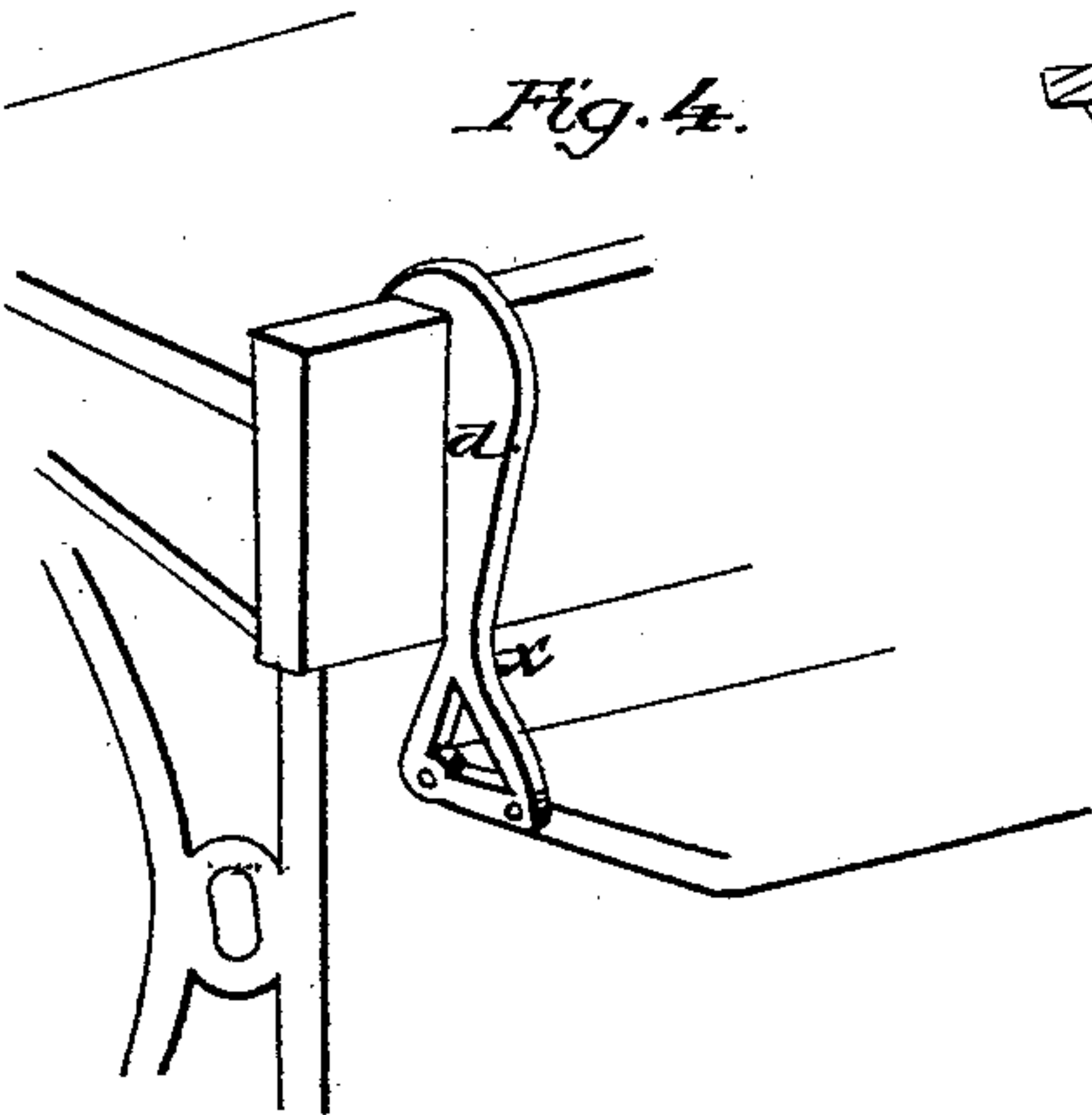
