

No. 657,501.

Patented Sept. 4, 1900.

W. E. RICHARDSON.
CAR SEAT CUSHION.

(Application filed Apr. 25, 1900.)

(No Model.)

FIG. 1.

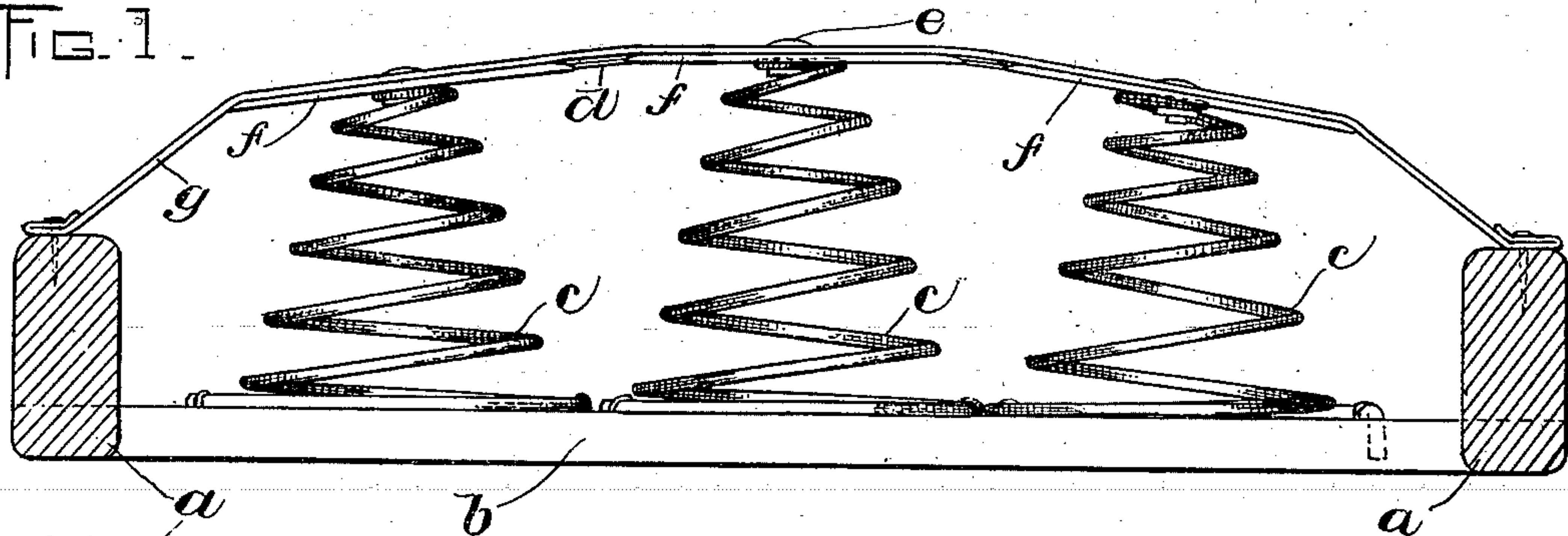


FIG. 2.

