No. 726,534. PATENTED APR. 28, 1903.

J. HOLLICOTT.

STIRRUP.

APPLICATION FILED SEPT. 19, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1

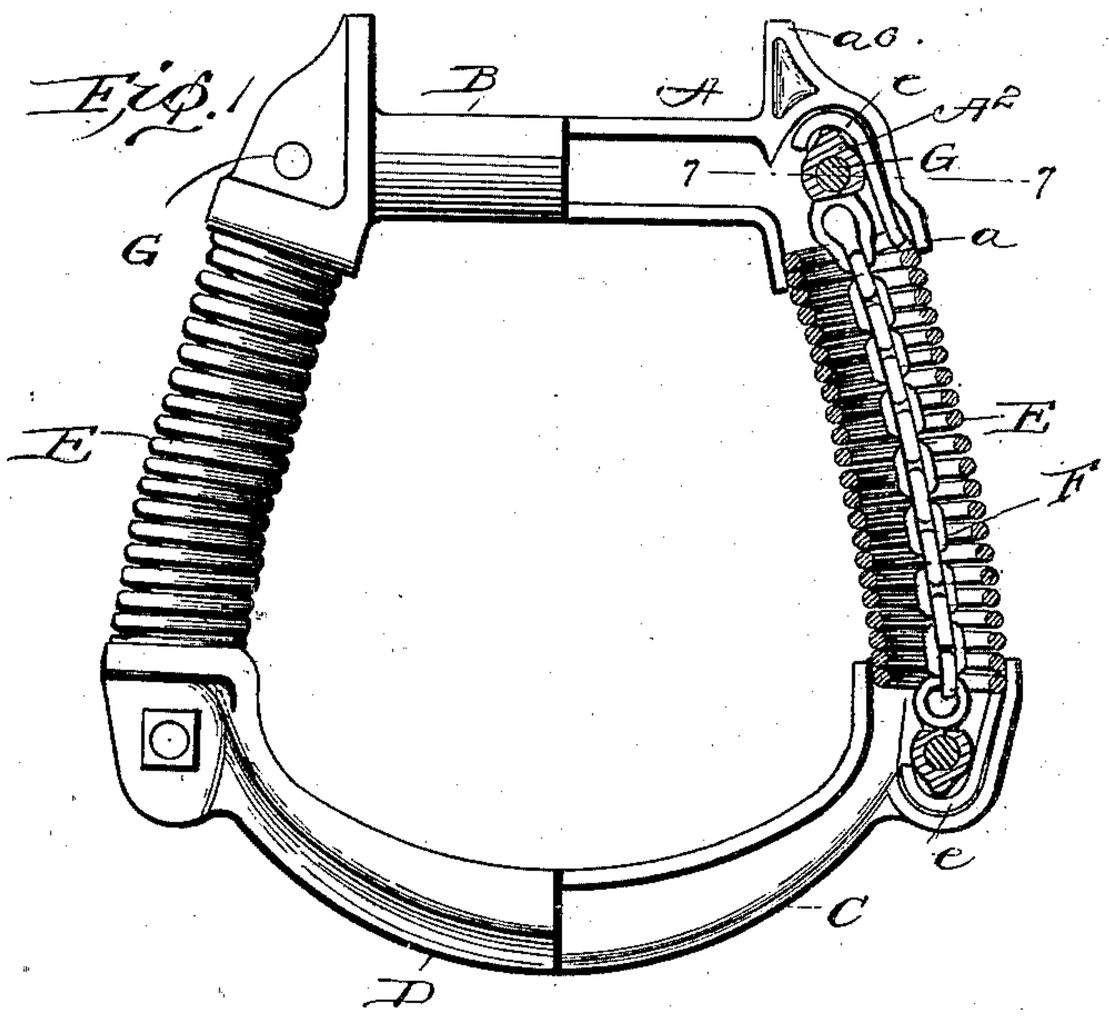


Fig. 4.