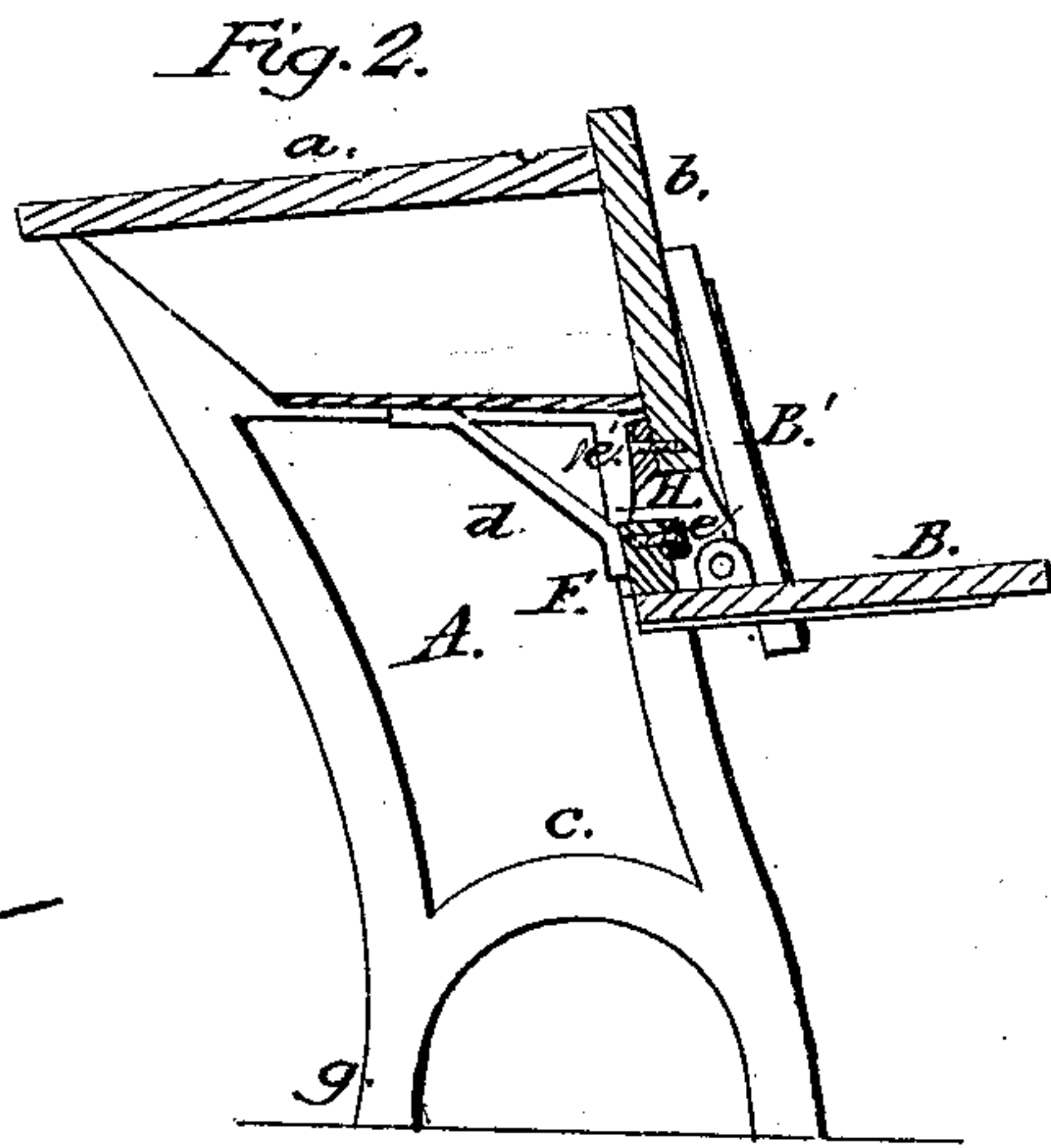
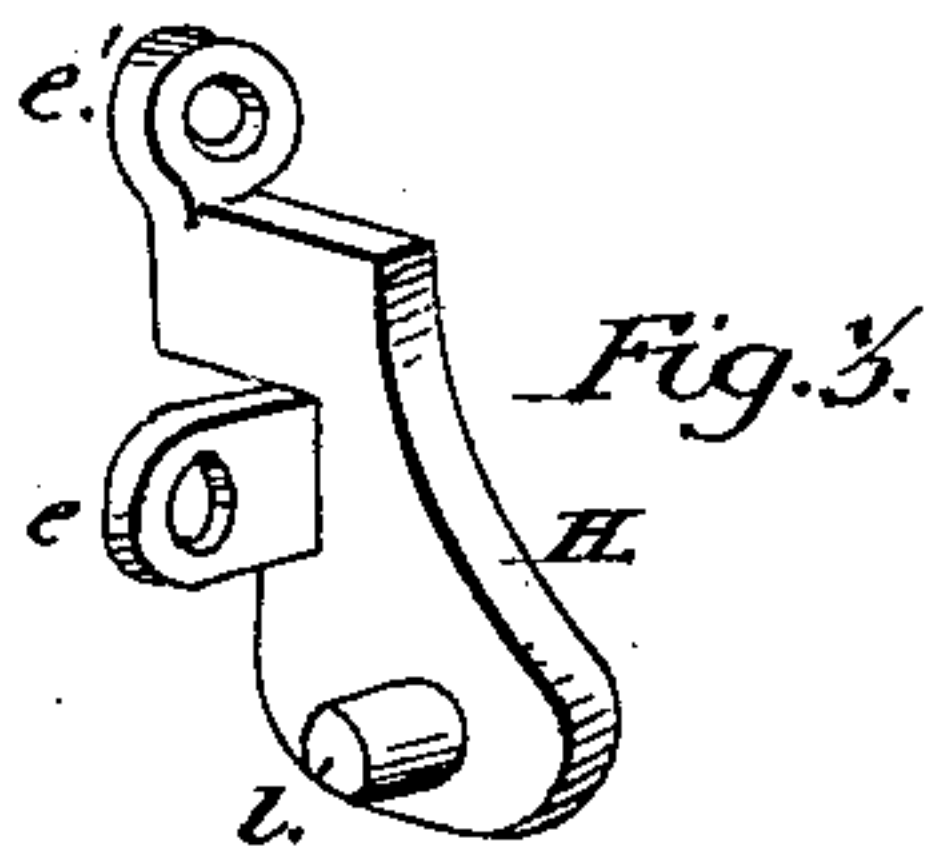
