

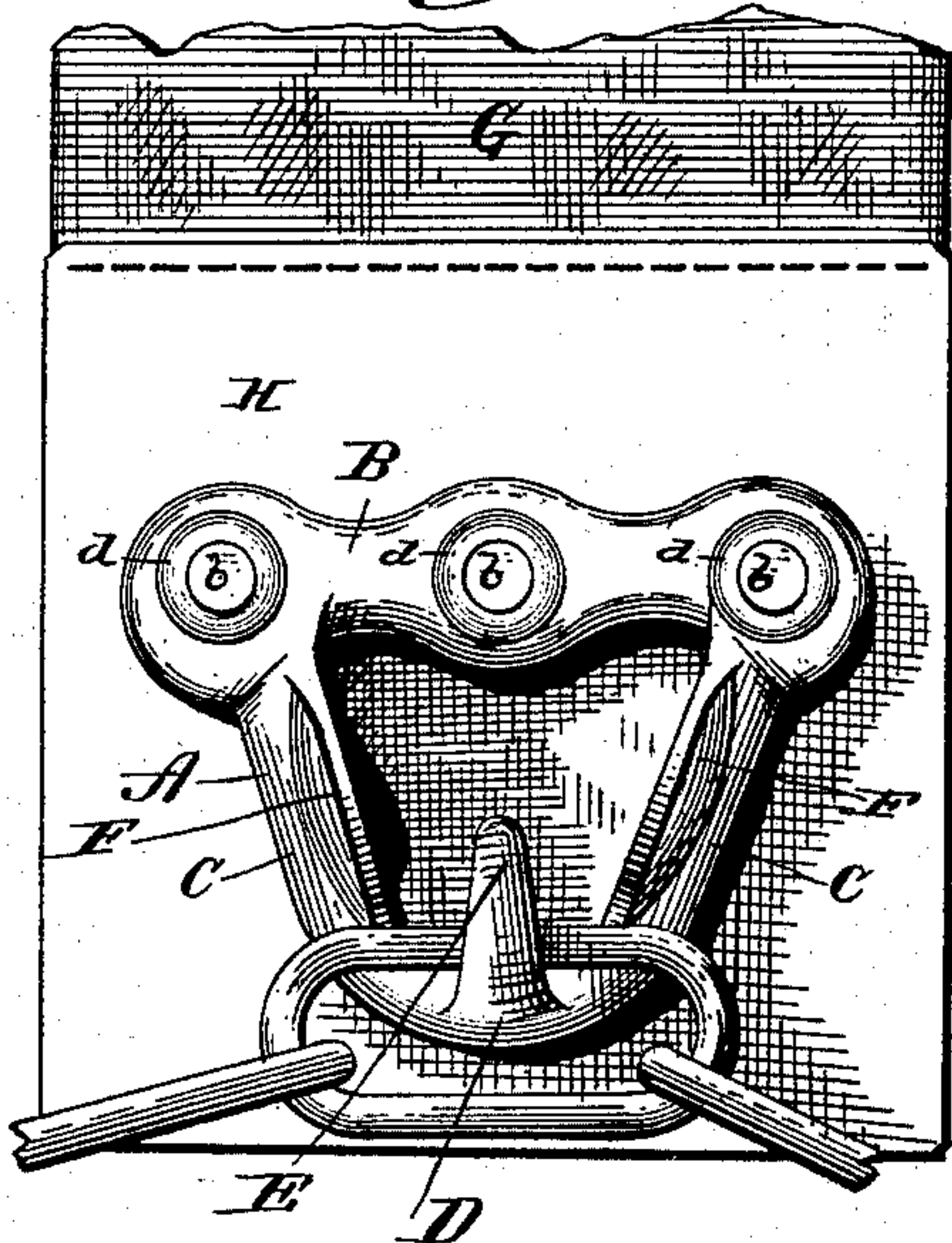
(No Model.)

