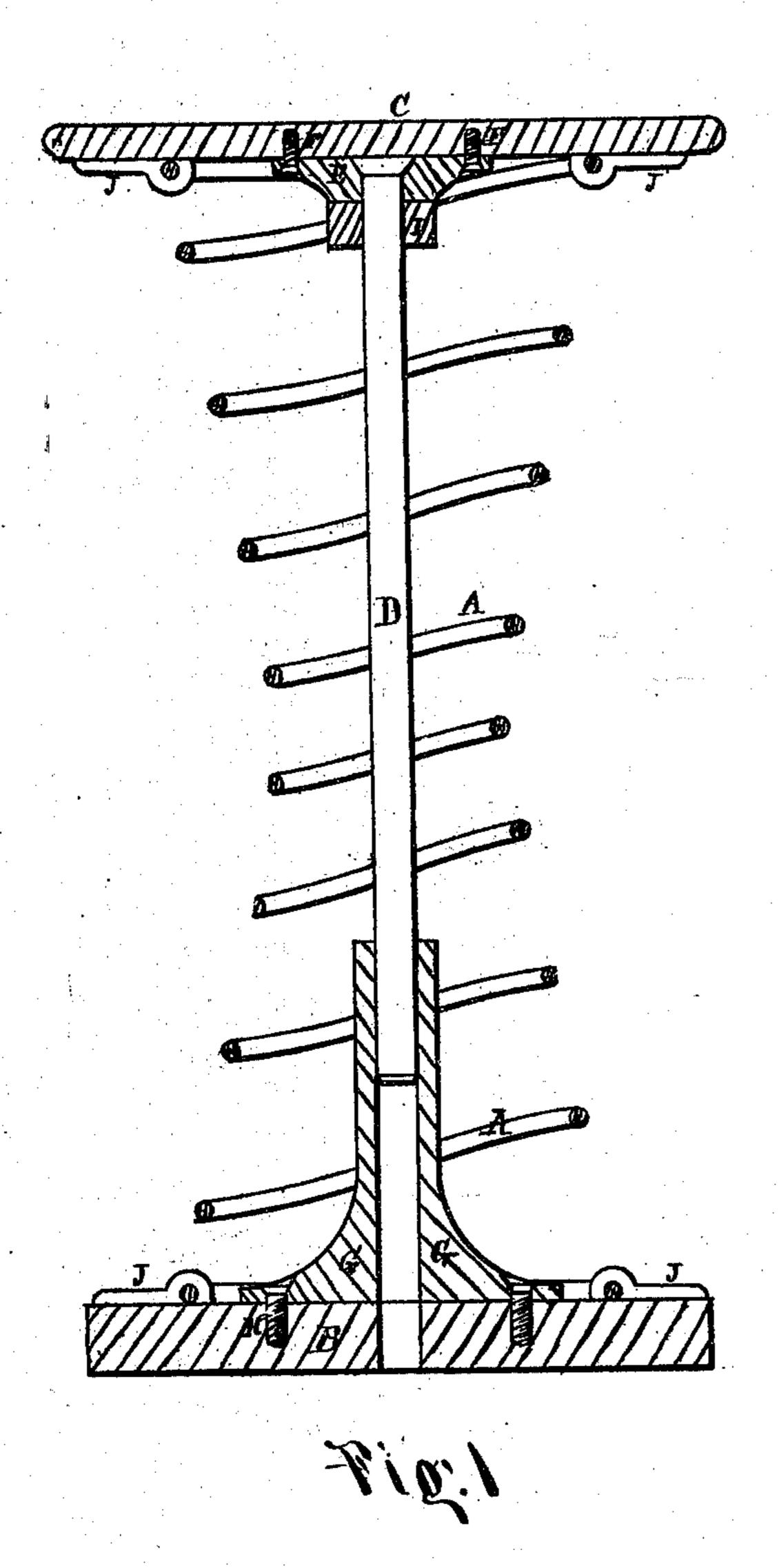
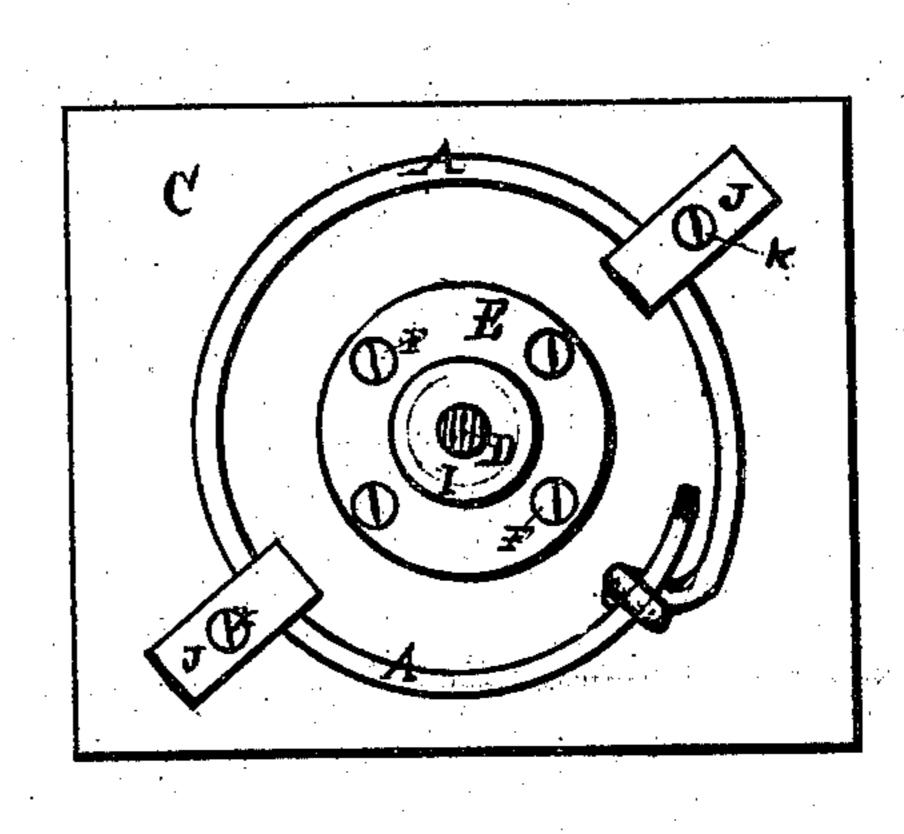
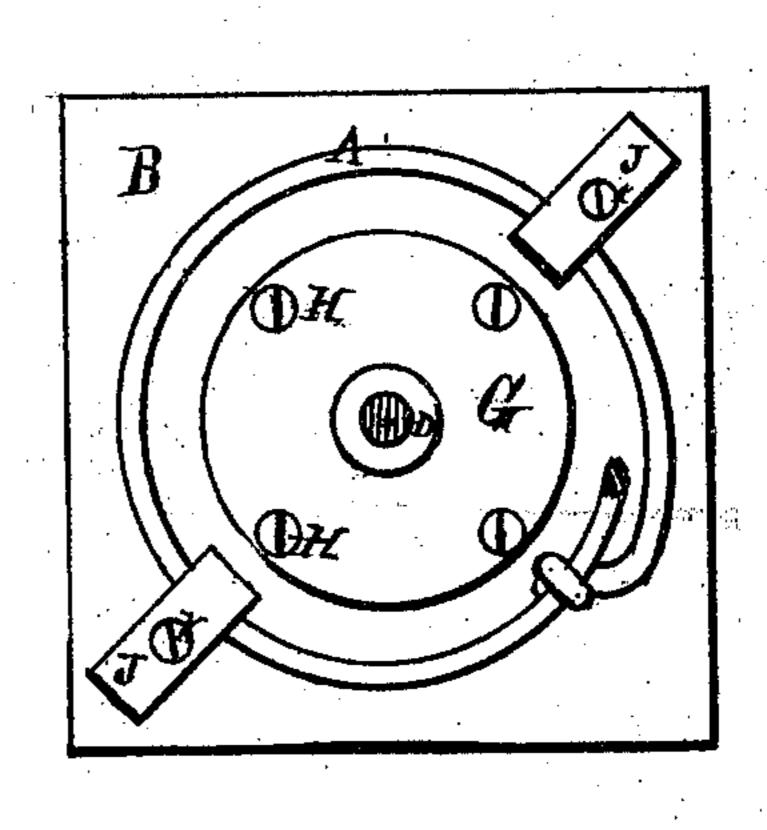
Bed Spring, No. 106,069.

