

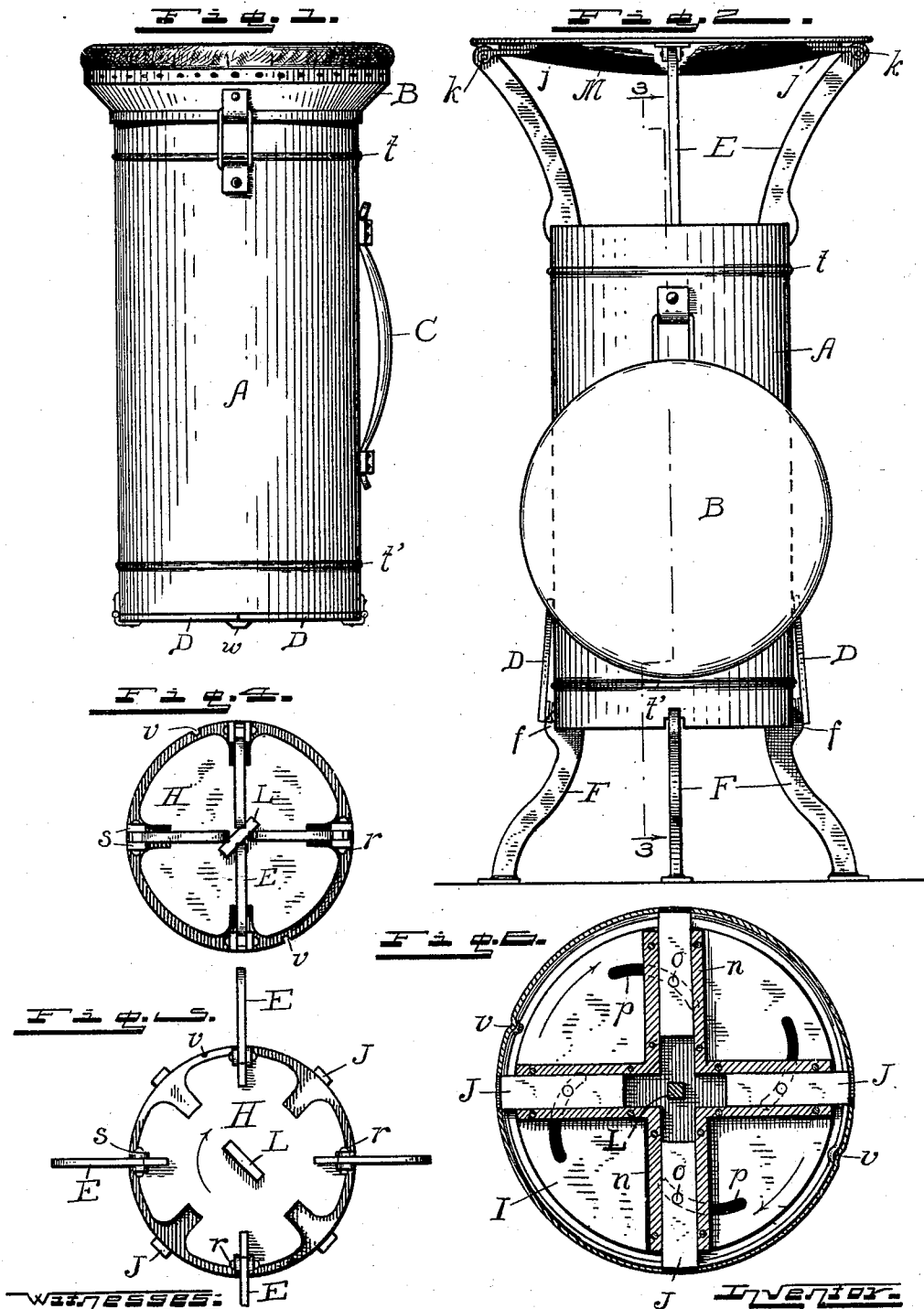
(No Model.)

2 Sheets—Sheet 1

J. HEARTTAGEN.
FOLDING SEAT.

No. 577,955.

Patented Mar. 2, 1897.



F. W. Hoerner.
W. M. Dunlap.

John Hearttagen,
by Heber S. Parson,
ATTORNEY.

