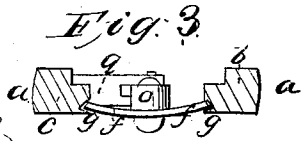
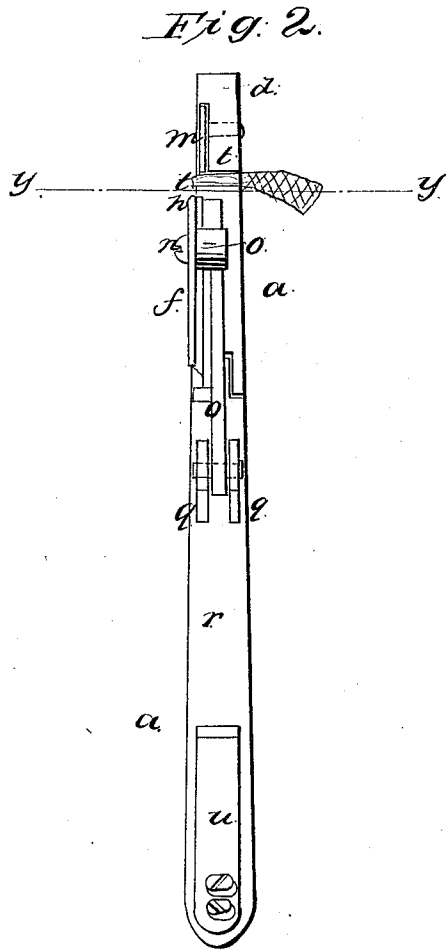
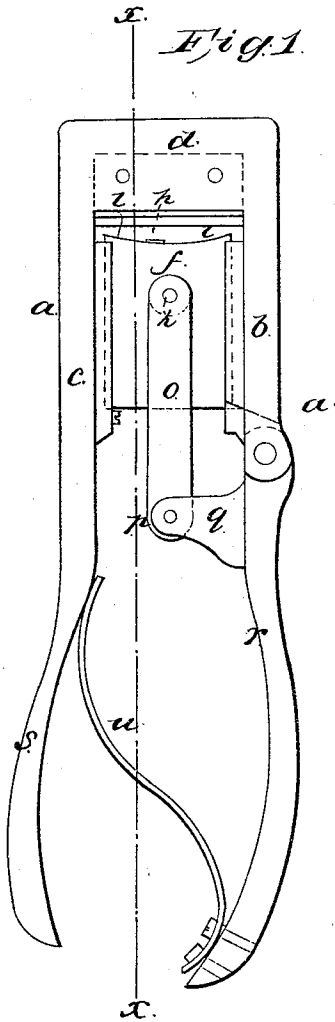


C. L. Topliff,
Nick Trimmer.

No. 48,743. Patented July 11, 1865.



Witnesses:

J. M. Cornington
Albert H. Brown

Inventor:

C. L. Topliff

UNITED STATES PATENT OFFICE.

CYRUS L. TOPLIFF, OF NEW YORK, N. Y.

IMPROVEMENT IN WICK-TRIMMERS.

Specification forming part of Letters Patent No. 48,743, dated July 11, 1865.

To all whom it may concern:

Be it known that I, CYRUS L. TOPLIFF, of the city, county, and State of New York, have invented a new and useful Improvement in Wick-Trimmers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of the specification.

In the use of coal-oil, particularly for illuminating purposes, much difficulty and annoyance have been heretofore experienced in the trimming of the wicks of the lamps employed, for the principal reason that they must be trimmed with the utmost accuracy and evenness to enable the wick to be raised to a sufficient height above its tube as to give the requisite and desired amount of light without in the least degree causing the lamp to smoke, the disagreeable and unpleasant effects of which have been too often experienced by every person using kerosene-oil to need any particular enumeration or mention herein.

Heretofore a pair of scissors have generally been employed for the trimming of coal-oil-lamp wicks, but with which, as is well known, it was almost impossible, and required much care and experience, as well as considerable time, to trim them with the proper and requisite evenness to produce the desired flame and light.

