

(No Model.)

S. C. CARY.
BOX FASTENER.

No. 546,839.

Patented Sept. 24, 1895.

Fig. 1.

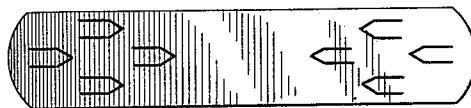


Fig. 2.

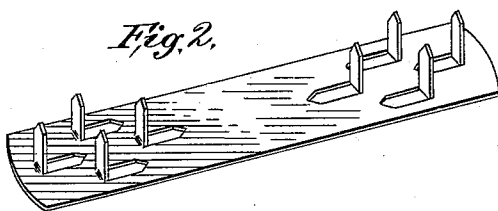
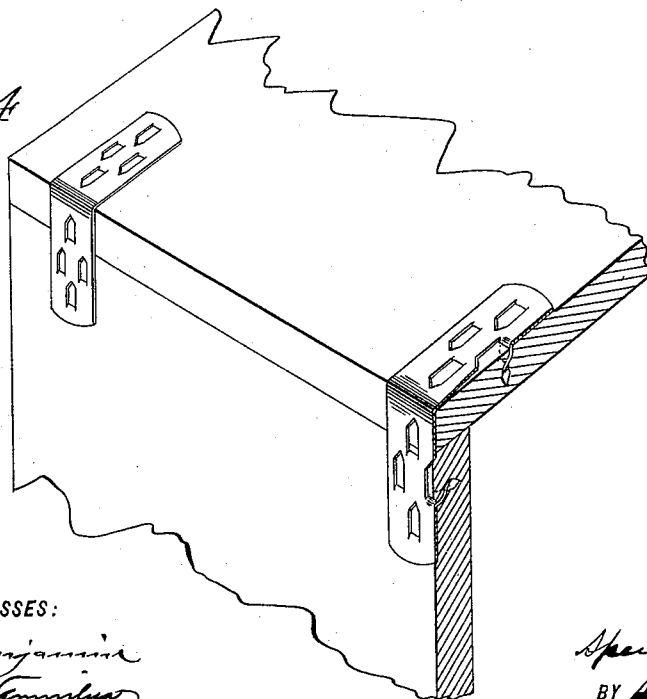


Fig. 3.



Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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BOX-FASTENER.

SPECIFICATION forming part of Letters Patent No. 546,839, dated September 24, 1895.

Application filed May 7, 1895. Serial No. 548,390. (No model.)

To all whom it may concern:

Be it known that I, SPENCER C. CARY, a citizen of the United States of America, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Box-Fasteners, of which the following is a specification, reference being had to the accompanying drawings, forming part of the same, in which—
Figure 1 is an upper face view of one form of the blank from which I prefer to make my new box-fastener, showing the general outline and the places cut to form the prongs hereinafter specified. Fig. 2 is a perspective view of the under face of the fastener with the prongs turned to their proper vertical angle with the body of the device. Fig. 3 is an edge view of said fastener with the prongs twisted; and Fig. 4 is an elevation of a portion of a box to which the fastener has been applied, a part being cut away to show the holding of the twisted prong in the wood.

I have made fasteners in which there was a plain body with prongs cut from the material thereof and simply turned at right angles to the body of the fastener, and in some instances they accomplish a useful purpose with no further manipulation; but I find that to give sufficient stiffness to the prong the metal must be of a heavier gage than would otherwise be necessary, and, too, they do not always drive as well or hold as strongly in the wood as I desire, and being frequently driven at right angles to the grain of the wood there is some tendency to split it, or if driven with the grain they do not hold as well as if driven across it, and to provide a better fastener I have devised the one now to be described, which is substantially similar to the other ones above named with this exception.

Having formed the body and struck out the tangs, either from the ends, the sides, or from within the exterior lines of the main body of the fastener, and having bent the prongs to the proper angle with the body, (see Fig. 2,) I then twist those prongs until their edges present substantially the appearance of spirally-curved lines, as seen in Figs. 3 and 4. This I find greatly strengthens the prongs, so that I can use a lighter-gage metal than heretofore, and, furthermore, it turns the point so that it will generally start in the wood with the grain or less directly across it than before and so

drive well but as the prong goes farther in; the parts of it nearer the body of the fastener than the point is come across the grain and thus hold better, for as the cross part enters gradually it, as it were, twists itself in and does not cut off so much of the wood as though a flat prong were driven directly across the grain from the first entering, and yet in its length it is nearly or quite across such grain, but holds more as a screw does and much more firmly than does the ordinary prong or even does one that is corrugated, as that merely crowds the wood out of the way and crushes it in entering instead of twisting itself under portions of it with a screw-like action, (or rather forcing the wood away without entirely crushing the fiber which returns to hold above the twisted part after that has passed farther into the wood.) Again, the metal of the device is to some extent yielding (being usually made of soft steel) and being entered in the wood, if some part of that is quite hard, the prong, having already a twist, will yield somewhat and pass to one side or turn more with the grain and be capable of being entered farther by repeated blows and holding better against the very obstructions, while yet maintaining its form to a considerable degree—that is, it does not crush down at a point without the wood, as does a rigid nail or an entirely straight prong; nor does it crush all the fibers of the wood, as would a nail sufficiently rigid to be driven in without bending. It thus approximates the holding power of a screw without the expense or the inconvenience of applying attendant upon the use of screws in addition to furnishing a yielding, but sufficiently-rigid, prong from comparatively light-gage metal.

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

A new article of manufacture consisting of a metal box fastener with prongs struck up from a somewhat yielding metal and twisted, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 4th day of May, 1895.

SPENCER C. CARY.

Witnesses:

EMMA C. DEGHUÉE,
A. G. W. VERMILYA.