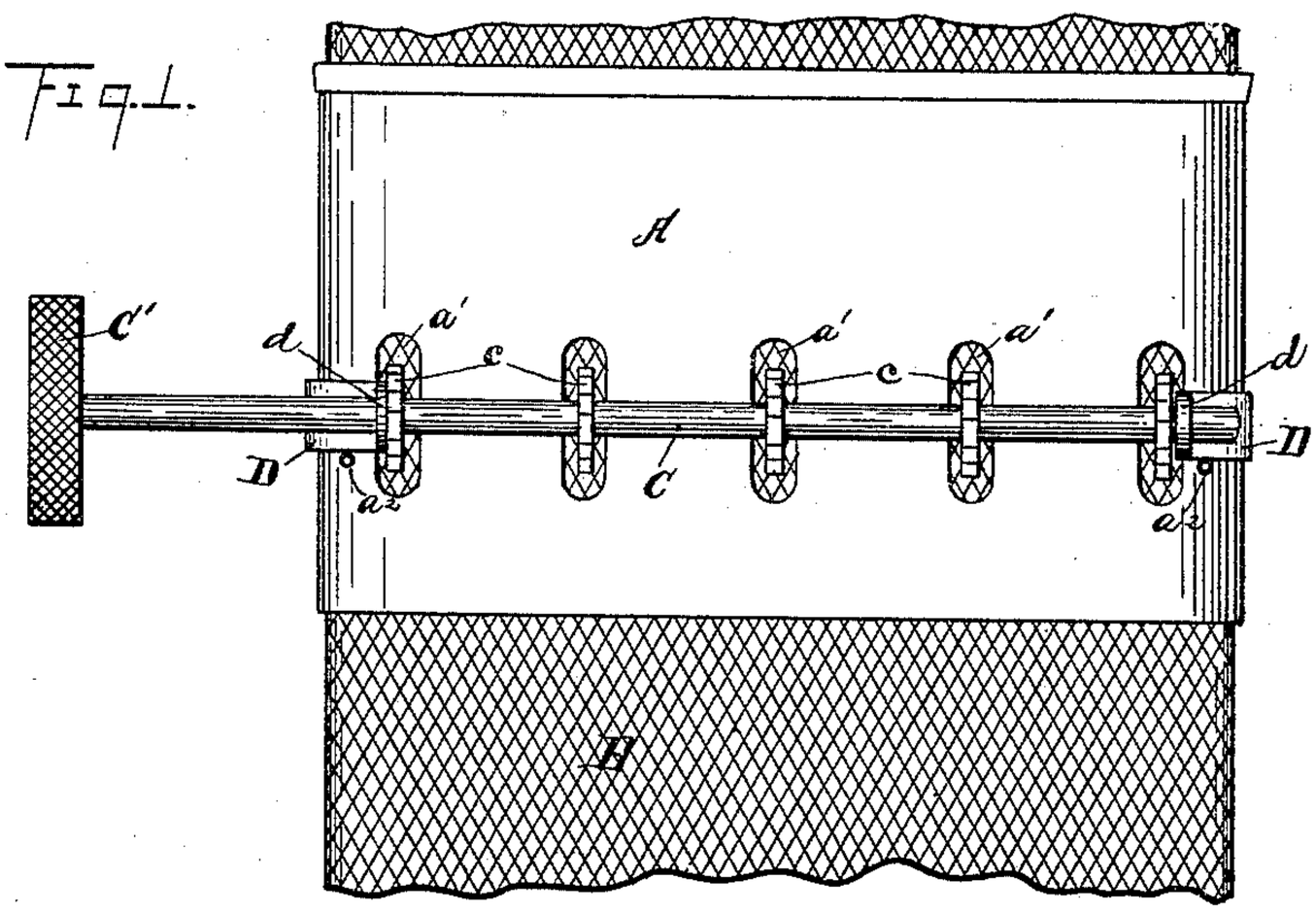
(No Model.)

J. McCONNELL.

WICK TUBE AND ATTACHMENT.

No. 436,948. Patented Sept. 23, 1890.