S. WARD.  
BACK BAND HOOK.

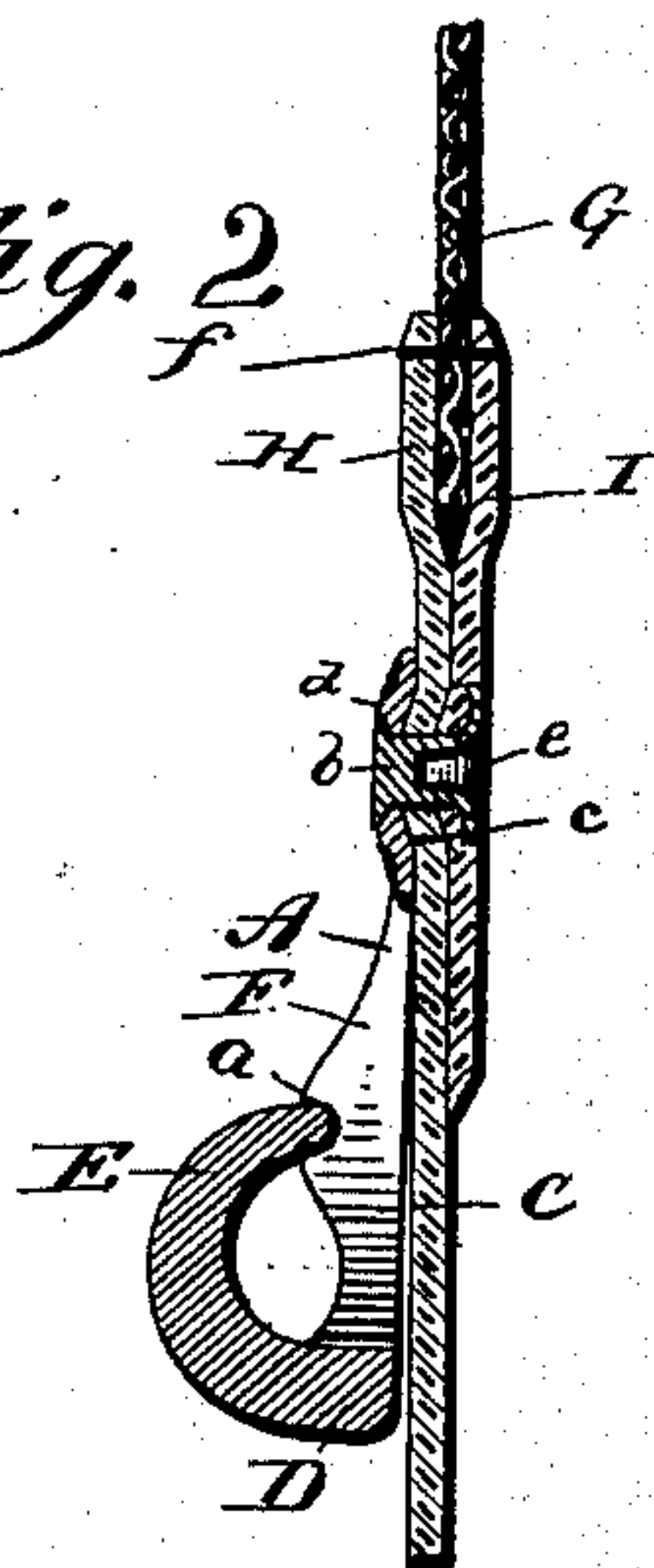
No. 384,882.

Patented June 19, 1888.

