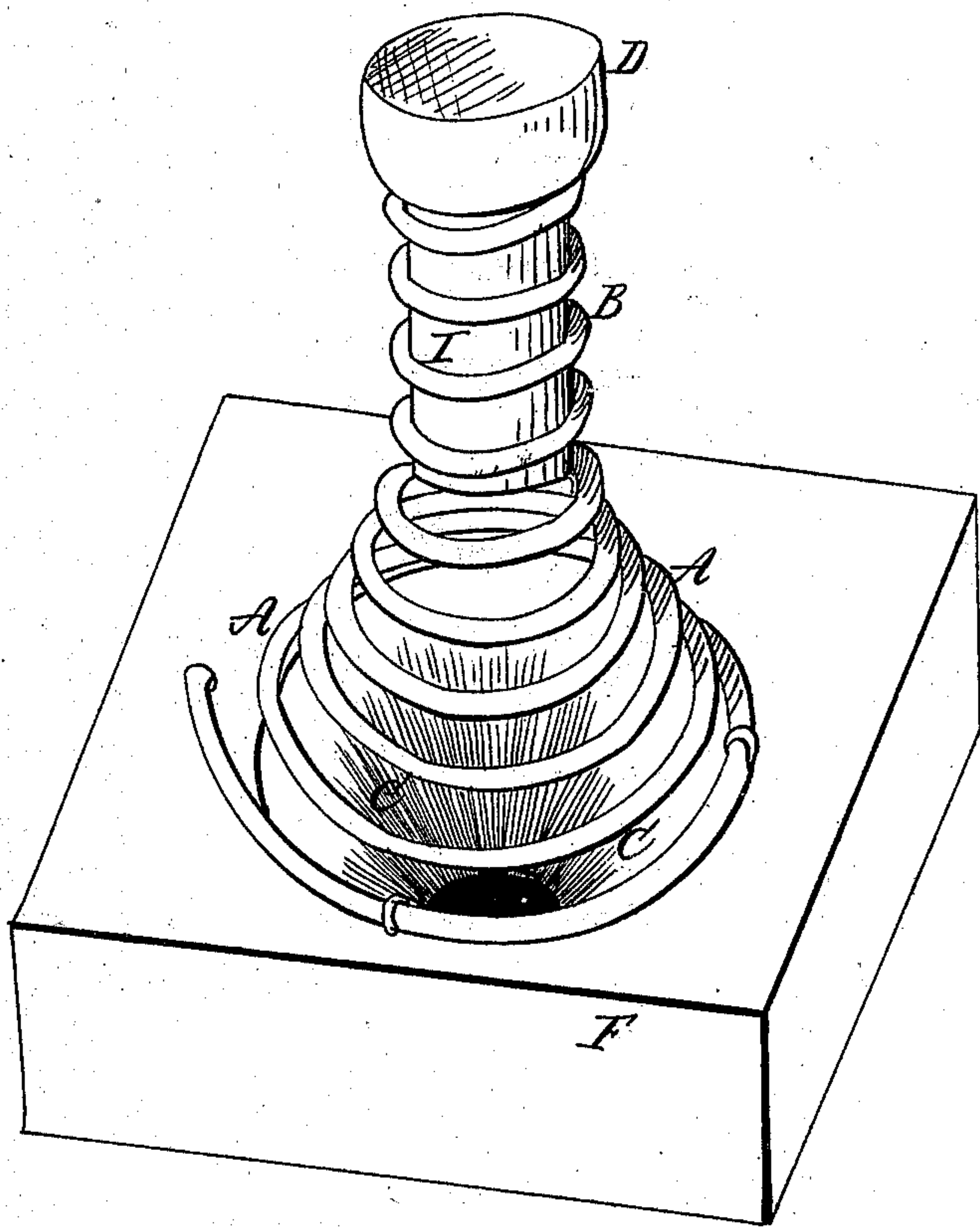


Rose & Buell,

Bed Spring.

No. 97,705.

Patented Dec. 7. 1869.



Witnesses

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Inventors,

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United States Patent Office.

TIMOTHY ROSE, OF CORTLAND, AND PLATT S. BUELL, OF WINDSOR,
NEW YORK.

Letters Patent No. 97,705, dated December 7, 1869.

IMPROVED COIL-SPRING AND ITS ATTACHMENTS.

The Schedule referred to in these Letters Patent and making part of the same.

We, TIMOTHY ROSE, of Cortland, Cortland county, in the State of New York, and PLATT S. BUELL, of Windsor, in the county of Broome, and State aforesaid, have invented certain Improvements in Coil-Springs and their Attachments, of which the following is a specification.

The nature and objects of our invention are to provide a coil-spring for beds, car and wagon-seats, chairs, and the like, which, in a given space, will give more elasticity than the ordinary coil-spring, and is combined with a cavity underneath the spring in the form of a concave, into which the spring may be pressed, the successive coils resting upon the concave when pressed down.

The accompanying drawing represents a perspective view of the spring and attachments.

The wire is coiled upon a form, the lower part, say for one-half the height of the spring, is made conical, and the upper half or portion is cylindrical, as shown in the drawings by the parts marked A and B, respectively.

The spring is then placed upon a block or other base, F, which is hollowed out beneath the spring, in the form of a concave, C C, corresponding in size to the conical portion of the coil, but the depth of the concave is not quite equal to the height of the conical portion of the coil.

In the cylindrical part of the coil is inserted, from the top, a movable plug or standard, I, reaching down to the conical portion of the spring, or nearly so.

This standard may have a button, D, or flange upon the top, projecting over the wire to prevent the plug working down, and also furnishing a base for the support of any weight, and to which to attach slats, canvas, or webbing.

At the bottom of the concave is a hole, through

which the lower end of the plug or standard may pass when the spring is pressed down.

The operation of this spring and attachments is as follows:

As the spring is pressed down, its different coils in its conical portion successively come into the concave, and rest upon its sides, and when the last coil of such conical portion comes to its rest in the concave, there is then left, and in use, the cylindrical portion of the spring, its base resting upon the lower portion of the concave.

As the conical part of the spring has the larger diameter, it will, of course, be the more elastic, and will be pressed down into the concave beneath, before the cylindrical portion is much compressed, the strongest part of the spring is thus used last.

What we claim, and desire to secure by Letters Patent, is—

1. The coil-spring A B, in the form described, that is, with the lower part in a conical form, and the upper part in a cylindrical form, for the uses and purposes set forth.

2. The combination of a conical coil-spring, (whether with or without the cylindrical part,) with the concave depression underneath said spring, when made in the manner described, for the uses and purposes set forth.

3. The combination of the spring A B, the concave depression C C, and the plug or standard I, for the uses and purposes described.

In testimony whereof, we have signed our names to this specification, in the presence of two subscribing witnesses.

Witnesses:

C. M. CARR,
R. H. DUELL.

TIMOTHY ROSE.
PLATT S. BUELL.