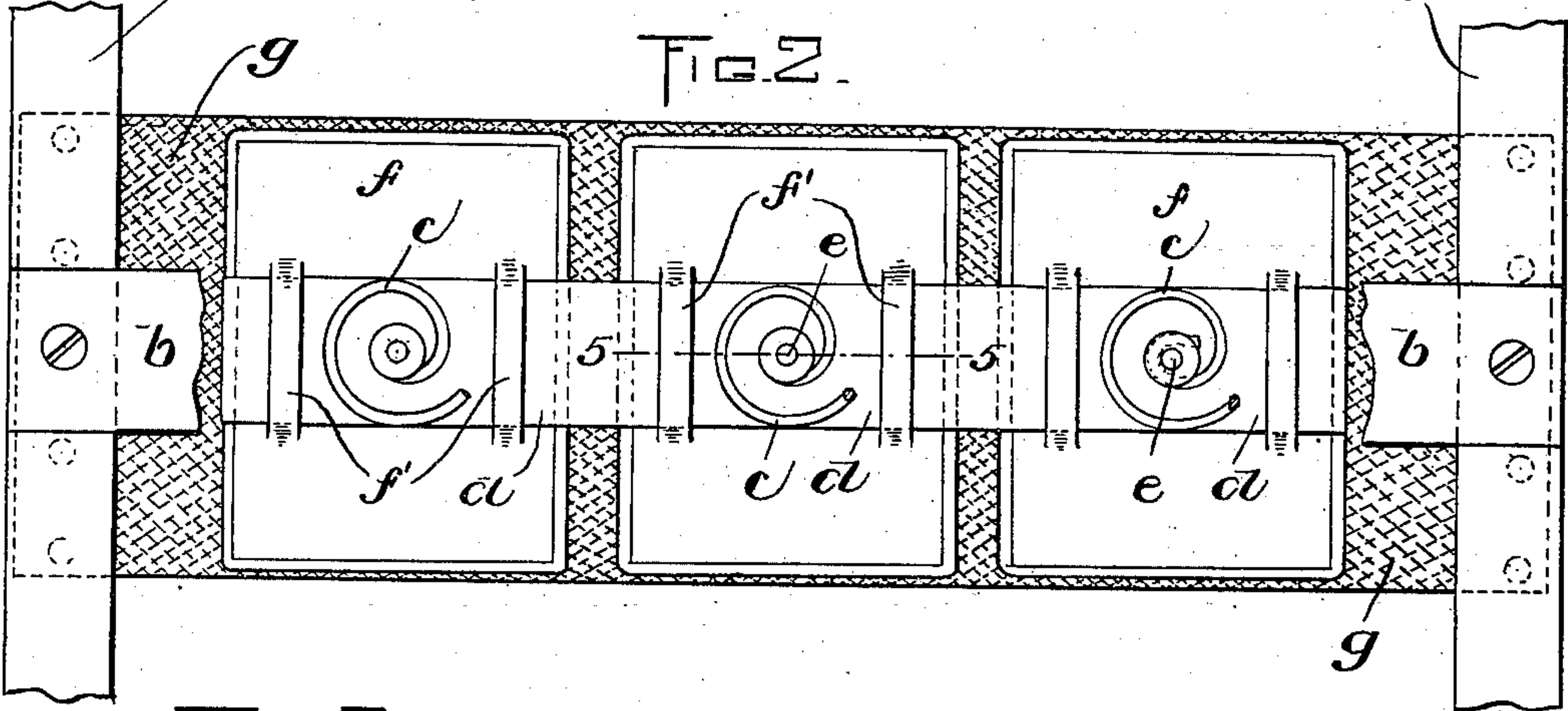


FIG. 3.

