Le Page & Raymond,

Furniture Spring.

No. 64,115. Patented Apr. 23, 1867

Fig. 1

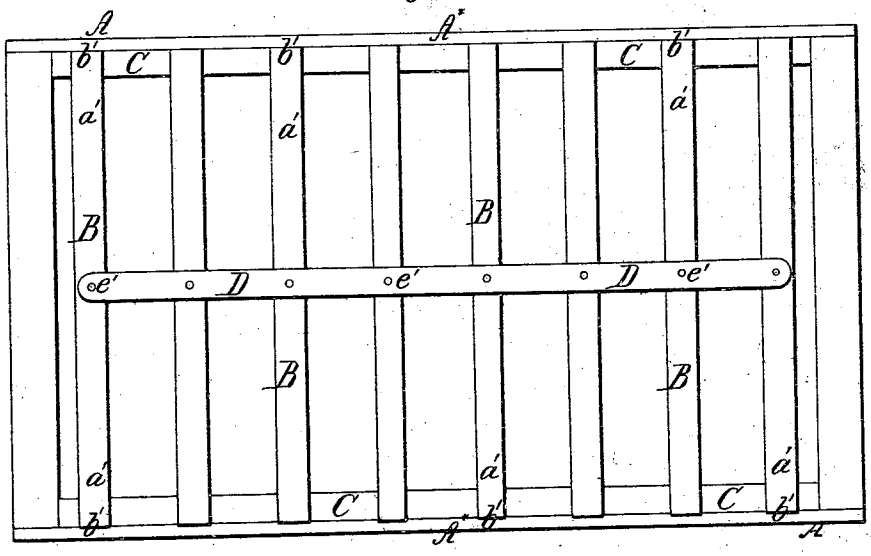
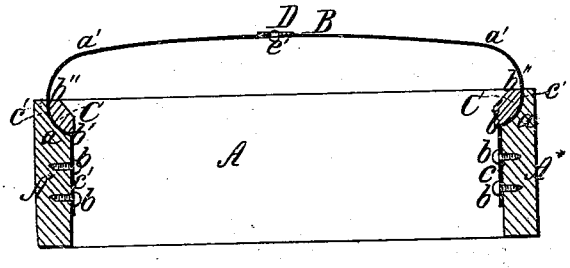


Fig. 2



Witnesses

J. M. Coombs

G. W. Reed

Inventors

Mathieu Lepage

François Raymond

United States Patent Office.

MATTHEW LE PAGE AND FRANCOIS RAYMOND, OF WOODHAVEN, NEW YORK.

Letters Patent No. 64,115, *dated April* 23, 1867.

IMPROVED SEATS FOR LOUNGES AND CHAIRS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, MATTHEW LE PAGE and FRANCOIS RAYMOND, both of Woodhaven, in the county of Queens, and State of New York, have invented certain new and useful Improvements in Seats for Lounges, Chairs, &c.; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is a plan view of a lounge or sofa bottom constructed according to our invention.

Figure 2 is a vertical transverse section of the same.

Similar letters of reference indicate corresponding parts in both figures.

Arched springs for seats and mattresses have heretofore been attached to the frames with a fixed bearing point, over and against which the curved end of the spring is bent on the application of any weight. This strain upon the spring at one point in course of time disintegrates the fibres of the metal, until eventually a fracture is the result, which can only be repaired by the insertion of a new spring. This invention is intended to obviate that difficulty, and it consists in a novel method of securing the ends of the arched springs of seats or bottoms for chairs, lounges, or the like, so as to give increased flexibility, and at the same time, by providing a changeable bearing to the ends of the springs, to materially reduce the liability to breakage.

To enable others to understand the nature and construction of our invention, we will proceed to describe it with reference to the drawings.

A represents a rectangular frame, which is made preferably of wood, and formed in the inner upper edge of each of the opposite sides A* of which is a rebate, *a*, which, taken transversely, is curved or arch shaped, as shown in fig. 2. The springs are shown at B, and are secured in a transverse position upon the frame A, and are arched, as represented more fully in fig. 2, the uppermost or main portion of the said springs being formed upon a slight curve, while at each end of such portion it is bent on a much shorter curve, which is in fact nearly or quite semicircular, as indicated at *a' b'*. That portion of each end of each spring marked *c'* in fig. 2, is so shaped as to fit into the rebate *a*, and extend downward therefrom upon the inner surface of the two opposite sides A*—as just hereinbefore mentioned—of the frame A. A longitudinal strip, C, of wood, or other suitable material, is then placed in each of the rebates *a*, upon the end portions *c'* of the springs B, the said strips being secured in place by screws, nails, or other suitable means. The extremity of each of the said end portions *c'* of the springs is then secured to the adjacent inner surface of the side of the frame A, by means of supplemental screws, *b*, all as shown in the aforesaid fig. 2. The upper edge, at the outer side of each strip C, is bevelled or cut away, or curved on the arc of a circle of smaller radius, so that the transverse section or profile of said strip represents an arc of an ellipse, as shown at *b''*, in order that the end portions of the springs may yield somewhat, and take a bearing nearer to the centre of the spring, in proportion to the weight thereon, when the upper or central portions thereof are pressed downward. Placed upon the springs B, in a position transverse thereto, or, in other words, in a position parallel with the sides of the frame A, is an elastic brace, D, which may be made of the same material as the springs B, and which is united therewith by means of rivets *e'*. This brace, from its elastic nature, yields with the depression of the springs when the seat is used, and at the same time prevents any lateral twisting or displacement of the same. The shape of the springs renders the seat very elastic, and the manner in which they are secured to the frame A insures their firm retention in their places, while the facility with which the bottom of the lounge, chair, or other article of furniture for sitting or recumbent purposes may be put together, renders such article capable of being manufactured at a very moderate cost.

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

The strip *c*, curved on its profile in the arc of an ellipse, in combination with the rebate *a*, curved in the arc of a circle for clamping the ends of the springs B, substantially as and operating in the manner set forth.

MATTHEW LE PAGE,
FRANCOIS RAYMOND.

Witnesses:
J. W. COOMBS,
G. W. REED.