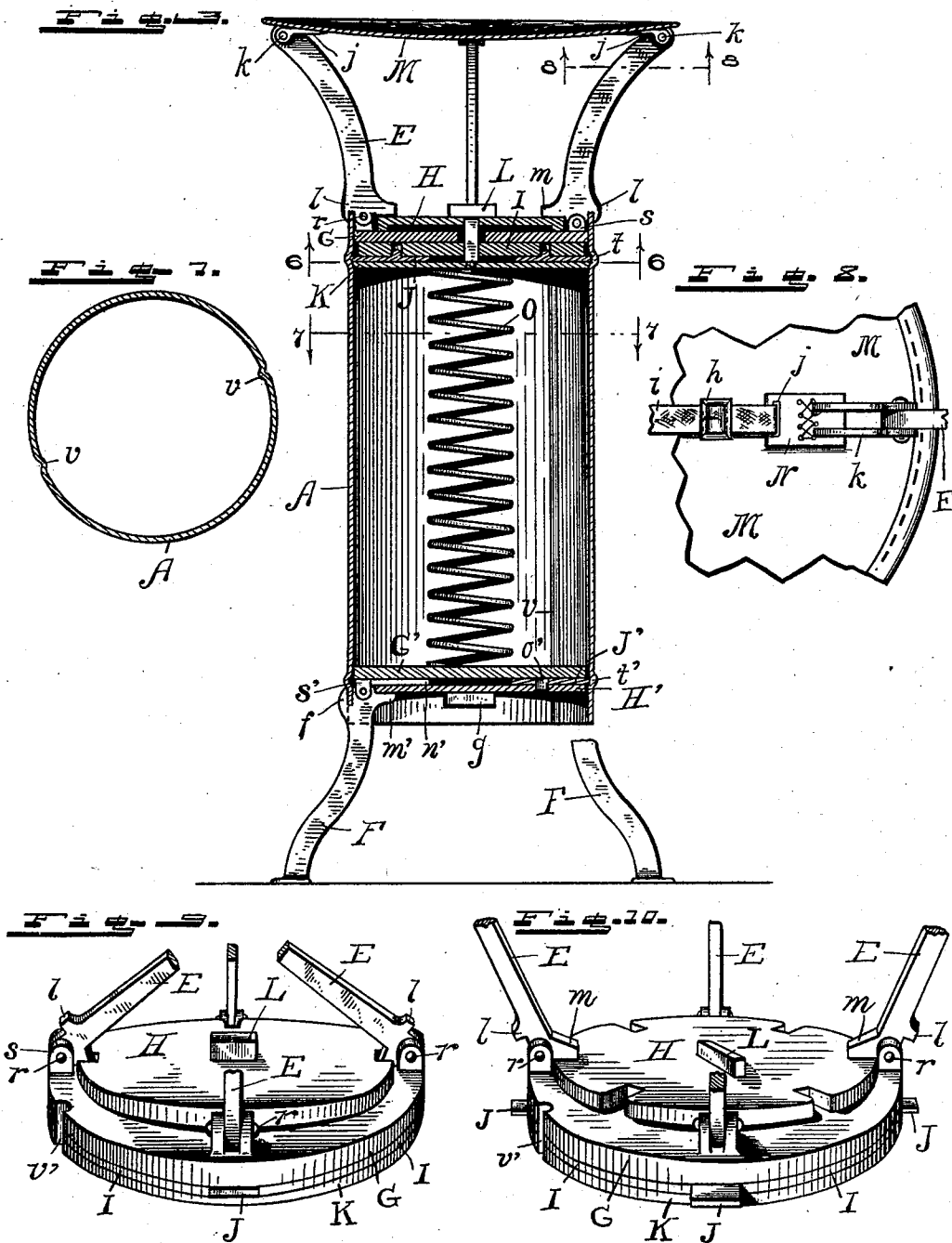
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WITNESSES:

F. M. Hoerner.
W. M. Dunlap

INVENTOR:

John Heartttagen.
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UNITED STATES PATENT OFFICE.

JOHN HEARTTAGEN, OF ALLENTOWN, PENNSYLVANIA.

FOLDING SEAT.

SPECIFICATION forming part of Letters Patent No. 577,955, dated March 2, 1897.

Application filed July 20, 1896. Serial No. 599,764. (No model.)

To all whom it may concern:

Be it known that I, JOHN HEARTTAGEN, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Folding Seats; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to

10 which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

15 My invention relates to folding seats of that class having an outer casing or wall within which the seat and legs are adapted to be folded when not in use and having a means for holding the seat and legs in adjustment when in use.

20 The objects of my invention are to provide a seat of this class that will be light and easy of adjustment, that can be folded into small compass when not in use, and carried as a hand-satchel, that is adapted to be carried by tourists upon excursions, and to be used generally where a light portable seat is desired.

25 The invention consists in the construction and combination of parts shown in the accompanying drawings, and described in the following specification.

30 In the drawings, Figure 1 is a side elevation of my improved folding seat, showing it telescoped or folded together. Fig. 2 is a like view with the top removed and showing the upper and lower extensions. Fig. 3 is a vertical central section of the same on the dotted line 3 3 of Fig. 2. Fig. 4 is a top or plan view of the upper arm mechanism, showing their relative position when withdrawn from the casing. Fig. 5 is a like view showing the arms and fasteners or locking devices extended. Fig. 6 is an enlarged view from below on the dotted line 6 6 of Fig. 3. Fig. 7 is a cross-section on the dotted line 7 7 of Fig. 3, showing the ways or guides. Fig. 8 is an under side view on the dotted line 8 8 of Fig. 3, showing the method of fastening the seat to the arms. Figs. 9 and 10 are perspective views before and after the operation of extending and fastening the arms.