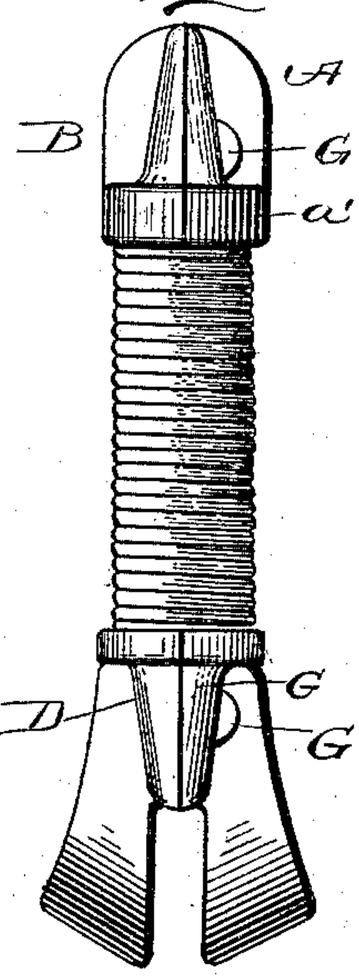


Fig. 5

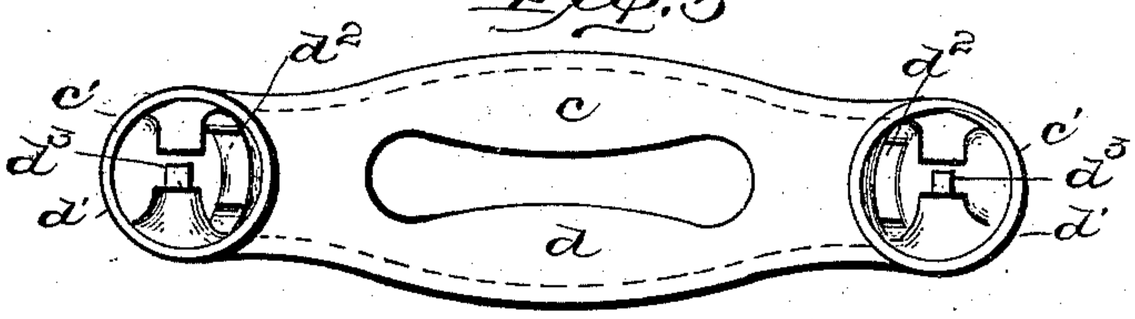


Fig. 6.

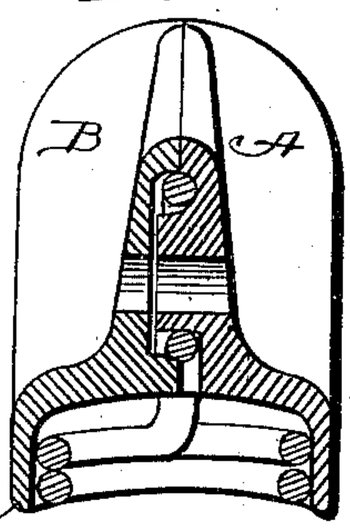


Fig. 7.

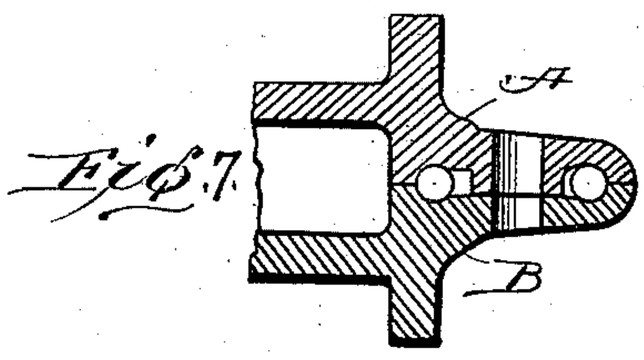
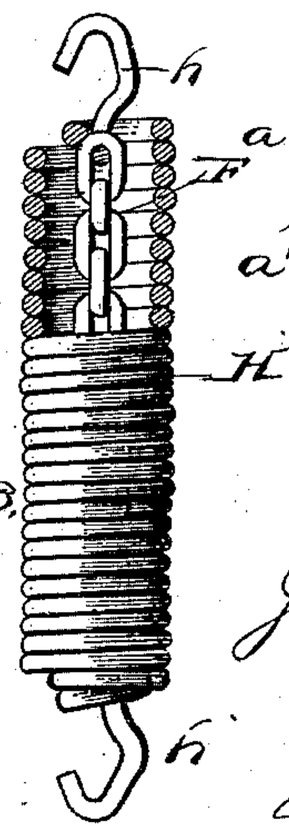


Fig. 8.



