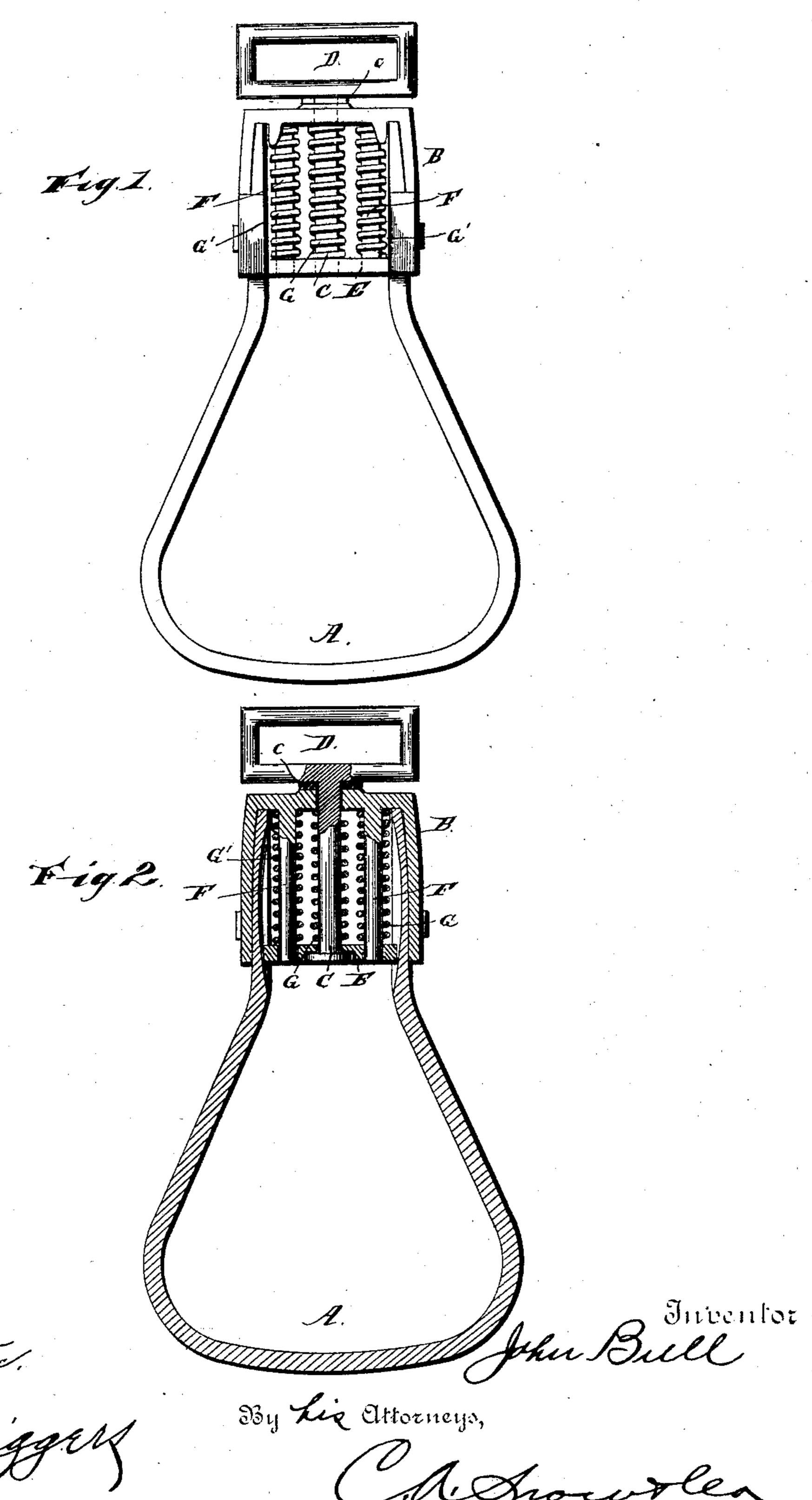
J. BULL.

STIRRUP.

No. 367,696.

Patented Aug. 2, 1887.



N. PETERS, Photo-Lithographer, Washington, D. C.

United States Patent Office.

JOHN BULL, OF CHATTANOOGA, TENNESSEE.

SPECIFICATION forming part of Letters Patent No. 367,696, dated August 2, 1887.

Application filed March 31, 1887. Serial No. 233,204. (No model.)

To all whom it may concern:

Be it known that I, John Bull, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Ten-5 nessee, have invented a new and useful Improvement in Stirrups, of which the following is a specification.

My invention relates to spring stirrups; and it consists in an improvement upon Patents 10 Nos. 157,786 and 227,727, granted to me December 15, 1874, and May 18, 1880, respectively, which will be more fully set forth hereinafter

and pointed out in the claim.

The object of my present invention is to 15 provide a box or casing whereby an attachment may be readily made with a wooden stirrup; and it consists in the construction of said box or easing in such shape as to render it practicable for the intended use. I attain 20 this object by the mechanism illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a side elevation of my improved 25 stirrup. Fig. 2 is a longitudinal vertical sec-

tion of the same.

A represents an ordinary stirrup made of a single piece of wood bent into proper shape and having a metallic casting, B, fastened 30 across its upper end. Through the center of the cross-bar a swivel shank or stem, C, passes, the upper end of which is formed or provided with a loop, D, for the attachment of the stirrup-strap. The shank C also passes through 35 and is rigidly secured to a movable plate, E, at its lower end.

To the under side of the casting B two parallel rods, F F, are formed integral with or secured thereto, which depend downward, and

also movably pass through the plate E. The 40 shank C and rods FF are all arranged in a direct line, and are each encircled by coiled springs G and G' G'. The coiled spring G is formed longer than the springs G' G', so as to keep the plate E in its lowered position. Be- 45 tween the under side of the loop D and the top of the casting B a rubber gasket, c, is arranged on the shank C, so that all noise or rattling will be obviated. By the integral construction of the rods FF with the casting 50 B a more positive action and durable formation is obtained.

By the use of my device a light springing action is given the body in riding and the sudden jar of jolts and breaks overcome. A 55 slight pressure of the foot is all that is needed to actuate the springs, and the results generally are more beneficial and satisfactory by

the use of my present improvement.

Having thus described my invention, what 60 I claim as new, and desire to secure by Letters Patent, is---

The combination, with a stirrup, A, having a box or casing, B, and the swivel-shank C, and plate E, of rods F F, formed integral with 65 the lower portion of the box or casing B, and depending downward and movably passing through the plate E, and springs G and G' G', surrounding the rods FF and shank C, substantially as described.

In testimony that I claim the foregoing as: my own I have hereto affixed my signature in presence of two witnesses.

JOHN BULL.

Witnesses:

THOS. F. BARKSDALE, GEO. P. L. WILEY.