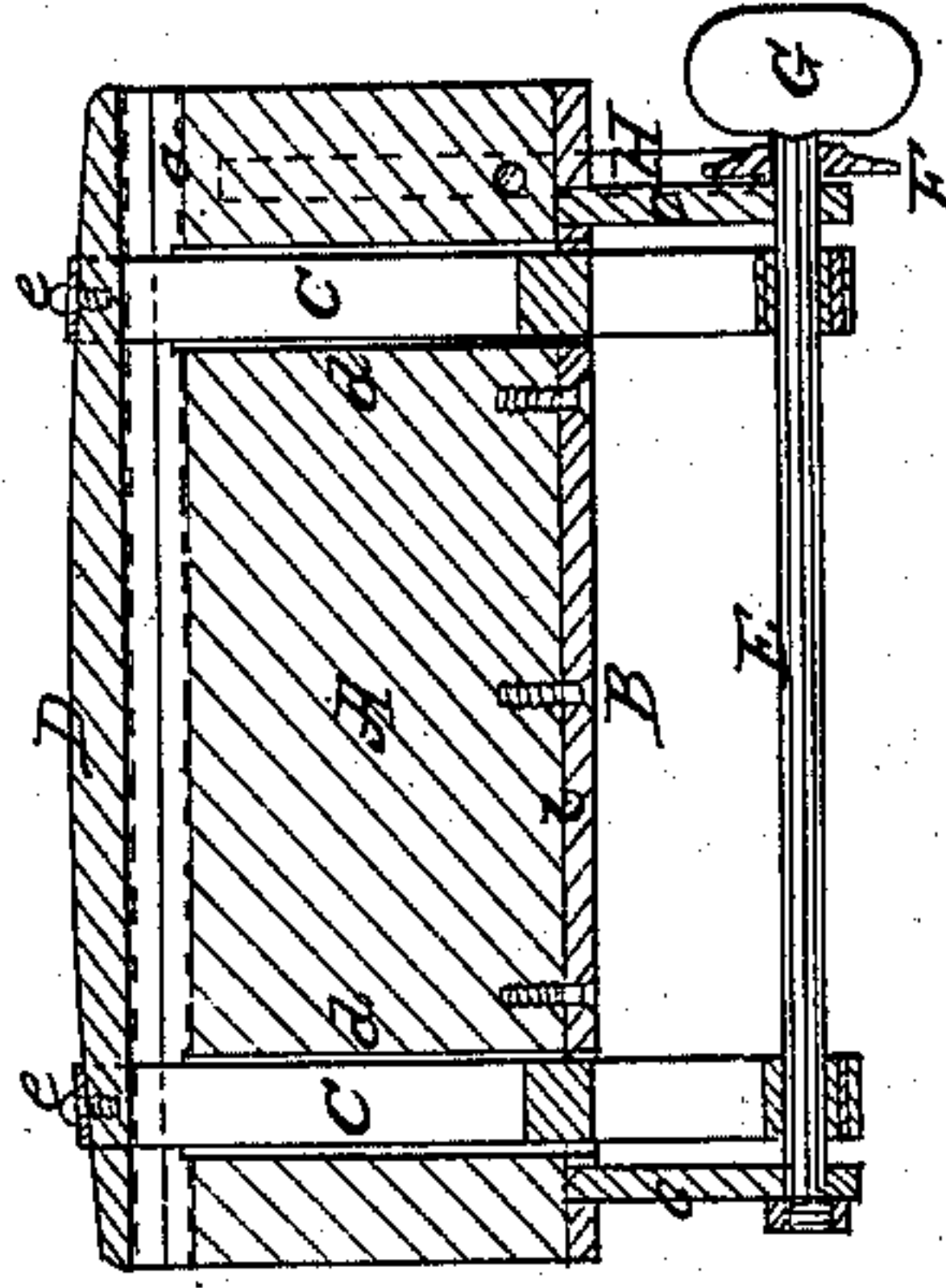
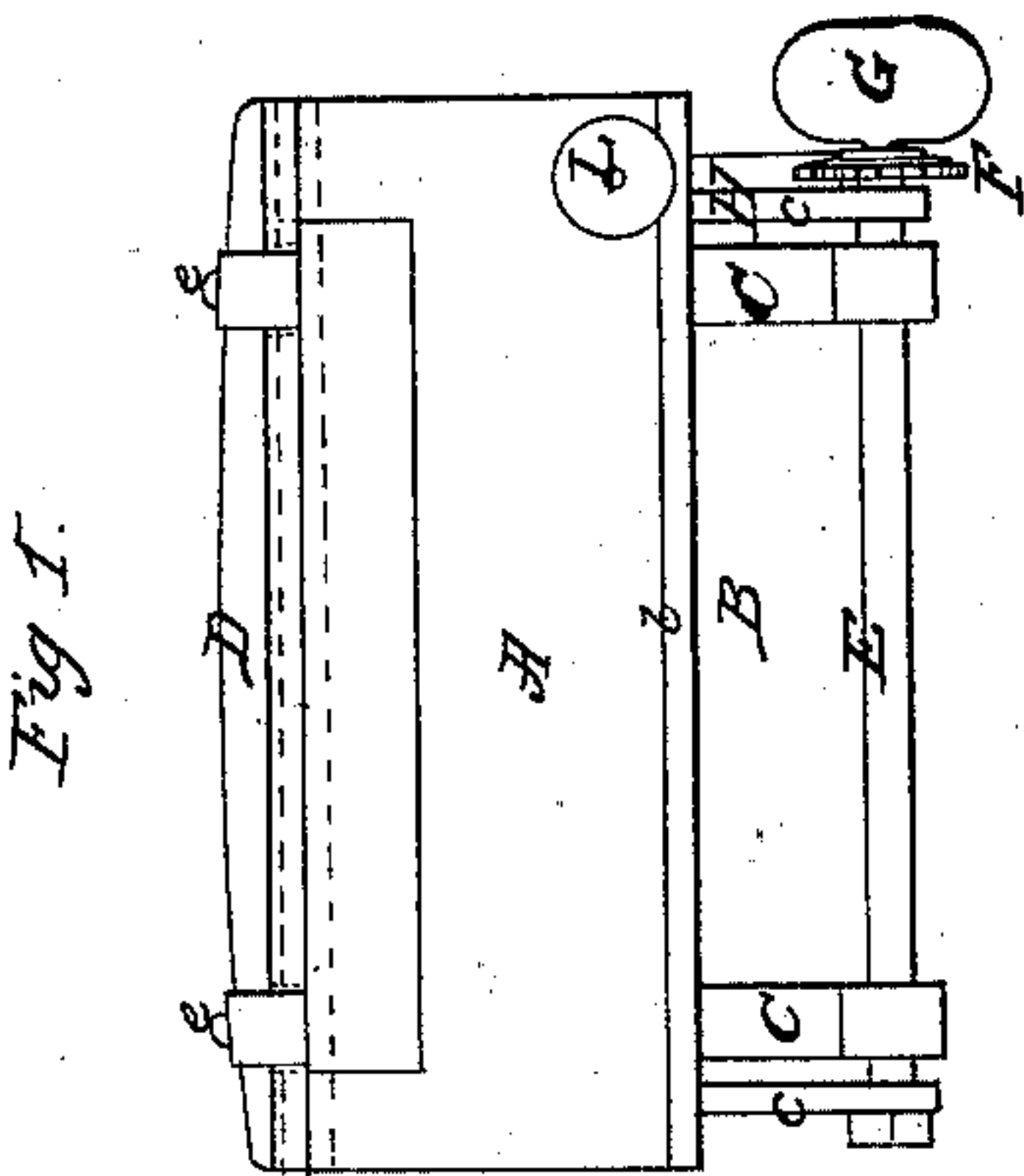
