J. G. ENGLISH.

Top-Joint for Carriages.

No. 210,510. Patented Dec. 3, 1878.

Fig. 1.

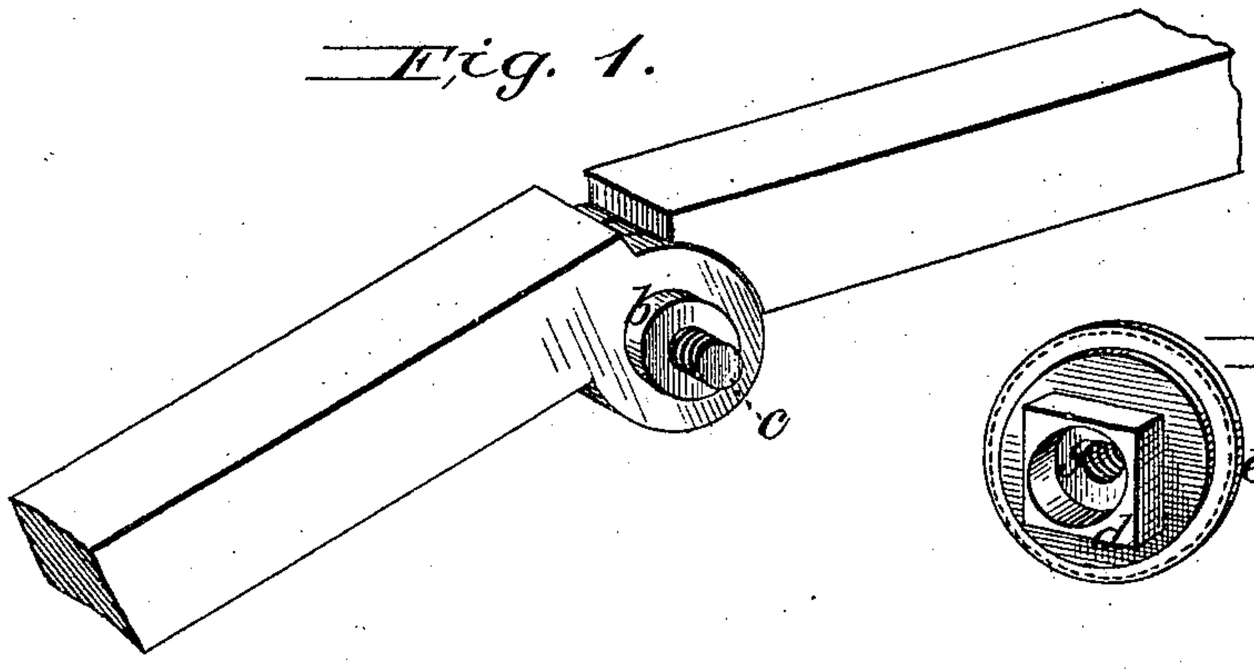


Fig. 4.

Fig. 2.

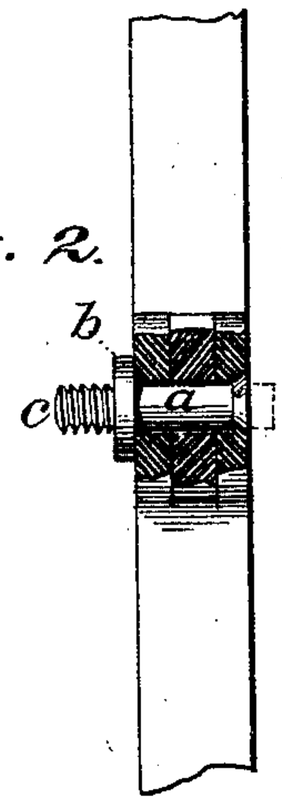


Fig. 3.

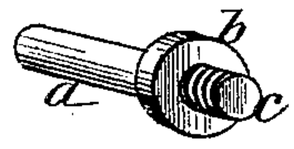
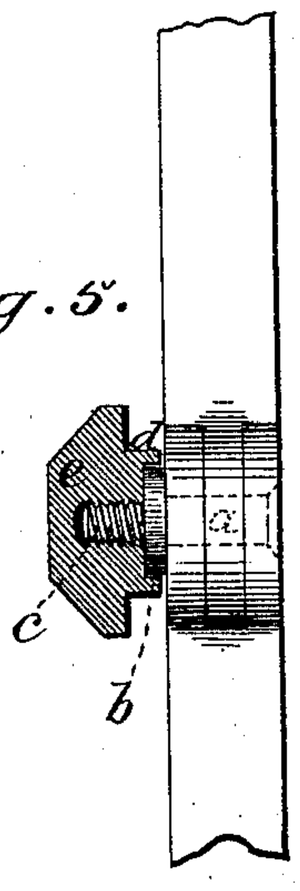


Fig. 5.



