

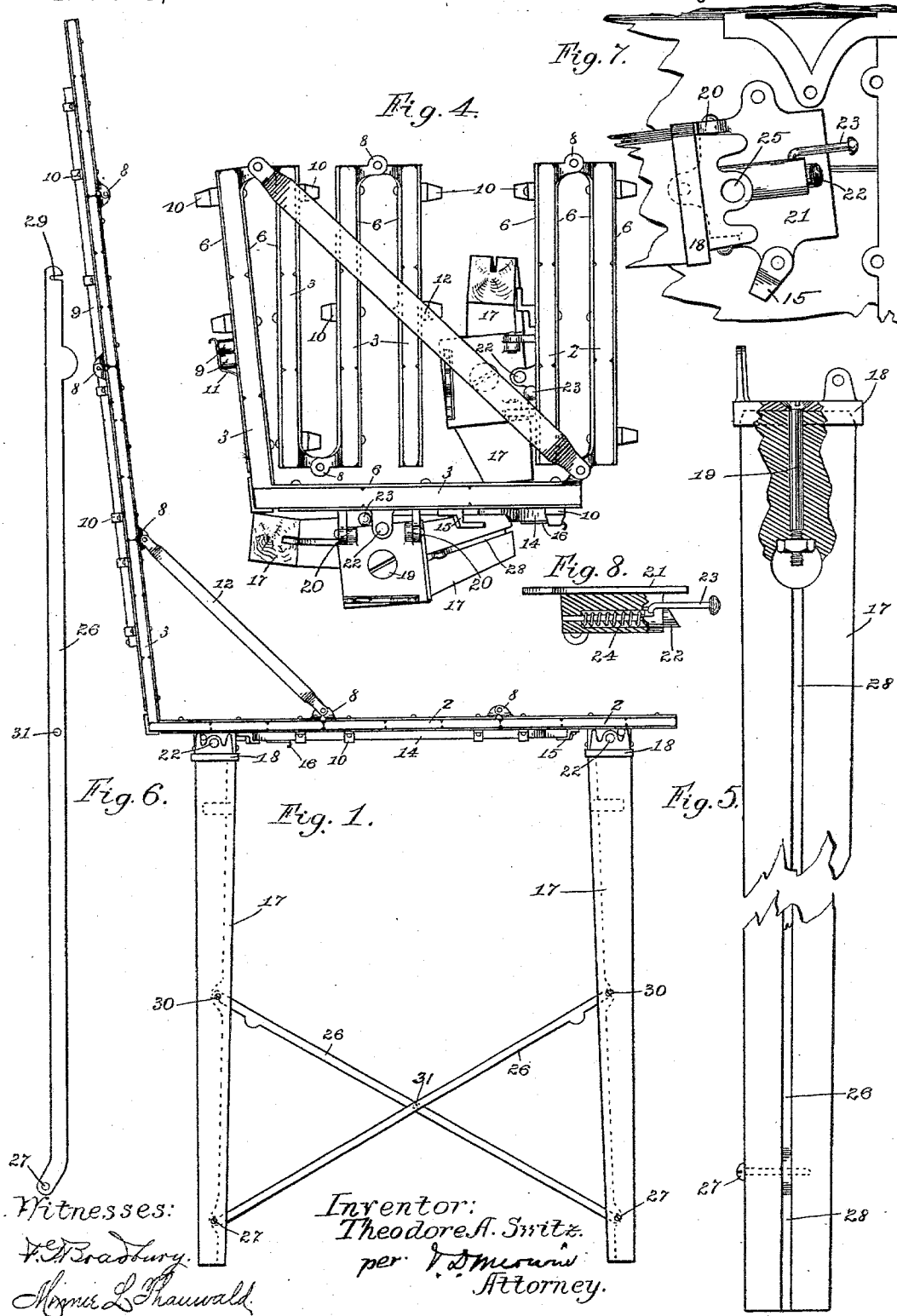
(No Model.)

2 Sheets—Sheet 1.

T. A. SWITZ.
FOLDING CHAIR.

No. 563,816.

Patented July 14, 1896.



Witnesses:
V. H. Bradbury.
Homer L. Chauwald.

Inventor:
Theodore A. Switz.
per J. M. Brown
Attorney.