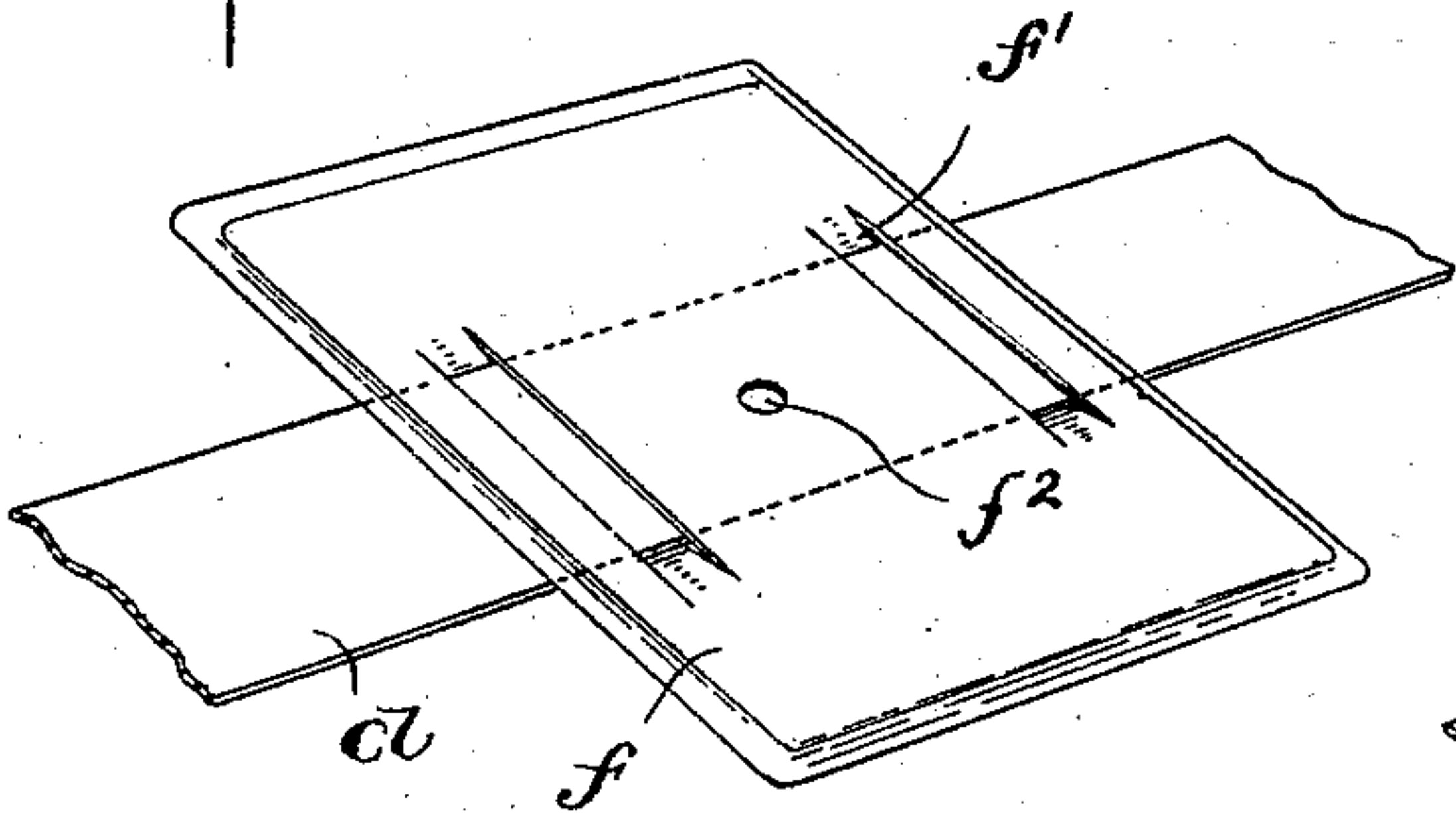


FIG. 4.

