

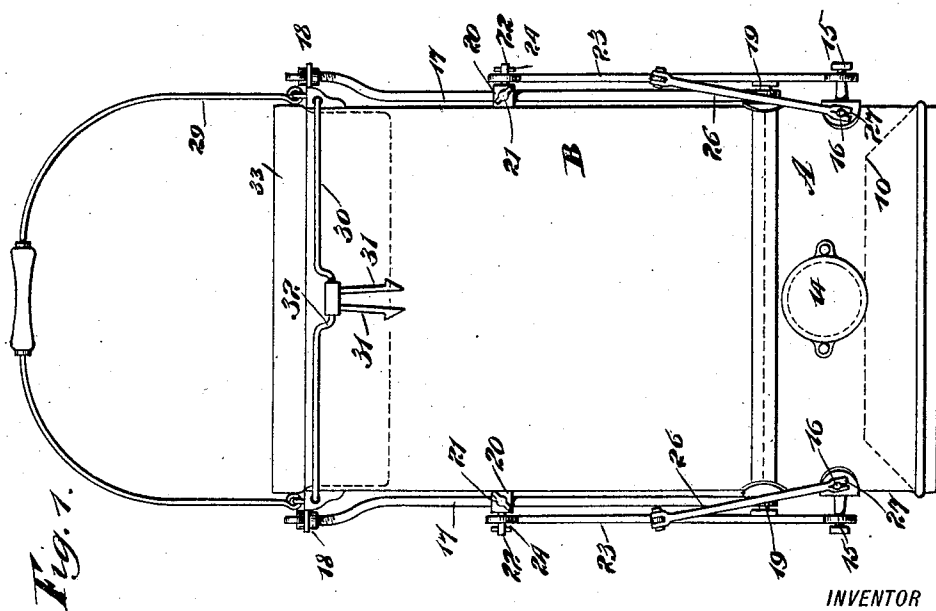
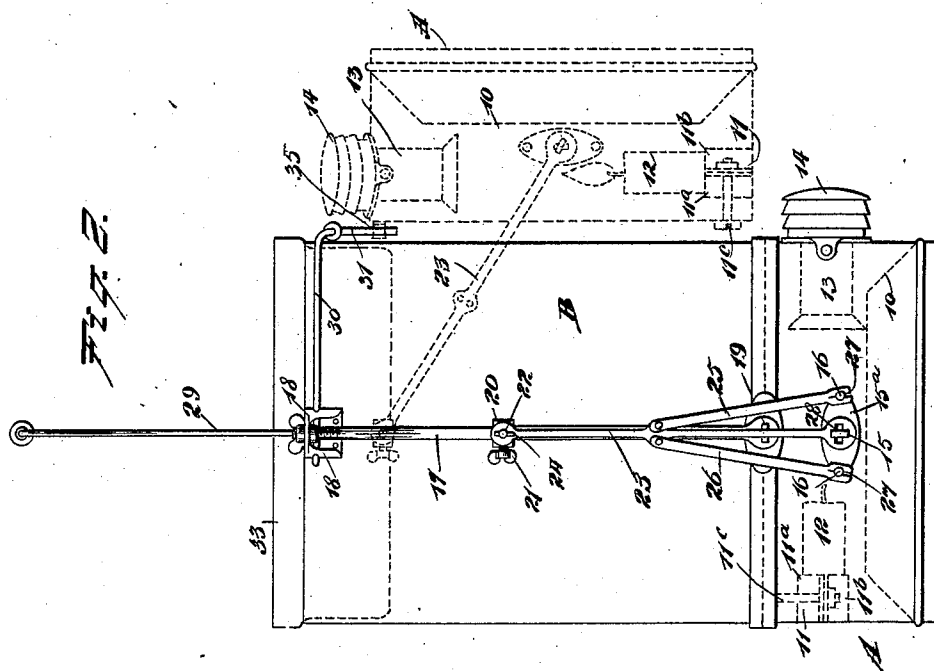
(No Model.)

2 Sheets—Sheet 1.

M. KILLIAN.
LANTERN.

No. 582,506.

Patented May 11, 1897.