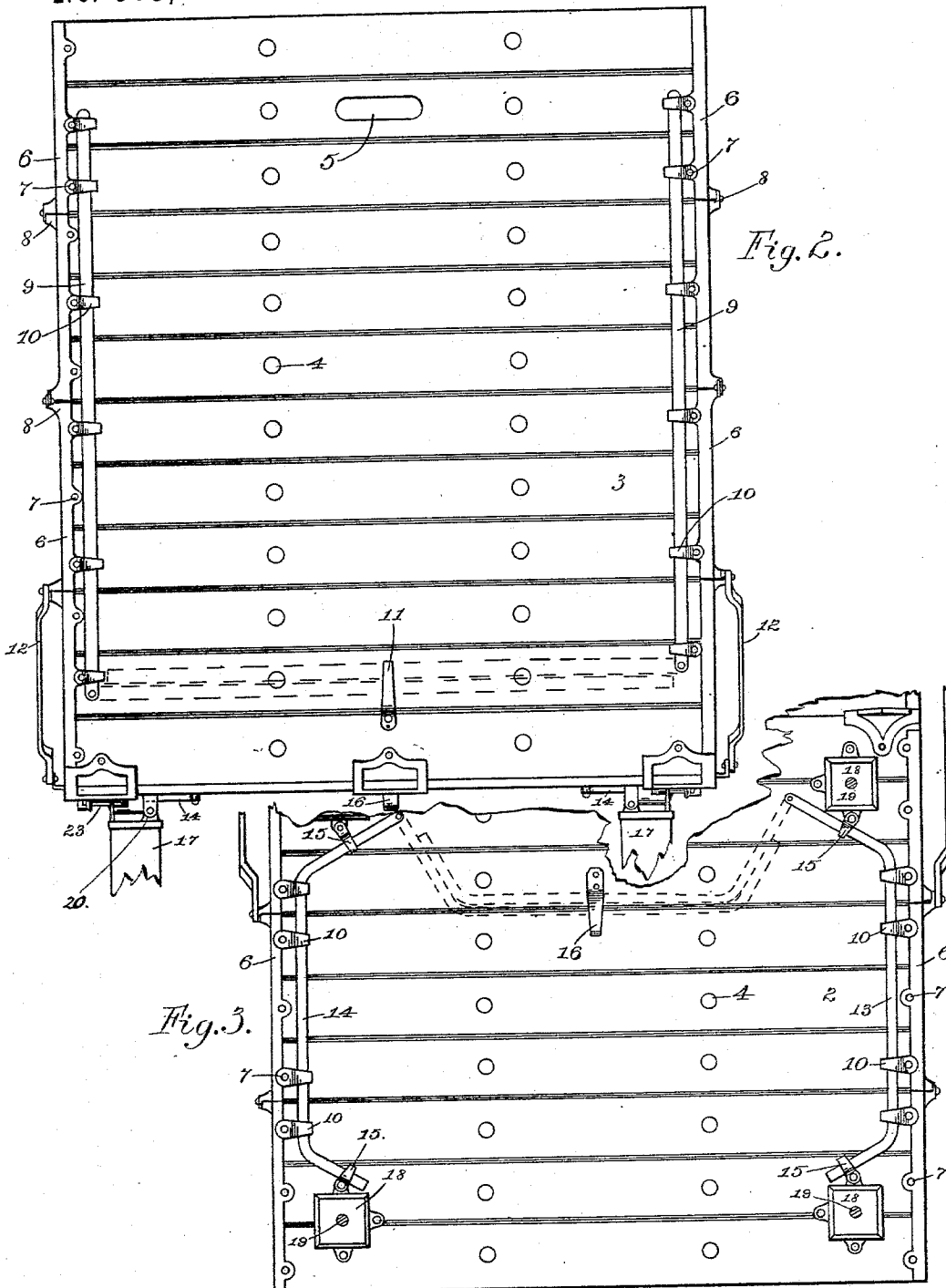
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Witnesses:

V. D. Broadberry.
Amos L. Thauwald.

Inventor:
Theodore A. Switz.
per: *V. D. Merwin*
Attorney.

UNITED STATES PATENT OFFICE.

THEODORE A. SWITZ, OF ST. PAUL, MINNESOTA.

FOLDING CHAIR.

SPECIFICATION forming part of Letters Patent No. 563,816, dated July 14, 1896.

Application filed July 29, 1895. Serial No. 557,412. (No model.)

To all whom it may concern:

Be it known that I, THEODORE A. SWITZ, of St. Paul, Ramsey county, Minnesota, have invented certain Improvements in Folding Chairs, of which the following is a specification.

My invention relates to improvements in folding chairs, its object being to provide an improved construction, which will permit the parts of the chair to be folded into compact form and small compass, so as to be fitted into a case for convenient handling when not in use.

