No. 652,805.

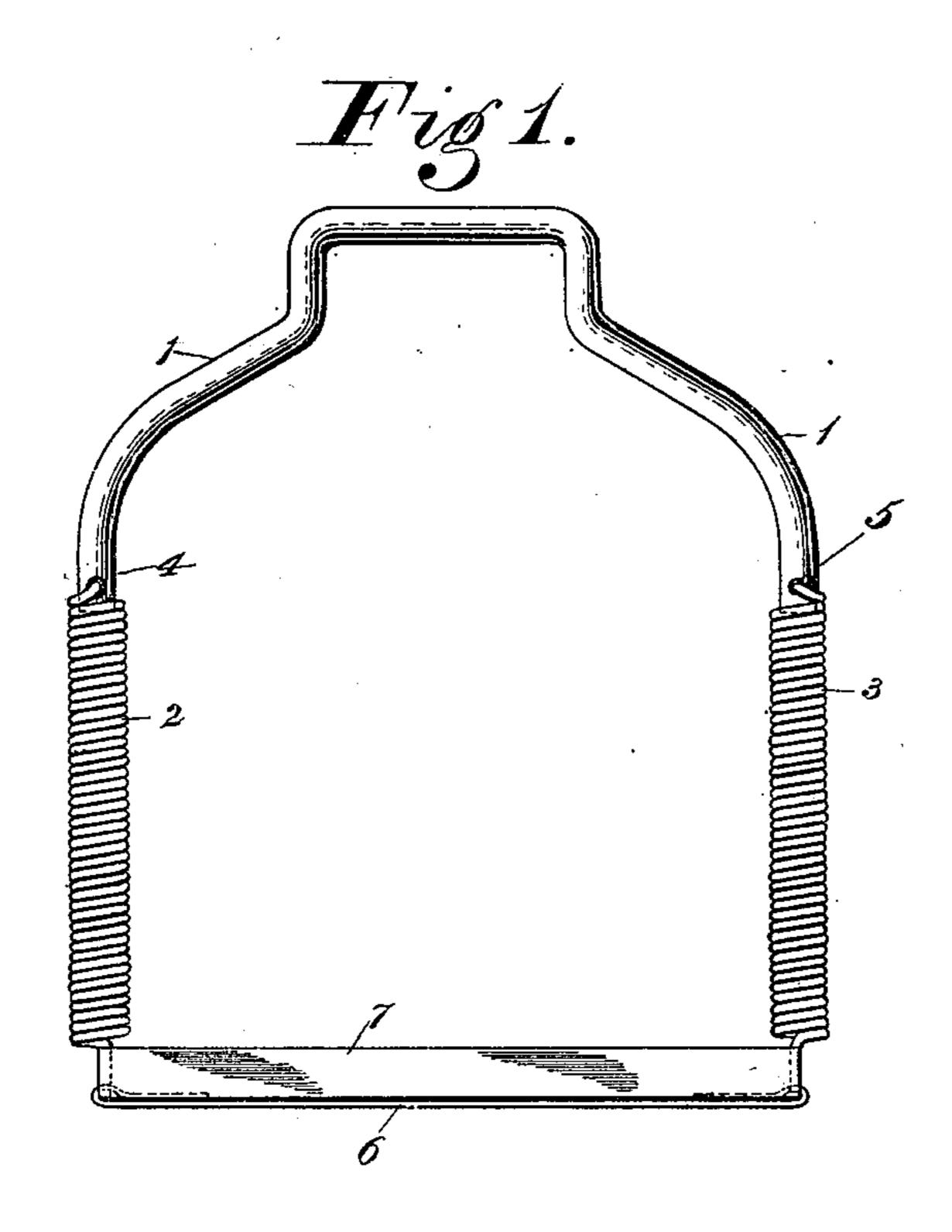
Patented July 3, 1900.

