

(No Model.)

B. F. GOODRICH.  
WICK FASTENER FOR OIL BURNERS.

No. 488,788.

Patented Dec. 27, 1892.

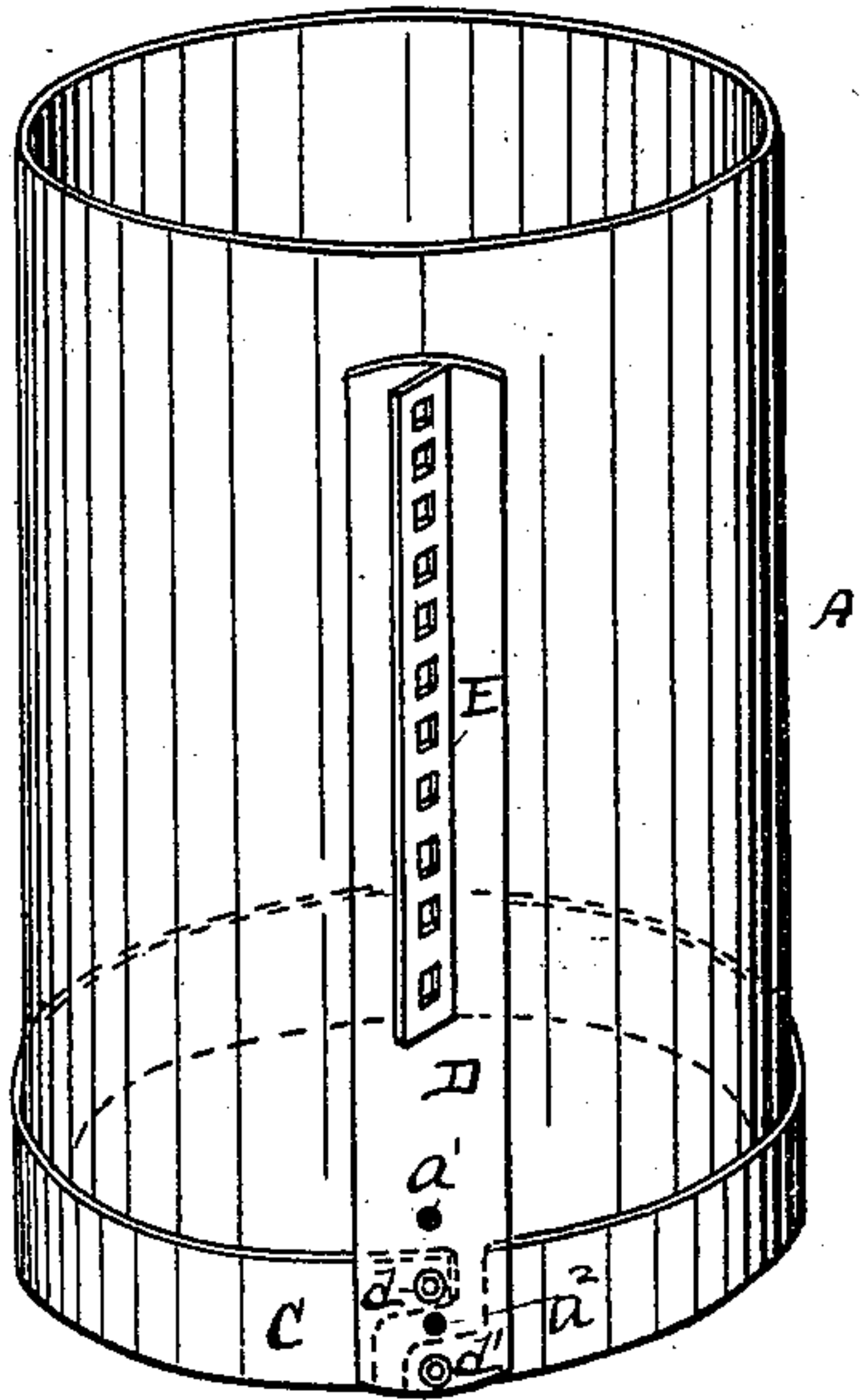


Fig. 1.

