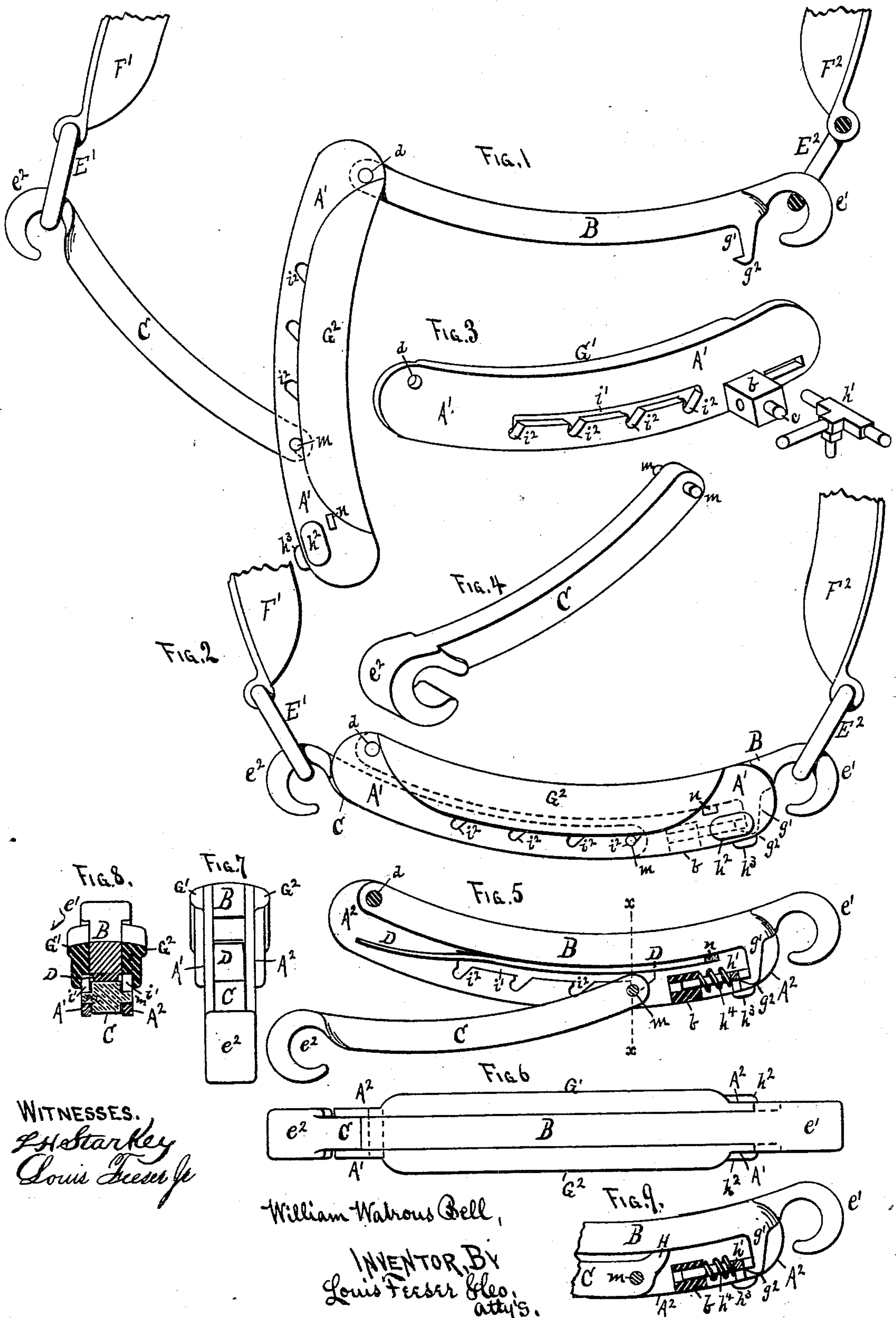


(Model.)

W. W. BELL.
HAME FASTENER

No. 259,283.

Patented June 13, 1882.



UNITED STATES PATENT OFFICE.

WILLIAM W. BELL, OF VALLEY SPRINGS, DAKOTA TERRITORY.

HAME-FASTENER.

SPECIFICATION forming part of Letters Patent No. 259,283, dated June 13, 1882.

Application filed January 17, 1882. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM WATROUS BELL, a citizen of the United States, and a resident of Valley Springs, in the county of Minnehaha and Territory of Dakota, have invented certain new and useful Improvements in Hame-Fasteners, of which the following is a specification.

This invention relates to harness-hames; and it consists in the construction hereinafter particularly described, and then defined by the claims.

In the accompanying drawings, Figure 1 is a side view, showing the fastener open, and Fig. 2 is a similar view, showing it closed. Fig. 3 is a perspective view of one side of the casing and spring-dog detached. Fig. 4 is a perspective view of the lower hooked bar detached. Fig. 5 is a sectional side view of Fig. 2. Fig. 6 is a plan view, and Fig. 7 is an end view, of Fig. 5. Fig. 8 is a cross-section on the line xx of Fig. 5. Fig. 9 is a sectional view of one end of the fastener, showing a variation in the method of constructing it.

$A' A^2$ are two plates or side pieces, one having a block, b , cast upon it near one end, and with a pin, c , projecting therefrom to form a rivet to secure the other plate to it, and with a bolt or rivet, d , through the other ends. By this means the two plates are connected together, but with a space between them, as shown in Figs. 3, 6, 7, and 8.

