

No. 764,985.

PATENTED JULY 12, 1904.

J. J. BUCHANAN.
RUNNER FOR SUSPENDER ENDS.

APPLICATION FILED JAN. 18, 1904.

NO MODEL.

Fig. 1

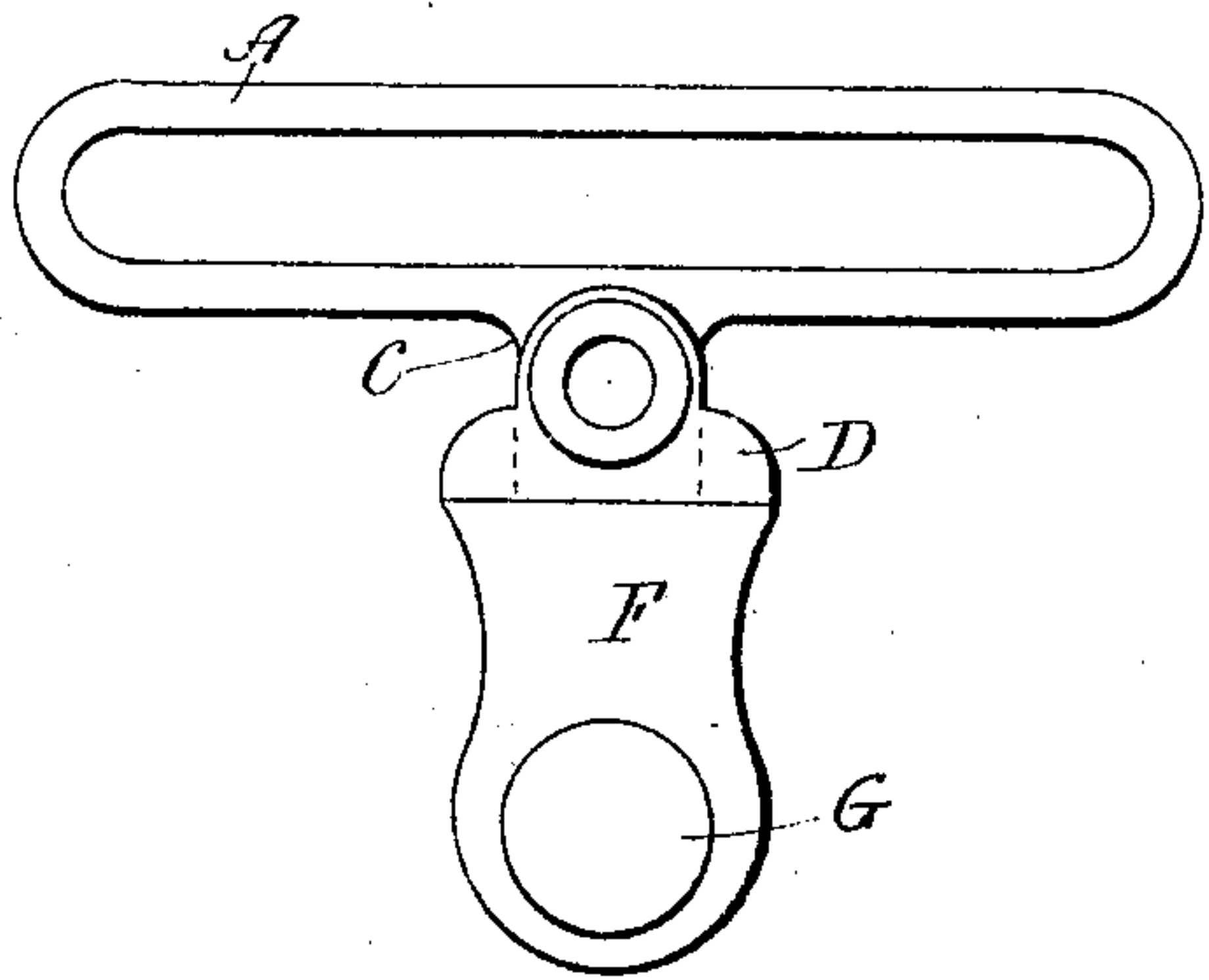