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No. 726,534. PATENTED APR. 28, 1903.

J. HOLLICOTT.

STIRRUP.

APPLICATION FILED SEPT. 19, 1902.

NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

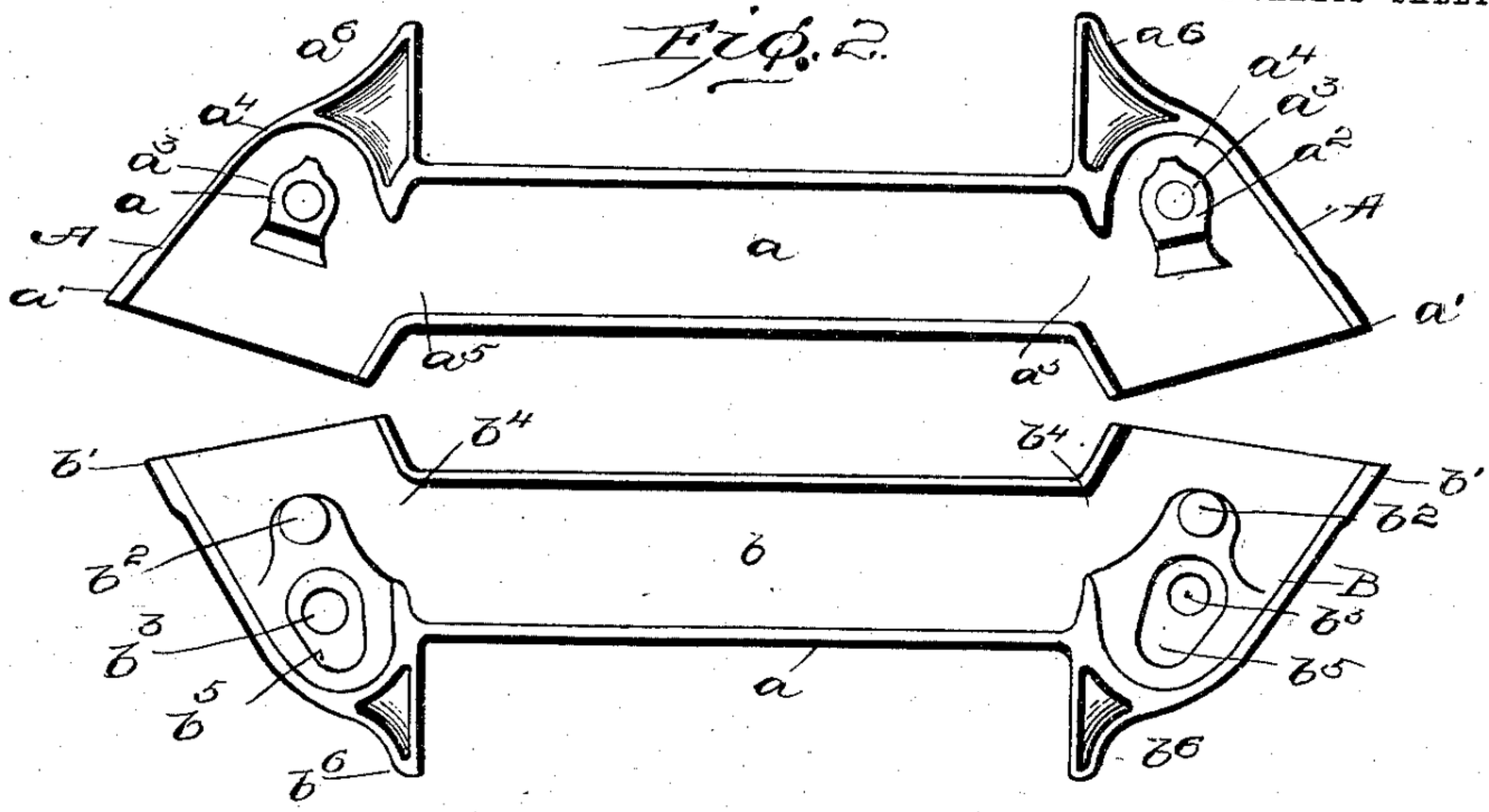

Fig. 3.

