

(No Model.)

F. G. JOHNSON.
UPHOLSTERED FURNITURE.

No. 384,259.

Patented June 12, 1888.

Fig. 1.

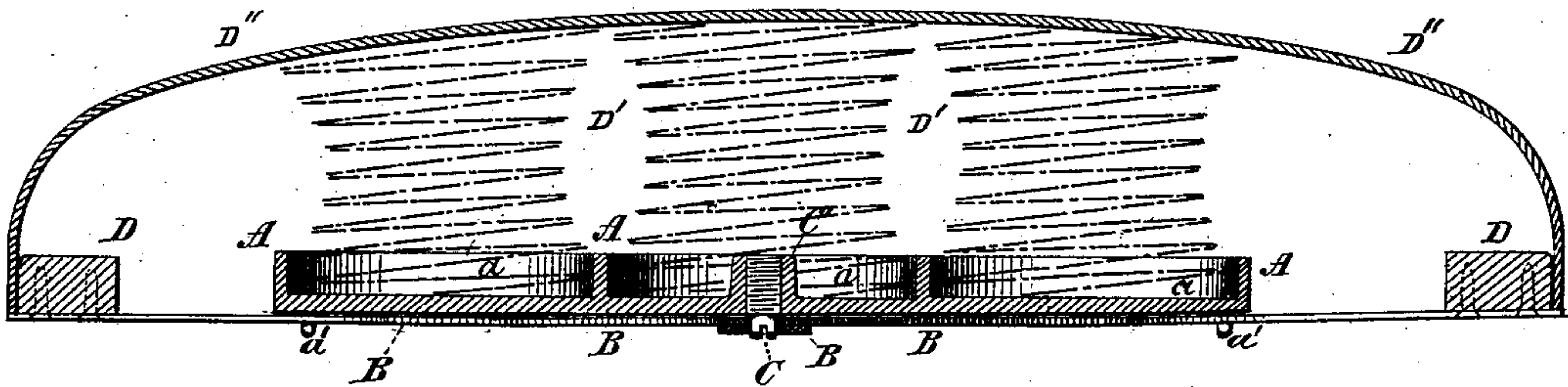


Fig. 2.

