

No. 730,203

PATENTED JUNE 2, 1903.

E. BROWNING.
COMBINED LIGHT AND REIN HOLDER.

APPLICATION FILED SEPT. 15, 1902.

NO MODEL.

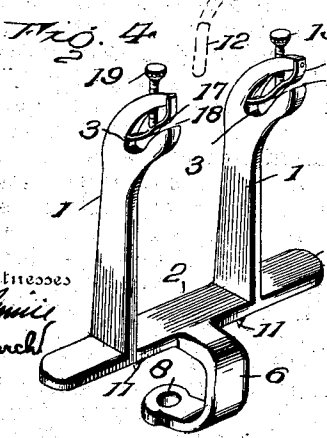
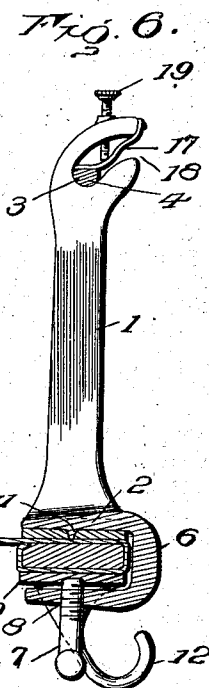
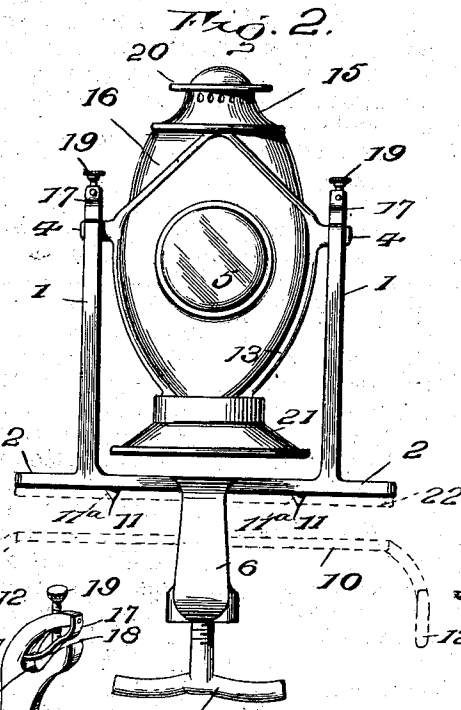
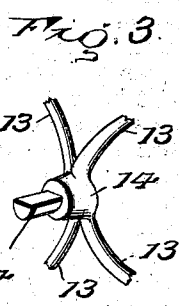
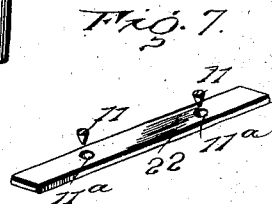
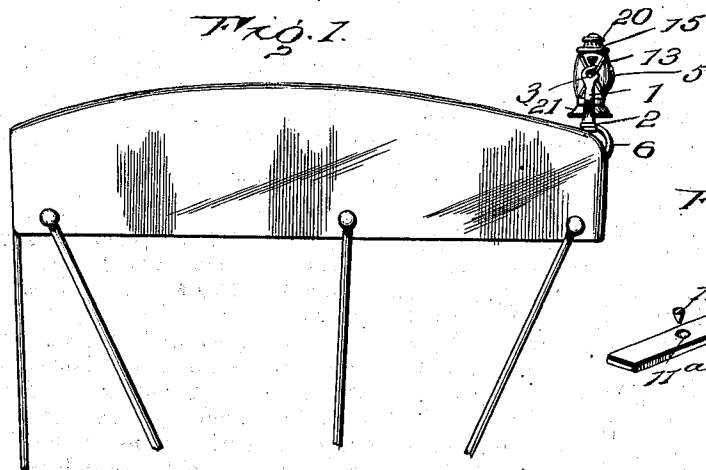


Fig. 5: A perspective view of a hook-like component with reference numerals 9, 10, 12, and 12.

Inventor
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UNITED STATES PATENT OFFICE.

ELI BROWNING, OF IOWA CITY, IOWA, ASSIGNOR OF ONE-HALF TO
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COMBINED LIGHT AND REIN HOLDER.

SPECIFICATION forming part of Letters Patent No. 730,203, dated June 2, 1903.

Application filed September 15, 1902. Serial No. 123,398. (No model.)

