A. J. HERRING.

Stirrups.

No. 145,869. Patented Dec. 23, 1873.

Fig. 1.

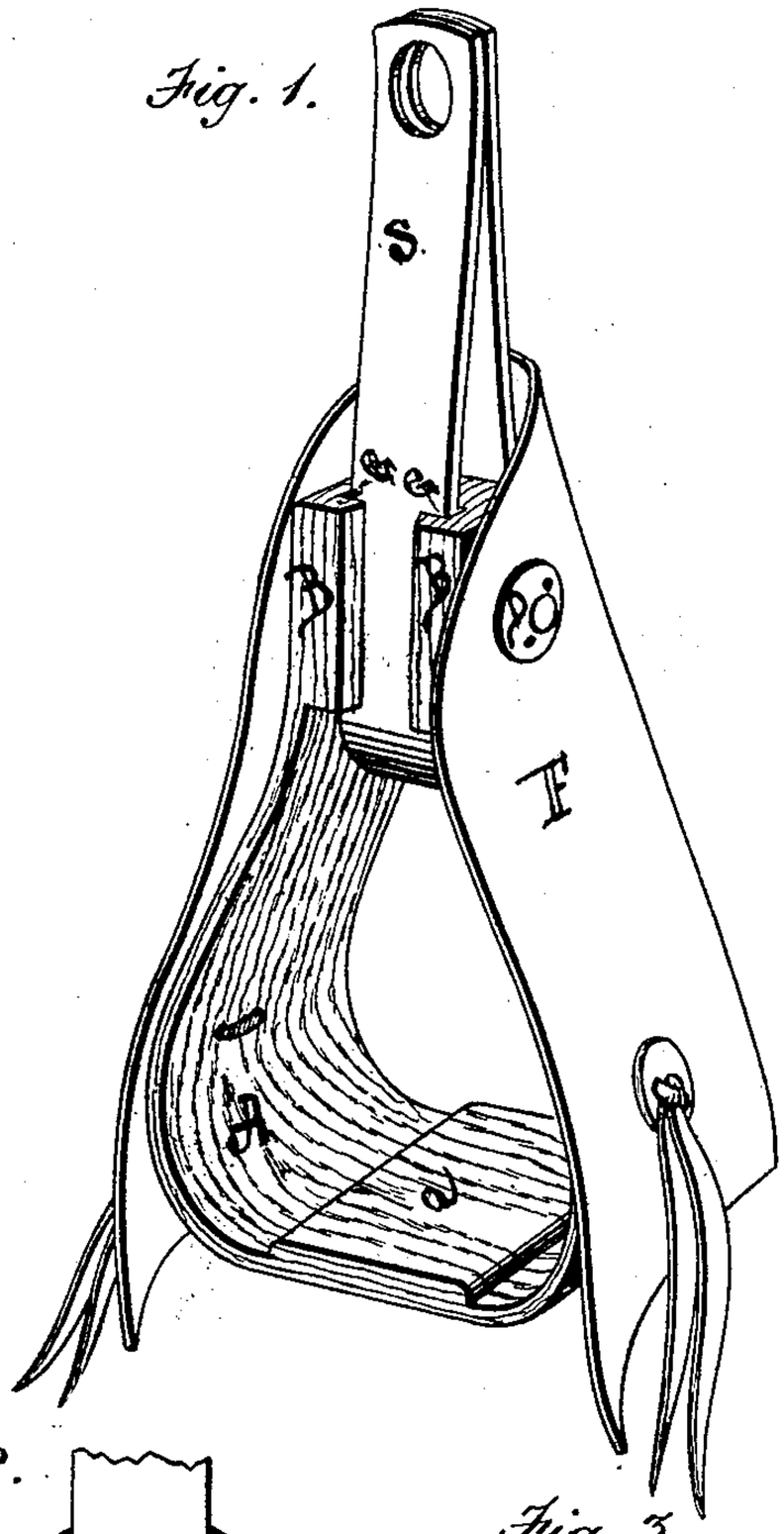


Fig. 2.

