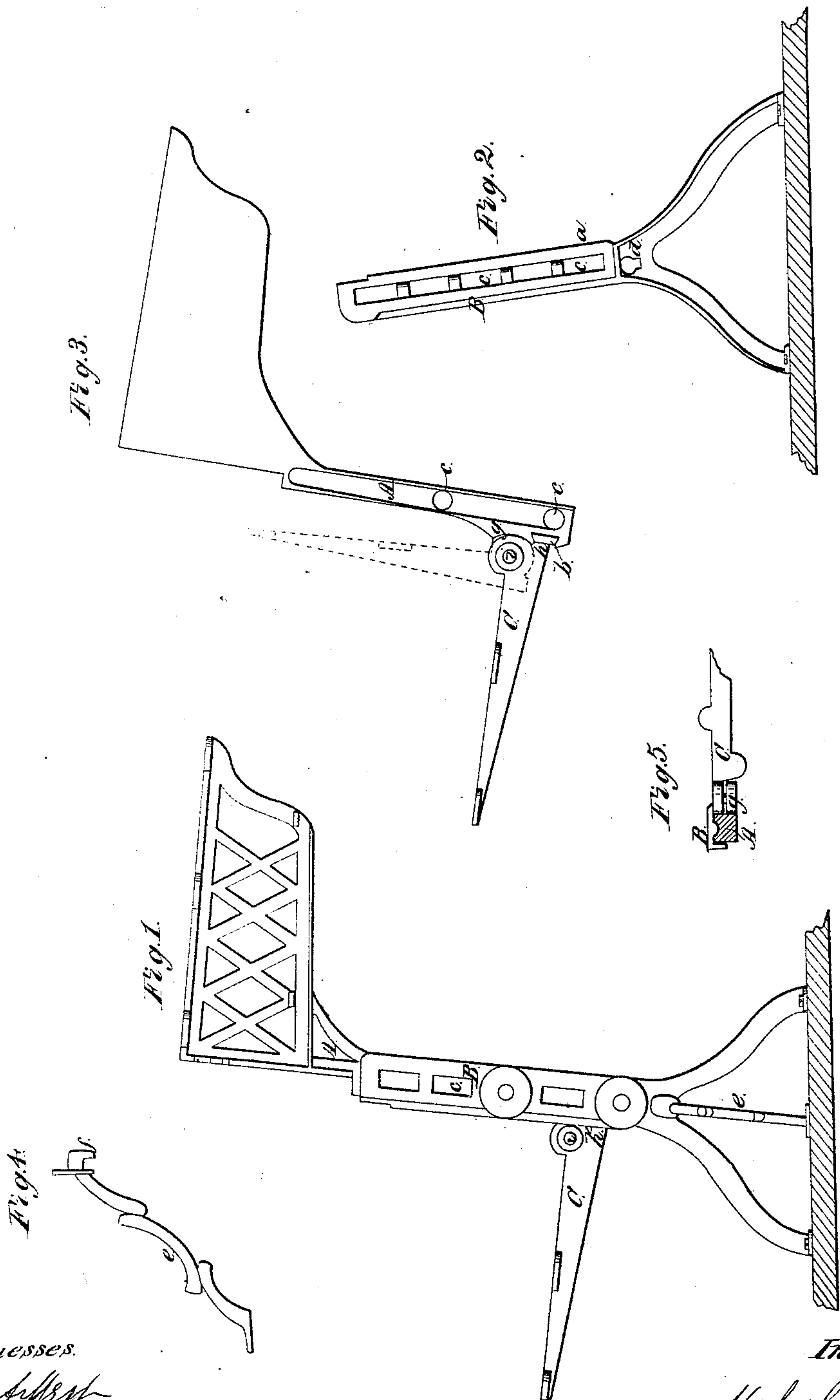


H. L. Andrews

School Desk.

N^o 82,061.

Patented Sep. 15, 1868.



Witnesses.

C. A. West.
L. L. Bond.

Inventor.

Robert Andrews

UNITED STATES PATENT OFFICE.

HERBERT L. ANDREWS, OF CHICAGO, ILLINOIS.

