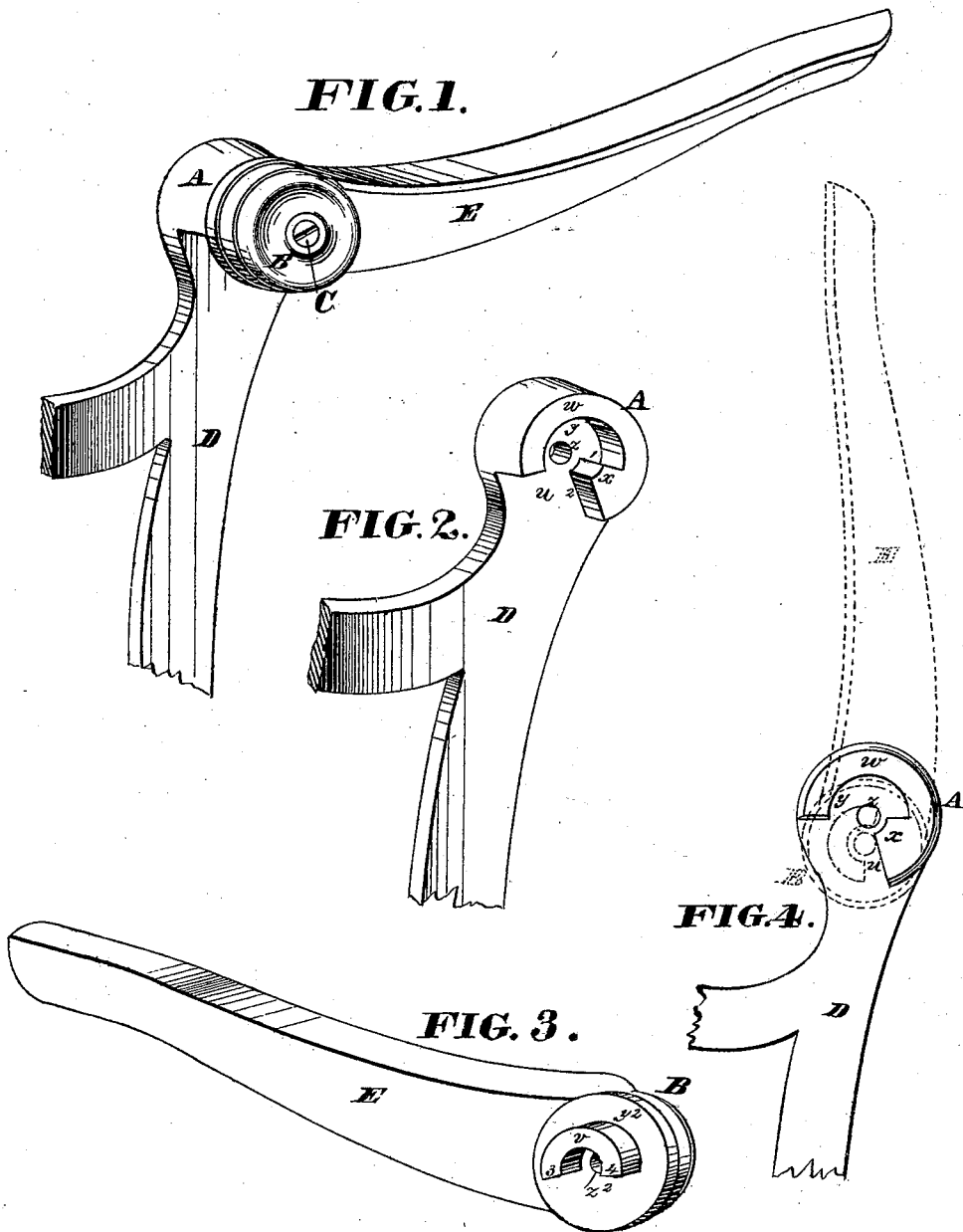


M. W. CHASE.
Seat-Hinges.

No. 141,115.

Patented July 22, 1873.



WITNESSES:

Jas. L. Swin
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INVENTOR:

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UNITED STATES PATENT OFFICE.

MARCELLUS W. CHASE, OF BUFFALO, NEW YORK.

IMPROVEMENT IN SEAT-HINGES.

Specification forming part of Letters Patent No. **141,115**, dated July 22, 1873; application filed June 30, 1873.

To all whom it may concern:

Be it known that I, MARCELLUS W. CHASE, of Buffalo, in the county of Erie, New York, have invented an Improved Seat-Hinge, of which the following is a specification:

This invention relates to hinges for attaching and supporting the folding seats of school-desks, opera-chairs, and settees; and it consists in a peculiar construction of hinge adapted to securely support the seat in effective position, so as to relieve the bolt from strain, and to allow of the unshipping of the seat without taking the desk or seat apart.

An axial bolt clamps the parts together and constitutes the pintle. The motion of the seat-arm is limited, and the seat is supported in effective position by means of a properly-arranged lug and concentric flange on one member and a segmental projection on the other member. A recess in the outer circular or segmental flange permits the escape of the inclosed projection when the bolt is removed without impairing the efficiency of the flange as a support.

Figure 1 is a perspective view of the seat-arm and a contiguous portion of the standard of a school-desk illustrating this invention. Fig. 2 is a perspective view of the standard, showing one member of the hinge. Fig. 3 is a perspective view of the seat-arm, showing the other member of the hinge. Fig. 4 is an elevation of the two parts, the seat-arm being shown in dotted lines, illustrating the method of unshipping the seat.

This invention is applicable to folding-seats in general, but is primarily designed for application to school-desks and settees. The improved hinge is composed of two circular or segmental members, A B, and an axial bolt, C. The members A B are preferably cast, respectively, on the standards D and seat-arm E, as in the illustration.

The construction of the members A B, in which the invention consists, is as follows: Each part is constructed with a central aperture, $z z^2$, to receive the bolt C, and the main surface $y y^2$ of each member is flat and par-

allel with that of the other. Projecting from this surface of the part A is a stop-lug, x , with two faces, 1 2, and a supporting-flange, w , concentric with the aperture z . On the surface y^2 of the part B a concentric segmental projection, v , is formed so as to fit within the flange w . The two ends 3 4 of this projection abut respectively on the ends 1 2 of the stop-lug x to arrest and support the seat in its horizontal and vertical positions. In the former or effective position of the seat the pressure or strain is sustained by the rear end of the projection v and the supporting-flange w , and the clamping-bolt is thus relieved from the same.

The supporting-flange w and the projection v are made sufficiently thick and the stop-lug x sufficiently long to possess the requisite strength. The length of the projection v is determined by that of the stop-lug and the space through which it is to move between the positions of the seat.

The depth of the projections need only be sufficient to obviate slipping in case the bolt should be loosened. The hinge may be as small in diameter as other hinges now in use in which inclosed stop-lugs are employed.

To provide for unshipping the seat a space, u , is left behind the stop-lug x of sufficient size to permit the escape of the projection v when the seat-arm is in vertical position, as illustrated in Fig. 4.

The bolt C may be of the form commonly employed, with countersunk head at one end and a screw-nut adapted to be turned by the ordinary wrench at the other.

The following is claimed as new—

A seat-hinge comprising a central bolt, C, for clamping the parts together, and a flange, w , having a recess, u , a stop-lug, x , and a projection, v , concentric therewith, and formed and arranged on the standard and seat-arm, substantially as herein described.

MARCELLUS W. CHASE.

Witnesses:

GEORGE D. EMERSON,
WESLEY CHASE.