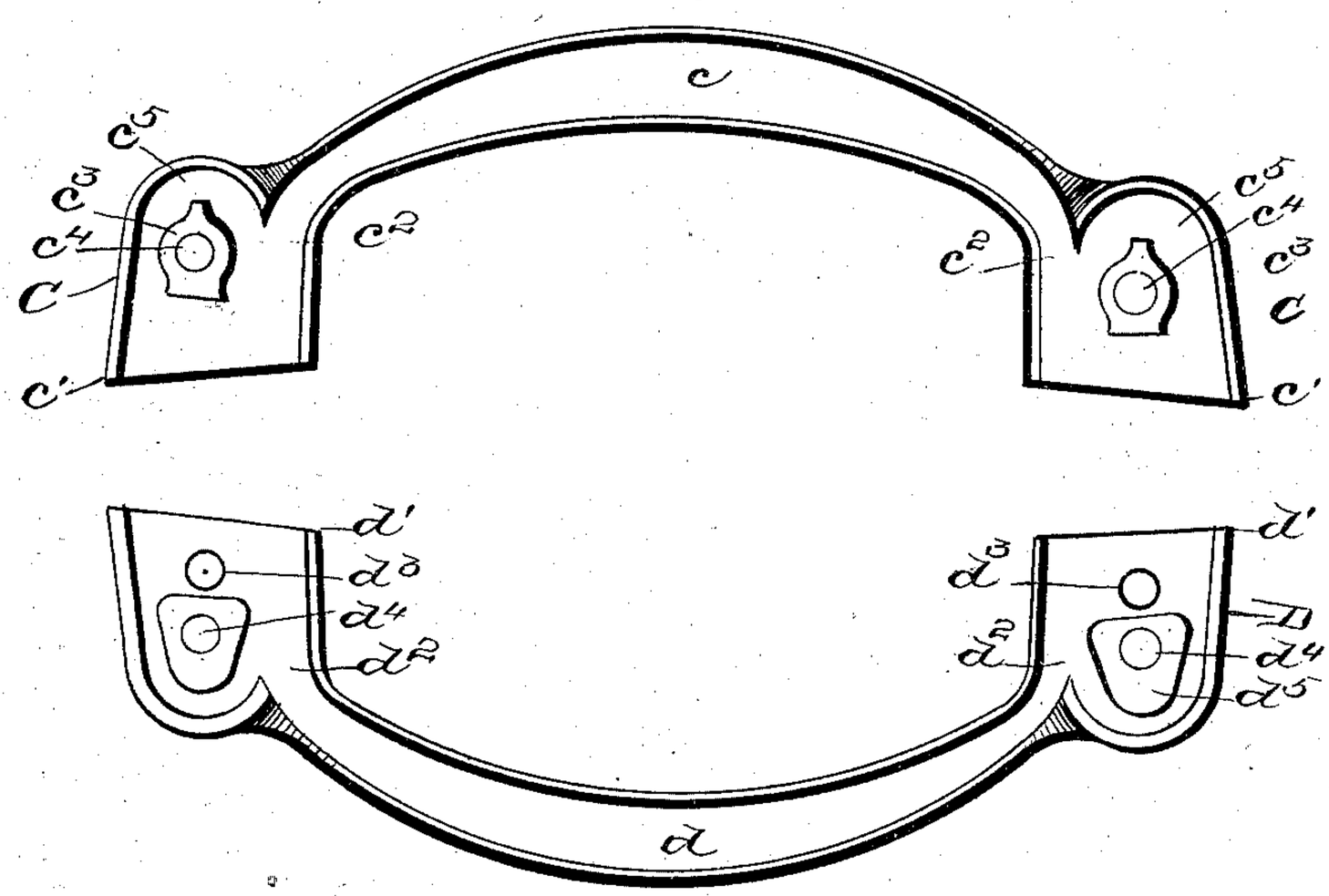

Fig. 3a

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UNITED STATES PATENT OFFICE.