Fig. 2

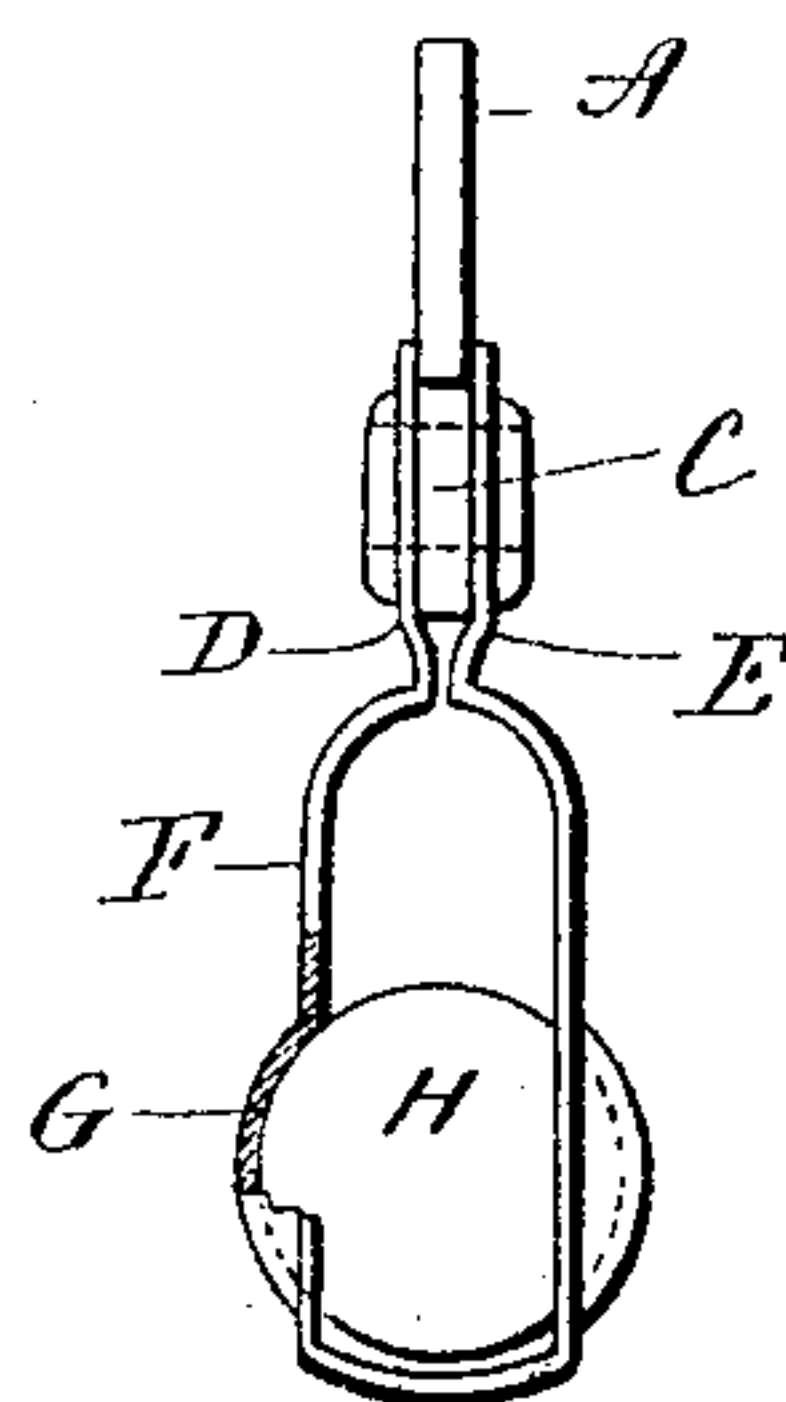


Fig. 3

