(No Model.)

C. A. DENISON.

HAME FASTENER.

No. 304,801. Patented Sept. 9, 1884.

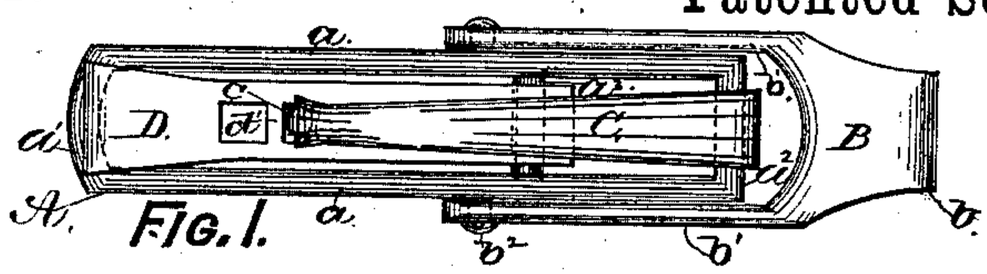

FIG. 1.

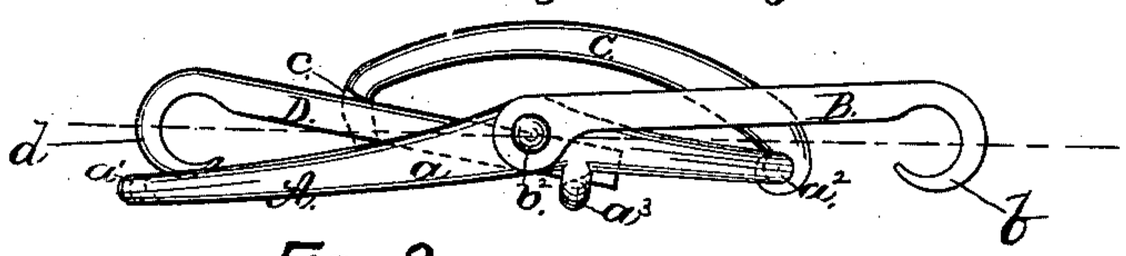

FIG. 2.

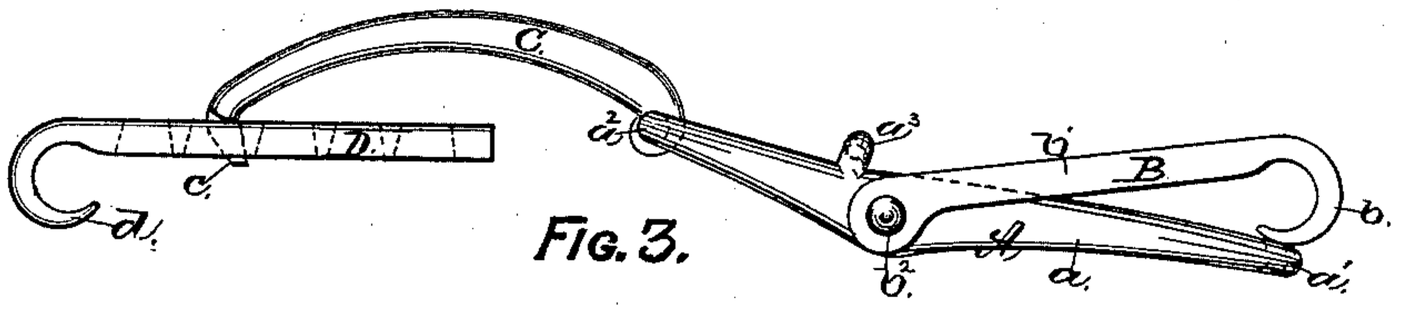

FIG. 3.

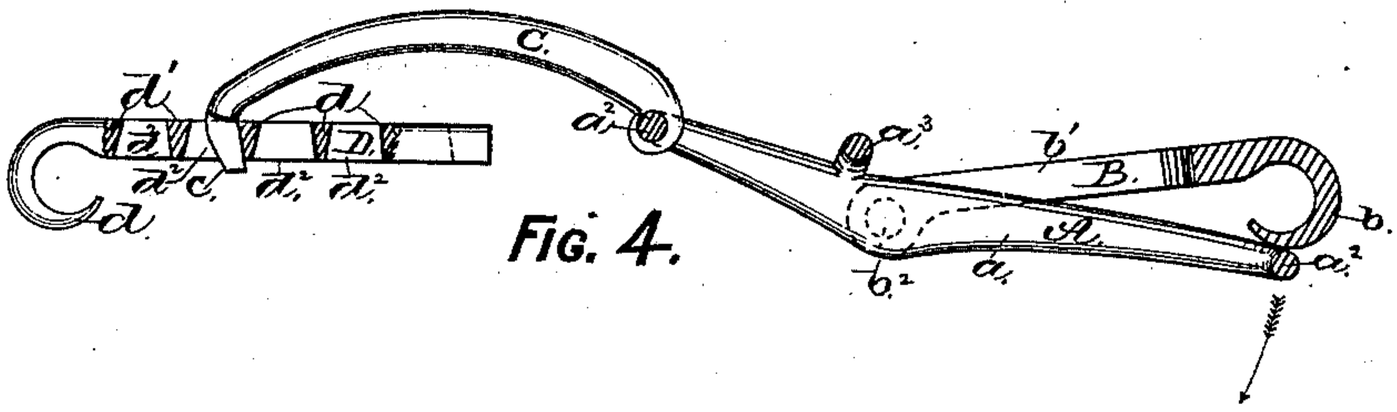

FIG. 4.