To this end my invention consists of the features of construction hereinafter more particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of my improved chair open for use. Fig. 2 is a rear elevation of the chair-back. Fig. 3 is a bottom plan view of the chair-seat. Fig. 4 is a side view of the chair when collapsed and folded together for packing. Fig. 5 is a detail of one of the chair-legs. Fig. 6 is a detail of one of the braces for connecting the front and rear legs. Fig. 7 is a detail of the leg-socket for connecting the same to the seat of the chair, and Fig. 8 is a detail of the locking device for securing the leg in outturned position.

In the drawings the bottom and back of the chair are made, preferably, of sections 2 and 3, having ventilating perforations 4, the top section 3 of the back being also preferably provided with a hand-hole 5. These sections are strengthened and prevented from splitting by end cleats 6, secured one on each side by means of rivets, bolts, or screws 7. These cleats are connected together by means of hinges 8, oppositely folding or turning, so as to collapse the sections upon each other, as shown in Fig. 4. The back when opened or extended is held in such position by means of the locking-bars 9, pivoted at one end to the lower section, and adapted to engage the fingers or hooks 10, projecting from the cleats 6, as shown in Fig. 2. When in collapsed or folded form, the bars 9 are turned to overlap each other upon the section to which they are pivoted, and held in place by means of the finger or hook 11, as indicated by dotted lines in Fig. 2. The back is further secured to the seat by means of the

braces 12, one on each side, which are offset sufficiently to allow the folded sections of the seat and back to be intumed between, as shown in Fig. 4. The three sections of the seat are similarly held together by cleats 6, connected together by the hinges 8, so as to fold in the same instead of opposite directions, as is the case with the back-sections, and are locked in extended position by the locking-bars 13 and 14, pivoted to the section adjacent the back, and engaging the hooks or fingers 15 upon the chair-leg socket, and the hooks or fingers 10 upon the cleats 6, and when collapsed are folded together upon the section to which they are pivoted, and held in place by means of the finger or hook 16, as indicated by the dotted lines in Fig. 3.

The legs 17 are held in place by means of sockets 18, to which they are secured by means of the bolts 19, (see Fig. 5,) each socket being secured by means of the hinge 20 to the plate 21, which is permanently fixed to the seat of the chair, the socket being locked to the plate by means of the spring bolt or catch 22, provided with the push-pin 23, and held in thrust position normally by the spring 24, the projecting beveled end of the bolt 22 engaging the hole 25 of the socket when the leg is outturned at right angles with the seat.

The front and rear legs are connected by the folding braces 26, one end of which is pivoted at 27 in the groove 28 in the leg, into which groove the brace is folded when not in use, the other end being provided with the hook 29, which engages a pin 30 about midway of the opposite leg, the braces being further interlocked by means of a stud 31 on one of the braces adapted to engage a corresponding socket in the opposite brace, as shown in Fig. 1.

When it is desired to collapse or fold the chair, the locking-bars 9 are freed from the fingers 10 and folded upon each other, as indicated by the dotted lines in Fig. 2. The upper sections of the back are then folded upon each other and turned downward toward the bottom, as shown in Fig. 4. The braces 26 of the legs are disengaged and folded into the grooves in the legs, the locking-bolts 22 are thrust inward, and the legs folded toward and past each other upon the seat. The locking-bars 13 and 14 are disengaged from the

hooks 10 and 15 and folded together behind the hook 16, as indicated by dotted lines in Fig. 3. The first and second sections of the seat are then folded upon each other and in-
 5 turned with the front legs over the other section of the seat, as shown in Fig. 4. The whole can then be packed into a rectangular box for convenient transportation.

The faces of the leg when outturned are
 10 parallel with the edges of the seat, but the hinges are set at a slight angle with the adjacent edge, (see Fig. 4,) those of each pair being at opposite angles, so that in folding the legs will pass by or over each other.

15 I claim—

1. In a folding chair, the combination of the back and seat, each made up of transverse sections, the hinged connections for said back and seat sections, and the locking-bars
 20 pivoted upon the face of one section of each, and adapted to engage the adjacent sections so as to independently lock the sections of said back and said seat in extended position.

2. In a folding chair, the combination of
 25 the sectional back and seat, the hinged cleats connecting said sections together, the locking-bars engaging said cleats to hold them in extended position, the legs hinged to the seat, the locking-bolts for securing them in out-
 30 turned position, and the interlocking pivoted braces for connecting the front and rear legs.