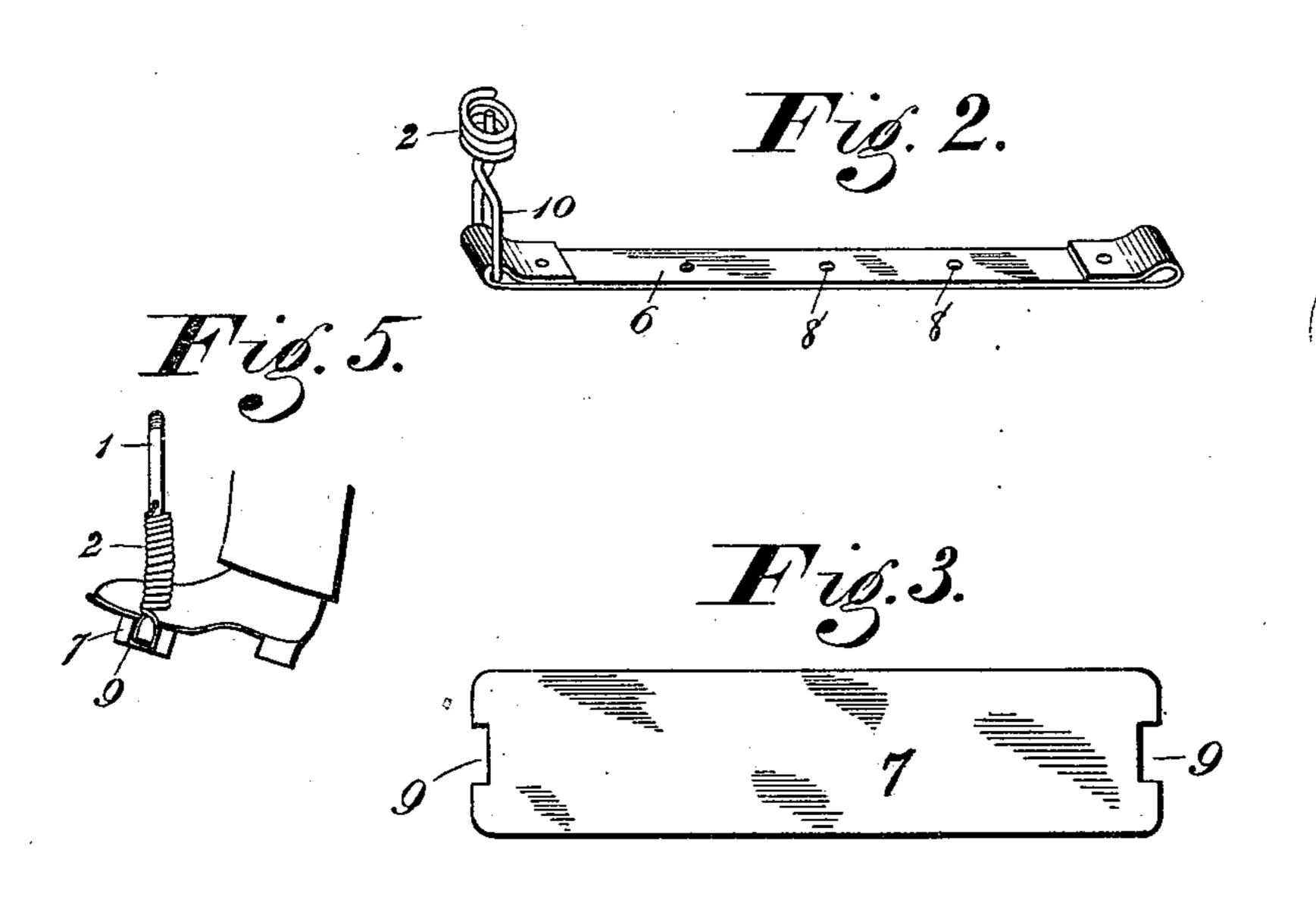
W. A. NEAL.

ELASTIC STIRRUP.

(Application filed Oct. 8, 1898.)

(No Model.)





Inventor

Witnesses

Wm.A. Seal.

O.O. Overholt. 13 2ASC. Williams W. Fig. 4.

12 Putt Behir Ettorneys,

UNITED STATES PATENT OFFICE.

WILLIAM A. NEAL, OF BUNGERS, WEST VIRGINIA.

ELASTIC STIRRUP.

SPECIFICATION forming part of Letters Patent No. 652,805, dated July 3, 1900.

Application filed October 8, 1898. Serial No. 693,006. (No model.)

To all whom it may concern:

citizen of the United States, residing at Bungers, in the county of Greenbrier and State 5 of West Virginia, have invented certain new and useful Improvements in Safety-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 to art to which it appertains to make and use the same.

My invention has relation to stirrups, the main object being to provide a stirrup which will give comfort to the rider by neutralizing 15 the jar occasioned by the motion of the horse and one in which the foot cannot hang should the rider be thrown from his seat.

Among the objects of my invention is to provide a stirrup which will give a firm support 20 to the foot and yet yieldingly respond to the movements thereof, and, further, to provide a tread for the foot which shall be formed of some non-conducting material, as wood, in order that the foot will be removed from con-25 tact with the usual metallic tread, thereby protecting the foot of the rider against becoming cold, as is now the case where a metallic stirrup is used, it being understood that the part coming in contact with the foot is so 30 formed that it may be readily renewed when worn or casually displaced.