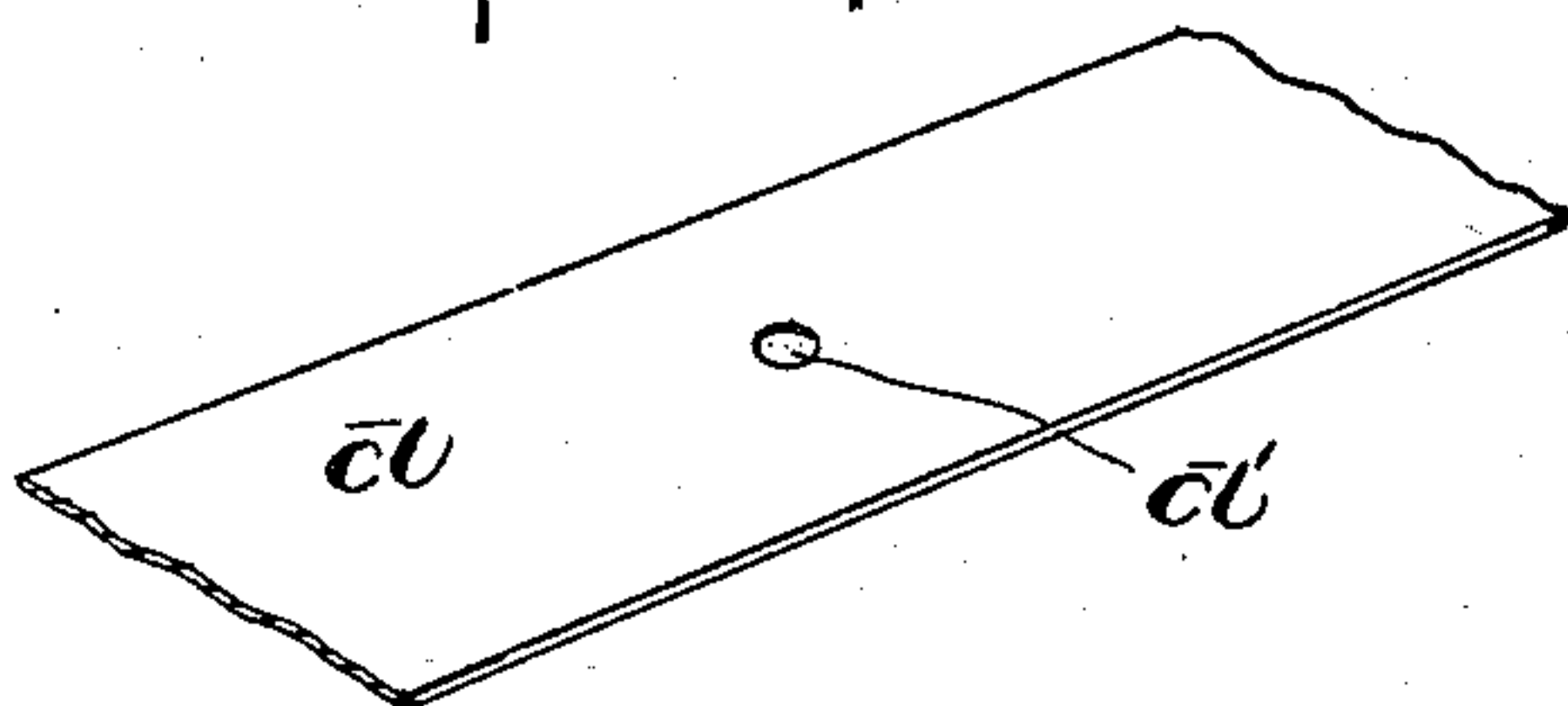
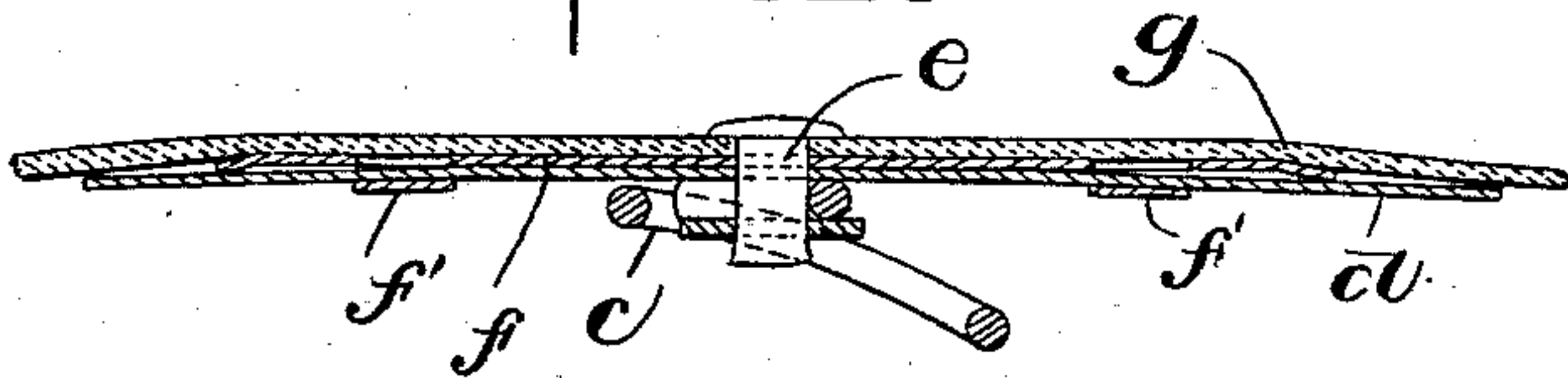


FIG. 5.