B is a bar or arm secured by one end (with the pivot d) between the plates $A' A^2$, and with a hook, e' , upon the other end, and adapted to be closed down between the plates $A' A^2$, with its upper surface flush with the upper edges of said sides, as shown in Figs. 7 and 8. Projecting down from the lower part of the bar B , near the hook e' , is a lug, g' , having an inwardly-turning toe, g^2 , adapted to catch beneath the head of a spring-dog, h' , and thus hold the bar B in place, as shown in Figs. 2, 5, and 9. The ends of the dog h' project through slots in the sides $A' A^2$, and are provided with buttons h^2 on the outside, by which the spring-dog may be moved backward and disconnected from the catch g' . A third button, h^3 , may be employed upon the bottom of the casing, so that the spring-dog may be operated from the bottom as well as the sides, and all three may be used together or separately. Formed in the inner

surfaces of the sides $A' A^2$ are slots or grooves i' , in the bottoms of which notches i^2 are formed at regular intervals, as shown.

C is a bar similar to the bar B , and with a hook, e^2 , in one end, and with pins m on the sides of the other end, adapted to fit into any opposite pair of the notches i^2 , and arranged to fold upward between the sides $A' A^2$, as shown in Figs. 2 and 9.

D is a spring secured at n in the sides $A' A^2$, and running along between the bars B and C , and adapted to press upon the inner end of the bar C to hold the pins m in the notches i^2 . By this means the pins m are held in the notches i^2 with sufficient force to prevent accidental disengagement; but at the same time by forcing the bar C backward the spring may be compressed and the pins m removed from one notch and set into another to alter the distance between the hooks $e' e^2$, as hereinafter shown.

In operating the device the spring-dog h' is disconnected from the toe g^2 , and the three parts—viz., the casing $A' A^2$ and bars $B C$ —spread apart, as shown in Fig. 1. The bar C is then set by the pins m in any pair of the notches i^2 it is desired to place it to adapt the fastener to the sized collar to which the hames are to be secured. The hooks $e' e^2$ are then hooked into the loops $E' E^2$ of the hames $F' F^2$, which brings the upper surface of the bar B in contact with the lower end of the horse's collar, and with the hame F^2 in about its proper position upon the side of the collar. The casing $A' A^2$ then acts as a lever of the second order, the pivot d being the "rest" or fulcrum, so that by forcing the casing $A' A^2$ upward over the bar B until the toe g^2 snaps under the spring-dog h' the bar C will also be drawn up between the sides, as shown in Fig. 2, and draw the hame F' into its proper position. Then when it is desired to release the hames again the buttons or thumb-plates h^2 are pushed backward to release the spring-dog h' , when the hames may be easily spread apart again.

The ends of the casing $A' A^2$ next the hook e' will be so formed as to close the hook e' when the bar B is shut down into it, so that the loop E^2 cannot be released therefrom when the casing is closed upon the bar. By this means, when the hames have been removed from the horse it is only necessary to snap the casing up over the bar B again to firmly "lock" the fast-

ener to the hames and prevent its becoming lost or mislaid.

Projecting ribs $G' G^2$ will be formed upon the sides $A' A^2$ to increase the width of the top of the fastener, so that less wear will occur upon the collar, and also for the purpose of covering the slots i' .

The lower ends of the notches i^2 are inclined backward or away from the spring-dog h' to enable the pins m on the bar C to engage more firmly therewith. The notches i^2 enable me to adjust the fastener to different-sized collars, so that one fastener may be used for any sized harness, and the notches may be made of any size or distance apart.

In Fig. 9 I show an arrangement whereby the spring D may be dispensed with, consisting of a small lug or projection, H , extending backward and upward from the end of the bar C , and adapted to rest in contact with the bar B when the fastener is closed up to hold the pivots or pins m down into the notches.

I do not wish to confine myself to the specific method shown for fastening the sides $A' A^2$ together, as I am aware that it can be done in many ways.

A small lip or plate will be cast upon the side A^2 to project over the spring-dog to cover it and protect it from injury.

The spring-dog consists, as shown, of a shank or stem, one end running through the connecting-block b , and with a cross-head upon the other end, with its arms passing out through slots in the sides $A' A^2$, and to which the buttons h^2 are attached, as before stated. A spring, h^4 , is coiled around the stem or shank, between

the block b and the cross-head, to hold the dog in contact with the toe g^2 , the block b thus serving the triple purpose of a means for connecting the sides $A' A^2$ together, a guide for the shank of the dog, and a stop for the coiled spring h^4 . When the third button, h^3 , is used a small arm will be cast upon the lower side of the shank to support it, as shown.

Any other suitable locking device may be substituted for the dog h' , if desired.

What I claim as new is—

1. The side plates, $A' A^2$, each having formed therein a longitudinal groove, i , and notches i^2 , in combination with a bar, C , having a hook, e^2 , at one end, and pins m extending from both its sides near the other end, and fitted between the plates, whereby the parts are adapted to operate, as set forth.

2. The casing $A' A^2$, having slots i and notches i^2 , and provided with ribs $G' G^2$, in combination with bar C ; provided with hook e^2 , and pins m , connected to plates $A' A^2$, as set forth, for the purposes specified.

3. The combination of casing $A' A^2$, having slots i and notches i^2 , bar B , provided with hook e' and catch $g' g^2$, bar C , provided with hook e^2 and pins m , spring D , and spring-dog $h' h^4$, the several parts being arranged to operate as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM WATROUS BELL.

Witnesses:

C. N. WOODWARD,
E. RICE, Jr.