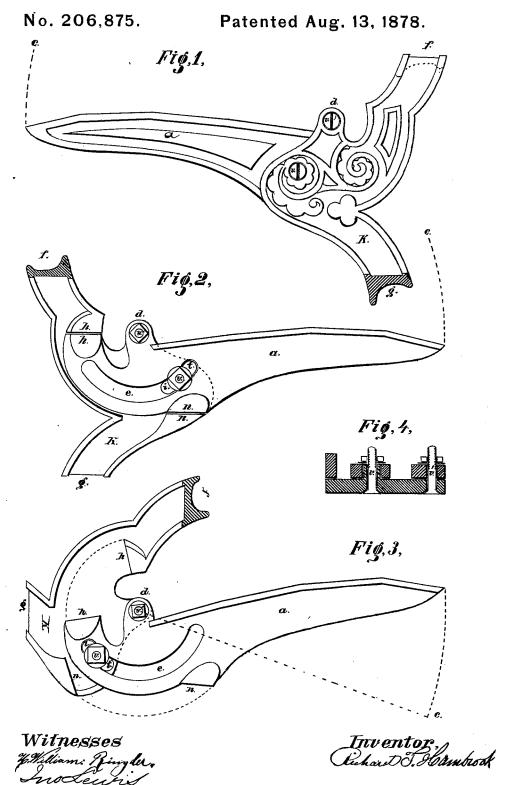
R. T. HAMBROOK. Hinge for Folding-Seats



## UNITED STATES PATENT OFFICE.

RICHARD T. HAMBROOK, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN HINGES FOR FOLDING SEATS.

Specification forming part of Letters Patent No. 206,875, dated August 13, 1878; application filed February 28, 1878.

To all whom it may concern:

Be it known that I, RICHARD T. HAMBROOK, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hinge-Joints for Folding Seats; and do hereby declare the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification.

The nature of my invention consists in the novel combination and arrangement of an arm-bracket having a curved slot adapted to engage a suitable bolt, which bolt is provided with an oblong and slightly curved piece fitting loosely in the slot, this curved piece or projection forming a part of the pedestal or standard, the whole constituting an improved hinge-joint for folding seats, schooldesks, chairs for churches, public halls, railway-coaches, &c., all as hereinafter more fully described and definitely claimed.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 represents the outside of seat-arm, lock, and joint adjusted for use. Fig. 2 represents the inside of seat-arm, lock, and joint adjusted for use. Fig. 3 represents the seat-arm folded. Fig. 4 represents a sectional view of the joint.

K represents the pedestal or standard, the same being made of east-iron, hard wood, or other suitable material, of which g is the lower extremity and f the upper extremity, represented on the diagram.

a represents the arm of the seat, made of iron, wood, or other suitable material. The dotted line represented by c shows the direction of swing of the seat-arm. d represents the fulcrum of the seat-arm. i t is a curved projection of the pedestal K, of which it forms part, which fits closely into and revolves freely within the curvilinear slot e in the arm a as the seat-arm is moved, and whose exterior surface may be flush with the adjacent sur-

face of the seat-arm, or may project a trifle beyond said surface, but in either event allowing the bolt V to perform the office hereinafter mentioned. Said bolt V is a screw-bolt which passes through the pedestal and its curved process or projection *i t*, the nut being screwed on the inside, and a metallic washer of sufficient surface to project over the adjacent lips or edges of the seat-arm being interposed between said nut and the seat-arm, and fitted closely thereto, in order to prevent any lateral movement, loosening, or oscillation thereof when the seat is in use. V' is a screwbolt connecting the seat-arm with the pedestal, and allowing the former to revolve upon it. h h and n are stops or shoulders east upon or otherwise rigidly attached to the pedestal and seat-arm, respectively, to sustain the seat-arm in its position when the seat is adjusted for use. A rubber pad or other compressible substance is interposed between the bearings at the shoulders h h and n n when the seat is

The difficulty heretofore with hinge-joints has been their tendency to lateral movement, unsteadiness, loosening, and oscillation. Such tendency is entirely overcome by the use of the projections  $i\ t$ , which hold the seat-arm firmly in its place, and likewise allow complete freedom of vertical motion.

I am aware of school-desk seats having the features of mine, except the bolt provided with the oblong curved piece *i t*, and therefore do not broadly claim such construction; but

What I do claim, and desire to secure by Letters Patent, is—

Letters Patent, is—
In a school-desk, the arm-bracket a, having the curved slot e, adapted to engage in the bolt V, said bolt having the ordinary nut and washer, and being provided with the oblong and slightly curved piece i t, loosely fitting in slot e, all combined as and for the purpose set forth.

## RICHARD T. HAMBROOK.

Witnesses:

JNO. LEWIS, H. C. WHITNEY.