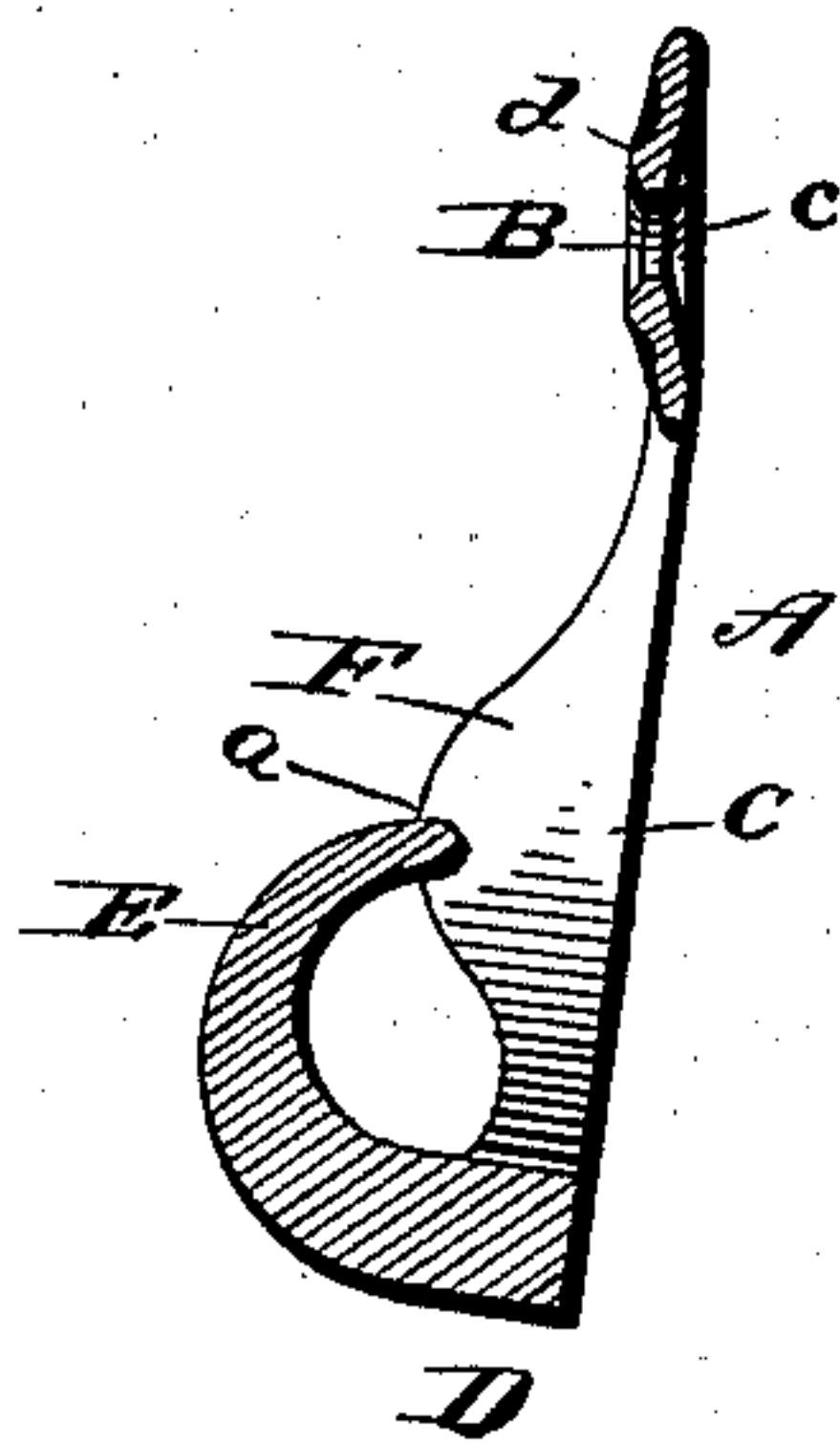
*Fig. 1.*



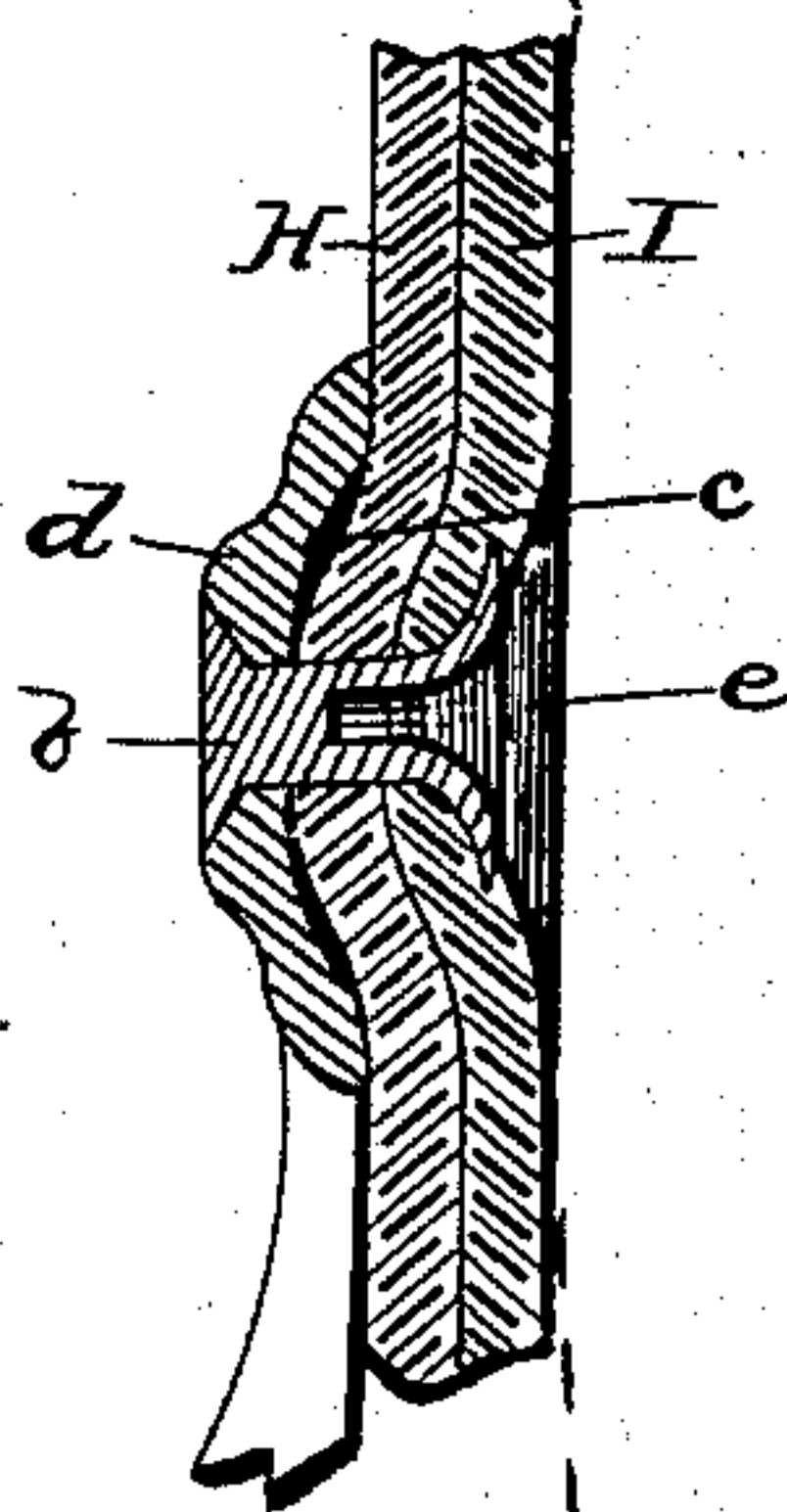
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES.

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# UNITED STATES PATENT OFFICE.

SETH WARD, OF PRINCETON, INDIANA.

## BACK-BAND HOOK.

SPECIFICATION forming part of Letters Patent No. 384,882, dated June 19, 1888.

Application filed April 30, 1888. Serial No. 272,338. (No model.)

*To all whom it may concern:*

Be it known that I, SETH WARD, a citizen of the United States, residing at Princeton, in the county of Gibson and State of Indiana, have invented certain new and useful Improvements in Back-Band Hooks, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has relation to certain new and useful improvements upon back-band hooks (or trace-carriers) and the method of securing the same to the back-bands of the harness; and the object I have in view is mainly to provide a simple and inexpensive device that will be eminently practical and positive in operation and at the same time very durable and strong, as will be more fully hereinafter stated.

The invention consists in certain novel features of construction, which will be more fully hereinafter specified, and particularly pointed out in the claims.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 represents a side elevation of one end of a back-band with my improved hook applied to it; Fig. 2, a vertical sectional view of the same; Fig. 3, a detail vertical sectional view of the hook, and Fig. 4 an enlarged detail sectional view showing more clearly the method I employ for securing the hook to the back-band.

