(No Model.)

E. P. WATERS.

HARNESS PAD.

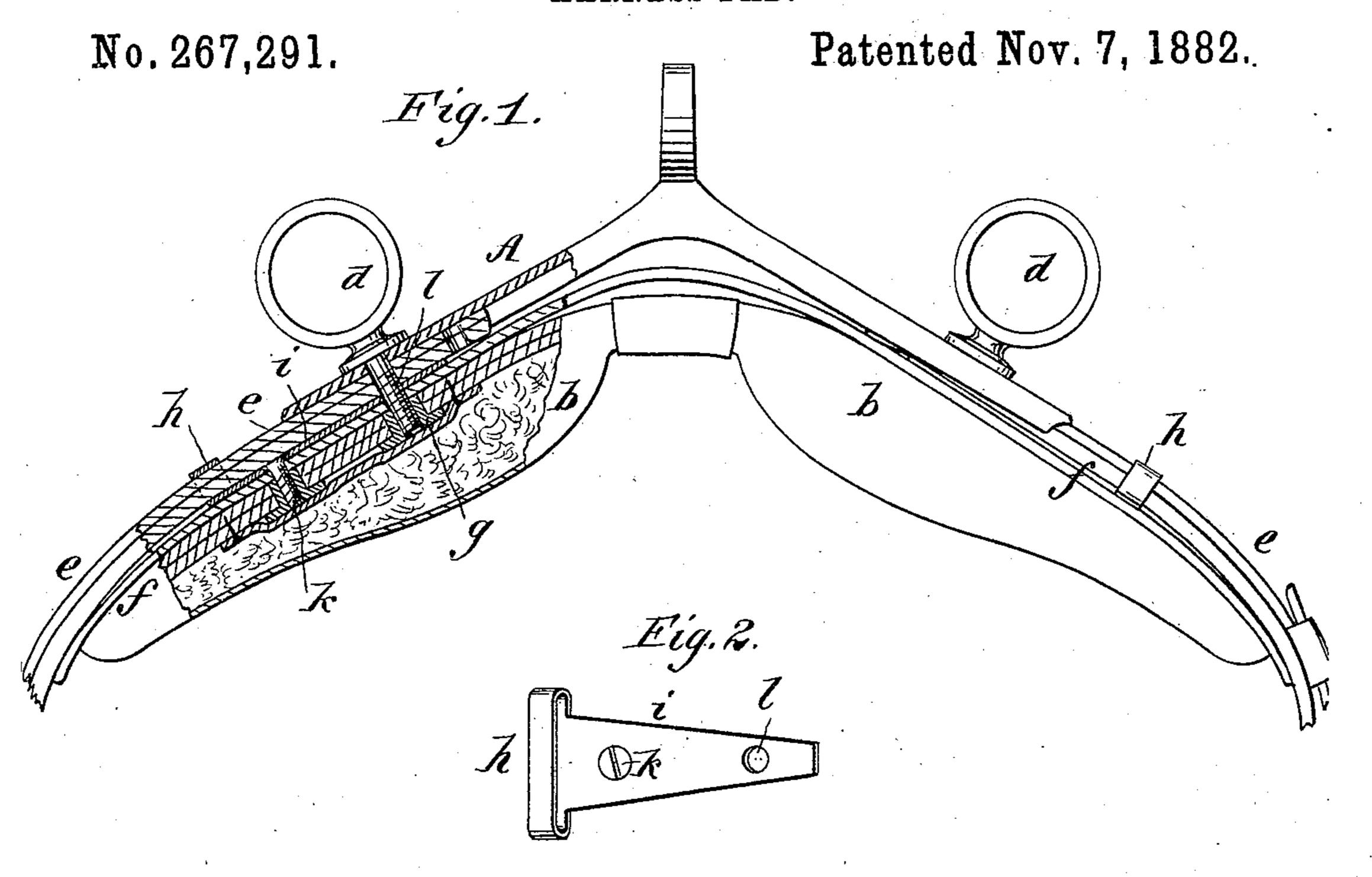


Fig. 3.

