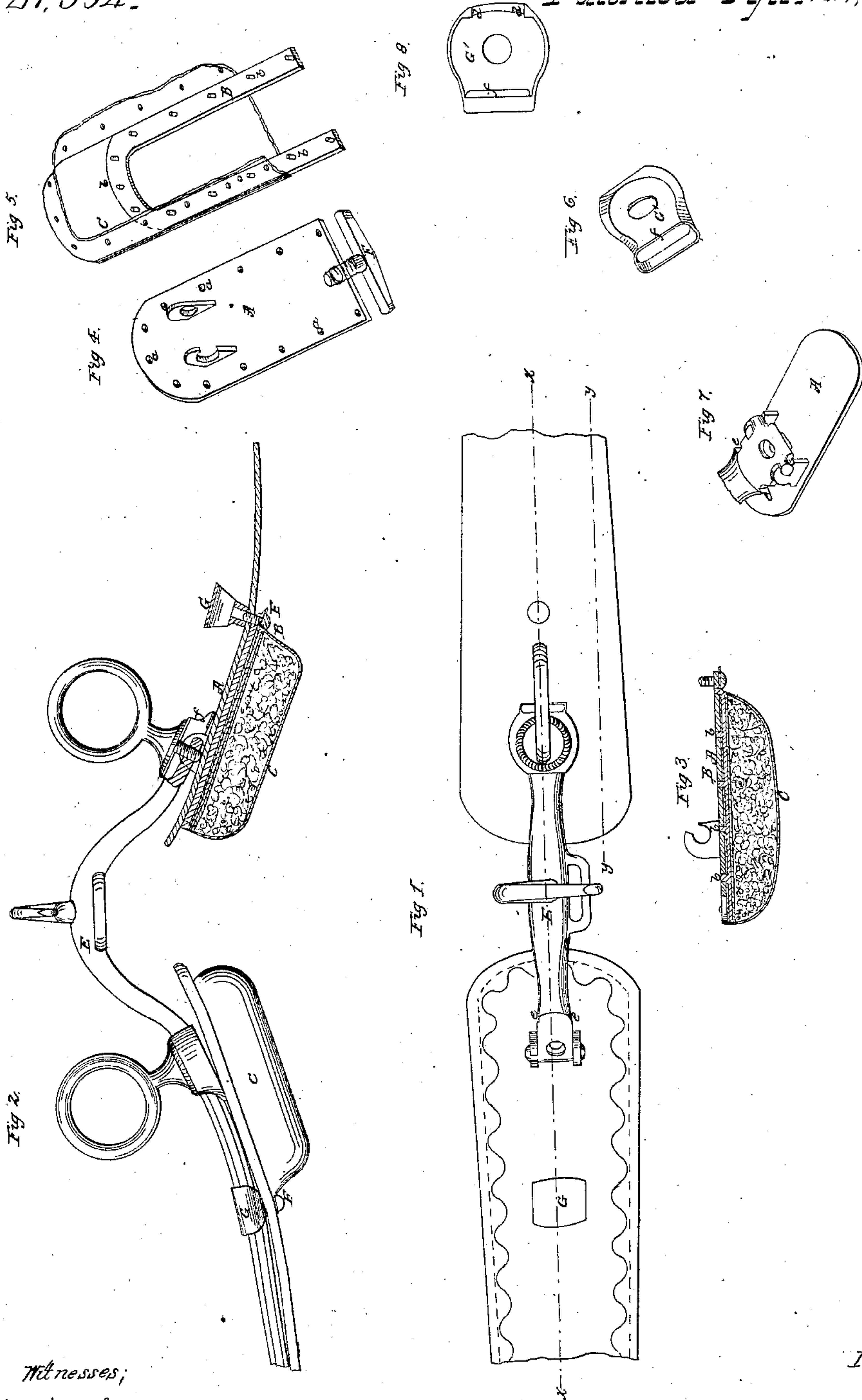


J. Ives

Harness Saddle

N^o 27,984.

Patented Apr. 24, 1860.



Witnesses;
James Ives
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UNITED STATES PATENT OFFICE.

JAMES IVES, OF MOUNT CARMEL, CONNECTICUT.

HARNESS-PAD.

Specification of Letters Patent No. 27,984, dated April 24, 1860.

To all whom it may concern:

Be it known that I, JAMES IVES, of Mount Carmel, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Harness-Saddles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, is a plan or top view of my improved harness pads attached to a tree. Fig. 2, is a vertical section in the line *x, x*, of Fig. 1. Fig. 3, is a vertical section in the line *y, y*, of the pad detached. Fig. 4, is a perspective view of the pad plate. Fig. 5, is a perspective view of the rivet plate and pad cloth. Fig. 6, is a perspective view of the cap, and Fig. 7, is a perspective view of the hinge joint slightly modified. Fig. 8, is a bottom view of the cap.

