(No Model.)

C. S. ELLIS.

HAME FASTENER.

No. 454,400. Patented June 16, 1891.

Fig. 1.

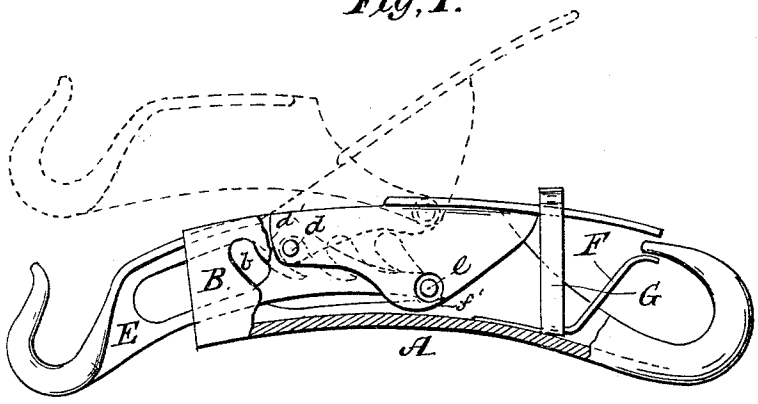


Fig. 2

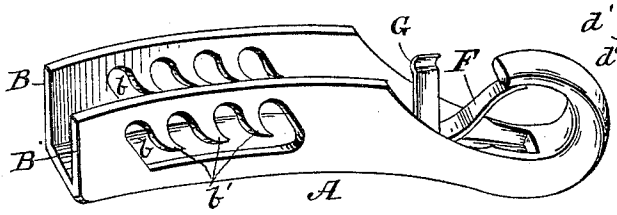


Fig. 3.

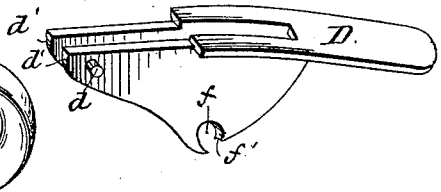
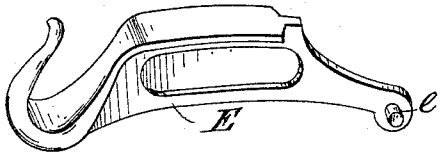
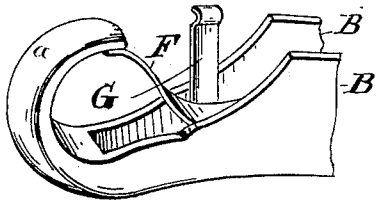


Fig. 4.

Fig. 5.





Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES S. ELLIS, OF CHICAGO, ILLINOIS.

HAME-FASTENER.

SPECIFICATION forming part of Letters Patent No. 454,400, dated June 16, 1891.

Application filed December 12, 1889. Renewed November 13, 1890. Serial No. 371,274. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. ELLIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hame-Fasteners; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to hame-fasteners.

The object of the invention is to simplify and cheapen this class of devices without detracting from their efficiency and durability, and to devise means that will prevent the unfastening of the device when the team is backing or going downhill.

The improvement consists of the novel features which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a side view, parts being broken away, of a fastener of my invention, showing its operation by dotted lines. Fig. 2 is a perspective view of the case. Fig. 3 is a perspective view of the operating-lever. Fig. 4 is a perspective view of the hook. Fig. 5 is a perspective view of the snap end of the case, showing the spring-retaining catches.

The case A has hook *a* at one end and parallel sides B, in which are formed corresponding longitudinal slots *b*, one in each side. One side, preferably the outer side, of the slots *b* is notched to form a series of teeth *b'*, which are adapted to engage with the lugs *d* on the split or separated portions *d'* of the inner end of said operating-lever D. The outer end of lever D is broad to obtain a purchase for the finger when pressing it toward the case. The hook E has its inner end passed between the separated portions *d'* of the lever D, and is provided with gudgeons *e*, which form pivotal connection between the said hook and the lever D. The gudgeons *e* are inserted in notches *f* in the edges of the separated ends *d'*, and are held therein by bending the points *f'* so as to close the open sides of the said notches, as shown in Fig. 3. The gudgeons are preferably cast with the hook; but a pin inserted in an opening in the said hook and cut off a proper distance on each side thereof will answer the same purpose.

The lugs *d* are cast with the lever, and in putting the parts together the separated portions *d'* of the lever D are pressed together and passed between the sides B of the case until the said lugs register with the slots *b*, when the said ends *d'* are spread or forced apart sufficiently far to effect an entrance of the said lugs in the slots *b*.

The spring F is fastened at one end to the case, and its other end extends across the space between the hook *a* and the ends of the sides B to prevent the accidental disarrangement of the fastener from the hames. The spring-catch G, secured to the spring F, is adapted to engage with and hold the lever D from accidental displacement in case the collar becomes compressed or the team backs or is going downgrade. The lever and hook fold within the sides of the case, and the fastener is adapted to the size of collar and hames by adjusting the lever D along the slots *b* in the case and fastening it in the located position by engaging the lugs *d* with one of the series of teeth *b'*.

I claim—

1. The hereinbefore-described hame-fastener, composed of a case open at one end and side and having a hook at the other end, the lever D, having its inner end bifurcated and adjustably connected with the opposing sides of the case and adapted to open out through the open side of the case, and the hook E, having its inner end inserted in and pivotally connected with the bifurcated end of the said lever D at a point between the ends thereof and adapted to open out on the same side of the case as lever D, said hook and lever folding within the plane of the case through the open side thereof, substantially as set forth.

2. In a hame-fastener, the combination, with the case and the operating-lever, of the spring F and the spring G, connected with said spring F and adapted to engage with the said operating-lever, substantially as and for the purpose described.

3. The hereinbefore-specified hame-fast-

ener, comprising the case having a hook at one end and parallel sides and having longitudinal slots in the said sides and teeth along one edge of the said slots, a lever having its inner end separated and having lugs on the sides of the said separated parts, a hook having its inner end inserted between the separated ends of the lever and pivotally connected therewith, and the springs F and G, substantially as and for the purpose set forth.

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

CHARLES S. ELLIS.

Witnesses:
W. B. WINGET,
THEODORE LANGBEIN.