R. A. OLDFIELD.

LAMP.

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1,338,954. **Patented May 4, 1920.**

Fig. 3.

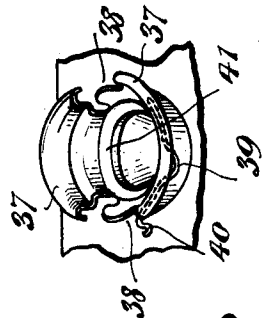


Fig. 4.



Fig. 2.

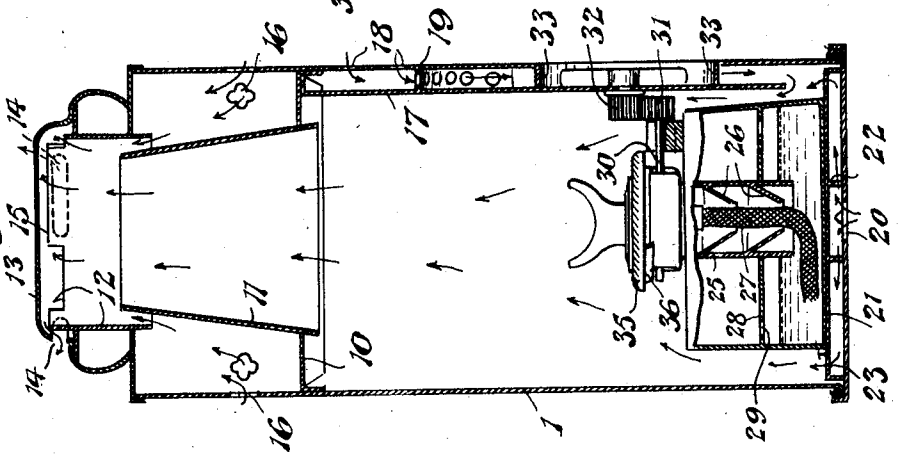
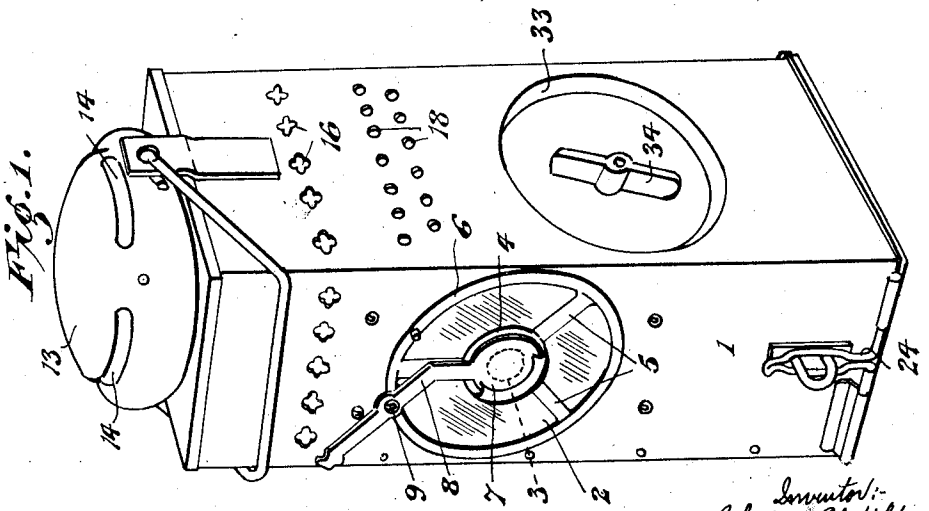


Fig. 1.



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UNITED STATES PATENT OFFICE.

ROBERT ALEXANDER OLDFIELD, OF BIRMINGHAM, ENGLAND.

LAMP.

1,338,954. Specification of Letters Patent. Patented May 4, 1920.

Application filed January 23, 1919. Serial No. 272,762.

To all whom it may concern:

Be it known that I, ROBERT ALEXANDER OLDFIELD, a subject of the Kingdom of Great Britain, residing at Refulgent Works, Warwick street, Bordesley, Birmingham, in the county of Warwick, England, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

This invention comprises a lamp or lantern for use in connection with guns such as machine guns, and it has for its purpose to provide a lamp or lantern which forms an illuminated target by virtue of which the gun may be sighted in the dark.

With this object in view it is desirable to provide a lamp which will withstand very high wind, which is light-proof, which is unspillable, and which is of a highly durable character.

In order that this invention may be clearly understood and readily carried into practice, reference may be had to the appended explanatory sheet of drawings, upon which:—

Figure 1 is a perspective view of a lamp according to the present invention.

Fig. 2 is a sectional elevation of the lamp shown in Fig. 1.

Fig. 3 is a part view of the oil reservoir, and particularly illustrating the burner socket.

Fig. 4 is an inverted view of the burner.