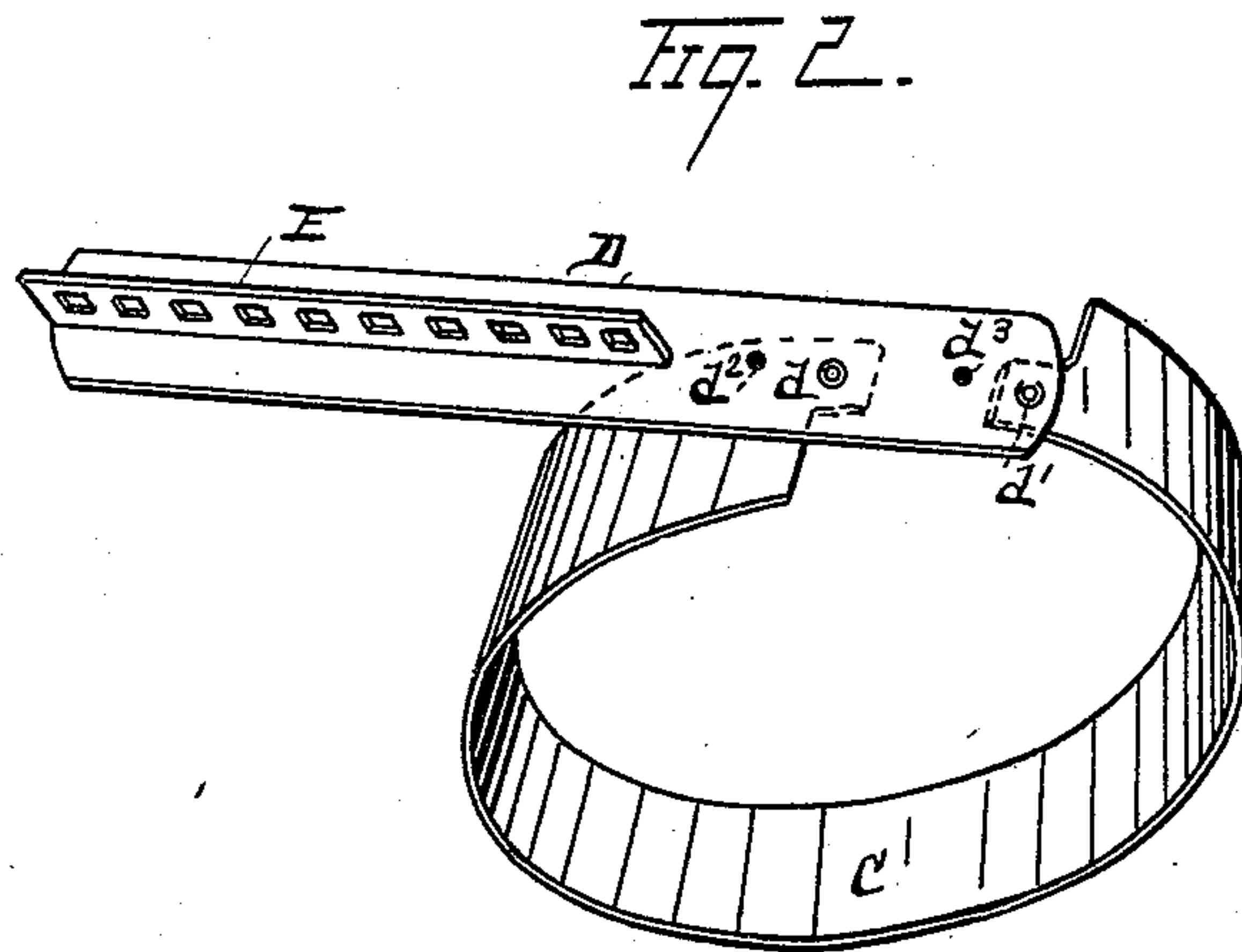


Fig. 2.

Fig. 3.