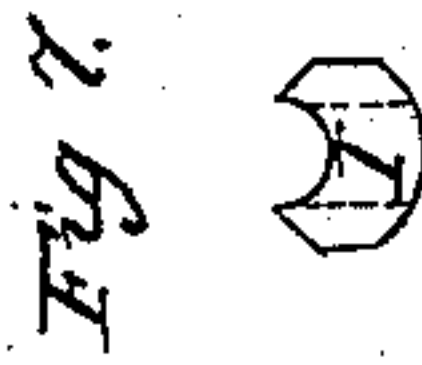
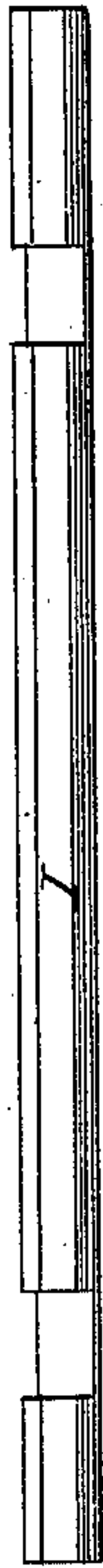
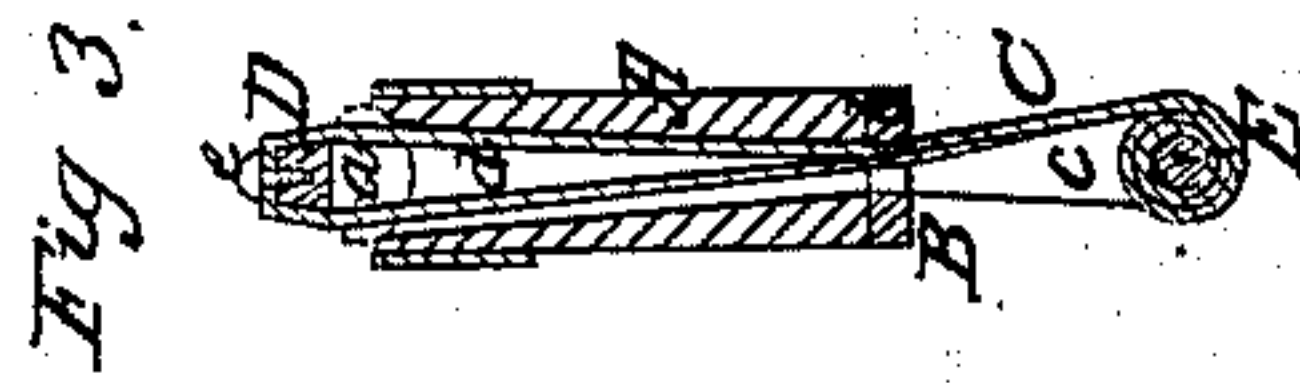
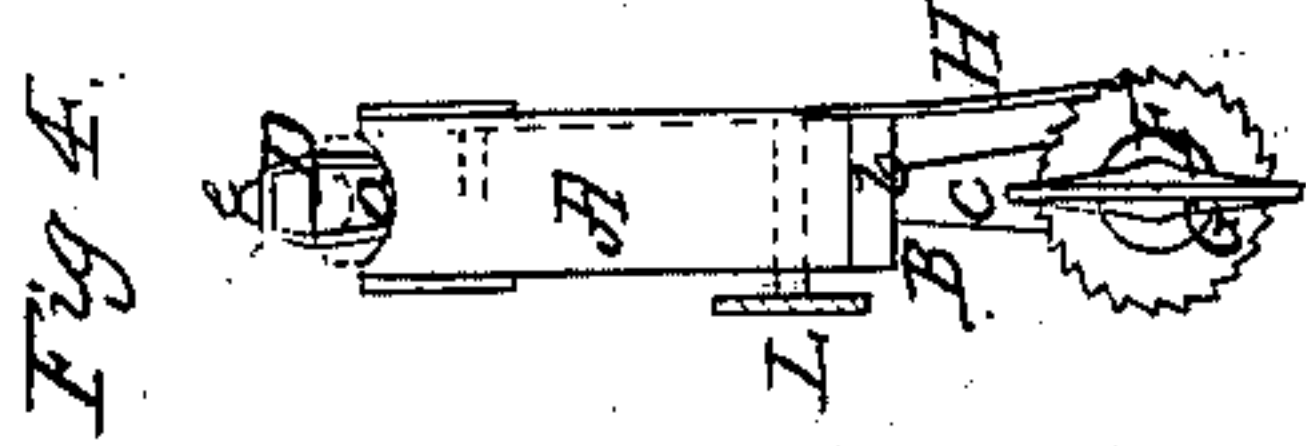


