

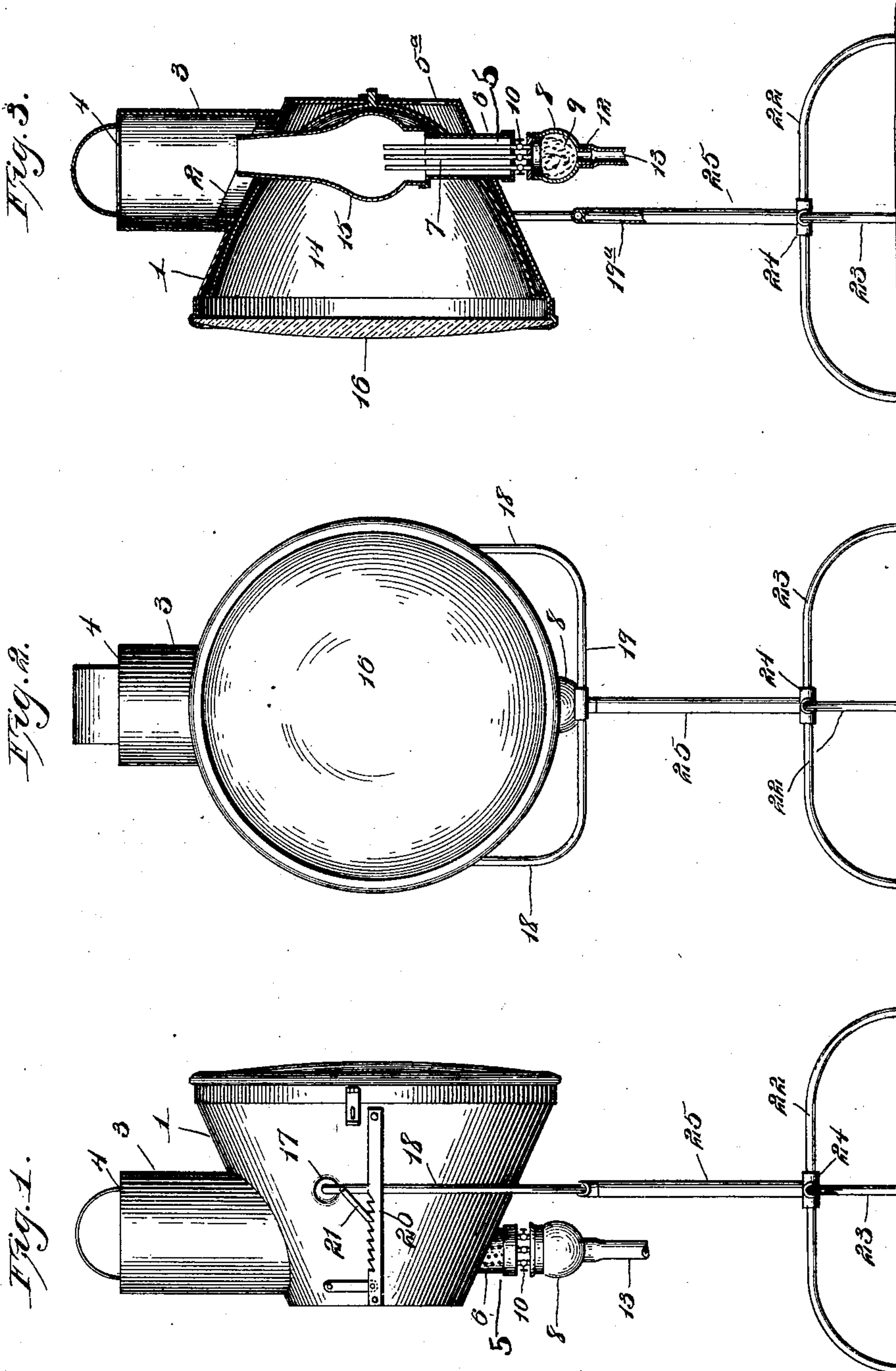
No. 673,118.

Patented Apr. 30, 1901.

J. T. EDWARDS.
REFLECTOR.

(Application filed Apr. 2, 1900.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH THOMAS EDWARDS, OF WEAVERVILLE, CALIFORNIA.

REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 673,118, dated April 30, 1901.

