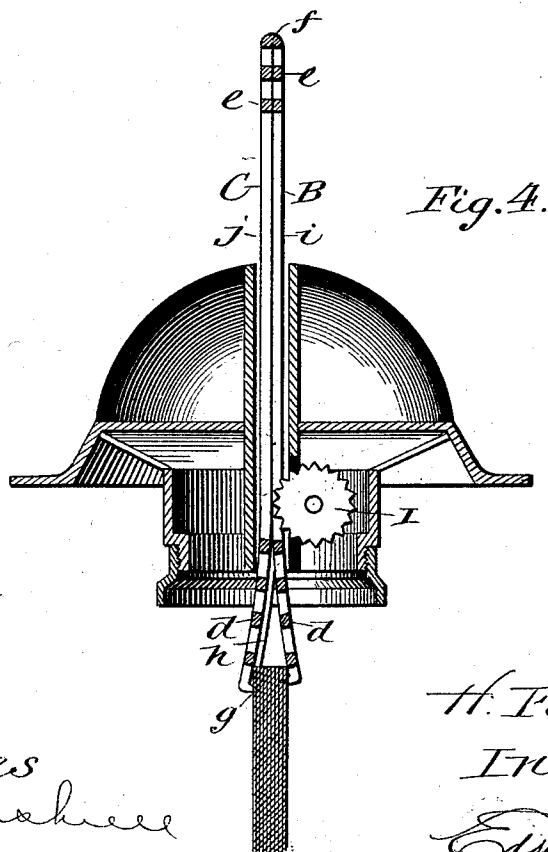
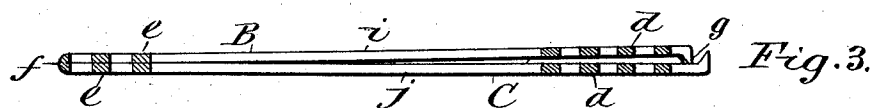
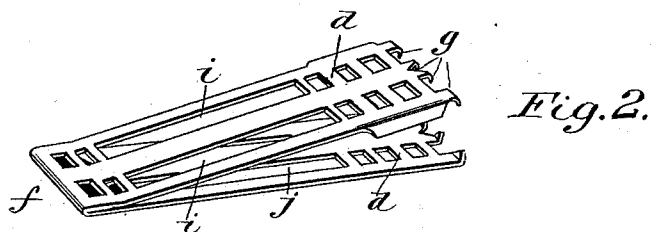
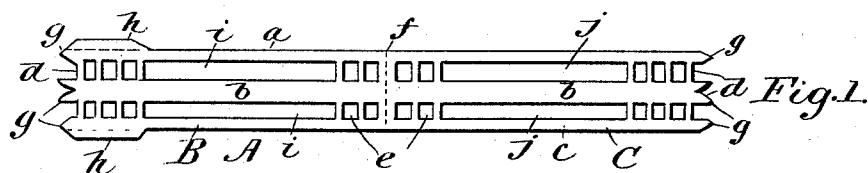


(No Model.)

H. FAIRCHILD.
WICK THREADER.

No. 510,014.

Patented Dec. 5, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

HEMAN FAIRCHILD, OF DERBY, VERMONT.

WICK-THREADER.

SPECIFICATION forming part of Letters Patent No. 510,014, dated December 5, 1893.

Application filed April 19, 1893. Serial No. 470,996. (No model.)

To all whom it may concern:

Be it known that I, HEMAN FAIRCHILD, a citizen of the United States, residing at Derby, in the county of Orleans and State of Vermont, have invented certain new and useful Improvements in Wick-Threaders; 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 appertains to make and use the same.

This improvement is designed for the purposes of easily and quickly introducing and drawing a lamp-wick through the wick-tube of a lamp, and the objects I have in view is to so construct the implement, which I shall hereinafter designate as a "wick-threader," that it can be easily drawn through the wick-tube with the assistance of the usual toothed feed wheels of the lamp-burner in introducing either end of the threader into the wick-tube and without hinderance from said feed wheels while the main part of the threader is being drawn through the wick-tube and also to afford a convenient means for securely gripping the lamp wick and for confining the edges of the wick within the sides of the threader so that the edges of the wick will not interfere with the adjustment or passage of the threader through the wick tube.

