

H. S. CRANDAL.  
Carriage-Top Prop.

No. 203,246.

Patented May 7, 1878.

Fig. 1.

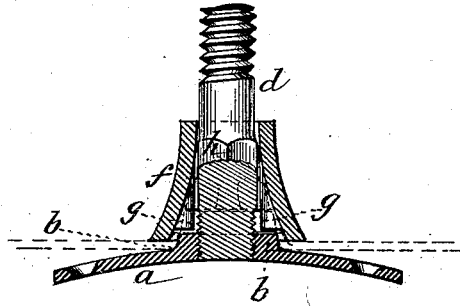


Fig. 2.

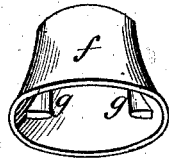


Fig. 6.

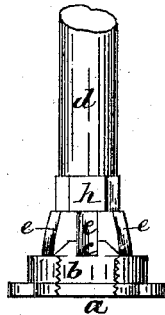


Fig. 4.

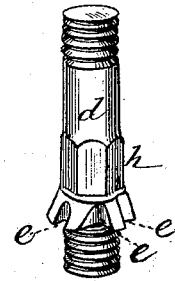


Fig. 3.

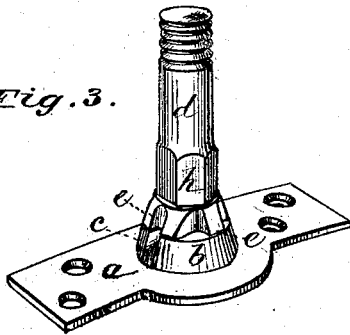
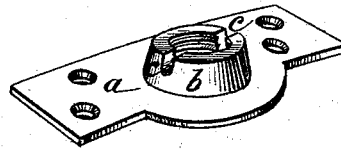


Fig. 5.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN CARRIAGE-TOP PROPS.

Specification forming part of Letters Patent No. **203,246**, dated May 7, 1878; application filed April 9, 1878.

*To all whom it may concern:*

Be it known that I, HENRY S. CRANDAL, of Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Carriage-Top Props; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

In ordinary carriage-top props the screw-bolt is liable to unscrew and become loose, as well as the leather-clamping washer; and my improvement relates to means for locking the bolt or prop and its covering-washer to the socket-plate when the post is screwed therein.

The socket or collar of the plate has notches on its opposite sides, and the screw-bolt has a notched shoulder, so that, when screwed to its place in the socket, the notches therein and in the shoulder will be coincident, and the lock made by projections or ribs on the inner side of the covering-washer entering and crossing the junction or lap of said coincident notches in the shoulder and socket, so that neither the bolt nor the washer can turn, thus making a simple and effective lock for these parts.

Referring to the drawing, Figure 1 represents a section of a carriage-top prop-lock embracing my invention; Fig. 2, the covering-washer; Fig. 3, the notched post and its socket-plate; Fig. 4, the notched screw-post; Fig. 5, the plate and notched socket; and Fig. 6 shows the post and collar notches lapping.

The plate *a* has an annular screw-threaded socket or collar, *b*, having notches *c* in its opposite sides; and the prop or screw-bolt *d* has a shoulder at its inner screw-end provided with a series of notches, *e*, around it, so that when screwed down upon said socket or collar, two of its notches will be brought coincident with those in the plate-socket. The covering-washer *f* has opposite interior ribs or projections *g*, and is made bell-shaped to fit over the bolt-shoulder and the plate-collar, so

that its ribs or projections will enter the coincident notches, and cross the junction or lap of the shoulder and plate-collar, thus locking the plate, bolt and covering-washer or cap together, and thus prevent the bolt and its washer from turning and the leather from being cut. The bolt has the usual joint-end for the carriage-top braces, and the binding joint-nut is screwed upon the outer end of said bolt. The bolt has an angular formation, *h*, contiguous to the notched shoulder, by which it may be screwed into the plate-socket to bring the locking-notches coincident. I thus form a simple and effective lock by causing the covering-cap ribs to cross the junction of said coinciding notches in the post-shoulder and plate-socket.

Fig. 6 shows the notches in the plate-socket lapping with those in the post by means of projections on the socket or collar outside of the post-shoulder; but I prefer the other plan shown.

I am aware that it is not new to lock the covering-washer and the prop-bolt of a carriage-top prop by means of a projecting rib on the socket-plate collar, and the covering-washer having interior scallops to receive said projecting rib. My improved device requires no trimming of the leather to receive a projection from the plate-socket, and is therefore easy to fit, and besides, gives a strong double lock with a tight fit.

I claim—

The plate-socket having opposite notches, and the screw-bolt collar having notches adapted to coincide therewith, in combination with the covering washer or cap having interior ribs or projections adapted to fit in said coinciding notches, and to cross the shoulder and socket junction or lap, to lock the parts together, as specified.

In testimony that I claim the foregoing I have affixed my signature in the presence of two witnesses.

HENRY S. CRANDAL.

Witnesses:

G. C. NICHOLS,  
J. M. SEABURY.