WITNESSES:

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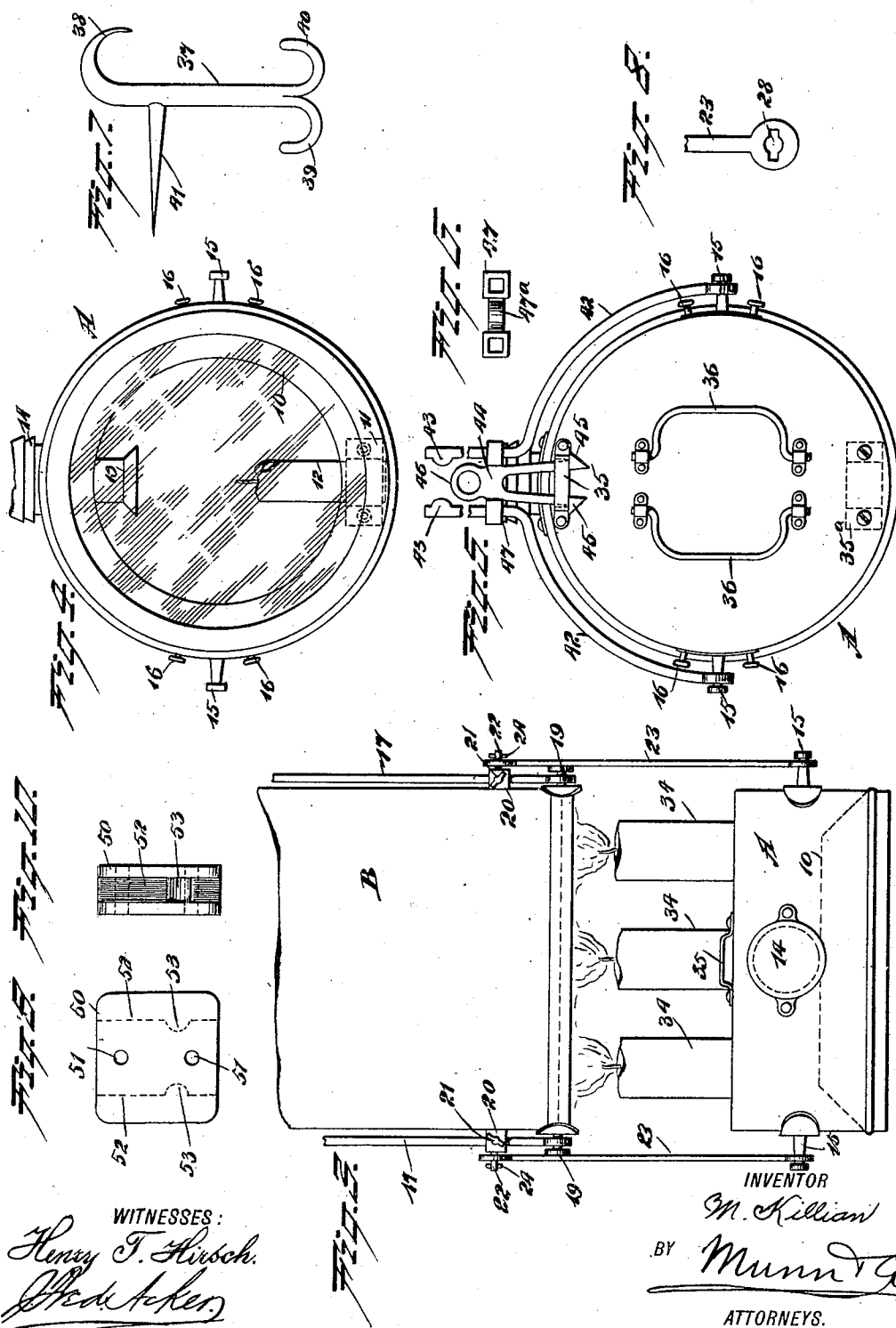
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UNITED STATES PATENT OFFICE.

MARTIN KILLIAN, OF CENTRAL CITY, COLORADO.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 582,506, dated May 11, 1897.

Application filed November 6, 1896. Serial No. 611,205. (No model.)

To all whom it may concern:

Be it known that I, MARTIN KILLIAN, of Central City, in the county of Gilpin and State of Colorado, have invented a new and useful Improvement in Lanterns, of which the following is a full, clear, and exact description.

The object of the invention is to construct a lantern which may be used in any manner in which an ordinary lantern may be employed and which may likewise be attached to a kettle for the purpose of enabling the contents of the same to be heated; and a further object of the invention is to provide a means for suspending the lantern from an overhead support or from an upright support, and to provide the lantern with devices by means of which it may be attached either to a receptacle or to a fixed object in a simple and economic manner.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of a pail and the lantern connected therewith and held against the bottom of the pail. Fig. 2 is a side elevation of the lantern and pail, the two parts being in the position shown in Fig. 1, and the said Fig. 2 illustrates in dotted lines a means for supporting the lantern at one side of the pail, so that it may be employed for lighting purposes when desired. Fig. 3 is a partial front elevation of the pail or receptacle and a side elevation of the lantern, the latter being dropped below the bottom of the pail in order to permit candles to be placed in the lantern in a manner to direct the flame to the bottom of the pail. Fig. 4 is a front elevation of the lantern. Fig. 5 is a rear elevation of the lantern, illustrating a modification in the devices for supporting the same. Fig. 6 is a plan view of a strap which is used in connection with the supporting devices for the lantern shown in Fig. 5. Fig. 7 is a plan view of a support for the lantern adapted for engagement with an overhead device or for attachment to a wall. Fig. 8 is a detail view of the lower end of the supporting-rod

which connects the lantern to the pail. Fig. 9 is a front elevation of a device for attaching the lantern to the dashboard of a vehicle, and Fig. 10 is an edge view of said device.