Therefore the present invention has for its principal object, and which is secured thereby, the production of a simple instrument or device by which the wicks of coal-oil or other similar lamps can be easily, rapidly, and readily trimmed with the necessary evenness to produce a clear flame of the desired size without causing the lamp to smoke. I accomplish this result by arranging within any suitable guiding-frame a cutter or knife-blade in such a manner that when moved by any suitable operating devices connected therewith (after having been first placed upon the wick-tube in the proper position) will cut or sever the wick with the requisite evenness and with but little trouble or loss of time, the advantages of which are many and so apparent to all as to need no particular mention herein.

I have also made some other improvements in the general and detail arrangement of the

cutter and its operating devices, which will be hereinafter particularly described.

In the accompanying plate of drawings my improvements are represented, Figure 1 being a view of the under side of the same; Fig. 2, a longitudinal section taken in the plane of the line *x x*, Fig. 1; Fig. 3, a transverse section taken in the plane of the line *y y*, Fig. 2.

a a in the drawings represent a frame, made of brass, cast-iron, or any other suitable metal or material, and consisting of two side pieces, *b* and *c*, connected together at one end by a cross-piece, *d*.

f is the knife or cutter-blade, made of any suitable material, and moving in grooves *g g* upon the inner surfaces of the side pieces, *b* and *c*, extending in the direction of their length. The knife-blade *f* is sharpened upon its inner end, *h*, and when moved toward the end piece, *d*, of the frame it first passes over the open space *l* between it and the same, in which the wick of the lamp is placed, as will be hereinafter described, and then over and upon the fixed plate or cutter-blade *m* of the end piece, *d*.

To the knife-blade *f*, and upon the under side thereof, is hung upon a pivot, *n*, a connecting-bar or rod, *o*, attached and hung by its outer end, *p*, to and in the projecting piece *q* of the swinging handle, lever, or arm *r* of the side piece, *b*, a corresponding-shaped handle, *s*, being secured to or forming a part of the opposite side piece, *c*.

When the implement, arranged as described, is to be used, it is first placed upon the wick-tube of the lamp so as to bring the space *l* between the end of the knife-blade and the cross-piece *d* directly over the wick in the tube, and in such a position with regard thereto that as the wick is raised by the spur-wheel ordinarily employed therefor it shall, as it moves upward, pass with perfect ease through the same, the frame of the implement resting by the shoulder *t* of its cross-piece *d* upon the top of the tube. The wick, after having thus been raised to the desired height within the cutting implement, as above described, according as it is necessary to cut more or less of it off to produce a clear flame to the lamp, is then severed or cut by simply turning with the hand the swinging handle of the frame *a*, which, through its connecting-bar *o*, causes the knife-blade *f* to be moved directly and in a hori-

zontal plane toward and through the wick, severing and cutting that portion of the wick as desired, and with the utmost ease, requiring no especial care or experience, the wick also being cut perfectly true and even, as is evident without further description. The knife-blade, after having severed the wick, as described, is then retracted or drawn back and away from the same by means of the bent spring *ll* attached at one end to the handle, between which and the fixed handle it is compressed as they are brought together to move the knife forward.

The cutting end of the knife-blade I prefer to make of a circular shape, as plainly seen in Fig. 1, the principal object of which is to cause it, in lieu of cutting the wick for its entire width at one and the same time, which it is evident would require a considerable exertion of power or strength, to gradually cut and sever it, first commencing at its outer ends, and as the knife continues to move forward cutting it in its central and intermediate portion or portions, as is evident.

If in case it should be desired to give a rounding shape to the top of the wick in the

tube, it is only necessary to so make the cutting-blade as to impart such a form thereto; but I deem it best and have found by experience that if the wick can be trimmed with a perfect even and straight cut it is much more desirable and effective.

Both handles of the frame may be hung upon pivots and attached to the knife-blade as described for the handle *r*; but one is sufficient to give the requisite force to the knife-blade to cut the wick.

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

1. The combination of the fixed cutter *m* and movable cutter *f*, arranged in parallel planes, and operating substantially in the manner and for the purposes specified.

2. In combination with the aforesaid cutters *f* and *m*, the handle *r*, when so pivoted as to move in a plane parallel or coincident with that of the knife *f*.

C. L. TOPLIFF.

Witnesses:

W. HAUFF,
ALBERT W. BROWN.