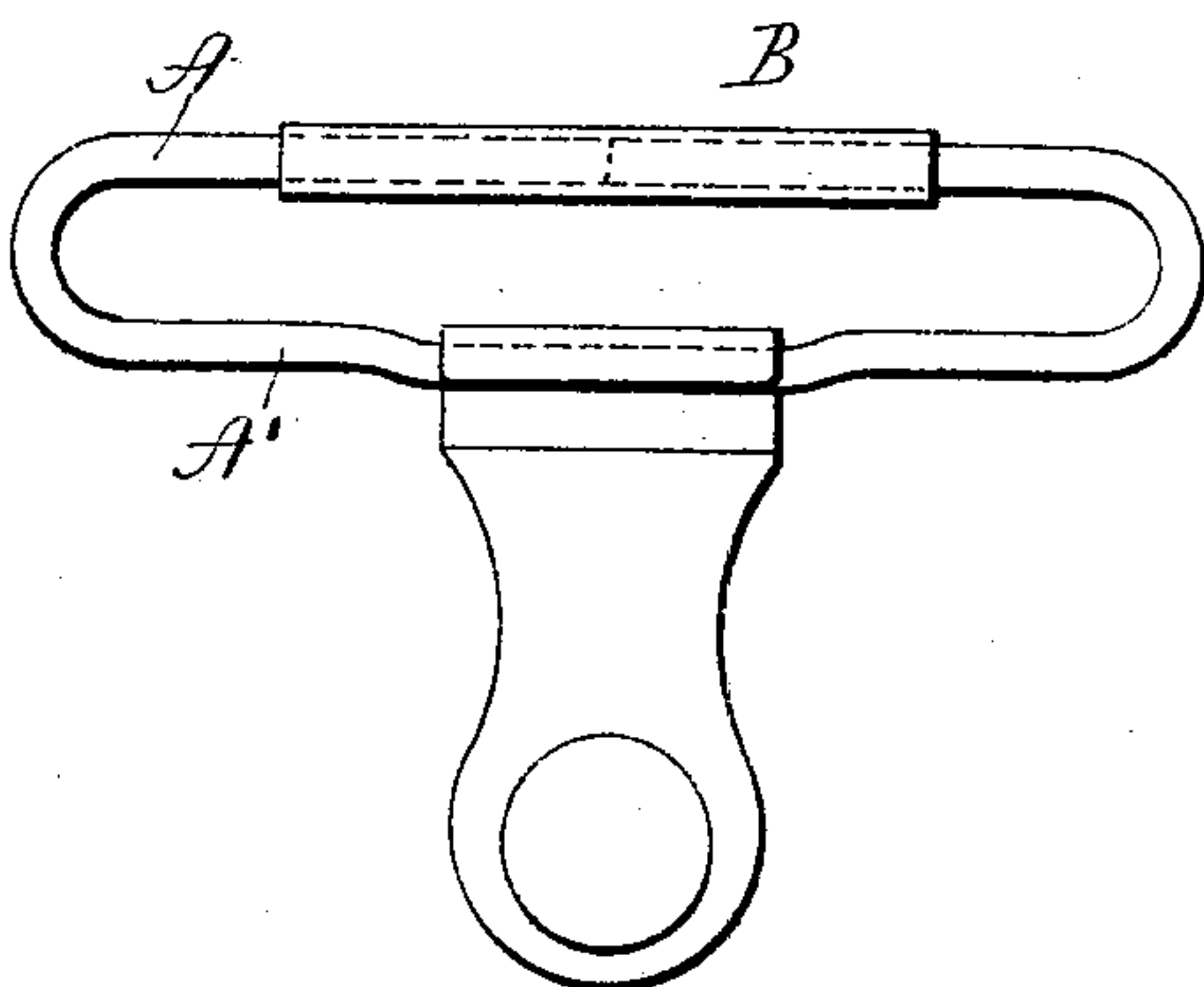


Fig. 6

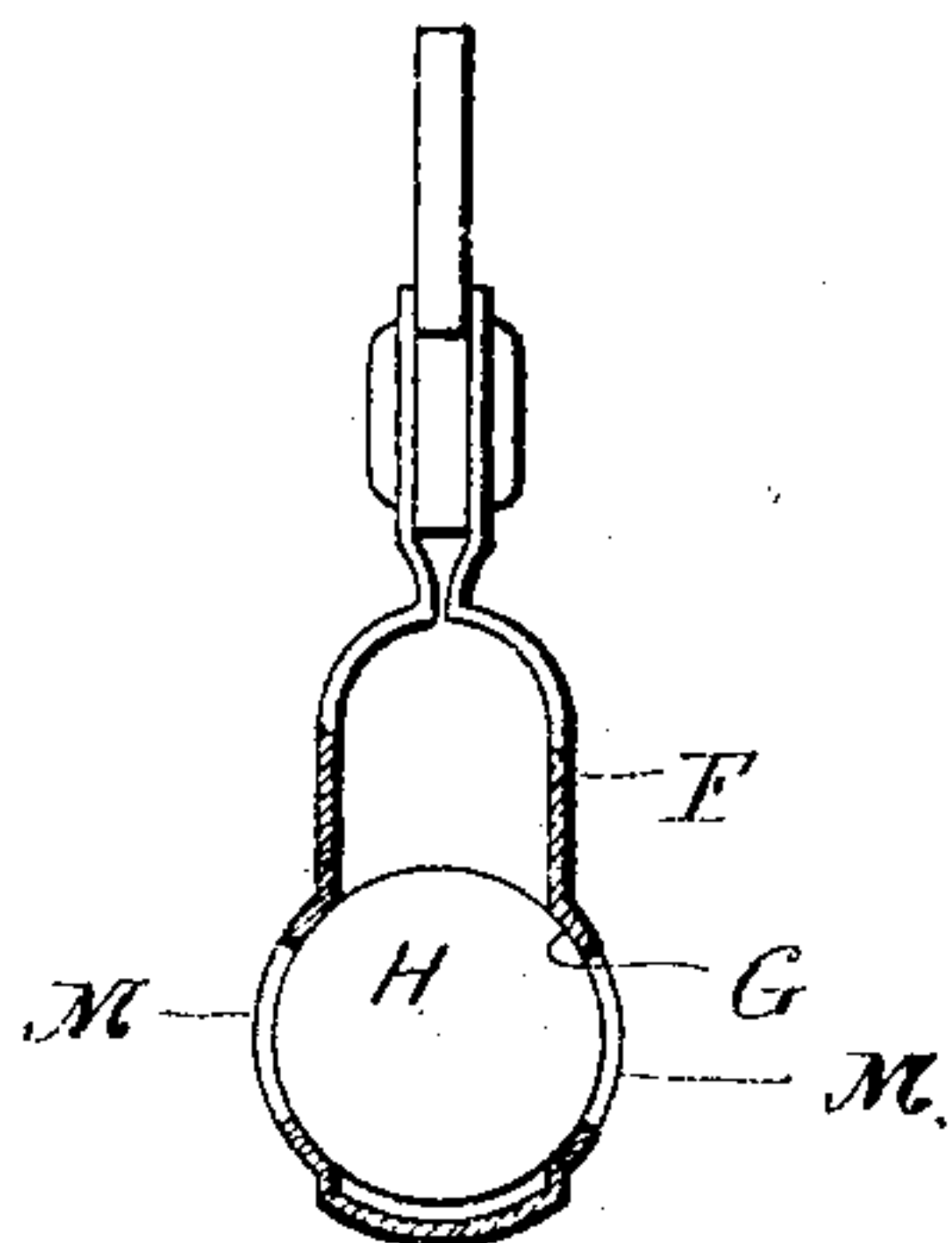


Fig. 4