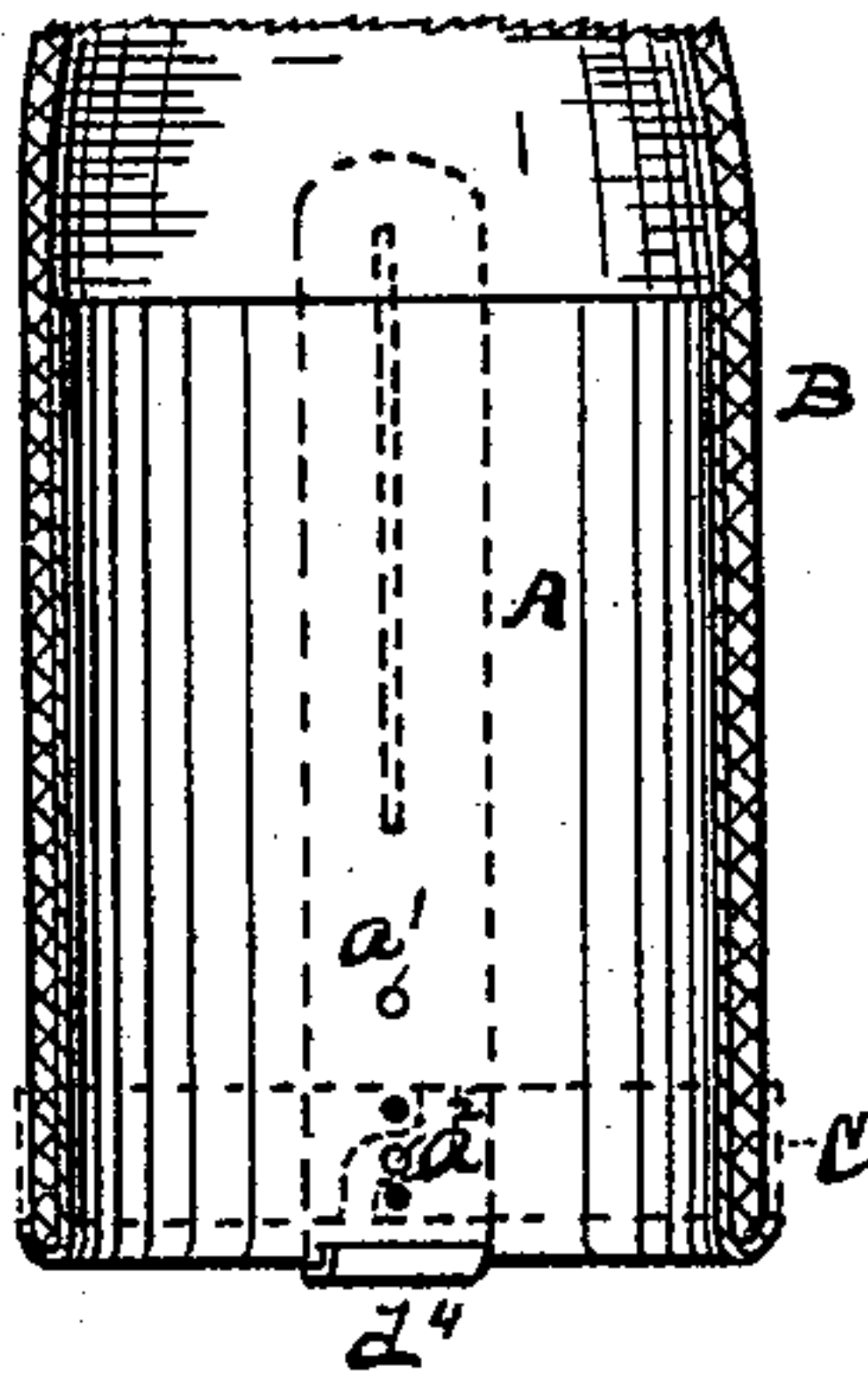
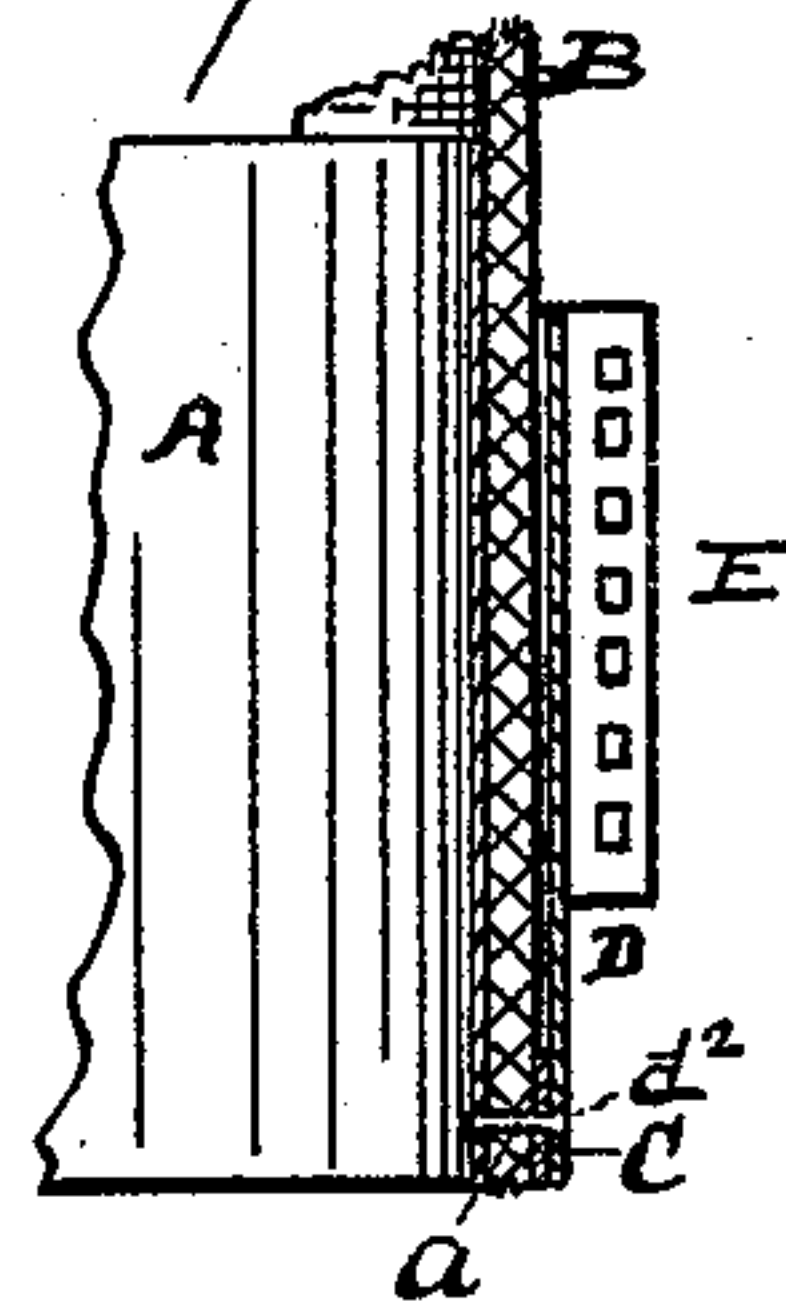