With these ends in view, the improved threader consists of two members made of suitable elastic metal and joined at one end so that the members normally spring or stand away from each other and each member comprises a series of longitudinal bars and a series of two or more bars at each end of the longitudinal bars and which serve to join or connect the longitudinal bars, so that the transverse bars at the ends of the threader are adapted to be engaged with the toothed feed wheels and long slots are provided in the threader between said transverse bars in which the feed wheels play idly while the threader is being drawn through the tube, each member being provided at its free end with inwardly extending spurs or teeth adapted to engage with the wick and with lateral flanges at the side edges to embrace and confine the wick within the limits of the threader, all as will be hereinafter more fully described and claimed.

Having thus stated the general nature and

objects of my invention, I will now proceed to a detailed description thereof in connection with the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a plan view of the blank or piece of metal from which my threader is made. Fig. 2 is a perspective view of the threader, and Fig. 3 is a longitudinal sectional view thereof. Fig. 4 is a sectional view through a burner with my threader in the act of drawing a wick through the wick-tube.

Like letters of reference denote corresponding parts in all the figures of the drawings.

In the manufacture of my improved threader, I first stamp or cut out a blank A, Fig. 1, in a single piece out of a sheet of metal having a necessary degree of elasticity suitable for the purposes of my invention. This blank consists of a series of longitudinal bars *a, b, c*, a series of transverse bars *d, d*, at each end of the longitudinal bars, and another series of bars *e, e, f*, at the middle of the longitudinal bars *a, b, c*, the ends of the longitudinal bars being provided with the spurs or teeth *g* and the outside bars *a, c*, having lateral flanges which project or extend beyond the side edges of the bars *a, c*.

To produce my threader, I bend or double the blank A upon itself along the line of the middle bar *f* into the form shown by Figs. 2 and 3 of the drawings, and then the spurs or teeth *g* are bent or turned inwardly toward each other, and the lateral flanges *h* are bent at right angles to the side bars *a, c*. The threader is thus made to consist of two members B, C, which are joined together by a solid piece *f* at one end, and the members of the threader have sufficient elasticity to normally stand away from each other when released from the wick-tube and the wick.

At the connected end of the threader, it is provided with two or more bars *e, e*, in each member, and at the free ends of the members a series of three or more bars *d, d*, are provided, while between the bars *d, e*, are formed the long slots *i, j*. These slots in the members B, C, of the threader are arranged in line with each other, and the bars *d, e*, are also in line and are properly spaced apart to provide interstices or openings to receive the teeth on the feed wheels of the lampburner.

In using the implement, the end of the wick

- is fitted between the free ends of the members B, C, and the end *f* of the threader is inserted into the lower end of the wick-tube so that the toothed wheels I of the burner engage with the bars *e, e*. The wheel shaft may now be rotated to cause the feed wheels to turn and the teeth thereof project through the slots in the threader so as to take into the fibrous wick and force the latter and the threader through the wick tube; and as the threader is confined in the tube the members B, C, are closed upon the wick so that the teeth or spurs thereof are forced into the wick to retain the latter in the threader with a firm grip or hold while the lateral flanges *h* confine the edges of the wick within the threader and prevent the edges of the wick from interfering with the progress of the threader and wick through the lamp burner.
- 20 With my implement a wick can be easily and quickly introduced in and passed through the lamp-burner, and the implement can be made very cheaply as it is stamped and bent from a single piece of metal.
- 25 Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—
1. As a new article of manufacture, a wick

threader struck up and bent from a single piece of sheet metal and comprising the spring 30 members connected at one end and each provided with the longitudinal bars, the transverse bars at each end with the long slots between the transverse bars, the teeth or spurs at the free ends of the long bars, and the lateral flanges at the outside edges of the bars and extending inwardly toward each other to 35 confine the edges of the wick within the threader, substantially as and for the purpose described. 40

2. As a new article of manufacture, a wick threader comprising the connected members formed of the longitudinal and transverse bars with the long slots intervening between the transverse bars, and the lateral flanges integral with the longitudinal bars, at the free 45 ends thereof, and extending inwardly toward each other at the side edges of said longitudinal bars, substantially as and for the purpose described. 50

In testimony whereof I affix my signature in presence of two witnesses.

HEMAN FAIRCHILD.

Witnesses:

JULIA A. BURTON,
LUCY C. SPRAGUE.