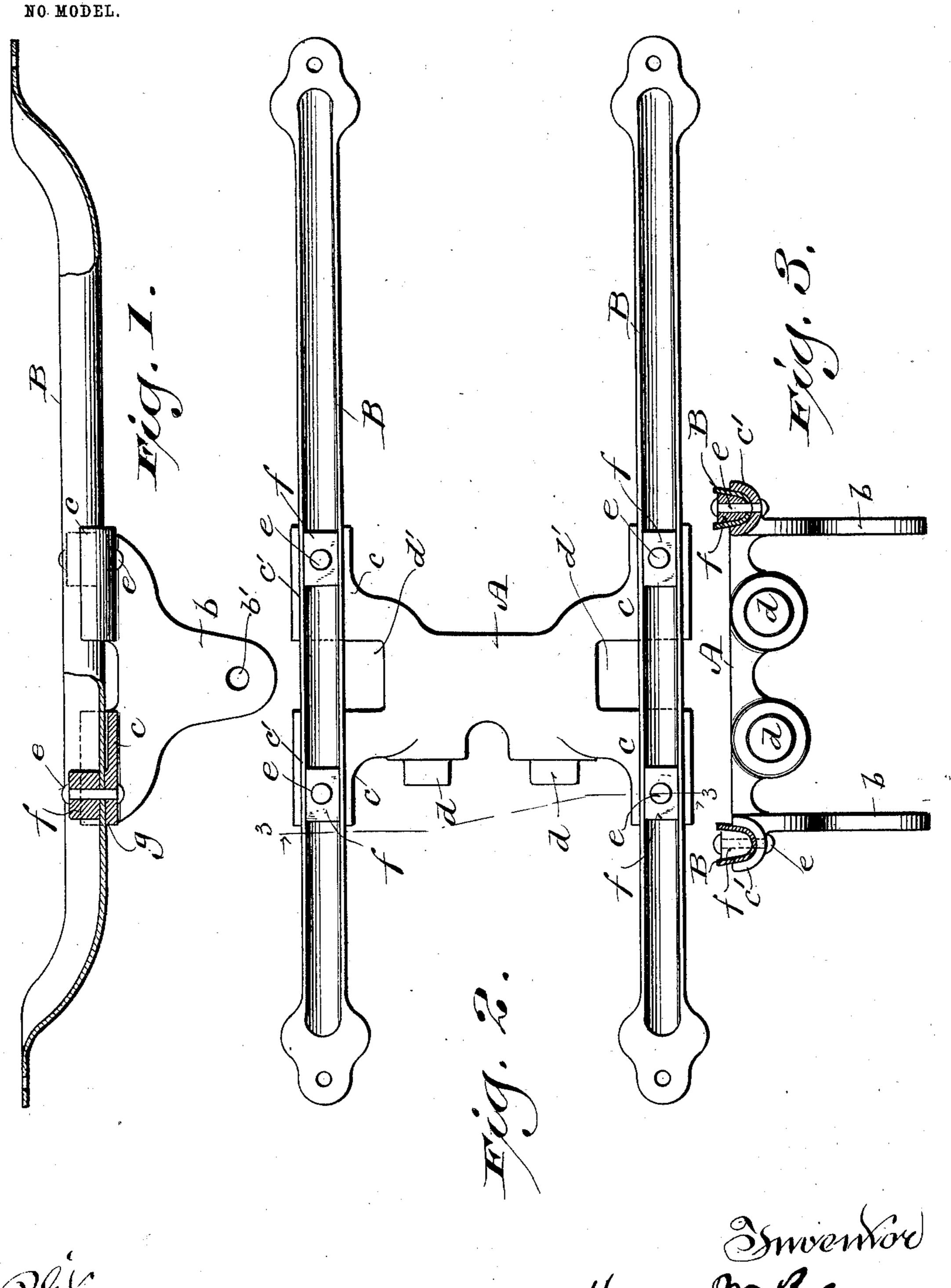
## H. W. BOLENS. SEAT SPIDER.

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## UNITED STATES PATENT OFFICE.

HARRY W. BOLENS, OF PORT WASHINGTON, WISCONSIN.

## SEAT-SPIDER.

SPECIFICATION forming part of Letters Patent No. 719,729, dated February 3, 1903.

Application filed January 5, 1901. Serial No. 42,167. (No model.)

To all whom it may concern:

Be it known that I, HARRY W. BOLENS, a citizen of the United States, and a resident of Port Washington, in the county of Ozaukee and State of Wisconsin, have invented certain new and useful Improvements in Seat-Spiders; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide the chair and stool trade with economical seat-spiders, the arms of which are not susceptible to fracture under any of the various conditions to which seat-spiders are ordina-15 rily subjected; and it consists in what is hereinafter particularly set forth with reference to the accompanying drawings and subsequently claimed.

