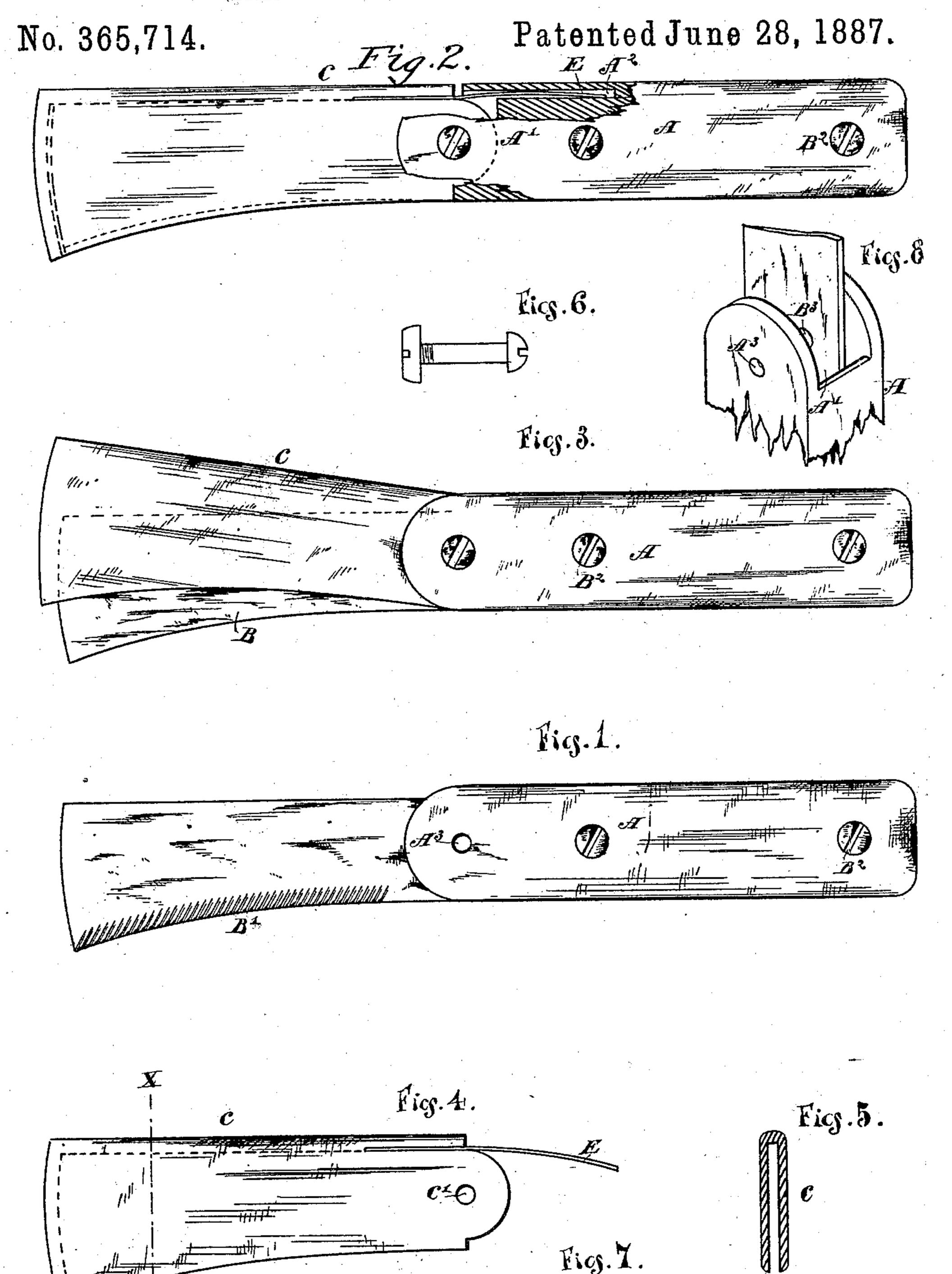
S. P. WARNER.

KNIFE FOR CUTTING GRAIN BANDS.



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United States Patent Office.

SIMON P. WARNER, OF ROCKFORD, ILLINOIS, ASSIGNOR TO JOHN LAKE, OF SAME PLACE.

KNIFE FOR CUTTING GRAIN-BANDS.

SPECIFICATION forming part of Letters Patent No. 365,714, dated June 28, 1887.

Application filed March 16, 1887. Serial No. 231,114. (No model.)

To all whom it may concern:

Be it known that I, SIMON P. WARNER, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Safety-Knives for Cutting the Bands of Grain-Bundles, of which the following is a specification.

The object of this invention is to produce a safety-knife for cutting the bands of grain-bundles preparatory to feeding the same to

thrashing-machines to be thrashed.

This invention consists of a band-cutting knife the blade whereof unsheathes simultaneously with the cutting of each band and is automatically resheathed after the severance of each of the same.

Referring to the accompanying drawings, which form a part of this specification, Figure 20 1 is a view of my improved band-cutting knife with the sheath thereof removed. Fig. 2 is a view of the knife sheathed, and having the handle thereof broken away to better show the manner of connecting the sheath and handle 25 of the same together. Fig. 3 is a view of the knife, showing the position assumed by the sheath thereof while the blade is severing a band. Fig. 4 is a view of the sheath detached from the knife. Fig. 5 is a view of a vertical 30 section of the sheath through the dotted line X X of Fig. 4. Fig. 6 is a view of a bolt for hinging the sheath to the handle of the knife. Fig. 7 is a view in detail of a portion of the knife that will be fully described hereinafter. 35 Fig. 8 is an isometric view of the upper end of the knife-handle.

Like letters of reference indicate corresponding parts throughout the several views.

A represents a knife-handle, having a recess, 40 A', and slot A² in the upper end thereof.

A³ represents circular openings through the upper end of the knife-handle.

B B' represent, respectively, smooth and sickle-edged knife-blades, secured to the handles A by means of the small bolts B².

B³ represents a circular opening through the

blade B.

C represents a sheath of sufficient dimensions to admit and contain the knife-blade B, and open along one edge thereof to allow the 50 cutting-edge of said blade to move freely in and out of said sheath.

C' represents circular openings through the sheath C. The sheath C is hinge-jointed to the handle A by means of the bolt D, which is 55 passed through the openings A³, B³, and C' aforesaid, and secured in place by the nut D'.

E represents a sheath-actuating spring, one end whereof is secured to the sheath C and the other end inserted into the slot A² in the 60 handle A. The office of the sheath-actuating spring E is to compel the sheath C to completely include the knife-blade B when the knife is not in use and to resheath said blade after the severance of each band.

I claim—

The herein-described knife handle and blade, in combination with a sheath of sufficient dimensions to admit and contain said knife-blade, and open along one edge thereof to allow the 70 cutting-edge of said blade to move freely in and out of said sheath, and a sheath-actuating spring to compel said sheath to completely include said blade whenever the same is not engaged in the operation of cutting a band, substantially as described, and for the purpose specified.

SIMON P. WARNER.

Witnesses:

L. L. Morrison, E. E. Johnson.