The lantern A preferably consists of a circular casing, in one end of which a glass or a lens 10 is located, the other end, which may be termed the "back" of the lantern, being of a solid material. Within the casing a socket 11 is located, preferably made in two sections 11^a and 11^b, clamped together by means of a screw 11^c, extending through the back of the lantern, the lens being at the front, as shown in Fig. 2, and the said socket 11 is adapted to receive a candle 12, the smoke from the wick of the candle when ignited being received by a funnel or chimney 13, located immediately opposite the socket in which the candle is to be placed, and a shed 14 is located upon the exterior of the casing of the lantern over the exit end of the funnel or chimney 13, and the said shed is of the character usually adapted to receive the waste products of combustion from the illuminating medium in a dark lantern. The shed 14 is so attached to the casing of the lantern that it may be readily detached therefrom, so that it may be placed in the pocket in the event the lantern is not in use.

Above the lantern A a pail B is located, the bottom of the pail being normally in engagement with the back portion of the lantern. On opposite sides of the lantern, at the exterior of the same, a preferably T-shaped stud 15 is secured to a suitable plate 15^a, and this plate at each of its ends is provided with a headed pin 16. A rod 17 is located at each side of the pail B, being secured thereto at its upper end by suitable lock-nuts to flanges 18, projected from opposite sides of the pail, and the lower end of the rod 17 is slotted to receive a T-head 19, secured to the pail, one at each side, as shown in Fig. 1. A sleeve 20 is held to slide upon each of the rods 17 and may be held in engagement with the rod at any point in the length of the latter through the medium of a set-screw 21. Each sleeve 20 is provided with an outwardly-extending stem or reduced portion 22, and upon each stem or reduced portion of each sleeve the upper end of a supporting-arm 23 is pivoted, the lower portion of the said arm being slotted

to receive a T extension or stud 15, projected from the outer side of the lantern, and the said supporting-arms are prevented from leaving the studs 22, attached to the sleeves 20, by passing cotter-pins 24 through the outer ends of the studs in front of the supporting-arms 23. Each supporting-arm 23 is provided near its lower end with pivoted links 25 and 26, and these links at their lower extremities have slots 27 produced therein, so that they may be sprung over the headed pins 16, attached to the plate 15^a, secured to the lantern, as illustrated in Fig. 2. The slot in the lower end of each supporting-arm 23 is designated in the drawings as 28, and its shape is clearly shown in Fig. 8.

A bail 29 is pivotally attached to the upper portion of the pail B, and near the top of the pail, upon one side, a supporting-arm 30 is located, which extends longitudinally along the outer face of the pail and is pivoted in the hangers or the supports 18, to which the bail is attached and with which the supporting-rod 17 is connected. The supporting-arm 30 is provided with a central crank 32, which is passed through a sleeve upon which pendent locking devices 31 are secured, the pendent devices being provided with angular heads at their lower extremities, and the top of the pail B is normally closed by means of a cup-like receptacle 33. (Shown in Figs. 1 and 2.) When the lantern is not in use, it is supported, as shown in Figs. 1 and 2, closely beneath and practically in contact with the bottom of the pail B, but when the contents of the pail are to be heated the set-screws 21 are loosened, so that the sleeves 20 may drop down upon the guide-bars 17, attached to the pail, and lower the lantern A a predetermined distance below the pail, as illustrated in Fig. 3. When the lantern is in its lower position, if it is desired to reverse the same such reversal may be made by disconnecting the links 25 and 26 from engagement with the lantern, whereupon the lantern may be turned upon its axis, which is the pins 15, so as to bring the lantern to the desired position.

When the lantern is lowered, as shown in Fig. 3, candles 34 may be placed on the top of the lantern, and the flame from the same will impinge upon the bottom of the can or pail B. The lantern is provided near the top with a strap 35 and preferably near the bottom with a second strap 35^a, so that the lantern when disconnected from the pail may be placed upon a dashboard or an equivalent support, suitable irons or hangers being secured to the dashboard and arranged to enter the straps 35 and 35^a. When, however, it is desired to place the lantern in front of the pail, so as to permit the lantern to be employed in the usual manner, the links 25 and 26 are disconnected from the pail and the lantern is carried upward at one side of the said pail, its upper strap 35 being engaged by the pendent locking devices 31, attached to the pail, and the supporting-arms 23 will then

have assumed the diagonal position shown in dotted lines in Fig. 2, the lantern being held firmly and securely in a position to be carried to distribute the light over the surface to be traversed. Handles 36 are secured to the back of the lantern in order that the improved lantern may be used in the same manner as a dark lantern.