Application filed April 2, 1900. Serial No. 11,192. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH THOMAS EDWARDS, a citizen of the United States, residing at Weaverville, in the county of Trinity and State of California, have invented certain new and useful Improvements in Reflectors, of which the following is a specification.

This invention relates to lamps, but more particularly to that class in which a reflector is utilized to intensify the light-rays projected from the burner upon a predetermined area; and one object thereof is to provide a reflector which is adjustably secured upon a suitable support and carrying the lamp proper, so that the entire device can be easily transported from place to place, if desired.

A further object is to so arrange the reflector upon its support that a quick adjustment thereof can be made to direct the rays of light upon a predetermined point and retain the reflector in its adjusted position until it is found desirable to change the path of the light to another direction.

With these objects in view my invention consists in a portable support to which is pivotally secured a lamp-carrying reflector provided with a rack adapted to be engaged by a pawl on the support, whereby the angle of the said reflector may be regulated.

My invention further consists in certain novel details of construction and combinations of parts, all of which will be specifically described hereinafter, pointed out in the claims, and illustrated in the drawings, in which—

Figure 1 is a side elevation of a lamp and reflector constructed in accordance with my invention. Fig. 2 is a front elevation of the same, and Fig. 3 is a vertical longitudinal section through the same.

The outer casing of the reflector (designated by the reference-numeral 1) is in the form of a hollow truncated cone and is provided at its top with a flange 2, surrounding the flue-opening, protected by the cylindrical protecting-casing 3, through the top 4 of which pass the products of combustion from the lamp 5, positioned in the lower portion of said casing 1. An opening 5^a is provided in the rear of the casing 1 to light the lamp. This lamp is preferably of an acetylene type, and in this instance it comprises a chimney-support 6, in

which is arranged a series of gas-containing tubes 7, provided at their free ends with burners of a suitable type, while their lower ends communicate with a cup-shaped chamber 8, immediately below the chimney-support, and in which is a filling of suitable filtering material 9.

Between the ends of the gas-tubes 7 are a series of valves or cocks 10, (one to each tube,) so that one or all of the tubes may be used to convey gas to the burners and the flow of gas can be independently controlled in each tube.

It will be noticed that the cup-shaped chamber is contracted at 12 to form a neck to receive the end of a hose or pipe 13, leading to a suitable gas-retort. (Not shown.)

A reflecting member 14 is positioned within the casing 1, cut away to accommodate the chimney 15 and its support, and is concave upon its inner surface, so as to direct the rays of light through the lens 16, hinged to the front of the casing in which the reflecting member is secured.

On the outside of the casing 1 are arranged two diametrically opposite arbors 17, each engaged by the ends of the arms 18 of the yoke 19, forming a part of a support to be presently described.

A rack-bar arranged on the side of casing 1 and engaged by a pawl 21 on one of the arms 18 is designed to normally retain the reflector in a horizontal position. By adjusting the pawl between the teeth of said rack-bar toward either end the angle of the path of the light can be changed to suit the operator.

The base of the support comprises two semi-elliptical rods 22 and 23, secured together by a sleeve 24, from which projects a hollow standard 25, in which is revolvably secured the rod 19^a of the yoke 19, so that the reflector can be swung from right to left, and vice versa, to direct the rays of light to different portions of the surrounding area in a horizontal plane.

Inasmuch as the support just described is made, preferably, of light durable tubing, the entire device can be easily transported from place to place, and this will particularly be found desirable in mines and subterranean passages.

While I have specifically described each

and every part of this invention, I would have it understood that I reserve the right to make such changes as would, for instance, suggest themselves to the ordinary mechanic skilled in the art to which my invention appertains without in any way departing from the spirit thereof.

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

10 1. In a device of the character described, the combination with a suitable support, of a yoke carried thereby, a reflector pivotally engaging said yoke, a rack-bar rigidly secured to the reflector-casing, and a pawl on the yoke adapted to engage said rack for the purpose set forth.

2. In a device of the character described,

the combination with a suitable support, of a yoke carried thereby, a reflector pivotally secured to said yoke, the ends of the arms of said yoke bent inwardly and engaging suitable arbors arranged upon the outside of the reflector-casing, a rack-bar extending transversely of said yoke and rigidly secured to the reflector-casing and provided with teeth upon its upper edge, and a pawl on the yoke the lower end of which is designed for engaging said rack by gravity.

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

JOSEPH THOMAS EDWARDS.

Witnesses:

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E. F. CONLIN.