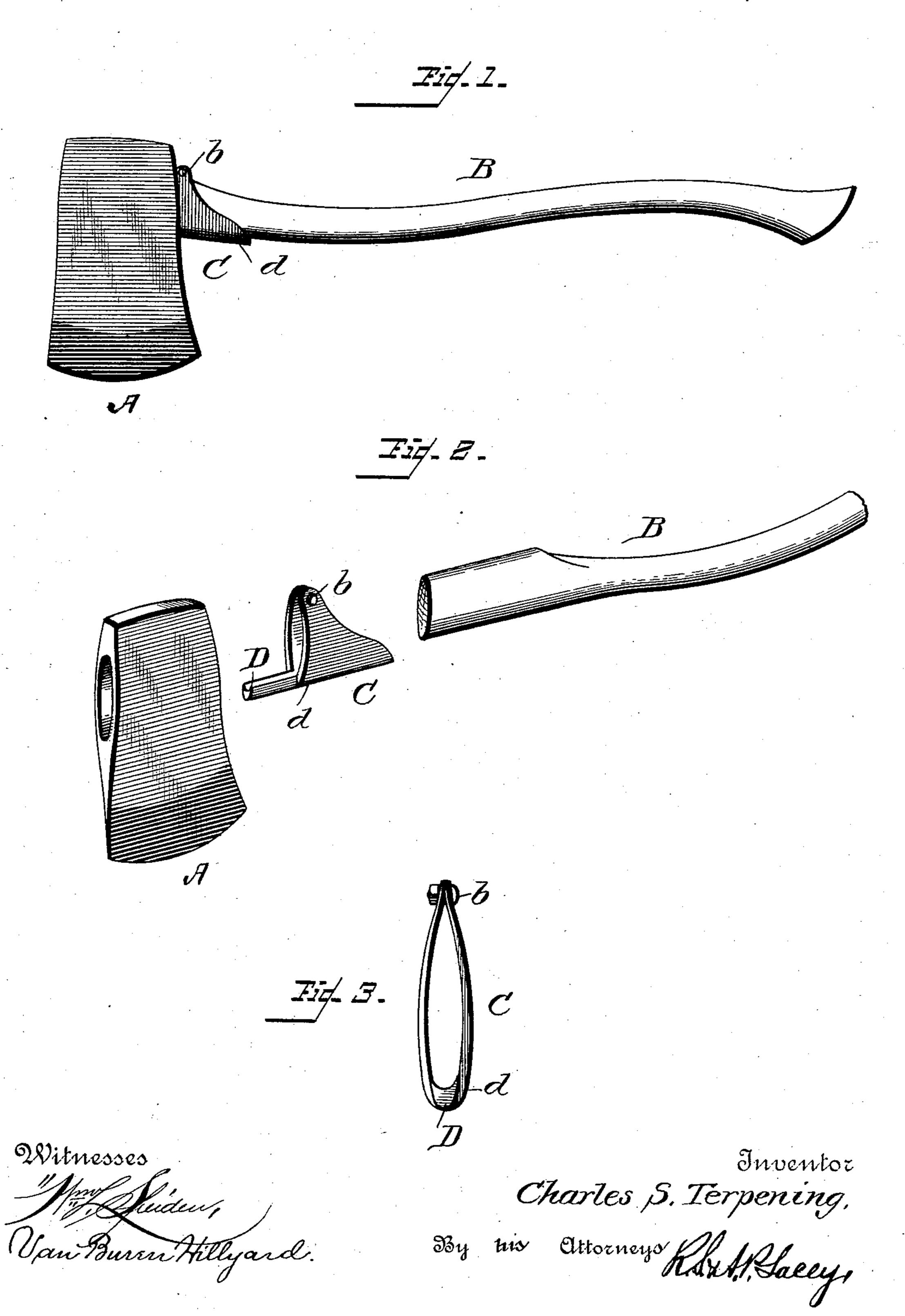
(No Model.)

## C. S. TERPENING. AX HANDLE SHIELD AND PROTECTOR.

No. 489,511.

Patented Jan. 10, 1893.



## United States Patent Office.

CHARLES S. TERPENING, OF DAYTON, WASHINGTON.

## AX-HANDLE SHIELD AND PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 489,511, dated January 10, 1893.

Application filed December 16, 1891. Serial No. 415, 264. (No model.)

To all whom it may concern:

Be it known that I, CHARLESS. TERPENING, a citizen of the United States, residing at Dayton, in the county of Columbia and State of Washington, have invented certain new and useful Improvements in Ax-Handle Shields and Protectors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to shields or protectors for helves, and aims to provide a shield or protector that can be applied to any helve and which will be separate and independent of the ax.

The improvement consists of the novel features and the peculiar construction and combination of the parts which will be hereinafter more fully described and claimed and which are shown in the annexed drawings, in which;

Figure 1 is a side elevation of an ax showing the application of the invention. Fig. 2 is a detail perspective view of the ax, helve and protector, the parts being detached and arranged in a relative position. Fig. 3 is an end view of the shield.

The ax A and helve B are of usual con-30 struction. The shield C is constructed of malleable cast iron or steel and encircles the helve immediately in the rear of the ax. The upper or free ends of the shield are connected by a bolt b or other fastening means which 35 will admit of clamping the said shield on the helve. The sides of the shield taper or flare gradually from the top to the bottom to give sufficient protecting surface for the lower side of the helve. The lower side d is consider-40 ably thicker than the sides of the shield, the latter being comparatively thin. By having the lower side  $\tilde{d}$  made thick ample metal is provided to withstand the usual wear to which the helve is subjected in the ordinary 45 use of the ax. The extension D projected from the front edge of the shield is adapted

to enter the eye of the ax and form a connec-

tion between the said ax and the lower end

of the shield. This extension D is a prolon-

gation of the lower side of the shield and is 50 as thick as the same to withstand the force of a blow on the lower side of the shield without breaking.

The shields are made in different sizes to fit the various grades of helves and axes. 55 The shield is usually fitted to the helve before inserting the latter in the eye of the ax, however the manner of placing the parts together is immaterial so long as the extension D enters the eye of the ax and the free ends 60 of the shield are clamped about the upper side of the helve.

Having thus described my invention, what I claim, and desire to secure by Letters Patent is;

1. A shield or protector for ax helves constructed to embrace the helve in the rear of the ax on all sides, and provided with clamping means to clamp the said shield on the helve, and having an extension to enter the 70 eye of the ax, substantially as and for the purpose described.

2. The combination with an ax and its helve, of a shield constructed to be fitted on the helve in the rear of the ax and embrace the 75 same on all sides, and having an extension at its lower side to enter the eye of the ax, and having the sides of the said shield gradually increasing in thickness from the top to the bottom portion, and a binding means to clamp 80 the said shield on the said helve, substantially as described.

3. As an improved article of manufacture, a helve shield or protector constructed to embrace the helve on all sides and gradually inscreasing in thickness from the top to the bottom edge, and having an extension projected from the said lower edge to enter the eye of the tool, and a clamping mechanism to clamp the shield on the helve, substantially as and 90 for the purpose described.

In testimony whereof I affix my signature in presence of witnesses.

CHARLES S. TERPENING.

Witnesses:

ELLA TERPENING, NONA TERPENING, ULRICH Z. ELLIS.