T. B. Hodge, Harness Tool.

N^o 61,939.

Patented Feb. 12, 1867.



Witnesses;
G. H. Andrews
Samuel H. Piper

Inventor;
Thomas B. Hodge.
by his attorney,
R. M. Hodge

United States Patent Office

THOMAS B. HODGE, OF FRANCISTOWN, NEW HAMPSHIRE, ASSIGNOR TO
HIMSELF AND D. MCCAINE, OF GROTON, MASSACHUSETTS.

Letters Patent No. 61,939, dated February 12, 1867.

HARNESS CLAMP.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, THOMAS B. HODGE, of Francistown, in the county of Hillsboro, and State of New Hampshire, have invented a new and useful or improved Clamp for use by harness-makers, and for holding a round trace or a rein while in the process of being sewed or stitched; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a front elevation.

Figure 2, a longitudinal section.

Figure 3, a transverse section; and

Figure 4, an end view of it.

Figure 5 is a top view.

Figure 6, a side elevation; and

Figure 7, a transverse section of one of its auxiliary bed pieces, to be hereinafter described.

In sewing together the covering and core of a round trace or rein it frequently becomes very difficult to retain the covering in its true relation with the core when they are held together by an ordinary harness clamp, but with my improved clamp no such difficulty presents itself, as the cap bar of the clamp, by resting on the top of the core and pressing the core closely down upon the covering, will hold the two so firmly together as to enable a workman to accomplish their connection by sewing without any danger of the displacement of either with respect to the other.

In the drawings, A denotes the main bed piece of the clamp, it being a board, rectangular in form, but grooved along and throughout its upper edge, as shown at *a*. A metallic frame, B, consisting of a bar or plate, *b*, and two arms, *c c*, extending from the said bar at right angles, is fastened by screws to the lower edge of the bed piece A. Two passages *d d* are made vertically through the bed piece A and the bar *b*, they being to receive two looped straps C C which extend down from a clamp bar, D, that is arranged over the bed piece and within the loops of the straps, in manner as represented, it being fastened to the loops by means of screws *e e* going through the loops and into the bar. Each of such straps, at its lower end, is fastened to a round rod, E, which turns freely within the arms *c c*, and has a ratchet, F, and a handle, G, fixed on it, and arranged as shown in the drawings. A spring catch, H, fastened to the side of the bed A, bears against the periphery of the ratchet. With such bed piece, clamp bar, and the appliances thereof, as described, I use one or more auxiliary bed pieces, I, formed as shown in figs. 5, 6, and 7; in other words, I usually have a series of them, each being grooved on its upper edge, the transverse section of such groove being semicircular or thereabouts. The groove of one is to have a diameter or width larger than that of another, the diameters or widths of the several grooves differing in their widths in order that the machine may be readily adapted, by the use of some one of such auxiliary bed pieces, to holding a rein or trace, whatever may be its diameter. When a rein or trace of the largest size or diameter is to be held in the machine, an auxiliary bed piece will not be needed in it. A knob, L, having its shank projecting from the catch, and going through the bed piece A, serves to enable a person to move such catch out of connection with the teeth of the ratchet. When an auxiliary bed piece is employed in the machine, it is laid therein, and goes through the loops of the straps, in manner as shown by red lines in the drawings.

In using the machine, the core piece of a rein or trace, with its covering, are to be laid together and in the groove of the bed piece, so as to have the core uppermost, in order that when the clamp bar is drawn down upon the core piece it shall hold it firmly upon the covering at the middle of the latter. By revolving the shaft or rod E the straps may be wound on it, so as to draw the clamp bar down upon the article; thus the core and its covering will be held firmly, and so that they may be sewed together in the ordinary way.

I claim the above-described arrangement and combination of the clamp D, the looped straps C C, the bed piece A, the rod E, and the ratchet F, and catch H.

Also the combination therewith of one or more of the auxiliary bed pieces I, made substantially as described.

THOMAS B. HODGE.

Witnesses:

S. D. DOWNES,

SAML. B. HODGE.