Fig. 4.



Witnesses  
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# UNITED STATES PATENT OFFICE.

BENJAMIN F. GOODRICH, OF HOMER, MICHIGAN.

## WICK-FASTENER FOR OIL-BURNERS.

SPECIFICATION forming part of Letters Patent No. 488,788, dated December 27, 1892.

Application filed April 6, 1892. Serial No. 428,040. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN F. GOODRICH, a citizen of the United States, residing at Homer, county of Calhoun, State of Michigan, have invented a certain new and useful Improvement in a Wick - Fastener for Oil-Burners; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My present invention relates to certain new and useful improvements in an oil burner, and has special reference to the construction of a wick fastener therefor, the object being to provide such a fastener of simple and economical construction and of superior utility.

It is well known that as wicks have been fastened in oil burners heretofore common, great difficulty has been experienced to re-wicking the burner when one wick is used up. My invention is intended to effectually overcome this difficulty.

To this end my invention consists of the combination of devices and appliances, their construction and arrangement as hereinafter specified and claimed and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation embodying my invention. Fig. 2 is a separate view, showing the clamping band in an open position. Fig. 3 is a vertical section the upper and lower edges of the clamping band being indicated by the dotted lines. Fig. 4 is a modification in section.

I carry out my invention as follows:

A in the drawings represents a wick tube. B is the wick which I engage upon the exterior of the wick tube.

C denotes an open clamping band or ring, that is, a band having its extremities brought adjacent one to the other, and arranged to permit the ends being brought nearer together, or separated farther apart so as to clamp the band on the wick and to release the band therefrom as may be required. This band is applied to the exterior of the wick to clamp the wick between the same and wick tube.