3. In a chair, the combination of the sectional seat and back, the hinged cleats connecting said sections together and permitting
 35 them to fold upon each other, the braces connecting the rear seat-section and the bottom back-section, the channeled legs, their connected sockets, the hinges connecting said sockets to the seat, the locking-bolts for secur-
 40 ing said sockets with the legs in outturned position, and the braces pivoted to said legs, each adapted to engage the opposite leg, and also adapted to be folded into the channel in said leg when not in use.

4. In a folding chair, the combination of
 45 the transverse sections of the seat and back, the hinges or joints connecting the adjacent sections permitting them to be folded upon each other, the bars pivoted upon the face of
 50 one section and adapted to sweep the adjacent sections when extended, and the clips upon said adjacent sections offset therefrom to receive the free ends of said bars.

5. In a folding chair, the combination of
 55 the back formed with a series of horizontal sections, the seat formed with a series of similar transverse sections, the hinges connecting the adjacent sections of the back and of the seat, the braces rigidly connecting the rear
 60 seat-section with the lower back-section, the locking bars or arms pivoted respectively to the lower back-section, and the rear seat-section adapted to be turned transverse of the adjacent sections, so as to lock them in ex-
 65 tended position.

6. In a folding chair, having its back and seat formed of transverse sections, the com-

bination therewith of the braces connecting the lower back-section with the rear seat-section, thus forming two sides of a parallelo- 70
 gram, the hinges connecting the adjacent sections of the seat and of the back, so as to permit them to be folded upon each other, and within the angle formed by the lower back-section and the rear seat-section, and the 75
 means for locking said sections in extended position.

7. In a folding chair having its seat and back formed of transverse sections, and the rear seat-section and lower back-section rig- 80
 idly connected to form one angle of a parallelogram, the combination with said sections, of the hinges connecting the same together and permitting them to be folded upon each other and into the angle formed by said first- 85
 named sections, and the locking-bars pivoted to said first-named sections and adapted to engage the other sections, so as to lock them in extended positions.

8. In a folding chair, having its back and 90
 its seat formed with transverse sections hinged together and adapted to fold upon each other, and the lower back-section and the rear seat-section rigidly connected to form an angle of a parallelogram, and adapted to receive 95
 the adjacent sections when folded upon each other, in combination therewith, the locking-bars pivoted to said rigidly-connected sections and adapted to be turned transversely of the adjacent sections, and the clips upon said ad- 100
 jacent sections, adapted to be engaged by said bars so as to lock said sections rigidly in the same plane.

9. In a folding chair, the combination with the seat formed of transverse sections hinged 105
 together, of the legs hinged respectively to the front and rear sections of said seat, and the members pivoted to said legs near their bottom each adapted to engage the opposite leg near its top when the legs are extended, 110
 and when thus extended to interlock with each other, and also adapted to fold into or upon the leg to which they are respectively pivoted.

10. In a folding chair, the combination of 115
 the back formed with a series of transverse sections, the seat formed with a series of similar transverse sections, the hinges connecting the adjacent sections of the back and of the seat, the sections of said back folding over 120
 and back upon each other and upon the rear seat-section, and the legs so hinged to the bottom of the front seat-section as to fold toward and past each other upon said section, and in the folding of the parts to be carried 125
 into the space between said section and the folded sections of the back.

11. In a folding chair, the combination with its seat, of the channeled legs hinged thereto, and adapted to be folded thereupon, the lock- 130
 ing-bolts for securing said legs in extended position, the brace pivoted in the lower end of the channel of each leg, and adapted to be folded so as to lie in said channel, and pro-

vided with a hook to engage a pin within the channel of the opposite leg, and the means for interlocking the crossed braces of the opposite legs.

5 12. In an article of the class described, the combination with the chair-seat made up of the series of transverse sections hinged together, of the bars pivoted upon one section and swinging over the adjacent sections, offset clips upon said adjacent sections engaged
10 by said bars so as to hold the sections in extended position, the legs hinged respectively to the front and rear sections, and the interlocking connections between said legs adapted
15 to hold the same extended, or to be released and allow the legs to fold against the seat-sections.

13. In an article of the class described, the combination of the chair-seat made up of a series of transverse sections, the hinged cleats
20 connecting said sections together, and permitting them to be folded upon each other, the locking-bars pivoted upon the face of one section and adapted to engage the adjacent sections to lock them in extended position,
25 and the legs hinged to the seat-sections and adapted to be folded against the same.

In testimony whereof I affix my signature in presence of two witnesses.

THEODORE A. SWITZ.

Witnesses:

T. D. MERWIN,

MINNIE L. THAUWALD.