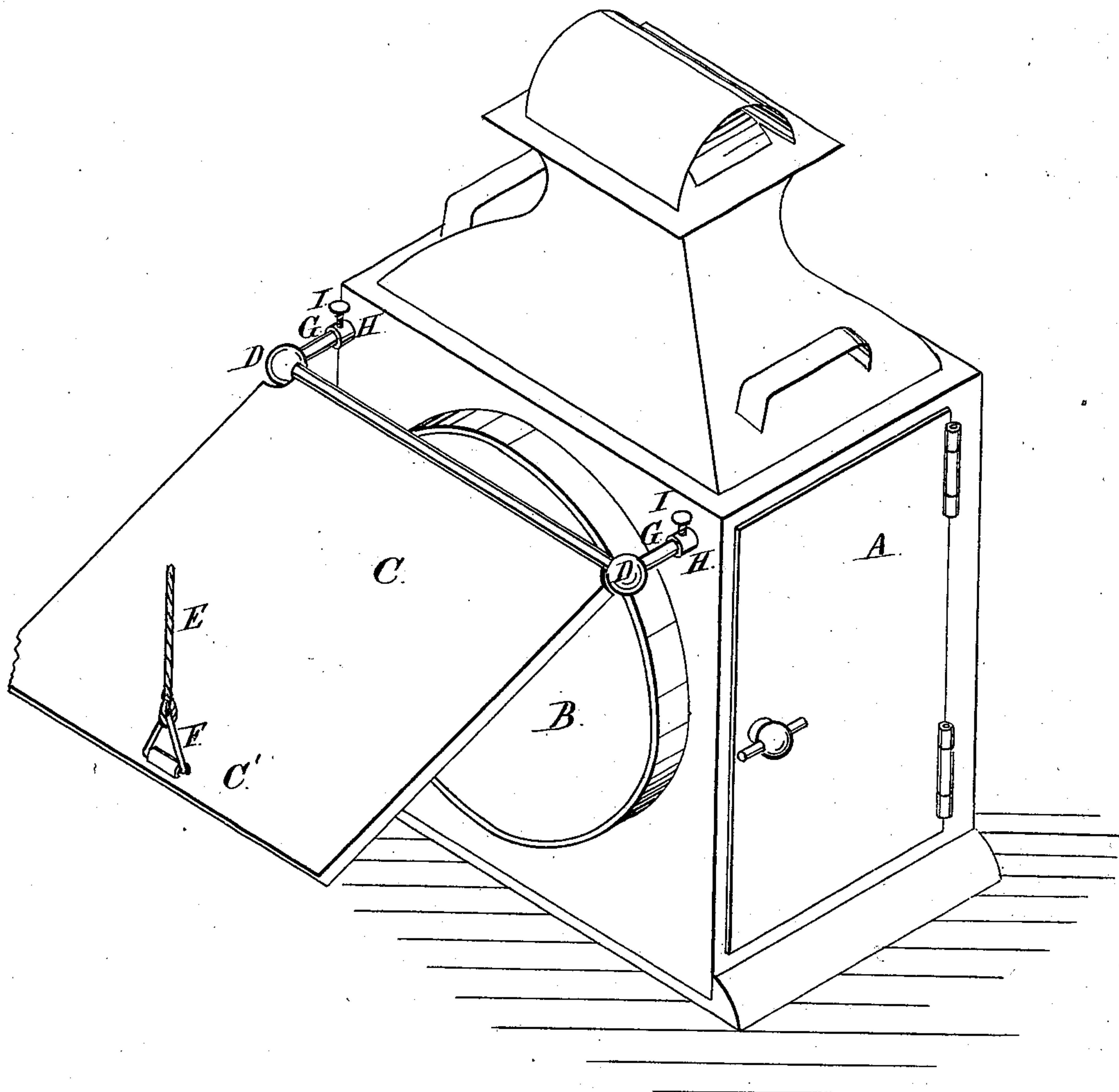


J. HIRTH.
Head-Light.

No. 227,628.

Patented May 18, 1880.



WITNESSES:

Geo. H. Knight
Walter Allen

INVENTOR:

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UNITED STATES PATENT OFFICE.

JOSEPH HIRTH, OF ST. LOUIS, MISSOURI.

HEAD-LIGHT.

SPECIFICATION forming part of Letters Patent No. 227,628, dated May 18, 1880.

Application filed February 9, 1880.

To all whom it may concern:

Be it known that I, JOSEPH HIRTH, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Head-Lights, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification.

My improvement consists in combining with a locomotive head-light a deflector hinged to the front of said head-light upon horizontally-adjustable rods sliding in suitable sockets attached to the head-light, and secured in position by means of set-screws working in said sockets, said deflector being raised and lowered by means of a cord or wire attached at one end to the free end of the deflector, its other end extending back to the point most convenient for operating the device.

The drawing is a perspective view of my improvement.

A shows an ordinary head-light, which is too well known to need any special description. B is the glass face through which the light shines. C is a deflector, of glass or metal, the former preferred, which is connected to the head-light by hinges D D, so that the free edge C' of the deflector may be raised

or lowered to deflect the light to any place required.

As a means for adjustment and support of the deflector in any position I have shown a cord or wire, E, extending upward from a loop, F, at the free edge of the deflector.

The cord may be carried over a pulley and descend to any point within easy reach, or may ascend direct to any such point.

I support the hinges D at the ends of rods G G, adjustable in sockets H H and held in position by set-screws I I.

This construction enlarges the scope of the deflector, for by drawing out the hinges some distance from the face B the light may be deflected at a distance farther back than could be otherwise done.

I claim as my invention—

• The combination, with the head-light A, of the deflector C, hinged to the horizontally-adjustable rods G, working in bearings in the case, suitable means for securing said rods in their bearings, and a cord or wire for raising and lowering said deflector, substantially as set forth.

JOSEPH HIRTH.

Witnesses:

SAML. KNIGHT,
JOSEPH RUFF.