WITNESSES:

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CAR-SEAT CUSHION.

SPECIFICATION forming part of Letters Patent No. 657,501, dated September 4, 1900.

Application filed April 25, 1900. Serial No. 14,269. (No model.)

To all whom it may concern:

Be it known that I, WALTER E. RICHARDSON, of Reading, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Car-Seat Cushions, of which the following is a specification.

This invention relates to cushioned seats such as are used in railway-cars, the seat comprising a rigidly-supported frame, springs supported in rows on cross-bars on the frame, and a seat-top of suitable upholstery supported by the springs. Between the upper ends of the springs and the seat-top are interposed bearings or seats for the seat-top, adapted to prevent the upper ends of the springs from pushing through the top, and these bearings have heretofore been sheet-metal strips extending across the upper ends of the springs and secured thereto, there being one strip for each row of springs and the springs being riveted to the strip.

My invention consists in an improved bearing presenting certain advantages, which will be set forth and claimed hereinafter.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a transverse section of a car-seat embodying my invention, the seat-top being removed. Fig. 2 represents a bottom view of a portion of the seat, showing portions of a row of springs and portions of the cross-bar which supports said row. Fig. 3 represents a perspective view showing a portion of the metal strip and one of the plates thereon. Fig. 4 represents a perspective view showing a portion of the strip alone. Fig. 5 represents a section on line 5 5 of Fig. 2.

The same reference characters indicate the same parts in all the figures.

In the drawings, *a a* represent the side bars of the usual seat-frame, and *b* represents one of the spring-supporting cross-bars attached to the frame and supporting a row of springs *c c c*, there being several cross-bars and several rows of springs to each frame.

d represents a relatively-narrow strip of sheet metal extending across the upper ends of the springs *c c c* and having perforations

d' to receive attaching-rivets *e*, hereinafter referred to.

f f f represent a series of sheet-metal plates which have struck-up offset loops *f'*, formed to receive the strip *d*, the plates *f* being strung upon the strip *d*, as indicated in Fig. 3. Each plate has a perforation *f''*, which coincides with one of the perforations *d'* of the strip *d*. The plates *f* and strip *d* are united to each other and to the springs *c* by rivets *e*, as shown in Fig. 5, a strip *g* of textile fabric being preferably united to said parts by the same rivets, the ends of the strip *g* being attached to the side bars *a a* of the frame. The plates *f* project from both edges of the strip *d* and are arranged sufficiently near together to collectively form a suitable support for the seat-top.

The improved bearing formed by the strip *d* and plates *f* is better than a single strip of a width equal to the length of the plates *f*, for the following reasons, namely: First, the double thickness of metal where the springs are riveted to the bearing makes the connection much stronger; secondly, the plates are adapted to tip independently and can therefore adapt themselves to the shape imparted to the seat-top by the part of the body supported by it, and, thirdly, a single wide strip attached to the row of springs is liable to buckle and be bent out of shape, an objection which does not apply to my improved bearing.

The bearing and the springs connected as shown constitute a seat-top-supporting member, the seat having a plurality of said members.

I claim—

In a car or other seat, an upholstery-supporting member comprising a series of springs supported by the seat-frame, a relatively-narrow flexible sheet-metal strip extending across the series of springs and perforated to receive spring-attaching rivets, a series of independent sheet-metal plates having offset loops whereby the plates are strung on the strip, each plate having a rivet-receiving perforation which coincides with one of the perforations of the strip, and rivets passed through the perforations in the plates and strip and

secured to the upper ends of the springs, the
said plates being of greater width than the
strip, and constituting a series of yielding
bearings for the upholstery top of the seat,
5 while the strip constitutes a flexible connec-
tion between the plates, and a reinforcement
thereof.

In testimony whereof I have affixed my sig-
nature in presence of two witnesses.

WALTER E. RICHARDSON.

Witnesses:

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C. F. BROWN.