Fig. 1.



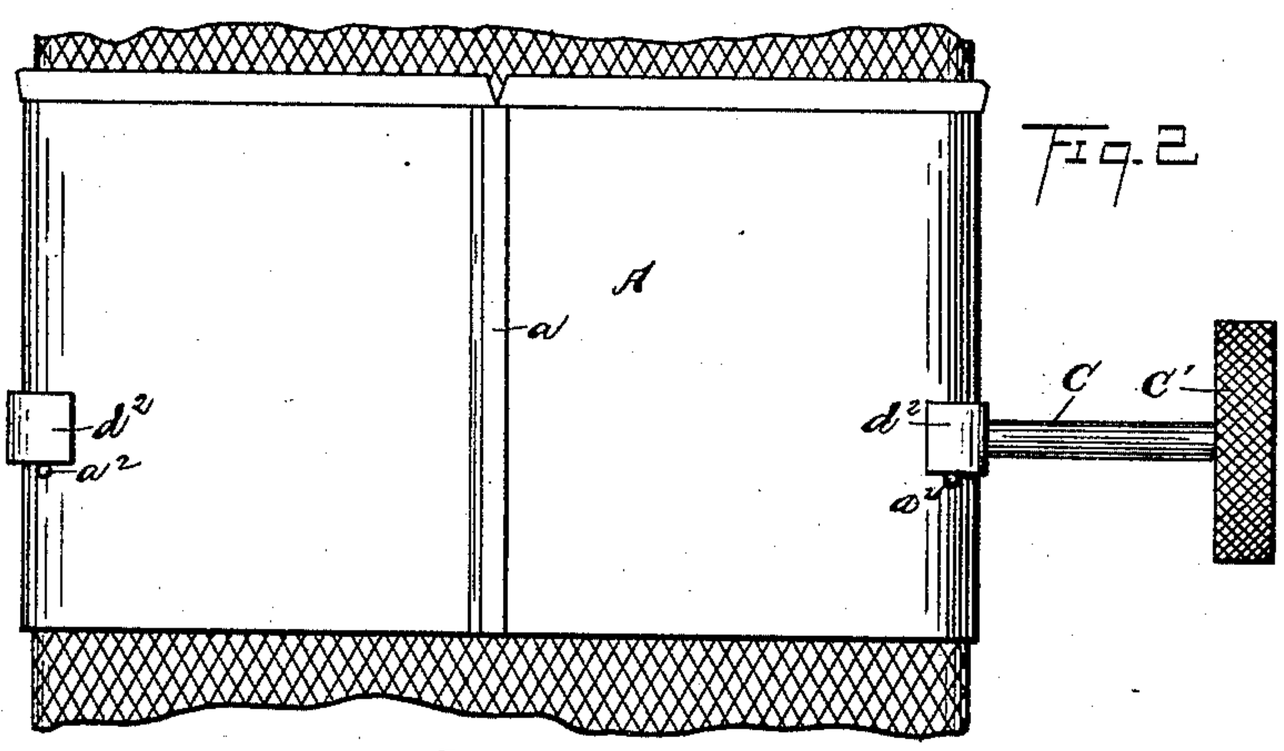


Fig. 2

Fig. 4.

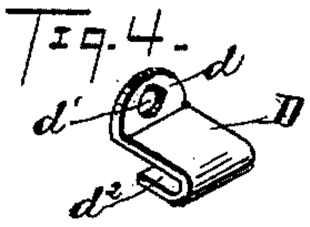


Fig. 5.

Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN McCONNELL, OF CLEVELAND, OHIO.

WICK-TUBE AND ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 436,948, dated September 23, 1890.

Application filed March 24, 1890. Serial No. 345,018. (No model.)

To all whom it may concern:

Be it known that I, JOHN MCCONNELL, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Wick-Tubes and Attachments; and I do hereby 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 pertains to make and use the same.

My invention relates to improvements in wick-tubes and attachments designed more especially for oil-stoves; and it consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figures 1 and 2 are elevations of a wick-tube, showing reverse sides thereof. Fig. 3 is an edge view of the wick-tube, showing the cover of the oil-container in section. Fig. 4 is a view in perspective in detail. Fig. 5 is a view in perspective showing a modification.