IMPROVED SCHOOL-DESK.

Specification forming part of Letters Patent No. 82,061, dated September 15, 1868.

To all whom it may concern:

Be it known that I, HERBERT L. ANDREWS, of Chicago, in the State of Illinois, have invented certain new and useful Improvements in School Desks and Seats; and I do declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an inside view of a single standard, with the rest-arm attached. Fig. 2 is an inside view of the lower part of the standard. Fig. 3 shows the upper part of the standard in the position shown in Fig. 1, the lower part being removed. Fig. 4 is a detached view of the brace; Fig. 5, a top view of the joint.

The object of my invention is to construct the two parts of the standard of a school desk and seat which is adjustable in height, so that the two parts shall be more securely held together and in place; to construct a simple and convenient joint for the arms of the seat; to construct such joint so that it shall be noiseless, and so that the seat shall not strike against the back; and to so make these several parts that, when they are together, the seat-arm shall be secured in its place without the use of a bolt or nut, and in a manner simple, novel, and efficient.

To enable others skilled in the art to make and use my invention, I proceed to describe its construction and operation.

I construct my standards in two parts. The upper portion A is so made that the top of the desk and a shelf may be attached in the usual manner. So much of this upper portion as comes in contact with the lower portion is made concave, and the corresponding part of the lower portion of the standard is made convex. The two parts are secured together by means of nuts and screws, the latter passing through the openings *c*. These parts, being, respectively, concave and convex, will be much more firmly held in place than if their surfaces were smooth. On the front edge of the lower part B of the standard is a flange, *a*. This flange holds the seat-arm in its place, and also secures a piece of rubber in the recess *b*, as hereinafter described. The other part, A, of the standard has a projection, *g*, at the lower end

and in front, which forms a head, upon which is placed the axle *i*, to receive the seat-arm C. This projection *g* is recessed or cut away in front, as shown in Figs. 3 and 5, the thickest part forming a stop, against which the end of the seat-arm C strikes when the seat is raised. This portion of the seat-arm I make cam-like in form, so that it does not touch the thickest part of the projection *g* except when the seat is turned up. Neither does metal come suddenly in contact with metal when the seat is raised; but such contact is gradual and without noise, and when turned up the seat is not easily jostled down. This feature of my invention can be used in all styles of standards, whether in two parts or not. In the lower end of A, and in front, is a recess, *b*, on a line with the end *h* of the arm C, and of the form shown. When the two parts of the standard are together the flange *a* covers the side of the recess *b*, and a chamber is formed open only in front, into which I insert a piece of rubber or other elastic substance, against which the projecting end *h* of the arm strikes when the seat is down, and thus all noise is prevented.

In putting the several parts together, the arm C is placed upon the axle *i*. The two parts A and B are then put together and secured by means of screws and nuts. It will be observed that the flange *a* will extend over the end of the arm C, and also over the rubber, so that it will be impossible for the arm to get out of place, though no bolt or other fastening be used. The end of the arm is of such thickness that it (the arm) can readily be moved up or down without rubbing between the projection *g* and flange *a*. *e* is a brace, provided with a hook, *f*, at the upper end, which is inserted in the opening *d* of the lower part of the standard, and the other end of the brace I secure to the floor by means of a screw. I use a brace to each standard, and place the same on the inside. These braces, I find, are very efficient in preventing the lateral motion of the desks, strengthening the same, and rendering it almost certain that the desks will not become loose by use. As shown, the rubber is held in the recess *b* by the flange *a* and the peculiar form of the recess. A recess for

the reception of the rubber might be provided in the end *h* of the arm C. The only object of the rubber is to prevent noise.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. The standard composed of two parts, A B, one provided with the projection *g* and axle *i*, and the other with the flange *a*, in combination with the arm C, the standards being secured by the screws and nuts, all substantially as specified.

2. The combination and arrangement of the recess *b*, when filled with rubber or other elastic material, standard B, and projecting heel *h* of the arm C, substantially as and for the purposes specified.

HERBERT L. ANDREWS.

Witnesses:

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