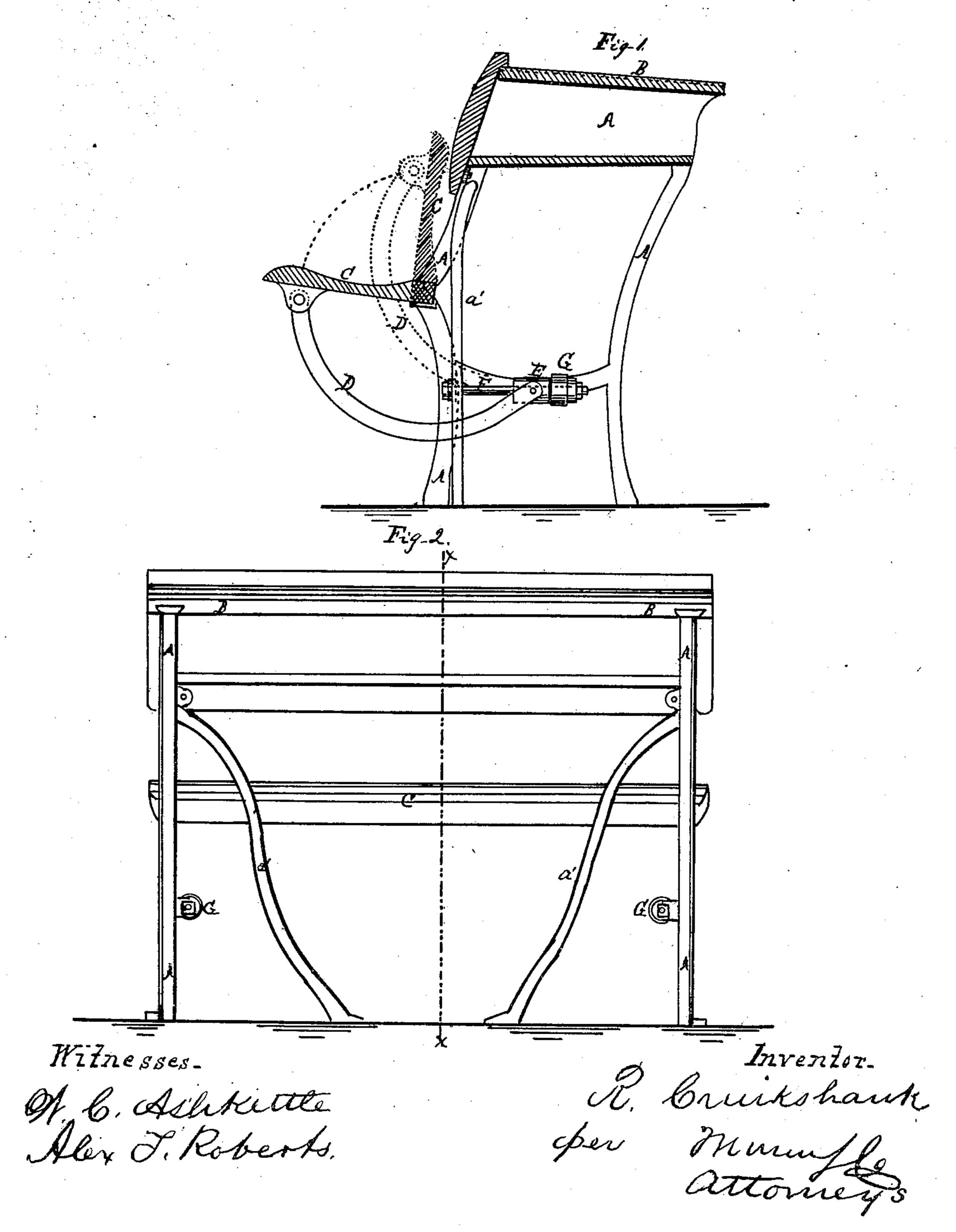
## R. CRUIKSHANK, DESK AND SEAT.

No. 75,379.

Patented Mar. 10, 1868.



## United States Patent Office.

ROBERT CRUIKSHANK, OF LAWRENCEVILLE, NEW JERSEY.

## IMPROVED DESK AND SEAT.

Specification forming part of Letters Patent No. 75,379, dated March 10, 1868.

To all whom it may concern:

Be it known that I, ROBERT CRUIKSHANK, of Lawrenceville, in the county of Mercer and State of New Jersey, have invented a new and useful Improvement in School-Desks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which--

Figure 1 is a vertical section of my improved desk, taken through the line x x, Fig. 2. Fig.

2 is a rear view of the same.

Similar letters of reference indicate corre-

sponding parts.

My invention has for its object to improve the construction of my school-desk patented May 24, 1864, and numbered 42,859, so as to make it more convenient and satisfactory in use; and it consists in the construction and combination of the various parts, as herein-

after more fully described.

A are the end frames of the desk, which are made of cast-iron, are screwed fast to the floor in the ordinary manner, and are strengthened with inclined braces a'. The upper edges of the end frames, A, are cast in dovetailed form, so as to enter dovetailed grooves formed in the under side of the top B of the desk, as shown in Fig. 2. By this manner of attachment the said top B is securely attached to the frames A, and at the same time can move upon said frames as it contracts and expands, thus guarding against the warping and splitting of said top by said contractions and expansions.

C is the seat, which is pivoted to and between angular or curved projections of the for-

ward parts of the frames A.

D are curved arms, the upper ends of which are pivoted to the forward part of the under side of the seat C, and the lower ends of which are pivoted to sliding blocks E, which slide horizontally upon horizontal guide-rods F, secured to ears formed upon the inner sides of the frames A. The curve of the arms or bars D is immaterial so long as its pivoting-points remain in the same relative position, and so long as the said curve is sufficient to prevent the middle part of the said arms from striking

against the lower edge of the seat C when the said seat is turned up into the position shown

in red in Fig. 1.

G are rubber blocks or equivalent springs placed upon or at the rear part of the guiderods F, against which the sliding blocks E strike both when the seat is lowered into a horizontal position and when it is raised into a vertical position. Care must be taken to place the spring G in the exact point where the sliding block E will strike against it both when the seat C is in a vertical and when in a horizontal position. By this arrangement two objects are effected: first, the seat is raised and lowered without noise, which is a very important consideration in a school-room; and, second, the seat C is made a spring-seat, making it more easy and comfortable for the pupils.

If desired, the guide-rod F, sliding block E, and spring G may be connected with the under side of the seat C, instead of being connected with the end frames, A, as hereinbefore

described.

Having described my invention, I claim as new and desire to secure by Letters Patent-

1. Connecting the lower end of a curved arm, D, with the end frames, A, by means of sliding blocks E and horizontal guide-rods F, substantially as herein shown and described, and for the purpose set forth.

2. The combination of the rubber block G or equivalent spring with the guide-rod F and with the sliding block E, said spring or rubber block being placed in such a position that the said sliding block will strike against it both when the seat C is in a horizontal and

when in a vertical position.

3. The supporting end pieces, A, when cast with dovetailed upper ends adapted to fit into corresponding grooves formed in the under side of the top B of the desk, as herein shown and described, for the purpose specified.

The above specification of my invention signed by me this 30th day of January, 1868.

## ROBERT CRUIKSHANK.

Witnesses:

JAMES T. GRAHAM, ALEX. F. ROBERTS.