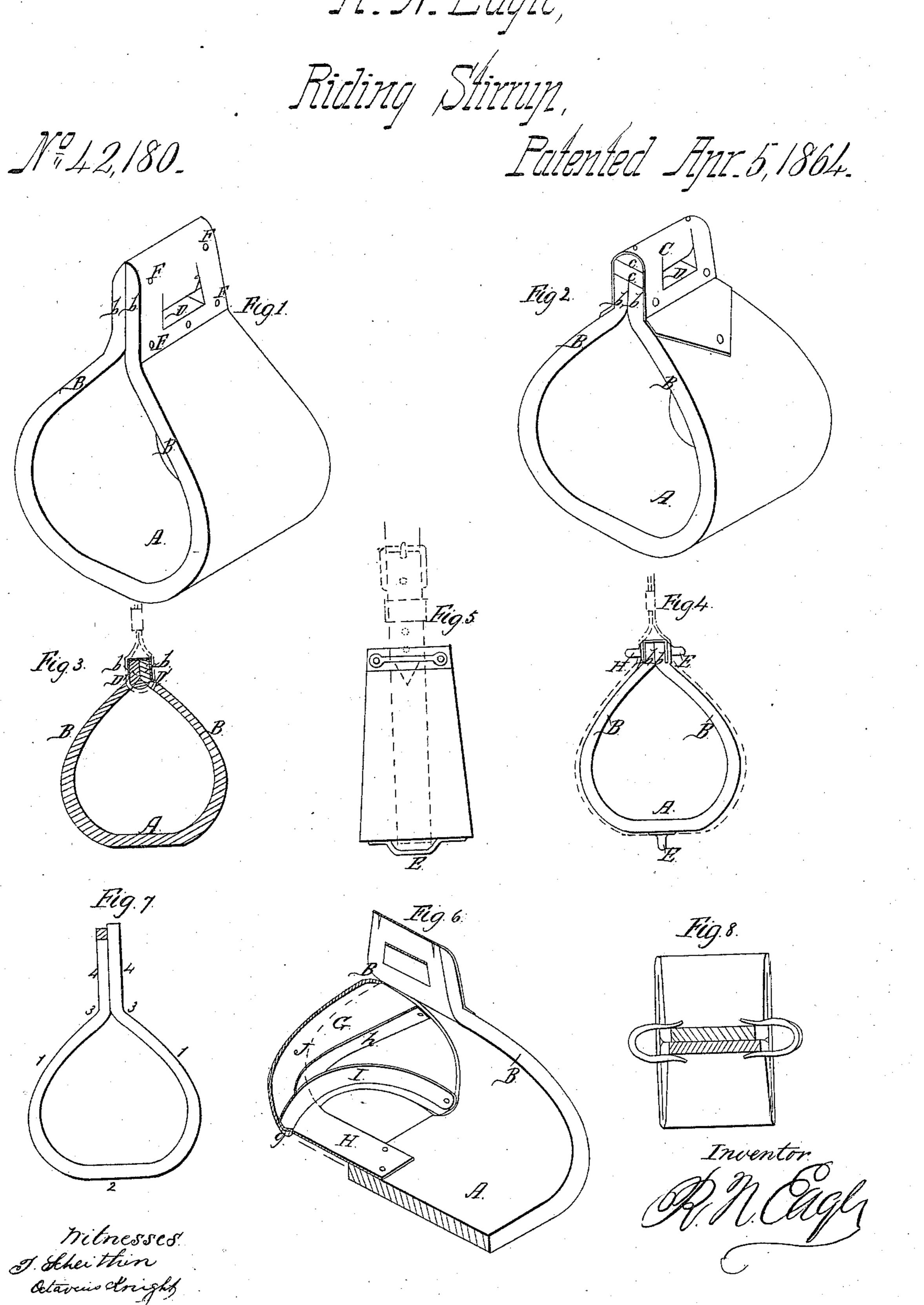
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United States Patent Office.

ROBERT NELSON EAGLE, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN RIDING-STIRRUPS.

Specification forming part of Letters Patent No. 42,180, dated April 5, 1864; antedated March 21, 1864.

To all whom it may concern:

Be it known that I, ROBERT NELSON EAGLE, of the city of Washington, in the District of Columbia, have invented certain new and useful Improvements in Riding Stirrups; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, which illustrate my said invention under various modifications.

Figures 1 and 2 are perspective views; Fig. 3, a vertical transverse section; Fig. 4, a rear elevation; Fig. 5, a side elevation, and Fig. 6, a perspective view of one-half of the stirrup divided longitudinally. Figs. 7 and 8 are diagrams illustrating the wooden frame as first bent in rough form.

Similar letters of reference indicate corre-

sponding parts in the several views.

My present improvement consists, first, in the construction and use of a stirrup-frame of wood with arms meeting below their upper ends and continuing upward in the form of a neck or web to afford means for the attachment of the suspending leather; second, in the construction and use of a wooden stirrup-frame, with arms meeting at or near their upper ends, and suspended without the intervention of a metallic cap; third, in the use of an open hood of peculiar construction, as hereinafter described; fourth, in the use, in combination with a stirrup hood of any suitable form, of one or more ribs of metal, wood, or other material.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same,

I will proceed to describe it.