According to the present invention I employ a lamp body 1, in which a circular window 2 of frosted glass is provided. Centrally in this window a circular area 3 of clear glass is incorporated; this circular area of clear glass may be encircled by a sheet metal annular frame 4 which may be supported by radial strips 5 extending to a frame 6 encircling the circular window so that when the central unfrosted area of glass is covered by a suitable shutter, an annular window remains in the center of which a dark circle occurs. The shutter for this purpose may comprise a disk 7 provided with an arm 8 through which latter a pivot 9 passes. This disk 7 normally covers the central unfrosted area 3 of the window. This is the position when the lamp is in use, in which a black central bull's eye is obtained encircled by an annular margin of illuminated window. The shutter is for the purpose of permitting of the adjustment of the wick in order, for instance, to determine the degree of light required. After this adjustment has been effected the central area is covered by the shutter.

The body of the lamp may comprise a rectangular box, in the top of which a chimney is provided of a character adapted to prevent the emission of light. 10 is a transverse partition in the interior of the box-like body 1. This partition carries a conical chimney 11 converging upwardly, which chimney 11 is substantially contained within the part of the box body 1 which is above the partition 10. 12 is a cylindrical chimney extending from the top of the box body 1. This chimney 12 is covered by a dome 13 in which egress apertures 14 are provided. At positions adjacent to the egress openings 14 the chimney 12 is provided with tongue-like projections 15 adapted to function as baffles. 16 are air admission perforations in the body 1 adapted to admit air which passes externally of the chimney 11 and internally within the chimney 12 to egress therefrom with the products of combustion by way of the openings 14. For admitting air for combustion at the burner an inner wall 17 may be provided in parallelism with one of the side walls of the lamp to form an intermediate flue or down-take, to the upper part of which air is admitted by way of perforations 18. 19 is a curved partition in the flue or down-take, in which curved partition perforations are provided. The air is delivered to the interior of the body at the bottom of the down-take. Other air may enter by way of an opening 20 in the bottom of the lamp body. This opening 20 admits to a shallow space or chamber below the burner reservoir, which space or chamber is closed at the top by a horizontal partition 21 which forms the base for said reservoir, the latter being adapted to be detachably installed upon said base in any approved manner. 22 is a circular vertical partition encircling the perforation 20, in which circular vertical partition perforations are provided. Air entering at 20 is baffled by the partition 22 and is enabled to egress by way of perforations 23 in the partition which forms the upper wall of the shallow space between the reservoir and the bottom closure member of the lamp body. Said bottom closure member is advantageously hinged and adapted to be fastened by any suitable form of fastening 24.

The burner may be furnished with a tube 25 which extends downwardly to a po-

sition near to the bottom of the reservoir. In this tube superposed truncated cones 26 are provided converging downwardly. The wick 27 passes through these cones and oil is elevated thereby. At a position below the top and bottom of the reservoir a horizontal partition 28 is provided. The depending tube 25 passes through this partition. Perforations or openings 29 are provided in the said partition advantageously at positions near to the corners thereof. Should the lamp be placed on one side or inverted, the reservoir being about half full, the oil cannot escape through the burner as this is avoided by the tube depending therefrom, and the cones within said tube. The said cones also serve to prevent egress of splashed oil, splashing being avoided or counteracted, however, by the perforated horizontal partition.

The spindle 30 by which the wick is operated may carry a toothed wheel 31 which meshes with a toothed wheel 32 mounted in the inner wall of the lamp body, which forms the ventilation down-take above mentioned. The outer wall of this part of the lamp body may be discontinued over a circle, the center of which is the axis of the toothed wheel which is carried by the said wall, and around this circle the space between the walls is closed by an annular closure portion 33 which may be bent inwardly from the outer sheet metal wall. As a result of this formation a shallow depression is provided in the side of the lamp, in which depression an operating lever or handle 34 may be incorporated to permit of the rotation of the toothed wheel carried by the lamp body. The lamp thus substantially involves no projecting parts which would be liable to damage.

35 is a ring which rotatably encircles the body of the burner, and which ring 35 is formed with tongues 36. The said tongues are adapted to engage with a rim 37 provided upon the burner socket. This rim is accordingly slotted at 38 so that the tongues 36 may be passed through the slots, and the ring 35 may then be rotated to engage with the rim 37. 39 is a spring which is suitably incorporated below the rim 37; two of these springs may be incorporated and they may be of such a character that the tongues 36 upon rotation of the ring 35 are adapted to pass beyond the bowed parts of said springs, depressing said bowed parts with the result that the said bowed parts form stops preventing the accidental release of the ring 35. The end of the spring 39 may be adapted to constitute a stop for the tongue 36, as shown at 40. 41 is a shoulder upon which may be provided a fiber or other soft washer which is compressed by the engagement of the tongues 36 with the rim 37 to thereby form an effective oil-tight joint.

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

A lamp having an annular window of frosted glass encircling a smaller window of transparent glass and an opaque shutter adapted to be displaced to cover and uncover the transparent area.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ROBERT ALEXANDER OLDFIELD.

Witnesses:

ARTHUR H. BROWN,

EDGAR N. WHEELER.