

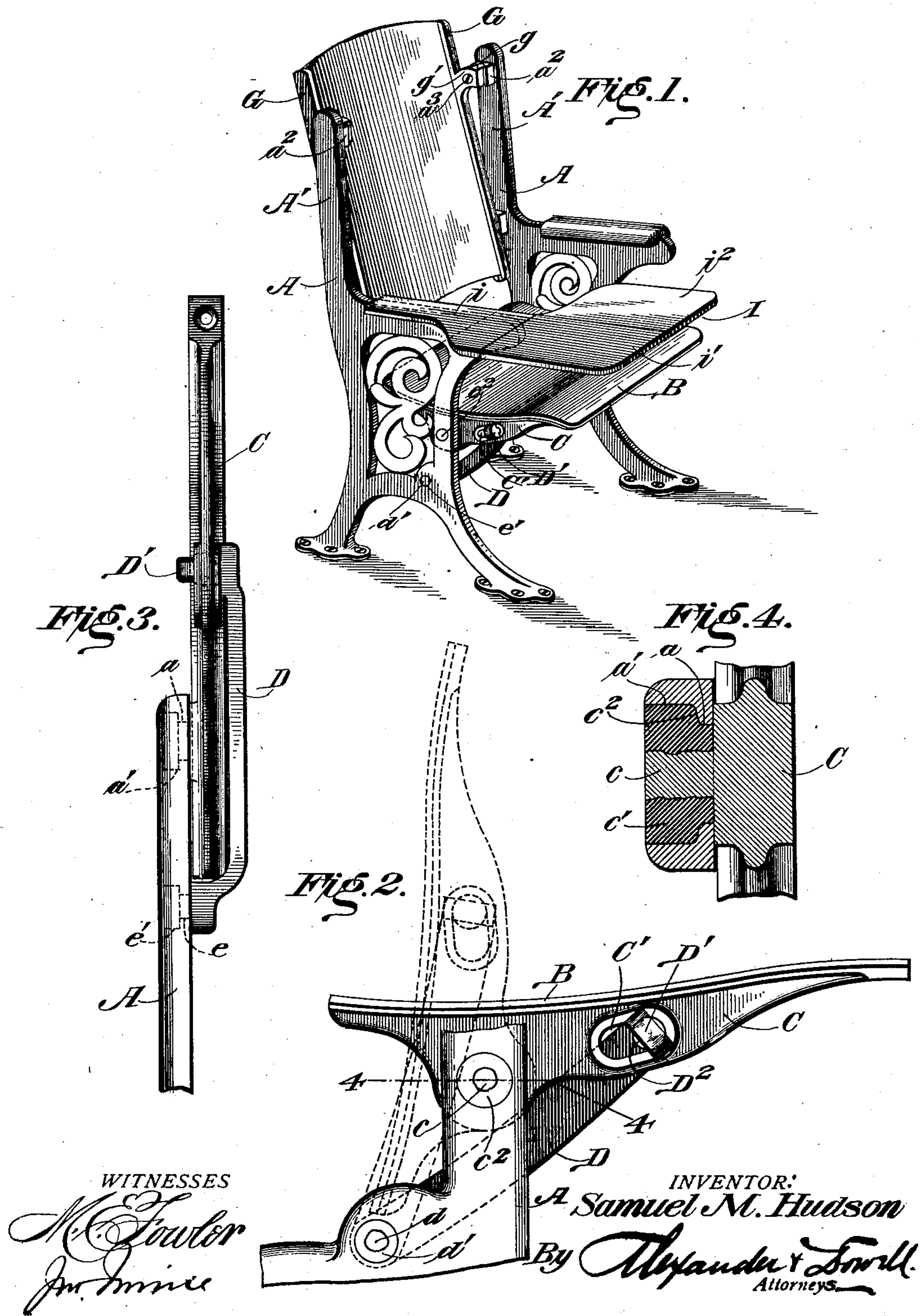
No. 701,728.

Patented June 3, 1902.

S. M. HUDSON.
CHAIR.

(Application filed May 28, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

SAMUEL MADISON HUDSON, OF ATHENS, OHIO.

CHAIR.

SPECIFICATION forming part of Letters Patent No. 701,728, dated June 3, 1902.

Application filed May 28, 1901. Serial No. 62,281. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL MADISON HUDSON, of Athens, in the county of Athens and State of Ohio, have invented certain new and useful Improvements in Chairs, Desks, &c.; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to furniture, and particularly to opera-chairs and desks having folding and adjustable parts.

The essentials of the invention are summarized in the claims following the detailed description of the invention, as illustrated in the accompanying drawings, which show one practical embodiment of the invention applied to an opera or folding-seat chair.

In said drawings, Figure 1 is a perspective view of an opera or folding chair constructed in accordance with my invention. Fig. 2 is an enlarged side view of the seat-bracket, showing its attachment to standard and brace. Fig. 3 is a front view of Fig. 2, partly in folded position. Fig. 4 is a section on line 4 4, Fig. 2, enlarged.

A designates the standards of a chair, to which the supporting-brackets C of seat B are pivoted, said standards being provided with upstanding portions A', to which the back is connected, as hereinafter explained. The general form and construction of the seat-standard, seat, and back are non-essentials, the present invention being applicable to a variety of chairs, desks, &c., the drawings illustrating these parts sufficiently to impart a clear understanding of the invention.