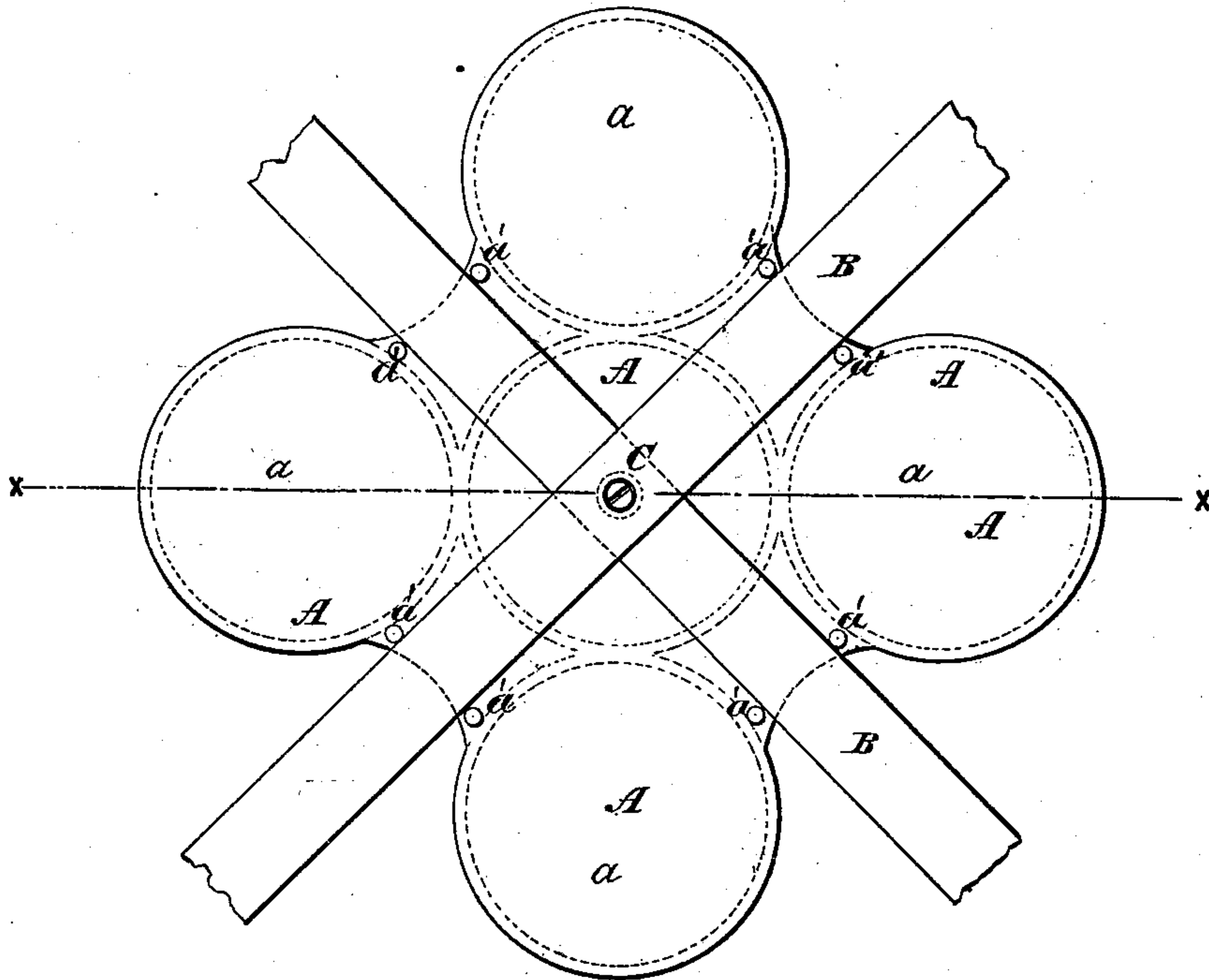
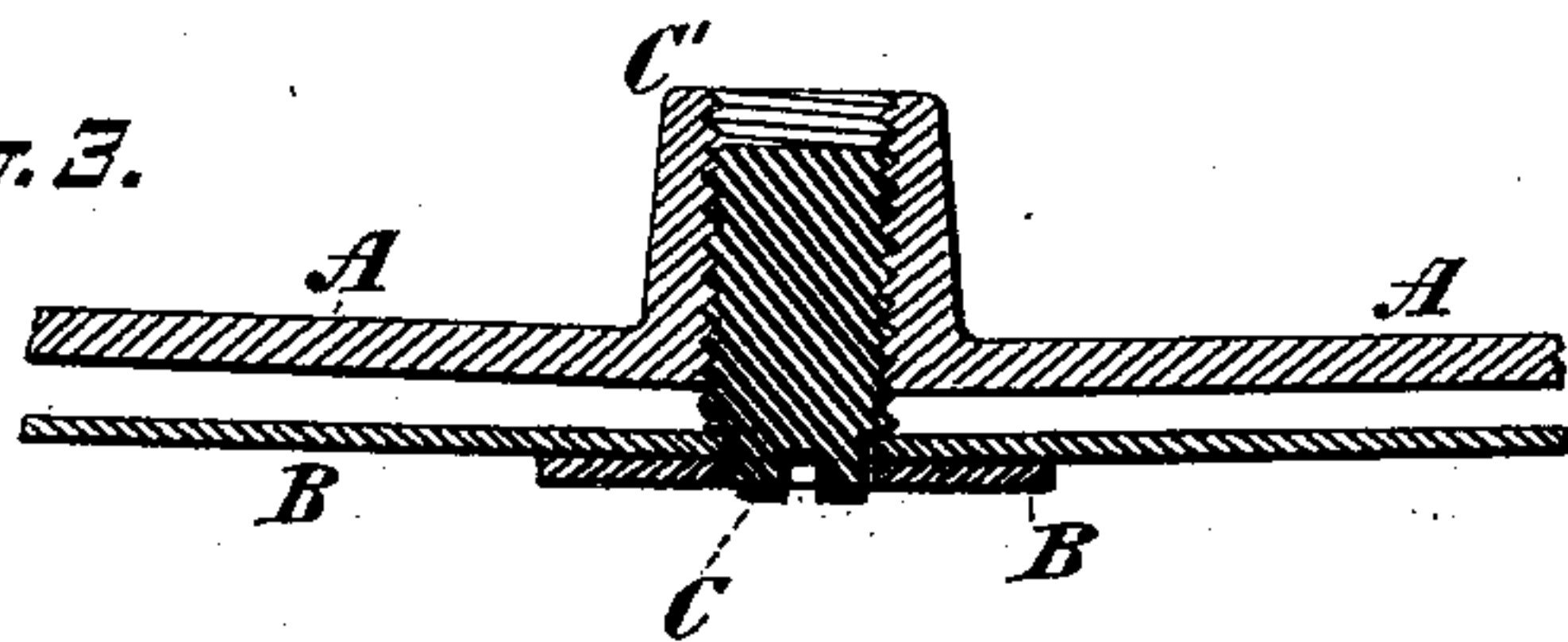


Fig. 3.



