C. E. Thompson.

Capping and Nicking Screw-Head Caps.

No. 67,463. Patented Aug. 6, 1867.

Fig. 4.

Fig. 5.

Fig. 3.

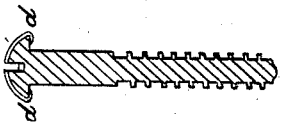


Fig. 2.

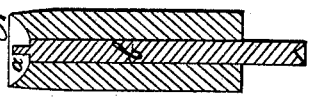
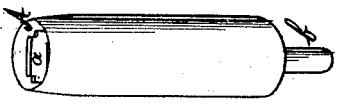


Fig. 1.



Witnesses.

Wm. C. Atwater

R. Fitzgerald.

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CHARLES E, THOMPSON, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO HIMSELF AND ORRIN W. SWIFT, OF SAME PLACE.

Letters Patent No. 67,463, *dated August* 6, 1867.

IMPROVED METHOD OF CAPPING AND NICKING THE CAPS OF SCREW-HEADS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES E. THOMPSON, of the city and county of New Haven, in the State of Connecticut, have invented a new and useful Improvement in Capping the Heads of Screws with Sheet Metal; and I do hereby declare that the following is a full, clear, and exact description of the construction, character, and operation of the same, reference being had to the accompanying drawings, which make part of this specification, in which—

Figure 1 is a perspective view of the cap-holder showing the punch or peg which punches or slots the cap and sets down the binding part to prevent the cap from turning.

Figure 2 is a section of the same cut longitudinally through the centre.

Figure 3 is a section of a capped screw cut longitudinally through the centre, showing the edge of the cap.

Figure 4 is a perspective view of a cap raised and partially slotted, ready to be spun on to the head of a screw.

Figure 5 is a perspective view of a cap raised smooth and whole, ready to be spun on to the head of a nail.

My improvement consists in securing the screw in the chuck of a common turning-lathe, while in connection with the travelling or adjustable centre of the lathe I use a hollow hemispherical cap-holder with a punch or peg, which punches or slots the cap and enters the nick of the screw so as to hold the cap perfectly steady, when I apply a burnisher and spin the edge of the cap over the edge or periphery of the screw-head so as to cause the cap to fit snugly and smoothly. I use any turning-lathe with a suitable chuck to receive the shank of the screw and hold it firmly in its position; and with a common travelling or longitudinally adjustable centre to bring up the cap holder. A, *figs.* 1 and 2, with its punch or peg *a* to punch and hold the cap in its place while its edge is being burnished or spun over the edge of the periphery of the head of the screw. I make this cap-holder of steel, or any other suitable material, of a cylindrical form, substantially as shown in fig. 1, and in section in fig. 2, making its working end substantially in the form of a hollow hemisphere, as indicated at A, figs. 1 and 2.

When I design to punch the cap in whole or in part, I make a suitable punch or peg, as shown at *a*, figs. 1 and 2, on the end of a rod, which I fit into the cylinder, as represented at *b*, fig. 2, so that the punch or peg *a* will pass into the nick in the screw-head punching the cap, if necessary, to assist in holding the cap steady while spinning its edge over the edge of the periphery of the screw-head. I cut and raise or strike up the caps from sheet metal in any of the usual ways, either whole and plain, as represented in fig. 5, or with a small or short slot in the central part, as represented at *c*, fig. 4, or with the slot cut of the full length; the plain cap, as fig. 5, may be used for screws as well as those with the slot cut the whole length, but for screws I prefer cutting the short slot, as represented in fig. 4, so that the punch *a* may cut the two ends and close the strips down into the ends of the nick so as to prevent the turning of the caps. To cap the screw, I put it into the lathe-chuck and secure it in a suitable manner, place the cap on the head and bring up the travelling centre and the cap-holder, in such a manner that the punch or peg will cut or finish the slot and enter the nick, at which time the periphery of the hollow hemispherical part of the cap-holder, as represented at A, figs. 1 and 2, will press upon the outer surface of the cap and hold it firm. I then apply the burnisher, while the work is revolving, and spin the edge of the cap over the edge of the periphery and against the under or back surface of the screw-head, so as to secure the cap firmly to the head, as represented at *d d*, fig. 3. I then remove the cap-holder by turning back the travelling centre, and burnish the whole of the cap, if desired, as is generally the case.

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

The method of capping the heads of screws and nicking the said caps, substantially as herein described.

CHARLES E. THOMPSON.

Witnesses.

R. FITZGERALD,

WM. O. ATWATER.