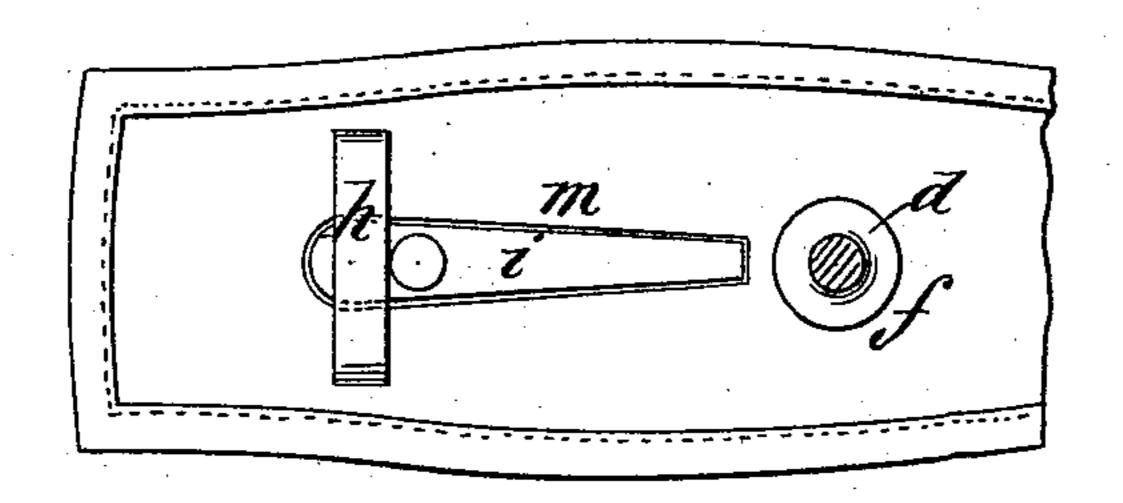
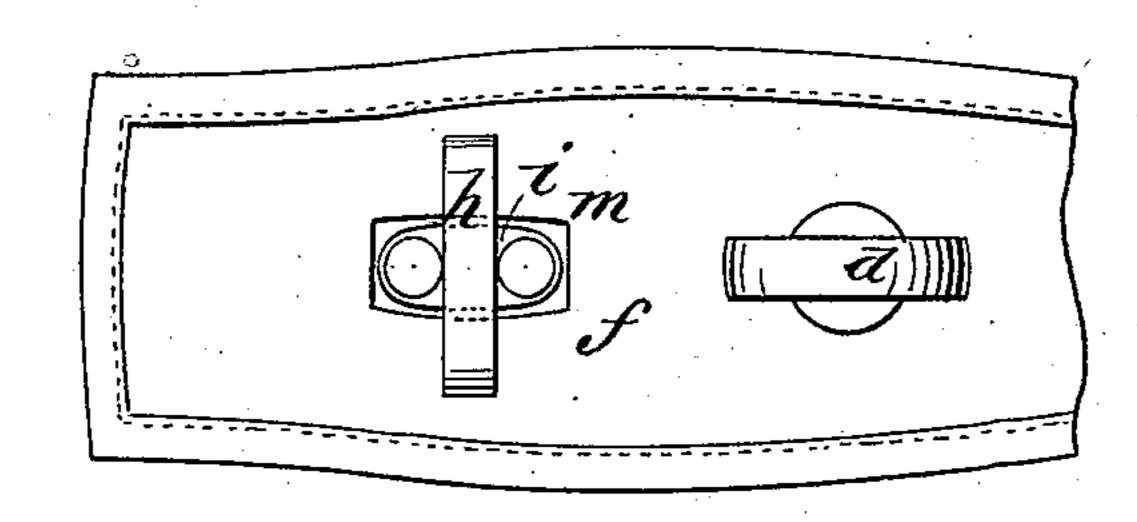


Fig. 4.



WITNESSES:

Donn Twitchell.

INVENTOR:

BY Mun C

ATTORNEYS.

United States Patent Office.

EDWARD P. WATERS, OF ROSEVILLE, ILLINOIS.

HARNESS-PAD.

SPECIFICATION forming part of Letters Patent No. 267,291, dated November 7, 1882.

Application filed September 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. WATERS, of Roseville, in the county of Warren and State of Illinois, have invented a new and Improved Harness Tree and Pad, of which the following is a full, clear, and exact description.

My invention consists in the combination, with the skirts and pad, of a loop-piece through which the skirt passes, and by which it is held in place, as more particularly set forth hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation, partly in section, of a harness tree and pad with my improvements. Fig. 2 is a plan view showing one form of the holding-loop, and Figs. 3 and 20 4 are plan views showing modifications in the construction of the same.

A is the metal portion of the tree, provided with pads bb. dd are the terrets. e e are the skirts at each side, and ff are the housings.

25 As in Letters Patent granted to me June 27, 1882, No. 260,262, the tree A at each side forms a pocket, into which the upper end of the skirt e enters, and the terret d, passing through the tree and skirt, enters a nut, g, beneath, so that it holds all the parts together and retains the skirt securely within the pocket. The skirts are formed with two or more holes for the terrets, which allow of their adjustment in length.

h is the holding-loop through which the skirt passes. In Figs. 1 and 2 this loop is shown as formed upon the end of a metal plate, i, which is attached upon the housing f by means of a screw, k, passing through the plate into a nut fitted in the pad. The piece i is made of a length to extend beyond the screw of the terret, and provided with an aperture, l, through which the screw passes. This prevents any turning movement of the piece i upon its screw k, so that any lateral or sidewise movement of the skirt

is effectually prevented. This is substantially as described in my Patent No. 260,262; but as shown in Fig. 3, the attaching-plate *i* is made smaller and shorter, and is riveted directly to the pad. The housing *f* is formed with a slot, 50 m, of a size for passing over the plate *i*, so that the housing may lie flat on the pad. At the same time the piece *i* and loop *h* are prevented from turning by their engagement with the sides of the slot.

In putting the parts together with this form of holding-loop the loop and the plate are turned at right angles to the position shown in Fig. 3. The pad is then applied and plate *i* turned back, thereby bringing the loop across 60 the slot and above the housing. The skirt may then be applied.

The loop shown in Fig. 4 is formed with or attached to a plate of small size, which is secured by two rivets directly to the pad, so 65 that the loop is rigidly held. The aperture m in the housing is made of a length and width for being passed over the loop when the housing is placed at right angles to the position shown in Fig. 4, and the housing being then 70 turned to its proper position, the loop stands transversely of the slot in the position for receiving the skirt.

This holding-loop may be used with what is known as a "hook-and terret" pad, in which no 75 tree is employed.

I am aware that a transverse loop having a screw-threaded shank secured by a nut on the under side of the leather has been used heretofore; but

What I claim as new and of my invention is—
The combination, with the pad and loop plate *i*, of the housing *f*, having the slot *m*, whereby the loop is brought across the slot above the housing and prevented from turning 85 by the sides of the slot, as described.

EDWARD P. WATERS.

Witnesses:

J. D. PETER, C. A. ANDERSON.