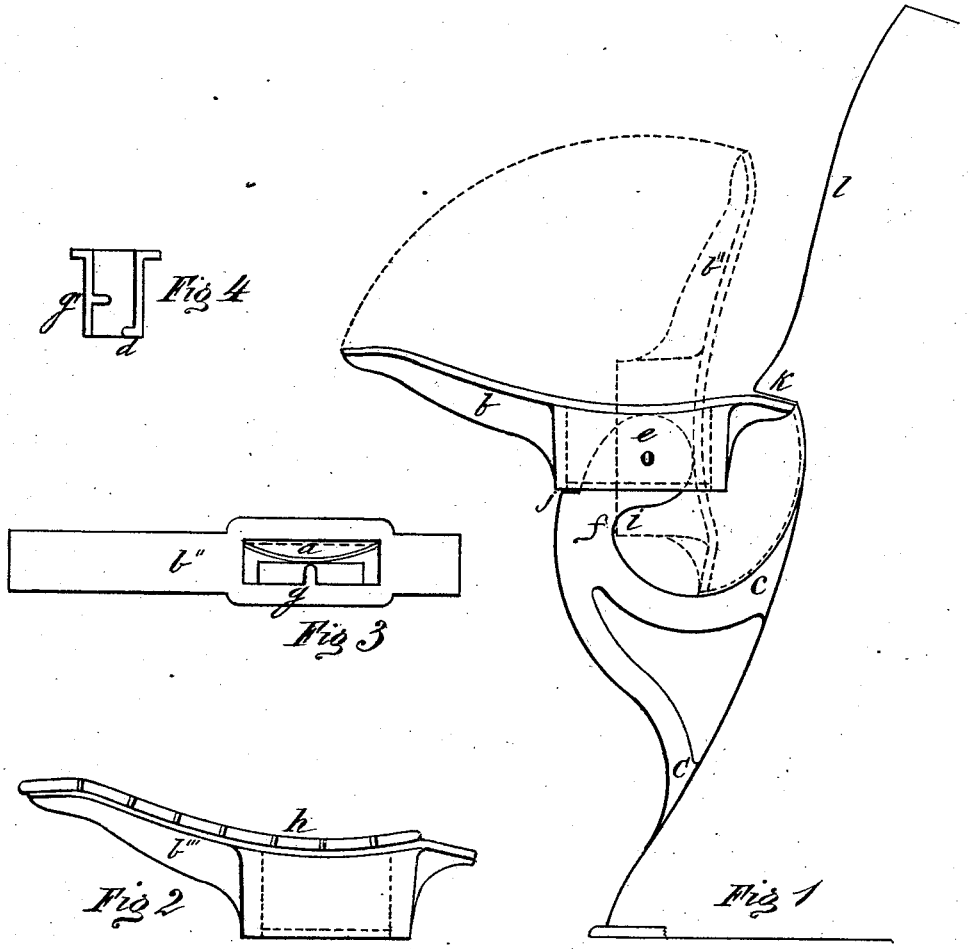
# B. ALLEN.

## School Seats.

No. 163,622. Patented May 25, 1875.

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# UNITED STATES PATENT OFFICE.

BENJAMIN ALLEN, OF TRENTON, NEW JERSEY.

## IMPROVEMENT IN SCHOOL-SEATS.

Specification forming part of Letters Patent No. **163,622**, dated May 25, 1875; application filed December 18, 1874.

*To all whom it may concern:*

Be it known that I, BENJAMIN ALLEN, of Trenton, New Jersey, have invented a Hinge for Folding Seats for Schools, of which the following is a specification:

The object of my invention is to produce a hinge for a folding seat for use in schools, churches, public halls, &c., that shall be noiseless in its movement, and not liable to fall down, by the use of a spring, as seen at *a*, Figure 3, producing constant friction, by which the seat is held at any angle at which it may be placed.

The hinge is illustrated in the accompanying drawings, referred to in the following description.

Fig. 1 shows a projection, *f*, designated an arm-rest, attached to a standard at *c c*, having a slotted hole in the head, as seen at *e*, with a shoulder or bearing for the seat-arm at *j*, and one for the heel of the seat-arm at *k*. Fig. 2 shows the seat-arm, with the slats *h*, forming the seat, attached. Fig. 3 is a top view of the seat-arm before the seat is put on, showing the spring *a* in position. Fig. 4 is a sectional view of the mortise in the seat-arm, showing a pin, *g*, cast on the inside of the mortise, and a flange, *d*, running lengthwise of the mortise at the lower edge, as shown by the dotted line in Fig. 3.

The seat is attached by placing the seat-arm on the arm-rest, allowing the head of the arm-rest to pass through the mortise, and inserting the pin *g* in the slotted hole *e*. The spring *a*, which is the segment of a circle, is then placed in the mortise by the side of the head of the arm-rest, as seen at *a*, Fig. 3, the flange at the bottom preventing it from passing clear through the mortise. The pin *g* is made short enough not to project through the hole *e* in the head of the arm-rest, thus preventing any interference with the working of the spring, and also allowing space enough for the head to pass up through the mortise. The spring is held in position from the top by the seat when fastened to the arm, as seen in Fig. 2. When the seat is turned down for use the arm takes bearing at *j* and *k*, leaving the pin *g* perfectly free, its only use being to keep the arm to its center in moving up or down. When the seat is folded or turned up, as shown by the broken lines at *b*, Fig. 1, the heel of the arm comes in contact with the neck of the arm-rest at *i*, thus preventing the seat from striking the back at *l*.

The remaining portion of the standard, Fig. 1, is not given in the drawings, being deemed unnecessary to show any claim.

I claim—

The combination, with the standard *f*, having an elongated opening, *e*, and shoulders *j k*, of the seat-arm *b*, having an oblong rectangular mortise, which is partly closed at the bottom by a flange, *d*, and provided with the pin *g*, projecting into said mortise, the arm being held upon the standard by the elastic plate *a*, sprung into the mortise and resting upon the flange *d*, all as and for the purpose set forth.

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Witnesses:

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