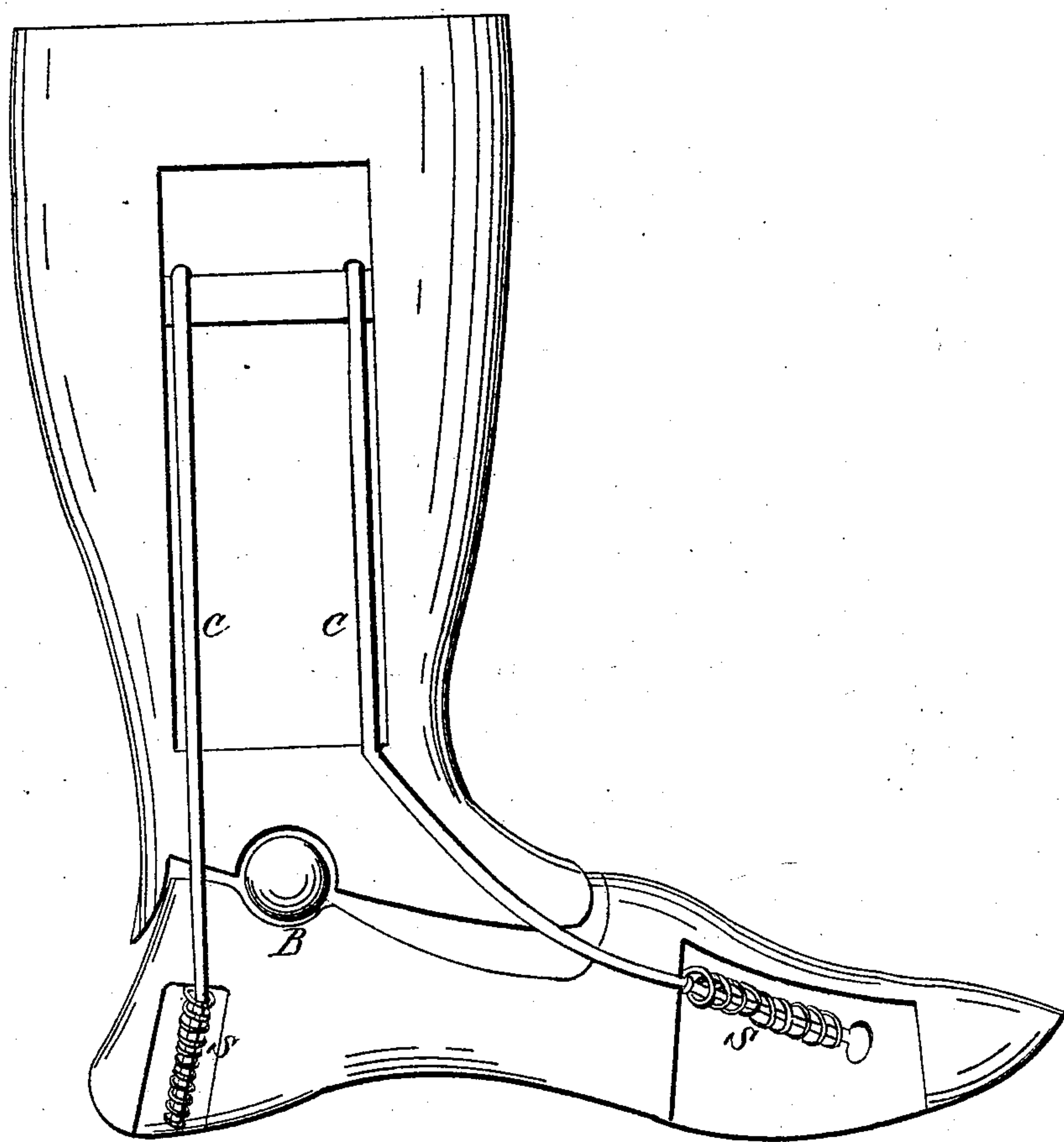


Nicholas & Bly,

Artificial Leg.

Nº 17,888.

Patented July 28, 1857.



UNITED STATES PATENT OFFICE.

R. H. NICHOLAS AND DOUGLAS BLY, OF ROCHESTER, NEW YORK.

ARTIFICIAL LEG.

Specification forming part of Letters Patent No. 17,888, dated July 28, 1857; Reissued July 7, 1863, No. 1,510.

To all whom it may concern:

Be it known that we, R. H. NICHOLAS and DOUGLAS BLY, both of the city of Rochester, in the county of Monroe and State of New York, have made and invented certain new and useful Improvements in the Construction of Artificial Legs; and we do hereby declare the following to be a full and accurate description of the same, reference being had to the accompanying drawings, making part of this specification, in which a sectional elevation of our improvement is given.

The nature of this invention consists in an improved joint which may in the artificial limb be substituted for any of the natural joints in the natural limb, and by which the elasticity and ease of motion of the limb is greatly increased. In our drawings this joint is shown adapted to the ankle and consists of the ball B placed between the upper and under portions of the leg—these two sections being held together by the cords *c, c*, and springs *s, s*, which respectively repre-

sent the gastrocnemius and soleus muscles 25 and the tendo Achilles and the plexor muscles and their tendons.

In the old form of pin or bolt joint the foot is attached to the leg in a firm and solid manner and any side jerk—as for instance 30 that produced by stepping upon an inequality in the surface of the ground produces a severe shock; but by substituting the ball B for the pin or bolt not only is the friction lessened but a certain degree of elasticity 35 is secured by which these objectionable shocks are avoided.

Having thus described our invention, what we claim therein as new and desire to secure by Letters Patent is— 40

The use of the ball B in the manner described—the two sections of the limb being held together in the manner set forth.

R. H. NICHOLAS.
DOUGLAS BLY.

Witnesses:

JOHN PHIN,
ROBERT ALEXANDER.