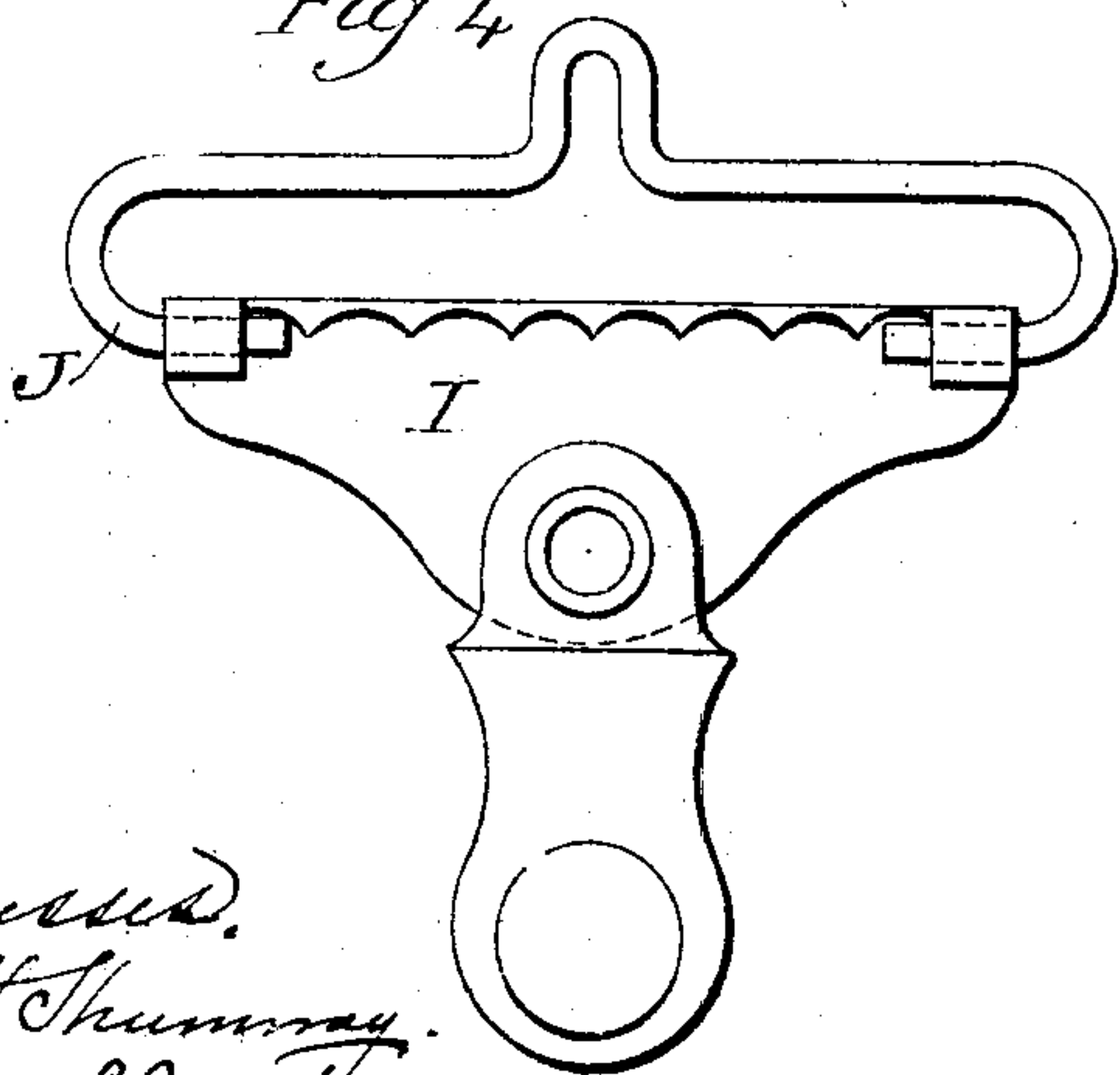
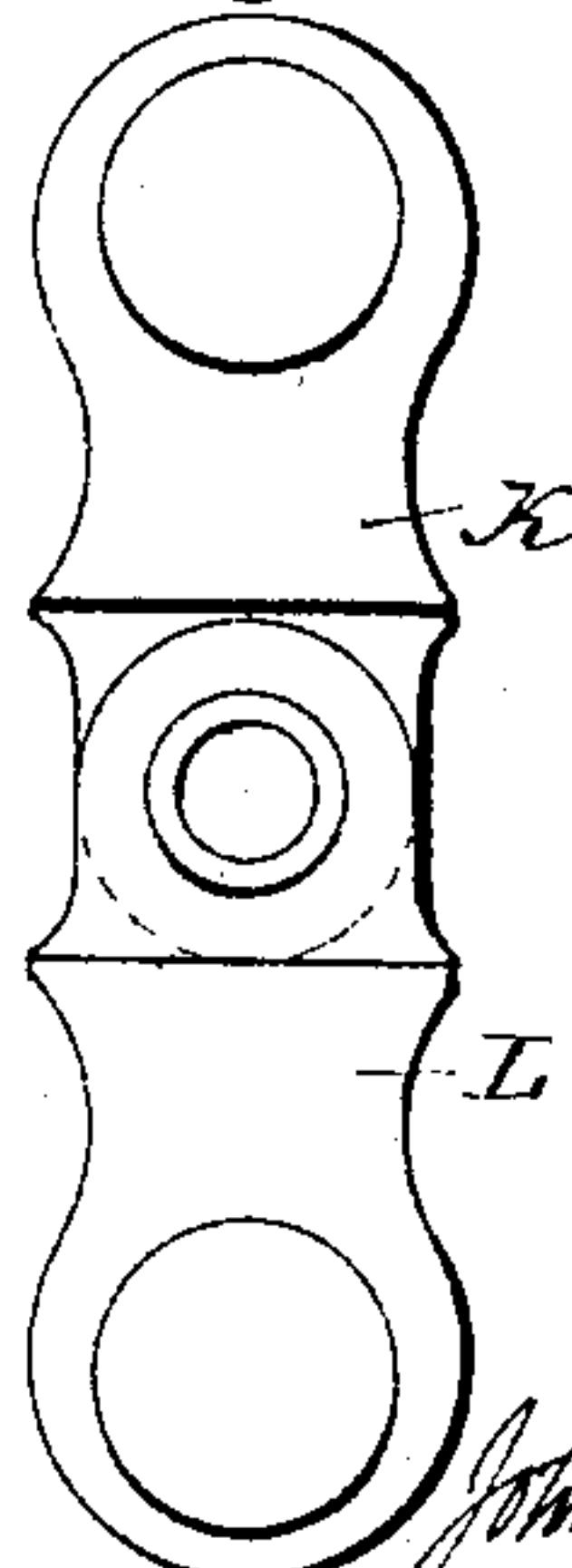