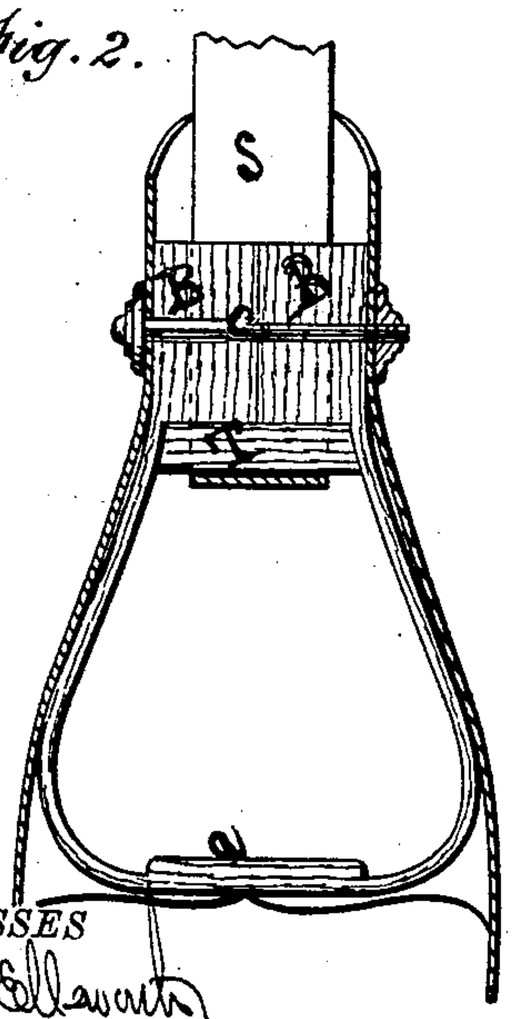
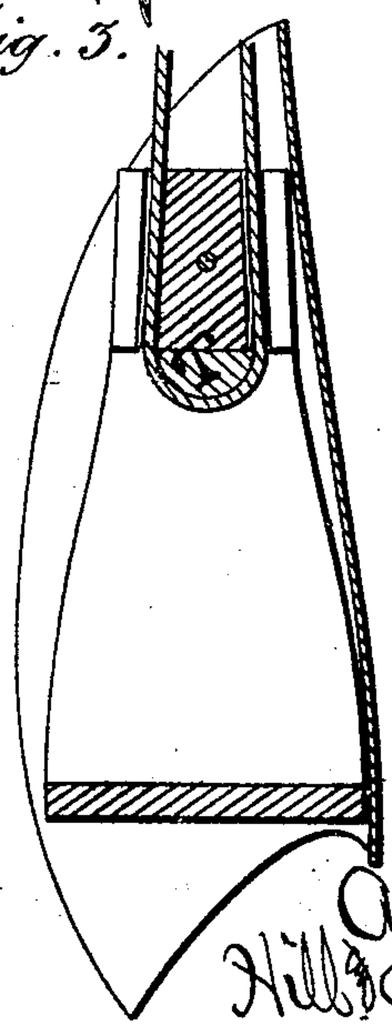


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

ANDREW J. HERRING, OF MAUCH CHUNK, PENNSYLVANIA.

IMPROVEMENT IN STIRRUPS.

Specification forming part of Letters Patent No. **145,869**, dated December 23, 1873; application filed September 15, 1873.

To all whom it may concern:

Be it known that I, ANDREW J. HERRING, of Mauch Chunk, in the county of Carbon and State of Pennsylvania, have invented a new and Improved Stirrup; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a transverse section of the same; and Fig. 3, a section through line *x x*, Fig. 2.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention is an improvement on my patent, No. 135,547, dated February 4, 1873, and has for its object to improve the construction of the wooden stirrup in such manner as to secure greater strength and stiffness without materially increasing the weight, and also to provide simple and efficient means for attaching the stirrup-strap to the half-blocks composing the top of the stirrup. To these ends, my invention consists, first, in the peculiar construction of the wooden piece, the same being bent at its outer ends, so that when the half-blocks are put together the grain of the wood in each block will be parallel with that of the other, instead of converging toward the top, as in the original invention. The outer sides of the stirrup, at its upper end, are thus rendered parallel, and better bearings to the bolt-head and nut, securing the half-blocks together and clamping the hood in place. The center of the stirrup is provided with a re-enforcement, which provides a flat surface for the bearing of the rider's feet, preventing the bottom from bending, and protecting it from wear. My invention consists, secondly, in providing vertical grooves in the half-blocks composing the top of the stirrup for the reception of the stirrup-strap, the latter passing down one side of the blocks, under the same, and up the opposite side, its edges fitting in the grooves in such manner as to hold the strap in place, all of which I will now proceed to describe.

In the drawings, A is the stirrup, worked out of one piece of wood, with the half-blocks B upon each end, which halves bear against each other when the stirrup is bent up, and are held in place by the transverse bolt C and nut D, the latter holding the leather hood E in place, as fully described and shown in my original patent.

In my former patent the half-blocks sloped inward on their outer sides, the grain in each block converging toward the center. I now bend the ends of the wooden piece so that when the blocks are placed together their outer sides are parallel, as shown in Fig. 2, thus providing parallel bearing-surfaces for the head of the bolt C and the nut D.

At the center of the stirrup is a re-enforcement, *a*, projecting from the upper side, and of sufficient width to afford a secure bearing for the sole of the foot. The re-enforcement is of uniform thickness, its edges rising sharply from the piece composing the stirrup, which is doubled in thickness thereby; consequently, when the ends of the wooden piece are bent up in forming the stirrup, the stiffness of the re-enforced portion prevents it from bending and keeps it perfectly flat, thus maintaining an even step for the foot, which conduces materially to the comfort of the rider during long journeys, and prevents undue wear on the bottom of the stirrup.

In my former patent the stirrup-strap was connected to the stirrup by a spring-frame; but, for the purpose of simplifying and cheapening the connection, I now provide vertical grooves G in the blocks B, two on each side of the stirrup, adapted to hold the edges of the strap S, which passes down one side under an interposed rounded block, T, attached to the lower sides of the blocks B, and up the opposite side, as shown.

The strap is thus held in its proper place at all times, is readily inserted and removed, and the arrangement presents a neat and finished appearance.

The bolt C is constructed square for a portion of its length, and its socket is correspondingly shaped, so that the bolt cannot turn or loosen the nut.

The hood is attached to the lower portion of

the stirrup by suitable straps or thongs T, as shown.

I claim as my invention—

1. The wooden stirrup A, provided with the re-enforcement *a* at its center, and having its ends bent so that the half-blocks B formed thereon shall have parallel outer sides, substantially as and for the purpose specified.

2. The blocks B, having grooves G, adapted to hold the edges of the stirrup-strap S, substantially as described.

ANDREW J. HERRING.

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