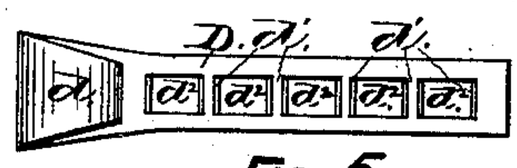

FIG. 5.

Witnesses:

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UNITED STATES PATENT OFFICE.

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HAME-FASTENER.

SPECIFICATION forming part of Letters Patent No. 304,801, dated September 9, 1884.

Application filed July 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. DENISON, of Greenbush, in the county of Rensselaer and State of New York, have invented new and useful Improvements in Hame-Fasteners, of which the following is a full and exact description, reference being had to the accompanying drawings, which form part of this specification, and in which—

Figure 1 is a plan view of my hame-fastener in its contracted or locked condition; Fig. 2, a side elevation of the same; Fig. 3, a side elevation of my hame-fastener in its extended or unlocked condition; Fig. 4, a longitudinal section of Fig. 3, and Fig. 5 an inverted plan view of the detachable and adjustable hook-link.

My invention relates to improvements on that class of hame-fasteners in which the operations of locking and unlocking the fastener are effected by means of a lever; and the object of my invention is to provide a fastening device that will be simple, cheap, and reliable, whose operations—in fastening and releasing the hames—will be expeditious and positive, and which can be readily adjusted in length, as occasion requires. This object I attain by means of the mechanism herein described, and illustrated in the accompanying drawings.

As represented in the drawings, my hame-fastener is composed of the following parts: an operating-lever, A, and its attached hook-piece B, connecting-bar C, and detachable and adjustable hook-link D. The operating-lever A is a single piece, made in the form of an open oblong link bent flatwise in the direction of its length to a very obtuse angle, and having the side bars, a, end bars, a' and a^2, and bridge-bar a^3. The hook-piece B consists of a hook, b, and two side limbs, b', the latter being adapted to extend down at the outer edges of the lever A, and are pivoted, as at b^2, to the side bars, a, so as to swing with perfect freedom over the shortest end of said lever. The hook b is designed to engage in a loop or eye formed on the lower end of one of the hames, and forms the means of securing one end of the fastener to the hames. The connecting-bar C is jointed to swing freely on the cross-bar a of the operating-lever, and it has on its free end a hook, c, which is adapted to engage in the detachable link. The detachable link D is provided at one end with a hook, d, for the purpose of attaching one end of the fastener to one part of the hames. The plate of said link is divided by means of the cross-bars d' into a series of openings, d^2, into any one of which the hook c of the connecting-bar C can be inserted, to attach said link to the fastener, the series of holes d^2 affording facilities for adjusting the fastener to any desired length. The detachable link D, when the fastener is closed, as shown in Figs. 1 and 2, will be kept in place by means of the bridge-bar a^3, which will then bear against the under face of said link, near its rearmost end.

The mode of operating my hame-fastener is as follows: The device being in the extended condition shown in Figs. 3 and 4, and the hooks b and d being properly connected to the loops in the lower ends of the two parts of the hames, the operating-lever A is turned on its pivotal center b^2, in the direction indicated by the arrow on Fig. 4, until the relative positions of the ends of said lever are reversed, and the fastener is reduced to its least length consistent with its present adjustment, as shown in Figs. 1 and 2. In effecting the above-described movement the end of the lever A, to which the connecting-bar C is attached, is passed between the limbs b' of the hook-piece B until the cross-bar a lies slightly below an imaginary direct line drawn between the centers of the hooks b and d, (as indicated by the broken line on Fig. 2,) and until the cross-bar a' bears against the link D, in which disposition of the parts the strains on the hooks b and d tend to retain the parts in a locked condition that will resist any accidental displacement of them. To release the fastener the free end of the operating-lever is moved until the joint at a lies slightly above the imaginary direct line between the hooks b and d, above referred to, whereupon the strains acting upon said hooks will instantly extend the device into the condition shown in Figs. 3 and 4, so that its detachment from the hames can be easily effected by simply disengaging one of the hooks—either b or d.

Provision is made, by means of the different

openings d^2 in the link D, for the adjustment of the fastener to different lengths; but when occasion requires a still greater extension of it may be obtained by means of one or more links provided with a hook and a suitable eye, that may be attached to either of the hooks *b* and *d*.

I claim as my invention—

In a hame-fastener, the operating-lever A, made in the form of an open oblong link that is bent flatwise to a very obtuse angle in the direction of its length, and has the hook-piece B pivoted thereto by means of fixed pivotal centers b^2, so that said hook-piece can swing over the short end of said lever, and the connecting-bar C, provided with the hook *c*, and jointed to the cross-bar *a* of said operating-lever, as herein set forth, in combination with the detachable link D, provided with a hook, *d*, and openings d^2, as and for the purpose herein specified.

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Witnesses:
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