To all whom it may concern:

Be it known that I, ELI BROWNING, a citizen of the United States, residing at Iowa City, in the county of Johnson and State of Iowa, have invented certain new and useful Improvements in a Combined Light and Rein Holder for Vehicles, of which the following is a specification.

This invention relates to the combination of a lantern, a lantern-holder, and a reins-holder for vehicles, adapted to be mounted for use on the tops of buggies, carriages, and other vehicles having tops.

One of the objects of this invention is to produce a combined lantern, lantern-holder, and reins-holder which may be mounted in such a way upon the tops of buggies, carriages, and other vehicles having tops as to furnish a headlight to guide the driver along his way at night and at the same time provide convenient means for holding the reins out of reach of the horse's tail when they are not held in the driver's hands.

Another object of this invention is to produce a combined lantern, lantern-holder, and reins-holder of the character described which will permit the lantern to be automatically adjusted to upgrade and downgrade in the road along which a driver is traveling.

Another object of this invention is to produce a combined lantern, lantern-holder, and reins-holder of the character described which will prevent the horse from obstructing the light before the driver and at the same time not blind the driver by glaring backwardly into his eyes.

Another object of this invention is to produce a combined lantern, lantern-holder, and reins-holder of the character described which will while unobstructedly lighting the way before the driver without blinding him with its backward glare so conceal the presence of those in the vehicle as to prevent footpads or any one by the wayside from seeing them or in any way recognizing their individualities.

Another object of this invention is to produce a combined lantern, lantern-holder, and reins-holder of the character described which will render a woman driver along a public road at night just as safe from molestation as

a man driver would be by keeping her sex so completely in the background of the light as to prevent her discovery by any one on the wayside.

Another object of this invention is to produce a combined lantern, lantern-holder, and reins-holder of the character described which may be kept permanently in place without disfiguration of vehicle or inconvenience of driver or which may be readily and easily removed either in part or entirely when desired.

Another object of this invention is to produce a combined lantern, lantern-holder, and reins-holder of the character described which may be left in place and in use with the top of the buggy or other vehicle down as easily and as safely as when it is up.

Another object of this invention is to produce a combined lantern, lantern-holder, and reins-holder of the character described which in addition to the uses of a perfect road-lantern will provide convenient, safe, and ready holders in which the reins may be placed and kept out of the reach of the horse's tail in such a manner as to be easily and readily resumed by the driver.

I attain these and other objects not specifically enumerated by means of the constructions, combinations, and arrangements shown in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is the side view of the buggy-top equipped with a combined lantern, lantern-holder, and reins-holder constructed according to the details of my invention. Fig. 2 is a full front view of my combined lantern, lantern-holder, and reins-holder, showing the trunnion-mount which gives the lantern grade adjustability. Fig. 3 is a detailed view of the hub, trunnion, trunnion-shoulders, and rib ends of the skeleton frame used in my trunnion-mount. Fig. 4 is an angle view of the lantern-holder or bracket without the lantern used in my combination, showing the base-piece, the vertical shanks, the spring-gear trunnion-beds, and the U-shaped clamp-yoke for adjusting the lantern in position. Fig. 5 is a detailed view of the lower clamp-plate, showing the reins-holder at each end thereof and the countersunk bed or rest provided in the central under surface there-

of to engage the upper end of the upwardly-actuated clamp-screw. Fig. 6 is a sectional side view through the whole combination; and Fig. 7 is a detailed view of the upper clamp-plate, showing the countersunk beds or rests for the lugs projected from the bottom surface of the base-piece.

Like characters of reference denote like parts wherever they occur in the various views of the drawings.

1 1 are vertical shanks erected near each end of the base-piece 2 to support the trunnion-beds 3, which take the trunnions 4, provided on each side of the skeleton frame formed by the ribs 13 13 13 13, emanating from the hub 14 on each side of said skeleton frame, in connection with the inverted-bowl-shaped upper piece 15 and the terminal lower piece to which the oil holder or reservoir 21 is attached, said ribs being united with said terminal upper and lower pieces.

5 is a bull's-eye lens set in an opaque flame-chamber 16.

6 is a downwardly-disposed U-shaped clamp-yoke having its upper end integral with the front side center of the base-piece 2 and its U curve thrown downwardly back around the front edge of the vehicle-top and fastened in place around such edge by the T-shaped clamp-screw 7, which passes upwardly through the aperture 8 in the lower end of the clamp-yoke 6 and engages the countersunk bed 9, provided in the nether surface of the lower clamp-plate 10, securely fastened transversely along the under surface edge of the vehicle-top.

