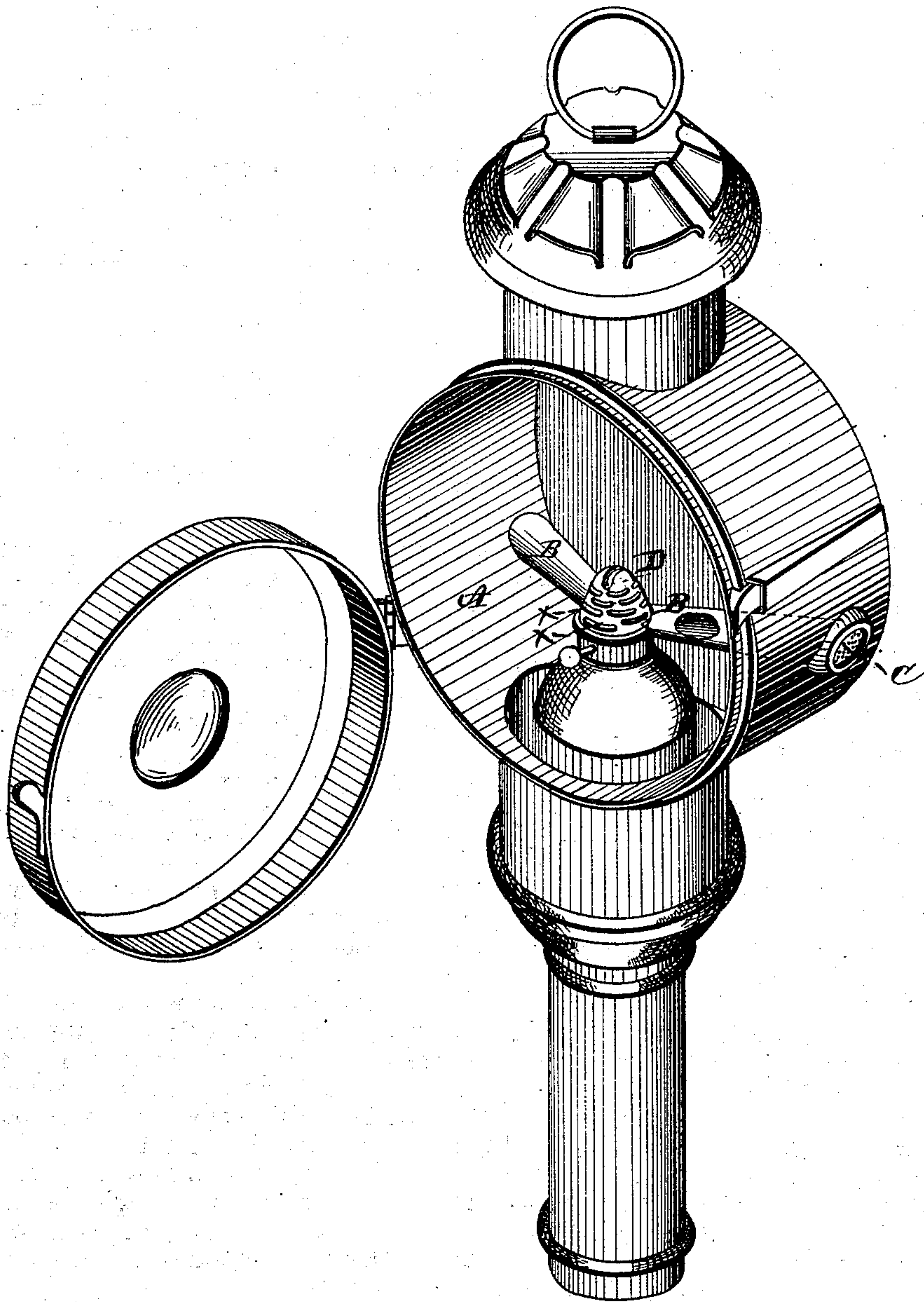


T. BOUDREN.
Carriage-Lamps.

No. 154,013.

Patented Aug. 11, 1874.



WITNESSES

Frank L. Durand
C. L. Evers,

INVENTOR

Thos Boudren,
per
Alfred Mason

Attorneys

UNITED STATES PATENT OFFICE.

THOMAS BOUDREN, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO THE WHITE MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN CARRIAGE-LAMPS.

Specification forming part of Letters Patent No. **154,013**, dated August 11, 1874; application filed July 23, 1874.

To all whom it may concern:

Be it known that I, THOMAS BOUDREN, of Bridgeport, in the county of Fairfield and in the State of Connecticut, have invented certain new and useful Improvements in Carriage-Lamps; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to lamps in which a current or currents of air are conducted through a tube or tubes to the flame.

Those who have occasion to use carriage-lamps are well aware that it has been heretofore very difficult, if not impossible, to keep lamps burning in the open air, and oftentimes when they were most needed—as over dangerous places in the road—they would be put out by a sudden jolt, or the rough motion of the carriage, or a sudden puff of wind.

The object of my invention is to overcome these difficulties, and furnish a lamp which will burn more freely than those at present in use, and with less liability of being extinguished.

My invention consists in providing the lamp with a slotted cone, and the employment of two horizontal air-tubes, flattened at their inner ends, said ends being adjacent to the cone, and said tubes being inclined rearward to the shell of the lamp-body, and provided with one or more screens, all as more fully hereinafter set forth.

I have found, by actual experiment, that a lamp properly made in this way will burn freely in a high wind, and stand the severe jolting of a carriage.

The perforated disk or gauze admits the air freely and sufficiently to support combustion, but effectually prevents a sudden motion of the air from the outside from being communicated to the flame with sufficient force to extinguish it. The channels prevent the air that is admitted from escaping, and conduct it directly to the flame which it is designed to feed.

The accompanying drawings represent a carriage-lamp in perspective with the reflector removed, showing the position of the chan-

nels or tubes B B for conducting the air to the flame.

A represents the shell or body of a carriage-lamp, upon the oil-reservoir of which is placed the cone D, having a series of slots, *x x*. B B represent two air-tubes, which are flattened at their inner ends, and which ends are in contact with the cone D, as shown, on the two opposite sides of the burner. These tubes are inclined from the burner toward the rear of the lamp-body, and open through, the outer ends thereof being circular. At the entrance of each tube is a perforated disk or screen, C.

By thus constructing and arranging the tubes in the lamp-body, the air is not admitted in gusts or in large volumes, as the rearward inclination thereof will prevent such, and the flattened ends of the tubes, in connection with the slotted cone, allows the air to be delivered to the flame in a thin sheet, through the cone, and directly under the flame.

In addition to the perforated disk C at the entrance of the tubes, others may be placed, at different intervals in the tubes, if one is found not sufficient; and they might be so that the first disk would be coarser meshes or perforations, and the next finer, and thus graduating them in this particular; or, if one disk only is employed, it might be placed at some other point than at the entrance of the tube without departing from the spirit of my invention.

I am aware that the employment of air-tubes, in connection with a lamp, for conducting air to the flame of the burner is not new.

What I claim is—

In combination with the lamp-body A and its slotted cone D, the rearward-inclined air-tubes B B, with flattened inner ends, and provided with perforated disks or screens C C, all substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of July, 1874.

THOMAS BOUDREN.

Witnesses:

GEO. H. JOHNSON,
F. W. SMITH.