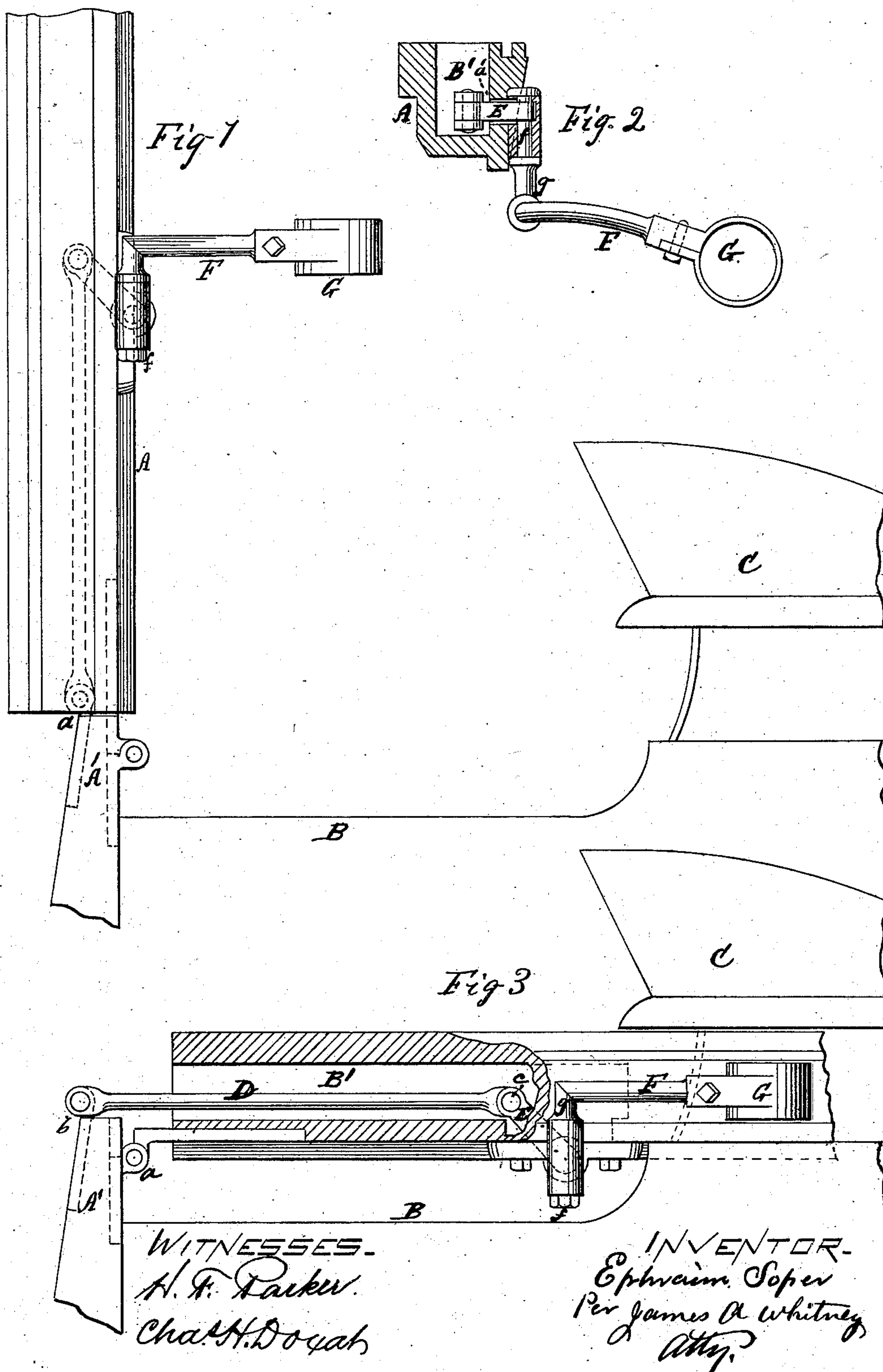


(No Model.)

E. SOPER.
Carriage Lamp Bracket.

No. 242,848.

Patented June 14, 1881.



UNITED STATES PATENT OFFICE.

EPHRAIM SOPER, OF BROOKLYN, NEW YORK.

CARRIAGE-LAMP BRACKET.

SPECIFICATION forming part of Letters Patent No. 242,848, dated June 14, 1881.

Application filed November 8, 1880. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM SOPER, of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Carriage-Lamp Brackets, of which the following is a specification.

This invention is designed to be applied to that class of carriages of which the tops are constructed to be raised or lowered when occasion requires, and its object is to enable the lamps to be attached to the front of the carriage-top in such manner that, whatever the position of the latter, the lamp will be automatically adjusted to a vertical position—that is to say, its socket will be automatically maintained at a horizontal position, whether the top be raised or lowered or placed in any intermediate angle. To this end the invention comprises a novel combination of parts whereby said object is effectually secured.

Figure 1 is a side view representing my said invention as applied in practice. Fig. 2 is a horizontal sectional view of a portion thereof, and Fig. 3 is a side view and horizontal section of the same.

A represents the forward end of the front half of a carriage-top vertically divided in the middle, and designed to fold, the front half forward and the rearmost half backward, in the manner well understood by carriage-builders. The lamp-supports are placed one on each side of the front A, and a description of that on one side will serve for both.

The front A of the carriage-top is hinged or pivoted at *a* to a fixed arm, A', attached to the box B, at the forward end of which latter is the usual seat, C. The part A is of wood internally grooved, as shown at B' in Figs. 2 and 3. Through this hollow B' extends a rod, D, one end of which is pivoted to a fixed pivot, *b*, at the top of the fixed arm A', and the opposite end of which is pivoted at *c* to the free end of a crank-arm, E, which extends radially through a slot, *a'*, in the side of the part A from a rock-shaft, *f*. This rock-shaft *f* is extended outward, as shown at *g*, from the outer extremity of which extension *g* extends forward

a bracket-arm, F, at the outer end of which is the socket G for receiving the lamp.

It will be observed that the rod D is substantially longitudinal with the part A, that the shaft *f* and its extension *g* are in a direction horizontally transverse to the part A, and that the bracket-arm F extends forward in a position substantially at right angles to the said shaft *f*, this relation of the parts enabling them to secure the result hereinafter more fully particularized.

When the carriage-top is elevated the part A, and consequently the rod D, will be vertical, the crank-arm E will be in position at an angle of, say, forty-five degrees, as represented in dotted outline in Fig. 1, and the bracket-arm F will be substantially horizontal, as also represented in Fig. 1. If, now, the part A be thrown forward around the pivot *a*, the rod D will exert a drawing action upon the crank-arm E to draw the same downward or backward, thereby in a proportionate degree lifting the bracket-arm F, and consequently the lamp-holder G, so that whatever the position of the part A the draft or drawing action of the rod D will always be automatically and duly proportioned to tilt upward the bracket-arm F, and thereby retain the lamp-holder G in a horizontal position, whatever be the angle to the vertical of the part A of the carriage-top. By this means the lamp will always be retained in a substantially vertical position during any and all adjustments of the part A of the carriage-top, and this, too, automatically and without care or attention.

What I claim as my invention is—

The self-adjusting support for carriage-lamps, composed of the shaft *f*, having the crank-arm E and the bracket-arm F, and the rod D, pivoted to a fixed point of attachment at one end, and at the other connected with the free or moving extremity of the crank-arm E, all substantially as and for the purposes herein set forth.

EPHRAIM SOPER.

Witnesses:

CHAS. H. DOXAT,
JACOB LEVY.