11 11 are conical lugs provided on the under surface of the base-piece 2 to be pressed through the action of the clamp-screw into the countersunk beds 11^a 11^a, provided in the upper surface of the upper clamp-plate 22, which is to be permanently secured along the bow edge of the vehicle-top and give the lantern-holder rigidity of position when adjusted to said vehicle-top.

12 12 are reins-holders provided at each end of the lower clamp-plate 10.

13 13 13 13 are ribs which emanate from each of two hubs 14, provided on opposite sides of the skeleton frame and connected by such ribs with the terminal pieces of said skeleton frame. These ribs pass slantingly upward and slantingly downward in opposite inwardly-curved directions till they meet and intersect upwardly in the under rim of the inverted-bowl-shaped upper piece 15 and downwardly in the upper edge of the bottom piece, to which the oil holder or reservoir 21 is attached, thus forming a skeleton frame to inclose and protect the opaque flame-chamber 16, which carries the bull's-eye lens 5.

17 17 are spring-tongues set in the mouths 18 18 of the trunnion-beds 3 3 and controlled by the downwardly-actuated screws 19 19 in guarding the passage-way through which the trunnions 4 4 slide in reaching their beds 3 3

in the upper ends of the vertical shanks 1 1 on each side of the lantern.

19 19 are downwardly-actuated screws passed vertically downward through the upper jaws of trunnion-mouths 18 18 to regulate the tension of tongue-springs 17 17 in retaining the trunnions 4 4 in their beds 3 3 and in regulating the grade-adjusting oscillation of the lantern in its holder.

20 is a weather-cap, consisting of a horizontally-disposed rim projection from the cap-piece 15 over the ventilation-holes provided on the sides of said cap-piece.

21 is an oil holder or reservoir, which is attached by suitable means to the lower end piece of the skeleton frame which incloses the opaque flame-chamber 16.

22 is the upper clamp-plate, carrying countersunk beds 11^a 11^a to engage the lugs 11 11 and hold the bracket in place.

In adjusting this combination to a vehicle for use the upper and the lower clamp-plates 22 and 10 are first securely attached along the upper and the lower surfaces of the bow of the vehicle-top, near enough to the front edge thereof to permit the lugs 11 11 on the base-piece to rest in the beds 11^a 11^a on the upper clamp-plate and the aperture 8 in the lower end of the clamp-yoke 6 to come over the countersunk bed 9 in the under surface of the lower clamp-plate. The clamp-yoke is then passed over the front edge of the vehicle-top, and the T-shaped clamp-screw 7 is inserted through the aperture 8 and turned till it engages the countersunk rest 9 in the lower clamp-plate and presses the conical lugs 11 11 on the under surface of the base-piece into the countersunk beds 11^a 11^a in the upper surface of the upper clamp-plate. The lantern is then adjusted to the holder by passing the trunnions 4 4 through the spring-gear passages 18 18 into the trunnion-beds 3 3 in the vertical shanks 1 1 on each side of the lantern. The ease with which this insertion of the trunnions is made, as well as the security of their retention therein, is controlled by the spring-screws 19 19, passed downwardly through the upper jaws of the U-shaped trunnion-beds provided in the upper ends of the vertical shanks. Gravitation keeps the lantern in an upright position and maintains a spirit-level in the lantern by inclining it forward toward the plane of the surface top of the vehicle when going upgrade and backward toward that plane when going downgrade, and thus prevents the flame from blackening the lens in such a manner as to destroy its light-giving efficiency.

While I may slightly vary the construction, arrangement, and disposition of parts without departing from the scope and the spirit of my invention and do not want to be limited to the exact constructions, arrangements, and dispositions shown and described,