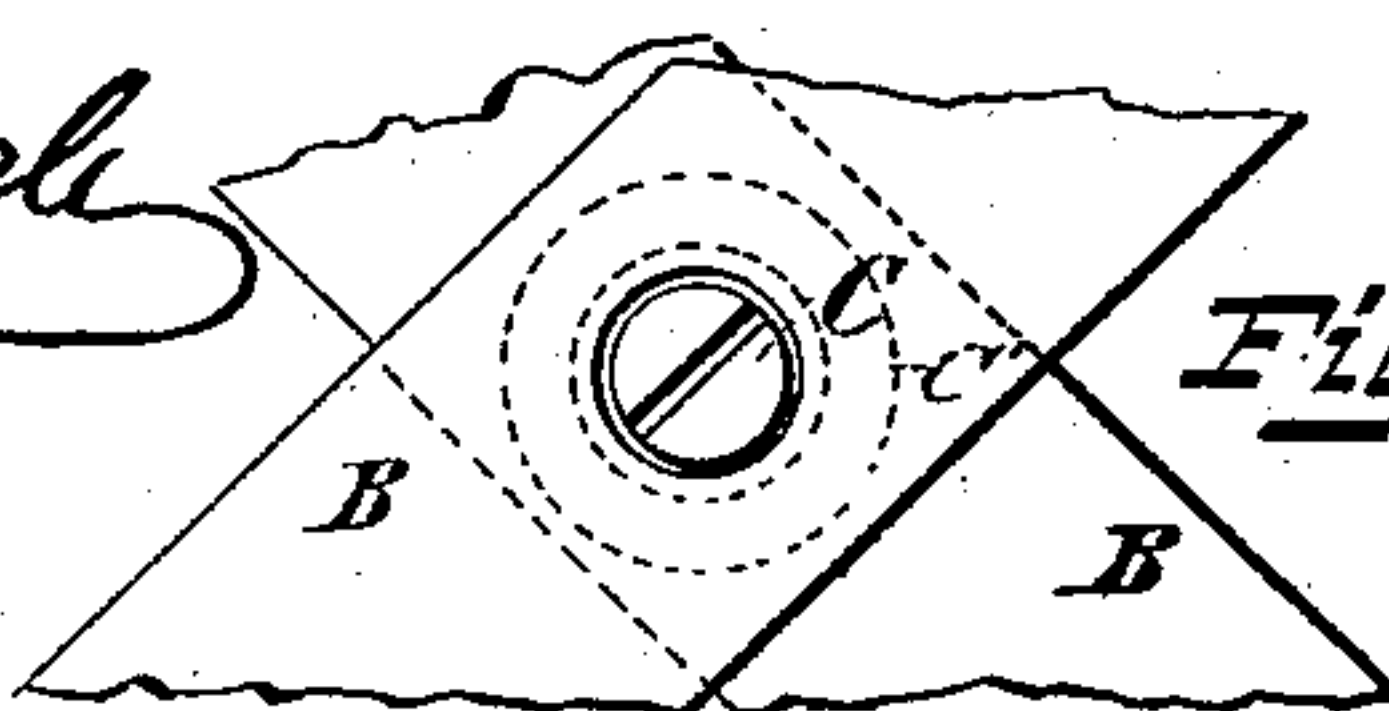
WITNESSES:

Gustave Dietrich
C. A. Dietrich.

INVENTOR,

Frank G. Johnson.

Fig. 4.



UNITED STATES PATENT OFFICE.

FRANK G. JOHNSON, OF NEW YORK, N. Y.

UPHOLSTERED FURNITURE.

SPECIFICATION forming part of Letters Patent No. 384,259, dated June 12, 1888.

Application filed April 11, 1888. Serial No. 270,370. (No model.)

To all whom it may concern:

Be it known that I, FRANK G. JOHNSON, a citizen of the United States, residing in the city, county, and State of New York, have invented a new and useful Improvement in Upholstering Chairs, Sofas, and other Articles of Furniture, of which the following is a specification.