D represents a lever arm engaged with the

clamping band in any desired manner to open and close the band to clamp it upon the wick and release it therefrom. As shown in Figs. 1 and 2, the lever arm has a pivotal engagement with each of the extremities of the band, as indicated at "d" "d'." This arrangement permits the band to be tightened up to clamp it upon the wick by throwing the arm into a vertical position, thereby bringing the two ends of the band nearer together. By throwing over the arm into an angular position as indicated in Fig. 2 the ends of the band are spread apart thereby allowing the band to be released from the wick. I do not, however, limit myself to the exact positions assumed by the arm in either operation. I prefer to provide the lever arm with a rack bar E, with which the wick raising mechanism is engaged.

As shown in Figs. 1 and 3 the wick tube is provided with pins "a'" "a<sup>2</sup>" to engage the arm. It will be obviously of advantage to connect the arm in some way with the wick, so that a lift upon the arm by the wick raising mechanism, will cause the wick tube to be raised, and prevent the band slipping upward on the wick. The provision of the pins "a'" "a<sup>2</sup>" serves this purpose, and also serves to hold the arm in an upright position when the band is clamped upon the wick.

In operation, where the foregoing construction and arrangement are employed, when the band has been slipped over the wick, the lower end of the lever arm is engaged upon the lower of said pins, and when brought into an upright position is also engaged with the other pin.

I would have it understood that I do not limit the scope of my invention to the specific details herewith illustrated as described. It will be a convenient construction of the ends of the band, to provide each with a projecting arm on opposite edges to lap by one another when the band is clamped. To engage the arm with the pins "a'" "a<sup>2</sup>" it may be provided with corresponding orifices "d<sup>2</sup>" "d<sup>3</sup>." It will be seen that the lever arm is vertically oscillatory and exerts a strong leverage upon the band.

What I claim as my invention is:

1. In a wick fastener, an open annular clamping band to encircle the wick, having in



combination therewith a lever arm, having a fulcrumed engagement with said band to contract and expand the diameter thereof, said lever arm arranged to be thrown into an upright position to close the band upon the wick, and to be thrown out of an upright position to loosen the band from the wick, substantially as described.

2. In a wick fastener, an open annular clamping band to encircle the wick having in combination therewith an oscillatory lever arm fulcrumed to one extremity of the band, said lever arm arranged to be thrown into an upright position to close the band upon the wick, and to be thrown out of an upright position to loosen the band from the wick, substantially as described.

3. In combination, a wick tube, an annular open clamping band to encircle the wick upon said tube, a lever arm having a fulcrumed engagement with said band to contract and to expand the diameter thereof, said lever arm arranged to be thrown into an upright position to clamp the band upon the wick, and to be thrown out of an upright position to loosen the band from the wick, and means connecting the lever arm when in an upright position with the wick tube, whereby the wick tube may be raised and lowered by said lever arm, substantially as described.

4. In combination, a wick tube, an open annular clamping band to encircle a wick upon said tube, a lever arm having a fulcrumed engagement with said band to contract and expand the diameter thereof, said lever arm arranged to be thrown into an upright position to clamp the band upon the wick, and to be thrown out of an upright position to loosen

the band from the wick, said tube provided with a stud engaging said lever arm when thrown into an upright position, substantially as set forth.

5. In combination, an open annular clamping band to encircle a wick, a lever arm having a fulcrumed engagement therewith, to be thrown into an upright position to close the band upon the wick, and to be thrown out of an upright position to loosen the band from the wick, said lever arm provided with a rack bar, substantially as described.

6. In combination, a wick tube, an open annular clamping band to encircle a wick upon said tube, a lever arm having a fulcrumed engagement with the clamping band to contract and expand the diameter thereof, means to engage said lever arm when in an upright position with said wick tube, and means engaged with said lever arm for raising and lowering the same, substantially as described.

7. In a wick fastener an open annular clamping band to encircle the wick, having in combination therewith an oscillatory lever arm engaged with said band at the two extremities thereof, whereby said extremities are forced toward each other when the lever arm is in an upright position and are forced from each other when said lever arm is thrown out of an upright position, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

BENJAMIN F. GOODRICH.

Witnesses:

P. W. HEATH,

L. B. TOMPKINS.