In carrying out my invention I bend wood into a stirrup-frame of similar shape with the ordinary article, but with material at top so disposed as to afford the means of attaching the suspending-leather independently of any band, cap, or strap of metal or other material, as represented in Fig. 7, which is a front elevation of the frame as first bent, and wherein 1 is the sides or lower arms, 2 the tread or base, 3 the shoulder or line of division between the aforesaid sides or arms and the neck, and 4 the web or neck of the frame.

Fig. 8 is a top view of the frame, illstrating

one mode of securing it in position until

properly set.

A B B represent the main frame of the stirrup, which may be of wood or other material bent in the form required, A being the connecting tread or base, and B B the arms, which meet at the their upper ends, and are connected by dowels, rivets, or bolts F F F, or by other suitable means to form a web, b, to which the suspending-strap may be secured in various ways.

In Fig. 1 the web b is represented as extended to a sufficient vertical width to afford the requisite strength without the aid of a cap, strap, or band of metal, or other material.

D represents a slot, extending completely through the web b for the reception of the

suspending-strap.

In Fig. 2 the web b is represented as cut off close above the slot D, and covered with a band or cap, C, beneath which and between it and the top of the web b may be driven a wedge or key, or two wedges or keys, cc, inserted from opposite ends, which will thus strain the cap or band C into proper form, and constitute a horizontal bar of ample strength, for purposes of suspension.

In Fig. 3 are represented two slots, D' D', formed in the arms below the shoulder of the web b for the reception of the suspending strap, as indicated by red lines. Instead of this, the suspending-strap may be applied to the exterior of the frame, either attached at or near the top of the latter, or extending beneath and completely around the frame, as represented by red lines in Figs. 4 and 5, and held in either case by rivets, tacks, loops E E, or other means of attachment.

Fig. 6 illustrates a form of web and suspending-slot analogous to that shown in Fig. 1, excepting that the web is cut shorter and the requisite strength supplied by a metal or other

cap or band C, as before explained.

My improved front or toe piece is illustrated in Fig. 6. It consists, essentially, of an open hood, G, of leather or analogous material, stamped or pressed into the required form, as clearly represented—that is to say, adapted for attachment by its upper edge to the forward edges of the arms B B on the inside or outside of the latter, and leaving a cavity be-

tween the lower edge of the said hood and the front edge of the tread, to afford ventilation and reduce the quantity of material required.

In order to impart the requisite strength and rigidity to the material used in its construction, the lower unattached edge of the hood thus formed, I produce, by pressure within suitable dies, a convexity or corrugation, as shown at g, close to the said lower and unattached edge of the hood. In cases where additional stiffness or strength is required I apply within the hood G a frame of metal or other material, consisting of a horizontal bar, H, attached to the front edge of the tread, and projecting forward therefrom to the lower edge of the hood, where it branches upward in contact with the under surface of the hood in two or more bars, h, (one shown,) extending and attached to the forward edges of the arms B near their upper ends. Instead of or in an addition to the bar H, a bar, I, may be applied in horizontal position attached at its respective ends to the forward edges of the arms B B at or near their junction with the tread, and extending around close within the lower edge of the hood, to fit which it may be curved in its transverse section.

Instead of or in addition to the skeleton frames H and I, above described, or either of them, I also propose to use a curved bar or band, J, of wood or metal, or both combined, attached to the center of the forward edge of the tread, extending forward to the lower edge of the hood, and thence upward within the hood to the apex of the frame, where its upper end will be attached. (See red lines in

Fig. 6.)

The above described strengthening-frames,

or either of them, may, if preferred, be applied on the outside of the hood, or partly on the

inside and partly on the outside.

For some purposes the entire upper part of the hood G may be corrugated in a vertical direction; but the only corrugation which I deem indispensable to my present improvement in the stirrup-hood is the horizontal external convexity g, which has been already described.

Having thus described my invention, what I claim as new therein, and desire to secure by

Letters Patent, is—

1. A stirrup frame of wood, bent as described, with arms meeting below their upper ends, and continuing upward in the form of a web or neck, to afford means of applying or attaching the suspending strap in any manner, substantially as described.

2. A stirrup frame, bent in proper form, with arms meeting at or near their upper ends, and suspended by a strap, or its equivalent, passing through a slot or slots in the frame, or applied to the exterior thereof, without the in-

tervention of a metallic cap.

3. An open hood or toe-piece, G, of leather or other material, formed by pressure upon or within suitable dies, and having its lower end separate from the frame of the stirrup, and provided with a horizontal corrugation or external convexity, g, to impart the required stiffness and strength.

4. The use of one or more strengthening ribs or frames, in combination with a stirrup-

hood or toe-piece.

R. N. EAGLE.

Witnesses:

OCTAVIUS KNIGHT, T. SCHEITLIN.