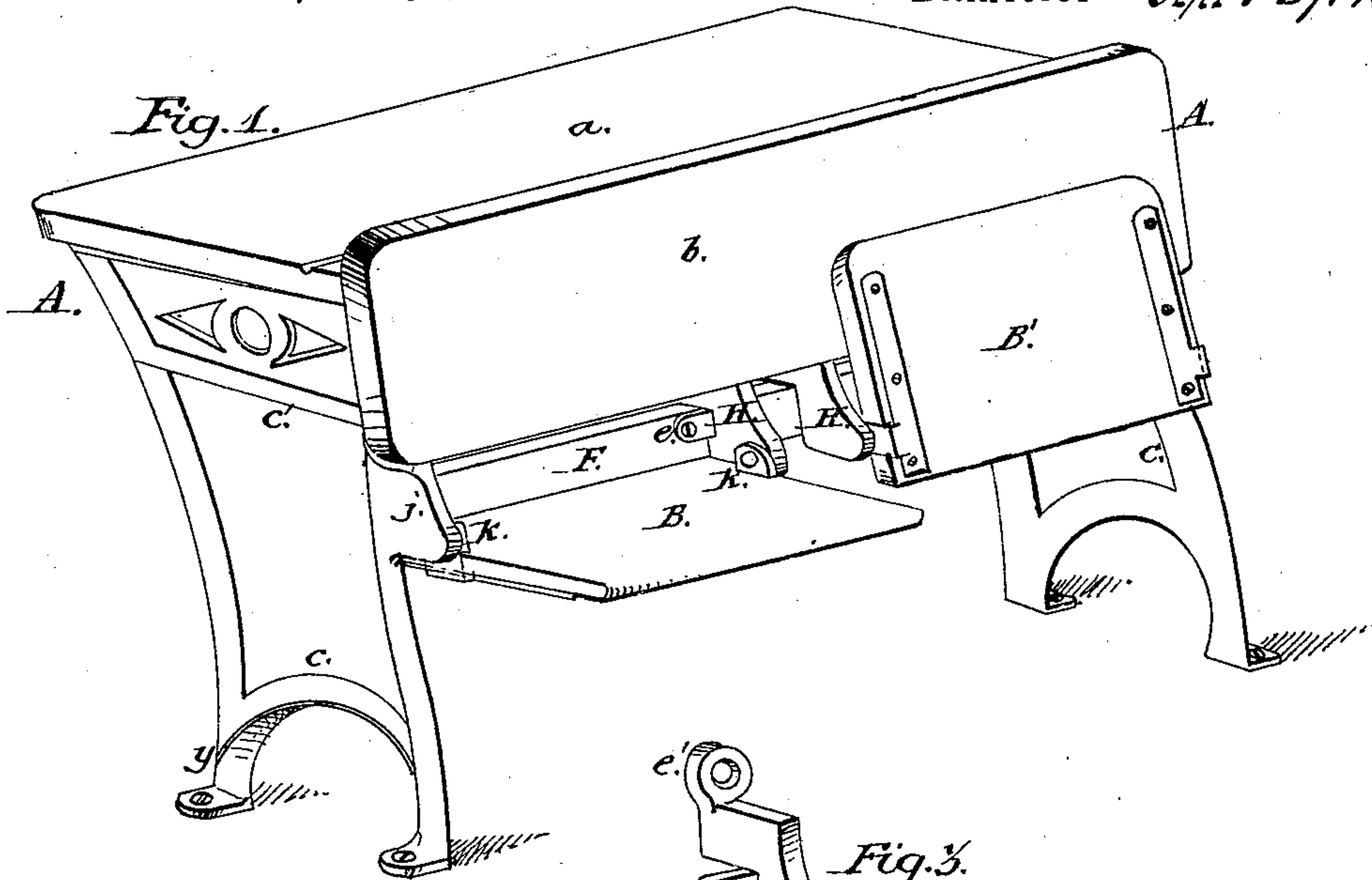