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

1. The combination of a lantern, a lantern-holder and a reins-holder for vehicles adapted to be adjusted to the top of a buggy, carriage or other top-vehicle, comprising a horizontally-disposed base-piece supporting integral vertical shanks projected from near each end thereof and rising on opposite sides of a lantern, said vertical shanks carrying at their upper ends trunnion-beds guarded by spring-gear passage-catches adapted to receive and hold trunnions on each side of a skeleton frame, terminating at its top in an inverted-bowl-shaped cap-piece and at its bottom in a rim-piece to which an oil holder or reservoir may be attached, said skeleton frame being adapted to encompass and protect a flame-chamber, said upper cap-piece being provided with lateral ventilation-holes under a rim projection around its crown, said base-piece having downwardly-projected conical lugs integral with its under surface to rest in countersunk beds provided in an upper clamp-plate and a downwardly-hooked U-shaped clamp-yoke integrally projected from the front side thereof between the bases of the vertical shanks, said upper clamp-plate being provided with countersunk beds to engage and hold said downwardly-projected conical lugs, said U-shaped clamp-yoke being provided with an aperture through its nether end to admit a clamp-screw, and said lantern and lantern-holder being provided with downwardly-projected upwardly-grappling rein-hooks let fall from the ends of a lower clamp-plate firmly secured to the edge or rim of the under surface of the vehicle-top and provided with a centrally-located countersunk bed for the end of the clamp-screw to rest in, substantially as described.

2. In the combination of a lantern, a lantern-holder and a reins-holder for vehicles, adapted to be adjusted to the top of top-vehicles, a skeleton frame for flame-chambers, comprising an inverted-bowl-shaped upper cap-piece with lateral ventilation-holes under a horizontally-disposed rim projection around its crown, ribs extending upwardly and downwardly in oppositely inward directions from the upper and lower sides of hubs on either side of said skeleton frame, said ribs meeting and intersecting each other, upwardly, in the rim of the inverted-bowl-shaped cap-piece and, downwardly, in the rim of the lower end piece of said skeleton frame, said hubs being provided with trunnions, which may be semicircular in cross-section, buttressed against washer-shoulders at their inner ends, and said lower end piece being adapted to receive and hold an oil holder or reservoir, substantially as described.

3. In the combination of a lantern, a lantern-holder and a reins-holder for vehicles, adapted to be adjusted to the top of top-vehicles, a lantern holder or bracket, comprising a horizontally-disposed base-piece having vertical shanks integrally projected from its

upper surface, near the ends thereof, and carrying in their forwardly-drooping upper ends trunnion-beds, guarded by spring-gear passage-catches and adapted to receive and hold the trunnions projected from the sides of an intersuspended lantern-frame, said base-piece having integral downwardly-projected conical lugs thereunder and a forwardly-projected down and backwardly hooked U-shaped clamp-yoke integrally projected from its front edge, or side, between the bases of the vertical shanks, said U-shaped clamp-yoke being provided with a clamp-screw aperture in its nether end to admit an upwardly-actuated clamp-screw, substantially as described.

4. In the combination of a lantern, a lantern-holder and a reins-holder for vehicles adapted to be adjusted to the top of top-vehicles, a spring-gear latch-guarded trunnion-passage and trunnion-bed, comprising a downwardly-slanting U-shaped slot made transversely through the forward-drooping upper end of a vertical shank on each side of a lantern-frame and having a downward curve on the lower inside of the U-bow to one side of its bottom as a bed for the trunnion to rest and turn in, the mouth of said U-shaped transverse slot being provided with a spring-tongue made fast to the upper end of the U-bow, passing downwardly back between the jaws of the U-bow and actuated by a downward screw passed vertically through a threaded aperture through the upper jaw of the U-bow to regulate the pressure of the spring-tongue on the trunnion and hold the trunnion in its bed, substantially as described.

5. In the combination of a lantern, a lantern-holder and a reins-holder for vehicles adapted to be adjusted to the top of top-vehicles, an upper clamp-plate, adapted to be permanently fastened along the front edge of the upper surface of the bow in a vehicle-top, and provided with countersunk beds or rests in its upper surface to engage and hold conical lugs provided on the bottom surface of a lantern-bracket to hold it in place on the top of a vehicle, substantially as described.

6. In the combination of a lantern, a lantern-holder and a reins-holder for vehicles adapted to be adjusted to the top of top-vehicles, a reins-holder, comprising a horizontally-disposed lower clamp-plate permanently secured to the front under surface of the bow in a top-vehicle and rein-hooks let fall from each end thereof, said rein-hooks and clamp-plate being provided, on their under surface, with a centrally-located countersunk bed or aperture to receive and hold the upper end of an upwardly-actuated clamp-screw, substantially as described.

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

ELI BROWNING.

Witnesses:

W. B. BROWNING,
R. H. BROWNING.