At the point where it is desired to connect the seat-bracket C to the standard A a hole *a* is made in the standard, this hole being of larger diameter at the side opposite the bracket, as shown at *a'*. The seat-bracket C is provided with a projecting lug or pin *c*, which is passed through opening *a*, and when the parts are thus adjusted the hole and the annular cavity formed in the enlargement of the hole *a* around the end of pin *c* is filled with cast metal, preferably Babbitt metal, which adheres firmly to the pin *c*, the latter being preferably roughened or angular on its end, so as to cause the metal to hold firmly thereto. This Babbitt metal forms an anti-

friction-journal on the pin *c*, which accurately fits the hole *a* and recess *a'*, and its enlarged head securely holds the pin in the hole and prevents rattling. Babbitt metal being non-frictional, the seat-bracket can be turned easily and quietly on the standard. By reference to Fig. 4 it will be seen that the anti-friction-journal has a broad cylindrical bearing on the standard, as at *a'*, which sustains the weight of the seat, and it also has a large annular bearing, as at *c'*, laterally against the standard, which prevents lateral play of the journal. The peculiar shape of this journal is one of the novel features of the invention, as it makes and maintains a closer and better wearing joint than a merely straight cylindrical or a conical bearing would afford. The joint formed by this method is simple, practical, and durable, avoids the trouble caused by the ordinary bolt-and-nut joints commonly employed, which soon become loose and noisy, whereas my joint is permanent and noiseless. Of course the same result would be obtained if the pin was on the standard and the hole in the seat-bracket, one construction being simply the reverse of the other, the results being identical.

The seat-bracket may be limited in its movement by the usual arrangement of stop-lugs on the bracket and standard or in any other desired way. The means illustrated in the drawings for this purpose are novel and preferred and also perform the office of a brace or stay. This means consists of a brace-bar D, having a pin *d* on its lower end which enters a hole *e* in the standard below the seat-bracket pivot thereto, said hole having an enlarged recess *e'* at its outer end and being filled after pin *d* is inserted therein by a Babbitt-metal journal *d'*, cast on pin *d* in the same manner that journal *c'* is cast on pin *c*, as above described, the mode of connection of the seat-bracket and seat-brace to the standard being substantially identical. In like manner it would be an obvious reversal to put the pin on standard and the hole in the brace-bar.

The upper end of the brace-bar D is provided with a T-headed lug D', which is engaged with a slot C' in the web of the seat-bracket, as shown. The head of this lug stands transverse to the bar and to the slot,

so that when the parts are assembled the head D' cannot disengage the slot. (See Fig. 2.) It is engaged therewith prior to attaching the bracket or the brace to the standard. Preferably the shank of the lug D' is provided with a babbitt washer D², which may be cast thereon, if desired.

Babbitt metal is referred to herein because it is a good well-known antifriction metal for bearings, &c.; but I do not confine myself to its use in the described connection, as any other satisfactory material may be employed.

As the bracket C and brace D are pivoted to the standard at different points, the brace will serve to limit the turning movement of the bracket on the standard, a quarter-turn of the seat being generally sufficient. Thus when the seat is lowered to the proper point the lug D' engages the outer end of slot C' and stops the seat and relieves the seat hinges or pivots of a great deal of strain, and when the seat is thrown up the brace prevents its being thrown too far back by again engaging the outer end of slot C'.

Obviously the seat-brace, as described, may be used in connection with seats hinged to the standards otherwise than by the novel pivot described herein, and I do not therefore confine myself to its employment in the specific combination shown.

Having thus described my invention, what I therefore claim as new, and desire to secure by Letters Patent thereon, is—

1. The combination of two members, one having an opening formed with an enlargement, the other member having a pin entering said opening, and a metal washer cast on the pin and filling the enlargement of the opening and forming a rotatable journal therein, thereby permanently hinging or pivoting the parts together, substantially as described.

2. The combination of two members, one having an opening enlarged at one end, the other member having a pin engaging said opening, and a non-frictional metal washer fixedly secured on the end of the pin and rotatable therewith and filling the enlargement of the opening, thereby permanently hinging or pivoting the parts together, substantially as described.

3. The combination of a member having an opening provided with an enlargement, a second member having a lug or pin entering said opening and projecting into said opening; and a non-frictional washer or journal filling

said enlargement and cast on the lug, said washer rotating with the pin and forming an antifriction-journal permanently pivoting the parts together, substantially as described.

4. The combination of a member having an opening provided with a circular enlargement at one end, a second member having a lug or pin entering said opening and projecting into said enlargement, and a non-frictional washer cast on the lug, said washer being rotatable with the lug and filling said opening and enlargement and permanently pivoting the parts together, substantially as described.

5. The combination of the standard and seat-bracket, an opening in one member having an enlargement; a pin or lug on the other member entering in said opening, and a non-frictional washer filling said enlargement and cast onto and rotatable with the pin for the purpose and substantially as described.

6. The combination of the standard having an opening provided with a circular enlargement at one end, a seat-bracket having a lug or pin entering said opening projecting into said enlargement, an antifrictional metal washer cast onto and rotatable with a pin, and said washer forming the journal of the seat-bracket and permanently uniting the parts for the purpose and substantially as described.

7. The combination of the standard having an opening provided with a circular enlargement the brace-bar having a pin entering said opening, and a metal washer cast on the pin and filling the enlargement of the opening, thereby permanently hinging or pivoting the parts together; with a seat-bracket pivoted to the standard and having a pin-and-slot connection to the brace-bar for the purpose and substantially as described.

8. The combination of the standard, and brace-bar an opening in one member having an enlargement, a pin or lug on the other member projecting into said opening, and a non-frictional washer filling said enlargement and fixedly secured to the pin, with a seat-bracket pivoted to the standard and having a pin-and-slot connection to the brace-bar for the purpose and substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

SAMUEL MADISON HUDSON.

In presence of—

MAY HUDSON,

BLANCHE KELLEY.