Referring to the drawings by letter, A designates the improved hook, which is cast or formed of a single piece of metal. This hook consists, essentially, of a horizontal cross-bar, B, through which the rivet-holes are formed for the purpose of securing the hook to the back-band, two converging side bars, C C, which are formed integral with the cross-bar B and depend from its lower edge, these two side bars being connected together at their lower ends by a curved rounded portion, D, and the strong tapering hook E, which is formed on the face of the portion D and is curved outward and upward, and then inward, terminating between the converging side bars, C C, as shown.

Formed on the inner vertical edges of the side bars, C, setting at right angles to the same, are the outwardly-projecting guard-flanges F F, which extend nearly the entire length of the side bars, terminating a short distance below the free end of the hook E. These guards

have their outer edges or faces curved, as shown in Fig. 3, their greatest diameter being about in a horizontal plane with the free end of the hook E, as shown at *a*. From this highest point *a* the upper portions of these guards taper off gradually until they merge into the side bars. The portions below this highest point *a* of these guards curve somewhat more abruptly in toward the side bars, as shown. These guards not only form a seat for the link of the chain and prevent it from being accidentally disengaged, but also serve to prevent the chain of the adjacent horse (when working in double harness) from becoming entangled in the hook E. They also, being curved and rounded, as shown, prevent chafing of the adjacent horse—a great desideratum with a hook of this character, as they necessarily project out somewhat from the sides of the back-band.

Through the cross-bar B, I form the rivet-holes, through which are passed the securing-rivets *b*, which are preferably of the tubular kind. Around each rivet-hole on the under side of the cross-bar are formed the circular depressions *c*, and around each hole on the face of the bar are formed the circular bosses *d*, which serve to strengthen the bar where it is weakened by the formation of the depression *c* on the opposite side of the bar. By this construction, when the rivets are inserted and clinched in the usual manner, (the upset portion of the tubular rivets being thereby forced slightly into the leather,) the leather of the back-band will be forced into the circular depression *c*, as clearly shown in Fig. 4, forming a rounded depression, *e*, in the under side of the back-band. The peculiar advantage in this method of securing the hook to the band lies in the fact that it will be impossible for the clinched ends of the rivets to chafe or scratch the side of the horse, as is evident.

The letter G designates the end of a back-band, consisting of cotton or other webbing usually employed for back-bands. To this webbing is sewed the leather end piece or tip, H, by a line of stitching, *f*.

I designates a leather re-enforcing and protecting piece, which is stitched to the webbing G by the same line of stitching that attaches the piece H thereto. This protecting-piece I extends down upon the back of the tip H a sufficient distance to permit the securing-riv-



ets *b* to pass through it in securing the hook to the band. By means of this protecting-strip *I* the end of the webbing *G* is protected and prevented from unraveling, and it also  
5 affords a strong and durable support for the rivets, preventing them from being torn out by the pulling of the trace-chain.

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

1. As an improved article of manufacture, a back-band hook formed of a single piece of metal and consisting of the cross-bar *B*, provided with rivet-holes, the depending converg-  
15 ing side bars, *C*, connected by the rounded portion *D*, the guards *F*, formed upon the inner vertical edges of the said side bars and extending nearly their entire length, these guards being curved on their outer edges, as described,  
20 and the hook *E*, formed on the face of the connecting portion *D* and terminating between the

flanges about on a horizontal line with their highest portions, substantially as herein set forth.

2. As an improved article of manufacture, a 25 back-band hook constructed of a single piece of metal and consisting of the cross-bar *B*, provided with rivet-holes, the depending side bars provided with guards and connected together by portion *D*, and the hook *E*, the said cross- 30 bar *B* being provided with circular depressions *c* in its under side and circular bosses *d* on its face, these depressions and bosses surrounding the rivet-holes in the cross-bars, as and for the purposes herein set forth. 35

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

SETH WARD.

Witnesses:

W. F. CRAIG,  
ABRAHAM GUDGEL.