Patented Ang. 2.1870.







d.yiF

Witnesses!

Inventor:

## Anited States Patent Office.

## WILLIAM LORD, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 106,069, dated August 2, 1870.

## IMPROVED SPRING FOR BEDS, SOFAS, &c.

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

To all whom it may concern:

Be it known that I, WILLIAM LORD, of the city and county of San Francisco, State of California, have invented an Improved Spring for Beds, Sofas, Chairs, &c; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters marked thereon.

My invention relates to that class of spiral springs in which the radii of the coils increase from the cen-

ter toward the ends of the spring.

The object of my invention is to provide an improved spring for general use, and particularly for chairs, sofas, or other seats, and for beds, and consists in the employment, with a spiral spring, of a central rod rigidly secured to a cap, and guided by a hollow standard, said standard being secured to a base; and further consists of an improved device for securing the ends of the spiral spring to said cap and base; also, of interposing between the cap and hollow standard an India-rubber spring encircling the central rod, in order to prevent the inelastic parts of the machine from coming together in case the spiral spring is overloaded, the whole arranged in such a manner as to form a spring that has a true rectilinear action, is not easily put out of order, and can be readily applied to any desired purpose, either singly or in numbers.

In the accompanying drawing—

Figure 1 is a longitudinal section of my improved spring.

Figure 2 is a view of under side of cap, showing fastening of spiral spring and other details.

Figure 3 is a top view of base, showing the hollow or guiding standard.

Like letters refer to like parts in all of the figures.

A is the spiral spring.

B, the base.

C, the cap.

D, the central rod, rigidly secured to the clamp or shoulder-piece E by means of screws F, as shown.

G is the hollow guide-standard, secured to the base by means of the screws H.

I is a cylindrical rubber spring, through which the rod D passes.

J are clamp-pieces that firmly secure the end coils of the spiral spring to the cap and base, by means of the screws K.

It is evident that the bollow standard G will effectually guide the rod D, so that, when my invention is in operation, the cap C will approach or recede from the base B in a straight line, and that, if the spiral spring should be overloaded, the rubber spring would prevent the contact of the inelastic faces of the standard G and the shoulder-piece E.

Having thus described my invention,

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

In a spring of the described construction, the extended standard G attached to the base, and rubber buffer attached to the cap C, when constructed and arranged as described, for the purpose set forth.

In testimony whereof I have hereunto set my hand

and seal.

WILLIAM LORD. [L. s.]

Witnesses:

C. W. M. SMITH, DAVID R. SMITH.