D. F. HAASZ.
Chair-Bottom.

No. 200,283. Patented Feb. 12, 1878.

Fig. 1.

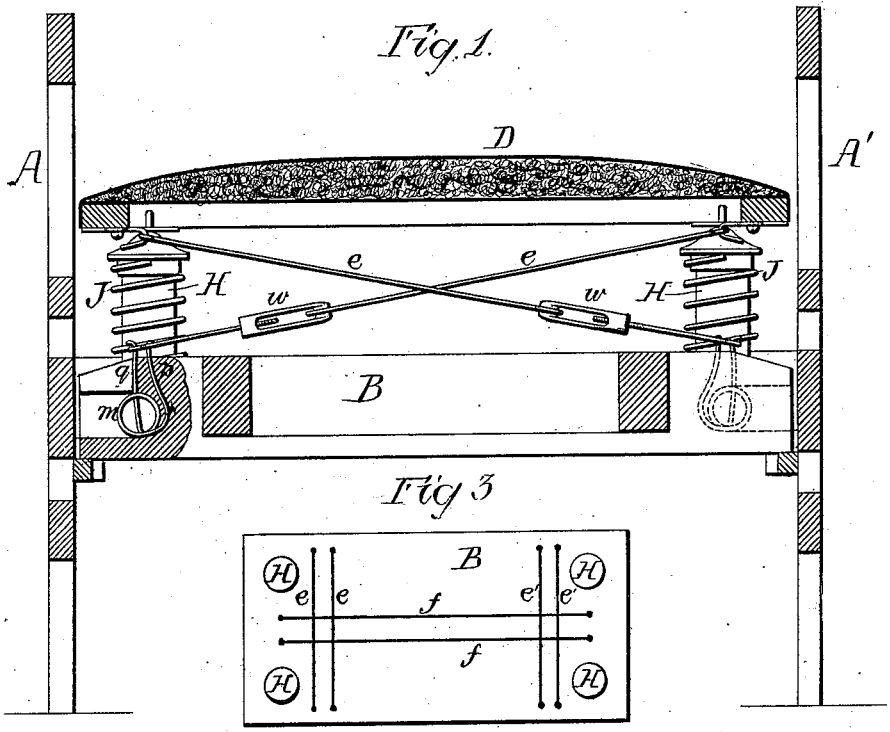
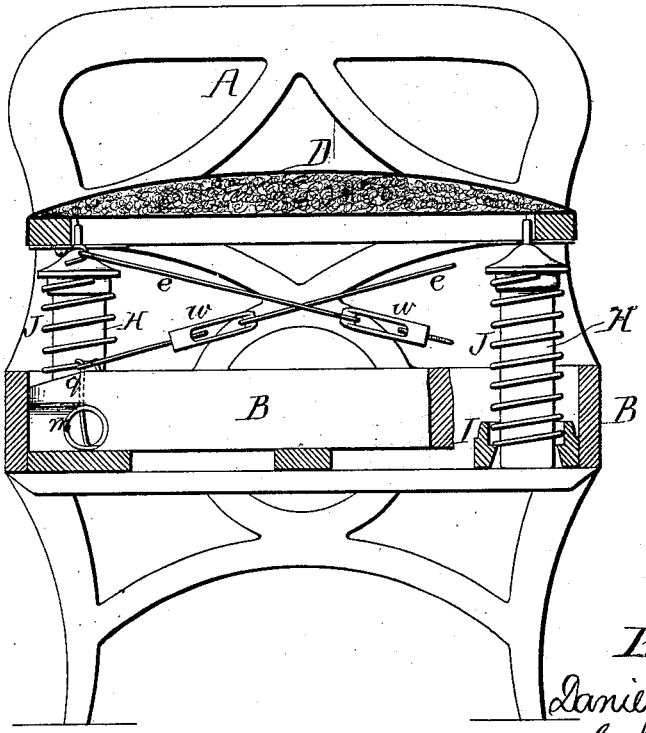


Fig 3

Fig 2



Witnesses
Harry A. Crawford.
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Inventor
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UNITED STATES PATENT OFFICE.

DANIEL F. HAASZ, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CHAIR-BOTTOMS.

Specification forming part of Letters Patent No. **200,283**, dated February 12, 1878; application filed June 9, 1877.

To all whom it may concern:

Be it known that I, DANIEL F. HAASZ, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Seats for Chairs, &c., of which the following is a specification:

The object of my invention is to so combine the seat of a railroad-car or other chair with springs and diagonal stays that it will yield freely when loaded, and at the same time retain its proper lateral position.

In the accompanying drawing, Figure 1 is a longitudinal vertical section of my improved seat; Fig. 2, a transverse vertical section, and Fig. 3 a diagram drawn to a reduced scale for illustrating part of my improvement.

My invention is illustrated in the present instance as applied to the seat of a railroad-car; but it should be understood that it can be adapted to the seats of chairs and similar articles of furniture.

A and A′ are the opposite standards of the seat, and B is a frame connected to the opposite standards, and forming the base of the seat. D is the seat proper, to the under side of which are loosely connected the upper ends of four rods, H, one near each corner of the seat, as shown in Fig. 3.

Each rod H passes through and is guided by a stationary sleeve, I, secured to the base B, each sleeve being recessed for the reception of the lower end of a spiral spring, J, which surrounds the rod, and the upper end of which bears against a collar on the same.

In order to retain the seat in its proper position longitudinally and laterally, I use a series of diagonal stays extending from the under side of the seat to the base, and arranged in pairs.

The system of stays which I prefer will be best understood by reference to Fig. 3, where it will be observed that there are two transverse stays, *e e*, near one end of the seat, two similar stays, *e′ e′*, near the other end of the seat, and two longitudinal stays, *f f*. The stays of each pair cross each other, and each stay is connected at one end to the base, and at the other end to the seat.

While the springs J permit the seat to yield vertically, the stay-rods prevent the lateral and longitudinal sagging of the seat; but the stays could not perform this duty effectually if they were rigidly connected at both ends to the seat and base, for in this case the depression of the seat would necessarily result in the bending of the stays. I therefore connect each stay to the base through the medium of a spring, the springs serving to impart such tension to the stays that the latter are at all times, whether the seat is loaded or not, in a proper condition to perform their duties.

Each spring *m* consists of a simple coil of wire, which is lodged in a recess in the base, one end, *p*, of the wire being attached to the base, and the other end, *q*, passing through a slot in the same, and being hooked or otherwise formed at the end for the reception of one end of one of the stays.

I prefer to make each stay-rod in two parts, connected together by a screw-coupling, *w*, so that the tension on the stay may be increased or diminished at pleasure.

It will be evident that my invention may be adopted in the construction of easy-chairs, &c.

I claim as my invention—

1. The combination of the seat D, the rods H, connected loosely to the under side of the seat, and the springs J, with the base B.

2. The combination, with the base B and diagonal stays, of coiled springs *m*, lodged in recesses in the said base, and having arms *q*, for attachment to the said rods, all as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL F. HAASZ.

Witnesses:

HERMANN MOESSNER,

HARRY SMITH.