## R. P. COWLES.

## Manufacture of Carriage Knobs.

No. 48,373.

Patented June 27, 1865.

Fig. 3.

Witnesses.

Topu E. Earle 48373 Rufus Sanford

Inventor.

## UNITED STATES PATENT OFFICE.

R. P. COWLES, OF NEW HAVEN, CONNECTICUT.

## CARRIAGE-KNOB.

Specification forming part of Letters Patent No. 48,373, dated June 27, 1865.

To all whom it may concern:

Be it known that I, R. P. Cowles, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in the Manufacture of Carriage-Knobs; and I do hereby declare the following to be a full, clear, and exact description of the same, when taken in connection with the accompanying drawings and the letters of reference marked thereon, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a central section, and in Figs. 3 and 4 the two parts de-

tached.

Heretofore carriage knobs have been made by casting a metal head onto a piece of pointed wire. Preparing the wire, molding and casting such extremely light pieces, together with the fact that no inconsiderable amount of labor was required to finish the casting, have rendered them comparatively an expensive article.

To produce a more perfect article, and at much less expense, is the object of my invention, which consists in the employment of a carriage-tack as the head of the knob, passed through rose or bushing struck up from thin metal.

To enable others skilled in the art to produce my improved carriage-knobs, I will pro-

ceed to fully describe my method of so doing, as illustrated in the accompanying drawings.

I first strike up, in dies prepared for the purpose, or otherwise, a disk of thin brass or other suitable metal of the form shown in section in Fig. 4, pierced through the upper side. This forms the neck, rose, or bushing of the knob. Then take a common carriage-tack, the head oval, as shown in Fig. 3, or other form, as may be desired, pass the tack through the hole pierced in the neck, as seen in Fig. 2, pressing it down until the head of the tack rests upon the neck and my knob is complete, as seen in Fig. 1.

I prefer and usually do cover the head of the tack with thin metal. The metal covering of the head, also the neck, may be formed from plated metal, or left plain, or jappaned, as desired, and of any size required. Thus I have produced a much more perfect knob than heretofore produced and at a comparatively trifling cost.

Having fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

The herein-described knob, as a new article of manufacture.

R. P. COWLES.

Witnesses:

JOHN E. EARLE, RUFUS SANFORD.