A represents the wick-tube, the same comprising a single piece of sheet metal doubled back and the ends thereof seamed together at the longitudinal center of the wick-tube on the side opposite the spindle.

B represents the wick, and C the wick-spindle, the latter being provided with toothed wheels *c* for engaging the wick, these wheels operating in slots *a'* of the wick-tube. The wick-spindle is provided with the ordinary thumb-wheel C' for raising and lowering the wick. Slots *a'* are punched out of the blank before the bending, and also the blank is indented on the inner face thereof to produce raised ribs or teats a^2, located as shown in Fig. 1.

A preferable means of mounting spindle C is as follows: The journal-bearings for the spindle comprise narrow strips of comparatively thin sheet metal D D, having the one end thereof turned outward to form ears *d d*, these ears being pierced at *d'* to receive the wick-spindle. The other end of strip D is doubled back or made hook-shaped, as shown at d^2, (see Fig. 4,) so as to embrace the edges of the wick-tube with a snug fit. Before attaching the thumb-wheels of the spindle these boxes are placed upon the spindle in position right and left handed, as shown, and the hook members thereof are crowded onto the edges of the wick-tube, members D resting on the projecting ribs or teats a^2. With such construction member D will likely maintain its place on the wick-tube, so as to perform its function; but to guard against these being displaced by rough usage these members are soldered to the wick-tube. If, however, through mismanagement the parts become heated so as to melt the solder, members D will maintain their position on the wick-tube and support the spindle in performing its function, so that no accident will occur.

Heretofore in manufacturing this class of goods the construction has usually been such that the toothed wheel had to be soldered onto the wick-spindle after the latter was in place in its bearing, and this was very inconvenient. With my improved construction, by reason of members D being made of separate pieces from the wick-tube, the toothed wheels can be soldered to the wick-spindle before the latter is placed in its bearing. Cover E of the oil-container has a groove *e*, that receives the wick-spindle, and when the cap E' is placed in position thereon and cemented the cement at the same time is placed around the wick-spindle, so that practically no leakage occurs at this point.

In constructing member D the hook portion thereof may be omitted, as shown in Fig. 5, in which case members D are secured to the wick-tube simply by soldering.

Heretofore wick-tubes have been constructed of one or two pieces of metal, usually joined at the edge or edges of the wick-tube. With such construction there are likely to be rough internal surfaces at the edges of the wick-tube. Such rough surfaces offer more or less resistance to the wick, so that, especially with broad wicks—such as used in oil-stoves—it is difficult to manipulate the wick so as to keep the upper end thereof level. With my improved construction, there being but one seam, and that located at the lateral center of the wick-tube and opposite one of the toothed wheels, this difficulty is entirely overcome.

What I claim is—

1. The combination, with a wick-tube and a wick-spindle bearing toothed wheels, substantially as indicated, of bearings for such spindle comprising metal pieces secured to

the wick-tube, such metal pieces having projecting ears pierced to receive the wick-spindle, substantially as set forth.

2. The combination, with a wick-tube and a wick-spindle, substantially as indicated, of bearings for the wick-spindle comprising metal strips having outturned ears pierced to receive the wick-spindle and having hook ends adapted to engage the edges of the wick-tube, substantially as set forth.

3. The combination, with a wick-tube and wick-spindle, of bearings for the wick-spindle comprising separate pieces of metal secured to the wick-tube, the latter having projecting ribs or teats adapted to support such bearings and to serve as guides in placing the latter, substantially as set forth.

4. The combination, with a wick-tube comprising a single piece of metal, with the seam formed between the edges of the tube, said tube having slots in one side, of a tube-spindle supported in suitable bearings at the edges of the tube and wheels on the spindle which operate in the slots to move the wick, one of the wheels being opposite the seam in the tube, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 13th day of March, 1890.

JOHN McCONNELL.

Witnesses:
CHAS. H. DORER,
WILL B. SAGE.