.

Witnesses:

JAMES I. KAY,

GEORGE H. CHRISTY.