Fig. 5



Witnessed.
J. H. Shumway.
Clara L. Reed.

John J. Buchanan.
Inventor.
By atty Seymour & Carr

UNITED STATES PATENT OFFICE.

JOHN J. BUCHANAN, OF WATERBURY, CONNECTICUT, ASSIGNOR TO
WATERBURY BUCKLE CO., OF WATERBURY, CONNECTICUT, A COR-
PORATION.

RUNNER FOR SUSPENDER-ENDS.

SPECIFICATION forming part of Letters Patent No. 764,985, dated July 12, 1904.

Application filed January 18, 1904. Serial No. 189,463. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. BUCHANAN, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new and
5 useful Improvement in Runners for Suspenders; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and
10 exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view of a runner for suspender-ends constructed in accordance with
15 my invention; Fig. 2, a side view, partially in section; Fig. 3, a front or plan view of a modified form of my improved runner; Fig. 4, a front view of a runner attached to a buckle-frame; Fig. 5, a front view of two
20 runners connected together; Fig. 6, a broken sectional view of a runner with a portion of the walls of the recesses removed.

This invention relates to an improvement in runners for suspenders—that is, a device
25 attached to or connected with a suspender-web and through which the suspender-end or other movable part runs, the object of the invention being a simple construction, whereby an antifriction-bearing is obtained; and
30 the invention consists in the construction as hereinafter described, and particularly recited in the claim.

As shown in Figs. 1, 2, and 3, the device is used in connection with a loop A, through
35 which the suspender-web passes. This loop may be formed from sheet metal, as shown in Fig. 1, or from wire, as shown in Fig. 3. If formed from wire, the ends are connected by a sleeve B. If formed from sheet metal,
40 the lower bar will be provided with an extension C, to which the ends D E of a metal strap are pivoted. This strap is doubled to form a housing F, the inner walls of which are struck outward, forming circular concave
45 recesses or seats G, which project beyond the outer face of the housing to receive a ball H of any suitable material, the ball extending

into the recesses, and thereby held in the housing F. Instead of riveting the ends of the strap to the loop, as shown in Figs. 1 and 2, 50 the ends of the strap may be bent around the lower bar A' of the loop, as shown in Fig. 3, and so as to turn thereon.

Instead of connecting the runner with the loop it may be connected directly with the 55 lever I of a buckle loop or frame J, as shown in Fig. 4, or for some purposes it may be desirable to pivotally connect two frames K L, as shown in Figs. 5, the frames corresponding in construction to the frames F, before 60 described.

If desired, the outer portion of the recesses G may be removed, forming circular openings M, and for some reasons this construction is advantageous, as it makes the device slightly 65 thinner. In all cases the ball is free to turn in the recesses, and the cord of the suspender-end passes over the ball and rides thereon.

By striking the metal of the housing outward to form the concave seats an increased 70 bearing-surface is provided for the ball without increasing the thickness of the metal from which the housing is formed, thus providing a sufficient bearing-surface for the ball to turn upon freely. 75

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

A runner for suspender-ends comprising a housing having concave seats formed in the 80 inner face of its front and rear walls and projecting outward beyond the outer faces thereof, and a ball located in said housing and extending into said seat between which it is held and in which it may be freely revolved, sub- 85 stantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN J. BUCHANAN.

Witnesses:

W. L. KING,
MINNIE M. M. TRIPP.