Attest:
H. D. Perrine
Floyd Norris.

Inventor:
James G. English
By. Johnson & Johnson
Atty's

UNITED STATES PATENT OFFICE

JAMES G. ENGLISH, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO EDWIN F. MERSICK, OF SAME PLACE.

IMPROVEMENT IN TOP-JOINTS FOR CARRIAGES.

Specification forming part of Letters Patent No. **210,510**, dated December 3, 1878; application filed November 9, 1878.

To all whom it may concern:

Be it known that I, JAMES G. ENGLISH, of New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Carriage-Top Joints; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part hereof.

This invention relates to devices for effecting the union of the knuckle, or what is technically known as the "rivet-joint," of the arms of carriage-tops.

The top-props and rivet-joints of carriages have heads which are ornamental, or designed to be so. The top-prop head is generally leather-covered, and admits of a great variety of ornamentation, while the rivet-joint has been hitherto supplied with a metallic head, which, of necessity, has been devoid of ornamentation. It has been customary, in riveting carriage-joint rivets, to place a piece of leather over the plain metallic head of the rivet while the riveting is being done, to prevent its polished surface from being battered. Thus the rivet-head is different, and appears to the eye different, from the carriage-top-prop head.

Now, the design of my invention is to produce a device which shall be perfectlly available for its purpose of a carriage-joint rivet, while assuming outwardly the same appearance, if desired, of the carriage-top-prop head.

My said invention consists of a rivet-shank adapted for the joint, and provided at its end opposite the riveting end with an outer shoulder, taking the place of the ordinary rivet-head, and a threaded screw projecting stem, to receive a leather-covered or metallic head, having a countersunk or counterbored nut, embracing said projecting stem and shoulder when adjusted, and in such manner as to render the head or nut-head free from contact with and of the movement of the joined carriage-arms.

In such a device the riveting may be effected with proper riveting-tools, and the nut-head afterward screwed on. Heretofore this has been impossible with the rivet-joints, the rivet and its head having been integral.

With my device the movable nut-heads are capable of being highly ornamented—if of leather, with the most delicate embossing; if solely of metal, they may be highly chased—since the riveting of the joint is effected before they are applied.

In the accompanying drawings, Figure 1 represents a view, in perspective, of a carriage-top arm embracing my invention, the ornamented nut-head being removed; Fig. 2, a section through the rivet-joint; Fig. 3, the shouldered and threaded rivet; Fig. 4, the nut-head therefor, and Fig. 5 a view showing the head isolated from contact with the arm.

Any nut-head leather-covered, metallic, or celluloid may be used, and may be of the most ornate design.

The rivet-shank *a* passes through the joint, and is provided nearer its outer end with a shoulder, *b*, from which projects a screw-threaded stem, *c*, to receive a counterbored or countersunk nut, *d*, carrying the ornamental head *e*, the riveting being effected with proper tools before the head is applied. The shoulder takes the place of the ordinary rivet-head, and at the same time prevents the contact of the head with the carriage-arm, and thus avoids its tendency to unscrew and work off by the movement of the arms in lowering and raising the carriage-top.

In order to receive the screw-projecting stem of the rivet the nut is counterbored and screw-socketed, the counterbore receiving the shoulder and the screw-socket *g* the screw-projecting stem *c* of the rivet.

It will be observed that there is no clamping action against the joint, as required for the joints of calipers; and that the use of a through-threaded nut, as in calipers, with a clamping action, would defeat the object of my invention. The fixed head of the rivet forms an outside shoulder to the joint, and is supplemented by a button-head, which has no clamping function, and which is adapted to receive and conceal the screw-stem and the rivet-shoulder by a countersink, which allows the button to be screwed hard against said rivet-shoulder or fixed head, but is kept free from contact with the joint, so that the working of the carriage-top joints cannot work the nut-buttons off.

I claim—

1. A carriage-top joint consisting of the knuckle-jointed arms, the rivet *a*, riveted at one end into the joint side, the shoulder or head *b*, bearing against the opposite side of said joint, a screw-stem, *c*, and a nut button or head, *e*, having a shouldered countersink, and a screw-socket adapted to receive and conceal said screw-stem and fixed head and prevent the nut-button from working against the joint, substantially as described.

2. A carriage-top-joint rivet, *a*, having a fixed head, *b*, and a screw-stem, *c*, supplemented by a nut-button, *e*, having a shouldered countersink and screw-socket, as shown and described.

JAMES G. ENGLISH.

Witnesses:
WM. BRYAN,
JOHN M. WHITNEY.