Figure 1 of the drawings represents a partly-20 sectional side elevation of a tilt-seat spider made in accordance with my invention; Fig. 2, a plan view of the spider; and Fig. 3, a transverse sectional view of said spider, the view being taken on line 3 3 in the second 25 figure of the series.

Referring by letter to the drawings, A indicates the spreader, at the opposite ends of which, between its front and rear edges, are formed depending ears b, perforated, as at 30 b', for the reception of the usual pintle whereby the spreader is pivotally mounted upon the

usual swiveled support. (Not shown.) B designates the spider-arms, which are mounted on the spreader, as will hereinafter 35 appear, the said arms being preferably formed of sheet metal and semitubular—that is, substantially U-shaped in cross-section.

At the rear edges the spreader may be provided with depending perforated tension-rod 40 and spring-receiving lugs d and at its opposite sides or ends with recesses d' for the engagement of the usual stop-ears common to the usual tilt-seat standard or support. By forming the notches d' there are left at the 45 four corners of the spider extensions c, the extensions of each side alining. These extensions or wings are so shaped as to constitute alining seats c' for the spider-arms—that is to say, they conform in cross-section to that 50 of the arms.

formed of sheet metal, and to give them proper rigidity they are semitubular in crosssection, and likewise are the seats c'. These spider-arms are curved longitudinally, flat- 55 tened, or made horizontal between their ends to set squarely on their seats and terminate in flat perforated attaching ends. The seats c' and spider-arms are incidentally perforated, in the present instance, to receive rivets e, 60 washers f, corresponding to the configuration in cross-section with the arms, being likewise perforated and seated in said arms. It is also preferable in case the spreader is made of cast metal to provide the seats c' thereof with 65 slightly-elevated portions g, such being for contact with the arms B and utilized to avoid the necessity of dressing the seats c' throughout their length. The extensions c extend outward beyond and are supplemental to the 70 spreader to provide for a desirable increase of width between the spider-arms B.

While the invention as herein shown and described is especially designed for tilt-seat chairs, it is applicable to other varieties of 75 chairs and to various kinds of stools, it being practical to vary the structural details of the improved spider according to its utility in the chair and stool trade without departure from the essential characteristics of the invention. 80

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

1. A seat-spider, comprising a spreader having pivot-ears, outward lateral extensions 85 wholly beyond the same and the spreader, and sheet metal substantially semitubular spider-arms mounted in seats formed on said extensions.

2. A seat-spider, comprising a spreader hav- 90 ing pivot-ears, outward lateral extensions wholly beyond the same and the spreader, and spider-arms mounted in said extensions.

3. A seat-spider, comprising a spreader provided at its opposite ends with ears adapted 95 for attachment to the support, and wholly beyond said ears of the spreader provided with lateral extensions provided with seats and spider-arms mounted on and secured to the latter.

4. A seat-spider, comprising a spreader pro-In the present instance the spider-arms are | vided at its opposite ends with ears adapted

for attachment to the support, and at each side of each of said ears and wholly beyond the same and spreader provided with extensions, seats formed in the extensions, and 5 spider-arms mounted and secured therein and conforming thereto.

5. A seat-spider, comprising a spreader pro-

vided with pivot-ears, seats curved in crosssection, supported wholly beyond the ears 10 and spreader and spider-arms terminating in attaching ends and curved in cross-section and fitting and secured to said seats.

6. A seat-spider, comprising a cast-metal spreader, seats curved in cross-section and 15 at their ends having elevations supported spider-arms conforming in cross-section to the said seats and resting on the elevations thereof.

7. A seat-spider, comprising a spreader having pivot-ears and wholly beyond the spreader and said ears provided with a pair of exten-

sions, and sheet-metal semitubular arms secured on said extensions.

8. A seat-spider, comprising a spreader, 25 extensions having curved seats connected thereto and wholly beyond the same, sheetmetal spider-arms semitubular or U-shaped in cross-section seated therein, washers fitting said arms, and rivets passed through the 30 washers, spider-arms and seats.

9. A seat-spider, comprising a spreader having trough-like seats and sheet-metal spiderarms curved in cross-section and secured within the same, the ends of said arms being 35

adapted to be attached to a seat.

In testimony that I claim the foregoing I wholly beyond the spreader, and sheet-metal | have hereunto set my hand, at Port Washington, in the county of Ozaukee and State of Wisconsin, in the presence of two witnesses. 40 HARRY W. BOLENS.

Witnesses:

C. A. SEIFERT, EDW. BARRELMAN.