In order that the lantern may be supported in a mine or in other places where work is to be done, a supporting device is employed, (illustrated in Fig. 7,) which device consists of a shank 37, having a hook 38 at its upper end and two hooks 39 and 40 at its lower end, the hooks being turned upwardly in opposite directions, together with a spur 41, which is attached to one upright edge of the shank 37, as shown in Fig. 2.

In Fig. 5 I have illustrated a slight modification in the form of the suspension device for the lantern. In said Fig. 5 arms 42 are pivoted on the T-heads 15 and are carried above the top of the lantern and thence upward in parallel lines, the projecting portions of the arms being provided upon their inner faces with lugs 43, as is also illustrated in the said Fig. 5. The projecting portions of the arms 42 are passed through openings in the ends of a bridge 47, which bridge is provided between the said openings with a depression 47^a, and into the said depression one end of a lock 44 is sprung, the said lock consisting of a plate having one of its ends bifurcated and terminating in heads 45, which are to be passed through the strap 35 on the back of the lantern, as illustrated in Fig. 5, while at the opposite end of the lock 44 an eye 46 is formed, and by means of this eye the lantern may be hung upon either one of the lower hooks 39 or 40 of the shank 37 of the supporting device shown in Fig. 7, according to whether said supporting device is suspended from an overhead support by means of its upper hook 38 or is attached to a vertical or an inclined support through the medium of its spur 41.

It is evident that the lantern may be carried to the front of the pail B, as shown in dotted lines in Fig. 2, and when so carried it will be supported at its upper end by the prongs 31, connected with the arm 30, the said prongs entering the upper loop 35 on the back of the lantern, and the lantern will be further supported by the arms 23, connected with the guide-bars 17, attached to the pail.

It is also evident that the lantern may be entirely disconnected from the pail, and also from the supports which are carried by the bars 17, so that the lantern may be used in the same manner as an ordinary dark lantern when desired.

Under the construction shown in Fig. 5 the lugs 43 will admit of the lantern being applied to a stick, a standard, or a support of corresponding character; but the lugs are particularly designed to facilitate the application of the lantern to the dashboard of a

vehicle. To that end a block or a casting 50 is employed, (shown in Figs. 9 and 10,) provided in its face with openings 51 to receive screws or the like, and also with a groove 52, one in each side edge, each groove having a recess 53 in its back wall. The block having been secured to a support, the lugs 43 are sprung into the recesses 53.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of a pail, a lantern provided with pivot-pins extending from opposite sides, supporting-arms connected with the said pivot-pins and to the pail, a locking device carried by the pail, and a keeper located on the lantern and capable of engaging with the locking device, as and for the purpose specified.

2. The combination, with a pail or like receptacle and guides secured thereto, of supporting-arms adjustable upon the said guides, a lantern pivotally connected with the supporting-arms, and branches from the supporting-arms, likewise connected with the lantern and extending one at each side of the main supporting-arms, as and for the purpose set forth.

3. The combination, with a receptacle and guides secured thereto, of a lantern, supporting-arms adjustably located on said guides and removably and pivotally connected with opposite sides of the lantern, branches pivotally connected with the supporting-arms and removably attached to the lantern, a keeper located on the lantern, and a locking device carried by the pail and adapted for engagement with the said keeper, as set forth.

4. The combination of a body, a guide on the body, a rod pivoted and slidable on the guide, a lantern to which the rod is pivotally connected, a keeper on the lantern, and a catch on the body for engagement with the

keeper when the lantern is in a certain position, substantially as described.

5. A lantern having arms connected therewith and extending outwardly therefrom, each arm having a lug on its adjacent face, a bridge connected to the outwardly-extending portions of the arms, and a block having grooved edges respectively receiving the outwardly-projecting portions of the arms, and provided in said grooves with recesses respectively receiving the lugs of the arms, substantially as described.

6. A lantern having arms secured thereto and projecting outwardly therefrom, a bridge connected to the outwardly-projecting portion of the arms and having a depression, a keeper secured to the lantern, and a lock sprung into the depression of the bridge and having a spring bifurcated portion capable of locking with the keeper, substantially as described.

7. The combination of a body portion, a rigid arm pivotally and slidably connected therewith, a lantern carried by the arm, and means for holding the lantern in either of two positions with reference to the body portion, the rigid arm being capable of swinging the lantern to engage with the body portion at either of two points, substantially as described.

8. The combination with a body portion, of two rigid arms respectively located on opposite sides thereof, each arm being pivotally and slidably connected with the body portion, a lantern carried between the arms and capable of engaging the body portion at either of two points, and means for holding the lantern removably in its two positions, substantially as described.

MARTIN KILLIAN.

Witnesses:

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ANDREW MAZZINI.