JOHN HOLLICOTT, OF TASCOSA, TEXAS, ASSIGNOR OF ONE-HALF TO CHARLES W. GILLESPIE, OF TASCOSA, TEXAS.

STIRRUP.

SPECIFICATION forming part of Letters Patent No. 726,534, dated April 28, 1903.

Application filed September 19, 1902. Serial No. 124,110. (No model)

To all whom it may concern:

Be it known that I, JOHN HOLLICOTT, a citizen of the United States, residing at Tascosa, in the county of Oldham and State of Texas, have invented certain new and useful Improvements in Stirrups; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to both elastic stirrups and safety-stirrups; and it is my object to provide a combined elastic and safety stirrup which will afford the requisite ease and comfort to the rider and also afford flexible sides to the stirrup designed to yield to the weight of the horse in case of a fall, but resume their normal shape when relieved of such weight, thus avoiding the danger heretofore incident to bending the stirrup and clamping the rider's foot therein.

It is also my object to provide an elastic stirrup with means for limiting the vertical play of the springs and serve as a stay to take up the weight of the rider, thereby preventing undue strain upon the springs.

In the accompanying drawings, forming a part of this specification, Figure 1 is a front elevation of the stirrup, partly in section. Fig. 2 is a detail plan view showing the two halves of the head of the stirrup. Fig. 3 is a detail plan view of the two halves of the tread of the stirrup. Fig. 3ª is a cross-section taken through the tread. Fig. 4 is an end elevation of the stirrup. Fig. 5 is a top plan view of the tread of the stirrup. Fig. 6 is a detailed end view, partly in section, of the head of the stirrup. Fig. 7 is a detail horizontal section taken on the line 7 7 of Fig. 1, and Fig. 8 is a modification in the form of a spring and arrangement of stay-chain therefor.

Referring more particularly to the drawings, A and B denote two castings composing the head, and C D denote two castings composing the tread, of the stirrup. The head and tread of the stirrup are thus each divided longitudinally into equal parts.

E E denote two spiral springs which form the sides of the stirrup, the upper and lower ends of which are seated in bearings formed in the ends of said castings, as hereinafter mentioned.

F denotes two chains which are housed within the spiral springs and are connected at each end to said bearings, with the chains loose or slack for the purpose hereinafter mentioned.

As shown in Fig. 2, the casting A, which forms one side of the head of stirrup, is composed of a semicylindrical body portion a, having at each end semicircular seats a', the walls of which project downwardly, as shown in Figs. 1 and 6. Above said seats are raised knobs or bearings a^2, having threaded bolt-holes a^3. Surrounding these knobs are curved or hook-shaped depressions forming recesses a^4.

a^5 denotes depressions forming channels leading from the interior walls of the body portion a to the seats a'.

a^6 denotes raised projections or ears at each end of the body portion. In Fig. 2, arranged upside down, is also shown the casting B, which forms the other half or side of the head of the stirrup. The body portion b is semicylindrical and has at each end semicircular seats b', above which are placed lugs b^2. Above these lugs are bolt-holes b^3.

b^4 denotes depressions forming channels leading from the interior walls of the body portion b to the semicircular seats b'. b^5 denotes depressions surrounding the bolt-holes b^2. b^6 denotes raised projections or ears at each end of said body portion. When the castings A and B are assembled to form the head of the stirrup, the following parts register or range opposite: the body portions a and b, the ears a^6 and b^6, the bolt-holes a^3 and b^3, the channels a^5 and b^4, the semicircular seats a' and b', and knobs a^2 and depressions b^5.