Other objects and advantages which I have in view are to so construct my stirrup that it shall be of the usual style and shape, shall be 35 composed of few parts, and hence simple in construction, shall be free from rods or springs below the bottom of the stirrup, which are necessarily bunglesome and inconvenient, one that shall have no rods running through 40 the springs, necessarily making a screeching noise, one that will adjust itself to the different positions of the foot and whose bottom will always present a broad side to the sole of the shoe, and one which will present a neat 45 appearance.

All of the above objects I claim to have combined in my new safety-stirrup, the construction and operation of which will now be fully explained, reference being had to the accom-50 panying drawings, which form a part of this

application, in which—

Be it known that I, WILLIAM A. NEAL, a stirrup complete. Fig. 2 is a perspective view illustrating the connecting-strap and the means of attaching the springs thereto. Fig. 55 3 is a top plan view of the bottom section or tread-piece of the stirrup. Fig. 4 shows a slightly-modified form of connecting strap or rod. Fig. 5 is a side elevation of my stirrup, illustrating the way in which it will adjust 60 itself to the foot of the rider.

> For convenience of reference the same numerals will be used to designate the same parts throughout the various views of the drawings.

Numeral 1 designates the rigid strap-engag- 65 ing section or bow of my stirrup, to which are attached, at the two ends thereof, the springs 2 and 3. These springs are attached in any suitable manner, as by providing the holes 4 and 5 in the respective lower ends of said sec- 70 tions 1 and passing the extreme upper ends of the springs through said holes. The lower ends of these springs terminate in bent sections, as clearly illustrated in Fig. 2, adapted to engage the respective loops at either end 75 of the connecting-strap 6. Upon the top of this connecting-strap is securely attached the foot or tread piece 7, which is formed, preferably, of non-conducting material. The connecting-strap 6 is provided with the holes 8 to 80 receive the rivets or screws to be employed in attaching the same to the tread-piece 7. Said tread-piece is preferably provided at each end thereof with the recesses 9, adapted to receive the lower or extended ends 10 of the spring- 85 sections.

Fig. 4 shows a slight modification of the connecting-strap, being provided at either end thereof with the short upwardly-extending sections 11 and 12, which terminate in the 90 hooks 13 and 14, adapted to receive the springs at the lower termination thereof. If found desirable, this piece of the stirrup instead of being a strap may be made of a round rod of suitable strength, so that the bent ends 95 or hooks 13 and 14 thereof when attached to the lower ends of the springs will form pivotal connections therewith which will permit the bottom of the stirrup to adjust itself to the foot in cases where the pressure is so 100 slight as not to cause the springs to yield. When this construction is used, the upwardlyextending sections 11 and 12 cause the points Figure 1 is a side elevation of my improved | of union of the footpiece to be about in a

plane with the top of said footpiece, which always causes said piece to hang in its proper position. It is, however, thought that for ordinary use the strap illustrated in Fig. 2 will be found preferable, as it presents a greater wearing-surface at the point of union with the springs. When the rod just referred to is employed, a convenient method of attaching it to the footpiece 6 will be by means of staples.

It will be readily understood that the yielding side sections of the stirrup will cause the
footpiece to readily adjust itself to the foot
of the rider, as illustrated in Fig. 5. It is
further apparent that should the rider be
thrown from his horse these yielding sides
will prevent the foot from becoming locked
in the stirrup, as is so often the case with stir-

rups of the ordinary construction.

Believing that the operation, construction, and advantages of my improved stirrup are fully apparent, further description is deemed unnecessary.

What I claim as new, and desire to secure

25 by Letters Patent, is—

1. As an improvement in stirrups, a bow-section; a horizontally-disposed strap-section; spring-sections connecting said strap-section and the ends of said bow, and a removable tread-piece having recesses in each 30 end, adapted to rest upon said strap and be held thereon by said spring-sections engaging said recesses, all combined as set forth.

2. As an improvement in stirrups, a rigid bow-section having holes in each end thereof; 35 spring side sections having their upper ends extended through said holes and terminating at their lower ends in loops; a strap connecting said loops with each other, and a tread-piece formed of wood or the like having recesses in each end adapted to receive said loops, said tread-piece being adapted to rest upon said strap, as specified and for the purpose set forth.

In testimony whereof I affix my signature 45

in presence of two witnesses.

WILLIAM A. NEAL.

Witnesses:

A. P. McClung,

L. J. WILLIAMS.