*A. Hutchinson,*

*School Desk.*

*No. 89484.*

*Patented Apr. 27. 1869.*



*Witnesses:*  
*Wm. Steel*  
*Jno. B. Harding*

*Inventor:*  
*A. Hutchinson*  
*by his Atty*  
*H. Howson.*

# United States Patent Office.

ALFRED HUTCHINSON, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 89,484, dated April 27, 1869.

## IMPROVED SCHOOL-DESK.

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

To all whom it may concern:

Be it known that I, ALFRED HUTCHINSON, of Philadelphia, Pennsylvania, have invented an Improvement in School-Desks; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of an improvement, fully described hereafter, in the school-desk for which Letters Patent were granted to me on the 15th day of December, A. D. 1868.

In order to enable others to make and apply my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a perspective view of my improved school-desk;

Figure 2, a sectional view of the same;

Figure 3, a perspective view of one of the brackets or hangers, to which the seats of the desk are attached; and

Figure 4, a view of a portion of the desk for which Letters Patent have been granted to me.

A represents a school-desk, of which *a* is the top, *b* the front, and *c c* the opposite end-frames, of cast-iron, which are secured to the floor by screws, or other fastenings.

These desks are arranged in the school-room in regular rows, and each of them is provided, in front, with separate and independent folding seats, *B* and *B'*, for the pupils who occupy the desk next in advance, the object of this arrangement, as fully described in my aforesaid patent of December 15, 1868, being to prevent the incommoding of one pupil by the movements of another.

The objection to my former invention (shown in fig. 4) was, that the entire strain and weight were borne by the cast-iron hangers *d*, to which the seats were pivoted, these hangers frequently breaking at the point *x*.

This defect is entirely overcome in the present arrangement, which is constructed as follows:

A wooden bar, *F*, extends between, and is suitably secured to the opposite end-frames *c c* of the desk, and is braced at the centre by a diagonal rod, *d*, which is secured to the bottom of the said desk.

Two metal brackets, *H H*, the form of which will

be best observed in fig. 3, are arranged to partly embrace this bar *F*, one on each side of the rod *d*, and each of the said brackets is furnished with two eyes, *e* and *e'*, by means of which it can be firmly secured to the bar, and to the inside of the front of the desk.

Each bracket *H* is furnished with a pin, *i*, directly opposite to a corresponding pin which projects from a lug or enlargement, *j*, of the end-frame *c*, these pins being arranged to enter metal sockets, *k*, formed at the opposite edges of the seats *B* and *B'*, which are thus hung to the desk.

Each seat can be freely turned upon its pivot to either of the positions illustrated in figs. 1 and 2, and when adjusted to a horizontal position, the entire rear edge of the said seat bears against the under side of the bar *F*, which thus relieves to a great extent the strain upon the brackets and lugs *j*. These brackets and lugs, moreover, owing to their peculiar form, and to the manner in which they are secured and braced at the weakest points, are much less liable to break than the light unsupported hangers described in my former patent.

Another advantage, gained by casting the lugs *j j* on the end-frames of the desk, is, that it enables me to dispense with two brackets, which would otherwise be required.

It will be observed, on reference to fig. 2, that the entire frame of the desk is inclined, the object of this arrangement being to throw the centre of gravity so far toward the legs *y* that the weight upon the seats *B* and *B'* shall have no tendency to tilt the desk, and raise the said legs from the floor.

I claim as my invention, and desire to secure by Letters Patent—

The combination of the bar *F*, brackets *H*, and lugs *j*, when the whole are adapted for the retention and support of the adjustable seats *B* and *B'* of a school-desk, as herein described.

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

ALFRED HUTCHINSON.

Witnesses:

JOHN WHITE,  
HARRY SMITH.