As shown in Fig. 3, the casting C, which forms one side of the tread of the stirrup, is arranged upside down and composed of a curvilinear body portion c, V-shaped in cross-section, as shown in Fig. 3ª, having at each end semicircular seats c', the walls of which project upwardly. Leading from said seats are depressions forming channels c^2, which enter the V-shaped or hollow portion of the body C. c^3 denotes knobs arranged under

said seats and provided with threaded bolt-holes c^4. Under and around said knobs are hook-shaped depressions forming recesses c^5. In Fig. 3 is also shown the casting D, which forms the opposite half or side of the tread of the stirrup. This side of the tread is composed of a body portion d, V-shaped in cross-section, as shown in Fig. 3^a, having at each end semicircular seats d', the walls of which project upwardly. Leading from said seats are depressions forming channels d^2, which enter the V-shaped hollow portion of the body d.

d^3 denotes lugs arranged below the seats, and below said lugs are threaded bolt-holes d^4. d^5 denotes depressions surrounding said bolt-holes. When the castings C and D are assembled to form the tread of the stirrup, the following parts register: the walls of the seats c' and d', the channels c^2 and d^2, the knobs c^3 and d^3, the bolt-holes c^4 and d^4, and the knobs c^3 and depressions d^5. The V-shaped or hollow portions c and d of the castings C and D together form the body portion of the tread of the stirrup, the walls of which are cut away to lighten the same, as shown in Fig. 5. As shown in Fig. 1, the semicircular seats at each end of the castings A B and C D when assembled form seats with circular walls, within which the ends of the springs E E are housed. Said springs have hook-shaped ends e e, which are hooked over the knobs a^2 in the castings A of the head and over knobs c^3 in the casting C of the tread.

F F denote chains which are housed within the spiral springs, as shown in Fig. 1, and the upper and lower ends or links of each chain are passed over the lugs b^2 and d^3, sufficient slack being given to the chain to allow the requisite yield to the springs. Said chains act as stays to prevent undue strain upon the springs and limit their downward play. Thus they serve to take up and sustain any undue pressure upon the tread. Instead of providing the two chains, as described—that is, one for each side of the stirrup—I may use a single chain, and it is for this purpose I provide the channels a^5 and b^4 in the head and c^2 and d^2 in the tread, as these channels form passage-ways for an endless chain which would pass through the cylindrical body portion of the head, thence through said channels to the coiled springs, through the coiled springs, and to and through said channels in the tread. The ends of the chain would then be fastened together in any suitable manner and rest in the hollow portion of the tread. It is evident also that instead of passing the chain under the tread the ends of the chain may be hooked over the lugs d^3. The parts are assembled by placing the chains inside the coiled springs, hooking the ends e of the springs over the knobs a^2 and c^3, and passing the end links of each chain over the lugs b^2 and d^3. The castings A B and C D are then fastened together by means of set-screws G, for which the bolt-holes a^3 b^3 and c^4 d^4 are provided.

In Fig. 8 I show a modified form of spring and arrangement of stay by means of which I am enabled to dispense with the formation of lugs b^2 and d^3 in the head and tread of the stirrup, to which are fastened the chains F. In the modified construction the springs H are reduced in diameter at each end by turning inward the end coils sufficiently to confine at each end within the coil one end of a double hook h, the other or outer hooked end serving to engage with the knobs a^2 and c^3, while the end inside the coiled spring hooks into the end links of the chain F^a.

Having shown and described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A stirrup consisting of a head and tread having housings at each end and coiled springs extending from head to tread the ends of which springs are seated and held in the housings.

2. A stirrup having a hollow head provided with recesses at each end forming seats communicating with said hollow portion, a tread having like seats, coiled springs forming the sides of the stirrup adapted to be secured in said seats, in combination with a chain passing through said head and springs and secured to said tread.

3. A stirrup consisting of a head and tread formed in longitudinal sections provided with recesses at each end which register with opposite sections to form seats and a coiled spring forming each side of the stirrup the ends of which are housed in and secured to said seats.

4. A stirrup consisting of a head and tread having housings at each end and coiled springs extending from head to tread the ends of which springs are held in said housings, in combination with a chain passing through each spring and fastened to said housings.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN HOLLICOTT.

Witnesses:
FRANK W. MOSER,
GEO. BURKHART.