Similar letters of reference, in each of the several figures indicate corresponding parts.

My invention consists in the construction of harness pads. First, in fastening the pad-cloth or lining to the pad plate by riveting, substantially in the manner hereinafter described.

It consists, second, in confining the back-band loop in position by combining it with a detachable T bolt of the pad plate, substantially in the manner hereinafter described.

It consists, third, in closing up and confining one end of the pad by the combined agency of the back band loop and the T bolt, substantially as hereinafter described.

It consists, fourth, in the employment of a removable capping plate which covers the hinge connection and forms a loop for the back band in combination with shoulders or lugs of the tree substantially in the manner hereinafter described.

To enable others skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

The usual way of forming the pad is by sewing the cloth or lining to a welt of the skirting. The performance of this operation is quite tedious and insecure and especially so if a neat job is turned out. To avoid thus sewing the pad-cloth or leather, to the skirting, I provide the pad plate A, with rivet holes *a, a*, near its side edges and upper end, and also employ an auxiliary plate B, of U shape with rivets *b, b*, formed on its upper side. Between the pad-plate

and the rivet plate I pass the edges of the pad cloth or lining C, which has previously been made in a form to fit over the rivet plate and punched so as to admit the rivets through it. I now insert a riveting anvil into the unstuffed pad, so that it comes under the rivet plate and with a hammer accomplish the riveting operation. The pad cloth has thus been neatly secured at its two sides and upper end, and is ready to be stuffed and applied to the tree E. The pad having been stuffed in the usual manner and the skirt properly placed over it, to attach it to the tree I employ a hinge joint such as represented in drawings, and then pass a T screw-bolt F, up through the pad cloth, pad plate and skirt leather and screw onto the end of the same the back-band loop G, as represented. Thus employing the T bolt, it will be seen enables me to close up that end of the pad which was left open to admit the stuffing, the head of the bolt performing this function and while this is accomplished, I obtain a firm support or hold for the back-band loop, the pad plate answering this end. It will also be seen that great convenience for reopening the end of the pad and introducing additional stuffing at any subsequent period is afforded.

To cover and give an ornamental finish to the hinge connection, and also additional security in case of the hook shaped bearings giving out under extraordinary strain, I employ a cap G', of the following construction. The cap has an opening in its top to admit the terret, and also a curved recess at its upper end to fit over the tree. At each side of this recess, a lug *d*, is formed. These lugs fit over and bear against shoulders *e, e*, of the pad-tree. At the lower end of the cap, a loop *f*, is formed as represented.

By providing the cap with lugs and having the terret pass down through it, it will be seen that when it is applied, the lugs, by coming against the shoulders *e, e*, will, in case the bearings of the journals of the hinge connection give way, prevent a separation of the pad from the tree. Again the cap answers as a washer between the terret and the back-band, thus giving a larger compressing surface and finally by having a loop at the lower end of the cap, a support is provided, between the skirting and the back band and thus the back-band is kept in a measure isolated from the skirting, and any vibrating action of the back-

band tends to assist the pad in swinging on its hinge connection.

I have found it to answer a good purpose in practice, to simply employ the pad plate with rivets cast on its under-side. To fasten the pad-cloth or lining on the pad plate thus constructed, the same manipulation as heretofore described is necessary with the exception that the auxiliary plate or washer is not employed and consequently the heads or hooks of the rivets are formed directly on the cloth.

My mode of constructing pads by riveting has been found in practice to answer far better than the ordinary modes, it giving a very neat finish, reducing labor and cost immensely, and withal increased durability.

What I claim as my invention and desire to secure by Letters Patent, is—

1. In the construction of a harness pad detached from the tree or housing, I claim the combination with the perforated pad

plate A, of a U shaped washer plate B, which has rivets or hooks formed on it, and is arranged within the pad and below the perforated pad plate, substantially as and for the purposes set forth. 25

2. Confining the back band loop in position by combining it with a detachable T bolt F of the pad plate A substantially as and for the purposes set forth. 30

3. Closing up and confining one end of the pad by the combined agency of the back-band loop G, and the T bolt F, substantially as and for the purposes set forth. 35

4. Providing the cap G', with a band or loop f, and with lugs d, d, and using it in combination with a tree E which has shoulders e, e, formed on it, substantially in the manner and for the purpose herein described. 40

JAMES IVES.

Witnesses:

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