

(Model.)

W. P. MILLER.
CHAIR SEAT SPRING.

No. 270,093.

Patented Jan. 2, 1883.

Fig. 2.

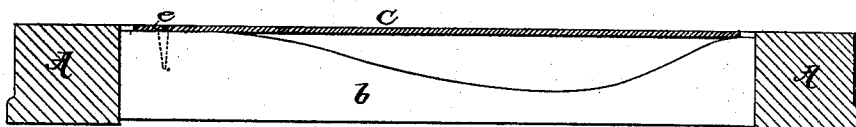
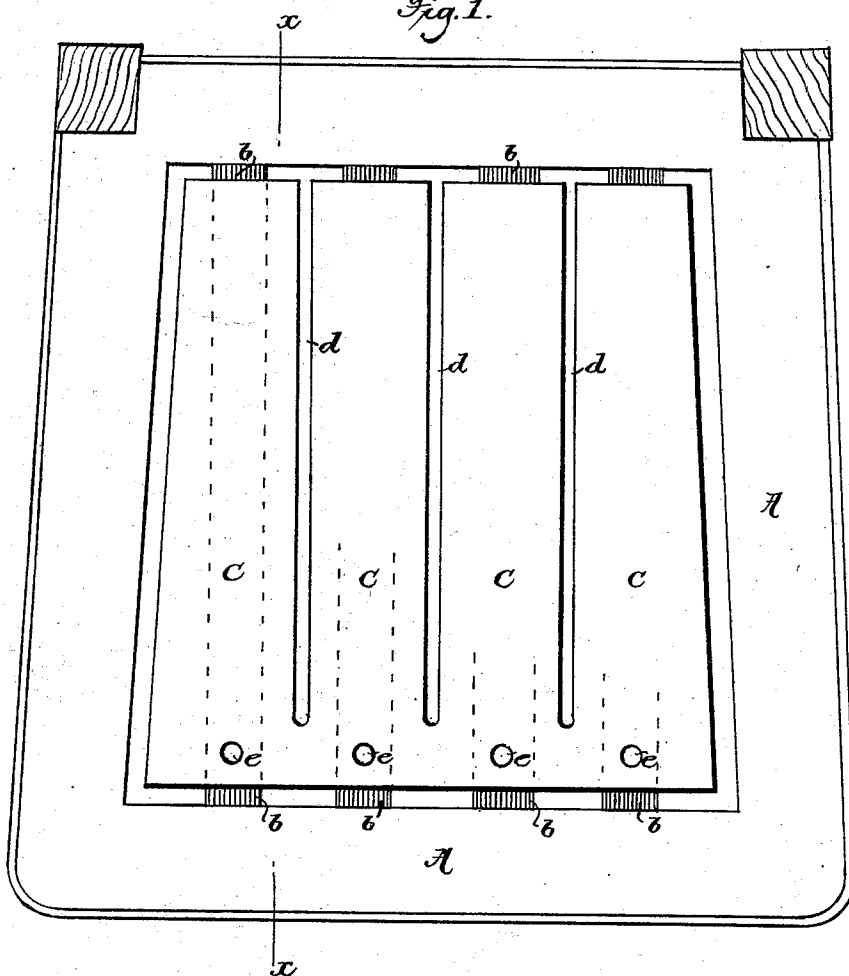


Fig. 1.



WITNESSES:

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WARREN P. MILLER, OF BROOKLYN, NEW YORK.

CHAIR-SEAT SPRING.

SPECIFICATION forming part of Letters Patent No. 270,093, dated January 2, 1883.

Application filed March 31, 1882. (Model.)

To all whom it may concern:

Be it known that I, WARREN P. MILLER, a citizen of the United States, residing in the city of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Chair-Seat Springs, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The present invention relates to a spring for use in the seats of chairs, settees, sofas, and analogous articles to enable said seats, when occupied, to conform to the person of the sitter.

It is the object of the invention to produce a spring of this character which shall possess a high degree of flexibility, and shall be cheap, durable, and capable of maintaining itself in proper position when in use.

To this end the invention consists in certain details of construction, which will be hereinafter fully explained and particularly pointed out.

In said drawings, Figure 1 is plan view of a chair-seat frame provided with my improved spring. Fig. 2 is a vertical section taken upon the line *x x* of Fig. 1.

The seat-frame *A* is of any of the usual and approved constructions, and is provided with a rigid seat, preferably formed by a series of bars or supports, *b*, extending from front to back, and secured to the seat-frame, substantially as shown in my former United States patent, No. 248,336, said bars or supports being wide enough to act as rests for the springs, and being cut away or concaved toward the rear, as shown in Fig. 2, so as to form a cavity that will permit the springs to have sufficient downward play to conform to the person of the sitter.

Resting upon the forms *b*, and extending across the concavities just referred to, are the series of springs *c*, formed from a single piece of sheet metal of suitable thickness by providing the same with narrow slits *d*, extending from the rear edge of the sheet to points so near the front edge as to leave only sufficient metal to maintain the several springs in their proper positions laterally, as shown in Fig. 1. The amount of metal removed in making the slits *d* will preferably be only sufficient to prevent the several springs from coming in contact with each other. The front edge of the sheet

of metal from which the series of springs are thus formed is provided with two or more holes, *e*, through which pass screws for securing the series of springs in position.

It is of course to be understood that after the springs have been secured in the position shown in Fig. 1 the bottom or seat of the chair will be suitably upholstered or covered, so as to conceal the springs and keep them from contact with the person using the chair.

When the springs *c* are made independent of each other, as in my former patent, herein referred to, it is difficult to so secure them to the forms or frame of the seat as to prevent their rear ends, which, as will readily be seen, must always be capable of longitudinal movement, from becoming displaced laterally; and it is also difficult to secure even the forward ends so that they will not, when the seat is in use, soon become loose and even entirely detached from the forms. By making the series of springs integral, as shown, it has been found that the whole series can be secured without difficulty, so as to be maintained in proper position as long as desired.

It will also be seen that by constructing the series of springs in a single piece a uniform temper will be secured, which is a feature of considerable importance, and also that a large amount of labor and expense will be saved in the making and assembling of the parts.

Although my improved spring is herein shown as applied to a chair-seat only, it is of course apparent that it is equally applicable to settees, sofas, and all analogous articles.

What I claim is—

1. The herein-described seat-spring, consisting of a plate of spring metal divided from one edge toward the other, so as to provide several longitudinal springs capable of independent movement, which said springs are connected together by a narrow strip of metal integral with them, whereby their lateral displacement is prevented and a simple means of attachment is provided, substantially as described.

2. A seat-spring consisting of a plate of spring metal divided from one edge toward the other, so as to provide several longitudinal springs capable of independent movement, which said springs are connected together and to the seat-frame by a narrow strip of metal, in

combination with a rigid seat composed of
forms or supports that provide a cavity af-
fording play for the springs, said cavity oper-
ating to limit the downward movement of the
5 springs and causing them to conform to the
person of the sitter, substantially as described.
In testimony whereof I have hereunto set my

hand in the presence of two subscribing wit-
nesses.

WARREN P. MILLER.

Witnesses:

T. H. PALMER,
J. A. HOVEY.