My invention relates to that class of chairs, sofas, divans, &c., the seats or bottoms of which are upheld by metallic spiral springs, which said springs usually rest upon and are supported by, and by means of twine are fastened to, a series of straps of webbing, which are crossed and recrossed and their ends fastened to the seat-frame of the various articles of furniture in which such springs are employed. The objections to this method of fastening and supporting the springs are that the twine wears off, rots and breaks, and allows the springs to become misplaced and to stand out of the vertical position; that the webbing stretches and allows the seat to sag, whereby the elasticity of the spring is rendered greatly ineffective to support the seat until the webbing is taken off and tightened up or renewed; besides the webbing soon loses its strength and often breaks. This method of supporting the springs affords no means of adjusting the springs to render the seat firmer, to adapt the articles of furniture to persons of light and heavy weights.

The object of my invention is to obviate all these objections and to render upholstered furniture more durable; to secure and support the springs in such a manner that they never become misplaced—that the seat never sags—and at the same time to conveniently adjust at pleasure the stiffness of the springs, whereby the seat can be rendered soft and easy for a light person or stiff and firm for a heavy person, all which I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 is a transverse vertical section on the line *x x* of Fig. 2; Fig. 2, a plan view seen from below; Fig. 3, an enlarged view of the central portion of Fig. 1, and Fig. 4 an enlarged view of the central portion of Fig. 2.

Similar letters refer to similar parts throughout the several views.

A A A A indicate a light metallic (preferably

cast-iron) plate having circular cups or sockets *a a a a* to receive, hold, and secure in position the bottom of the springs *D' D'*. There being as many sockets as there are springs, this plate A A A I will term the "socket-plate."

D D are two opposite sides of the chair-bottom frame.

D'' D'' show the top of the seat, to which the upper ends of the springs are secured in the ordinary manner.

B B are two thin metallic strips of iron, (such as is commonly called "hoop-iron,") which cross each other at right angles, the ends of which are securely fastened to the chair-bottom frame *D D* by suitable nails or screws, as shown in Fig. 1.

C is a plain screw, which I will term the "adjustable holding-screw" (shown full size in Figs. 3 and 4,) the diameter of a short portion of the lower end of which is reduced sufficiently to form a shoulder, and the reduced portion enters into and passes through a corresponding hole in the center of the crossing of the metallic strips *B B*, the shoulder of the screw *C* resting and working on the upper surface of the uppermost metallic strip as a bearing for the same. This adjustable holding-screw *C* works in a corresponding female thread cut in a central hub or projection, *C'*, which is a part of the socket-plate A A A. In the bottom end of the screw *C* is provided a screw-driver slot, whereby it (the screw) can be operated by an ordinary screw-driver.

a' a' a', Figs. 1 and 2, are small lugs projecting from the lower face of the socket-plate A A A, between which pass the metallic strips *B B* to prevent the socket-plate from horizontally rotating, while the small portion of the screw passing through the metallic strips *B B* (which I will term the "supporting-strips") prevents any lateral motion or movement of the socket-plate A A A. Hence the socket-plate, and so the sockets which hold the lower ends of the springs, are prevented from moving in any lateral direction.

By turning the adjustable holding-screw *C* backward (in case the thread be right-handed) it will carry the socket-plate upward, and so render the springs more resistant, and thereby make the seat or cushion of the chair more rigid and firm, and by turning the said screw

forward (in case the thread be right-handed) it will lower the socket-plate, and thereby render the springs less resistant and firm, and so soften the cushion, the counter-action of the screw falling upon the non-elastic supporting-strips B B.

The device, as shown in the drawings, is arranged for an ordinary single chair, in which five springs are employed and arranged in the usual relative position; but the socket-plate is adapted to other articles of furniture, as sofas, divans, &c., by arranging the several cups or sockets in such relative position as may be required by the peculiar shape and size of the article of furniture in which the device is to be employed.

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

1. In upholstered furniture, the socket-plate consisting of the circular sockets *a a a* and plate A A A, in combination with the supporting-strips B B, substantially as and for the purposes set forth.

2. In upholstered furniture, the socket-plate consisting of the circular sockets *a a a* and plate A A A, in combination with the adjustable holding-screw C and supporting-strips B B, substantially in the manner and for purposes described.

3. In upholstered furniture, the socket-plate consisting of the circular sockets *a a a*, plate A A A, and lugs *a' a' a'*, in combination with the adjustable holding-screw C and supporting strips B B, as and for the purposes set forth.

4. In upholstered furniture, the socket-plate consisting of the circular sockets *a a a*, plate A A A, and lugs *a' a' a'*, in combination with the springs D' D', adjustable screw C, and supporting-strips B B, as and for the purposes described.

FRANK G. JOHNSON.

Witnesses:

FRANK R. JOHNSON,
HORACE G. LANSING.