35 A is the casing, which may be made of light

sheet metal or fiber, and is provided with circular grooves *t* and *t'* near its upper and lower ends. A cover B, having its top suitably upholstered or padded, is loosely hinged near the top of the casing A and is adapted to be used as a child's seat. A suitable handle or shoulder-strap C is attached to the side of the casing, and at the lower end are hinged doors D, which are provided with a suitable fastening *w*, by means of which they are held closed when the seat is not in use. Vertical grooves or guides *v* extend between the circular grooves *t* and *t'* lengthwise the casing and on opposite sides thereof. Within the casing are operating devices whereby the seat-supporting arms E and the legs F are operated. The seat-supporting arms E are pivoted to a sliding disk G, having notches *v'*, into which the grooves *v* in the casing fit. The disk G has the ears *s*, between which the arms E are placed and secured by means of the pivots *r*. Upon the disk G rests a notched plate H and beneath the disk is a circular plate I, having segmental slots *p*, which receive the pins *o* of the sliding locking-bars J.

40 The locking-bars J are held in place and supported by a plain disk K, which is provided with notches *v'* and guides *n* of the same thickness as the bars J, which serve to hold said bars in the proper position and to cause them to move in a straight line when the plate I is rotated by reason of the segmental slots *p* engaging the pins *o*, attached to said bars. A key L, having a square shank, passes through H, G, and I and is pivotally attached to K, while G has a large opening which does not engage the shank. H and I, however, are provided with square openings the size of the shank and will therefore turn with the key. The disk G and plate I are prevented from turning by reason of the notches *v'* engaging with the groove *v* in the casing.

45 The arms E have a projecting portion *m*, which rests upon the plate H, as shown in Figs. 3, 5, and 10, when the arms are spread. They are also provided with shoulders *l*, which are adapted to rest upon the edge of the casing A and serve to support the arms when a weight is placed upon them.

50 The seat M is formed from leather, canvas, or other suitable material and has sewed or

otherwise suitably attached to the under side thereof the metal fasteners N, having ears *k* at the outer ends and slots *j* at the inner ends. The upper ends of the arms E are pivoted between the ears *k*, and straps *i* pass through the slots *j*. These straps pass between the fasteners N to reinforce the seat, and their length is adjusted by means of the buckles *h*. The lower end of the casing is provided with a sliding disk G', also provided with notches to fit the grooves *v* in the casing. It is also provided with ears *s'*, between which the legs F are pivoted. To the under side are fastened guides *n'*, similar to the guides *n* on the plain disk K, which hold the locking-bars J', having pins *o'*, in their proper positions. Beneath the disk G' is a notched plate H', similar to the plate H, but provided with segmental notches like those in the circular plate I. This plate H' is rotated by means of a small bar or key *g*, attached thereto. The legs F have a projecting portion *m'*, which engages the plate H' when the legs are extended. They also are provided with notched shoulders *f*, the edge of the casing being adapted to enter the notch. A coil-spring O has its bearing against the plate K and the disk G'.

In Fig. 1 my improved seat is in position to be carried from place to place and, as will be seen, is very compact. When it is desired to use it, the cover B is removed and the doors D are opened, when the coil-spring O will force the top and bottom operating mechanism to the ends of the casing. The arms E are thrown outwardly, and the key L is turned, which causes the plates H and I to rotate, the plate H locking the arms in that position and the plate I causing the locking-bars J to slide outwardly and enter the groove *t* by reason of the segmental slots *p* engaging with the pins *o* on the locking-bars. It will be seen that the seat will be firmly fixed in this position until the key is again turned and the plates H and I again rotated. The operation of securing the legs F is the same, except that but one plate H' is rotated in order to secure the legs F and lock the bars J' into the groove *t'*. The grooves *v* in the casing are to prevent the operating mechanism from turning within the casing.

When it is desirable to form a low seat, as for a child, the cover B is not removed, it only being necessary to open the doors D, when the spring forces the legs F to the end of the casing, when they are adjusted as above described. For this purpose the top of the cover may be suitably upholstered. To close the seat, the key L is turned until the notches in the plate H are opposite the projections *m* on the arms E, which also causes the locking-bars J to slide out of the groove *t*. The arms are folded and pressed down into the casing and the cover B placed in position. The same operation is repeated with the feet F, when the seat will again appear as in Fig. 1.

It will be seen that my folding seat, when

constructed of suitable materials, will be both light and strong, thereby making it easy for ladies or children to carry from place to place.

Having described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a folding seat of the class described, the combination of the casing A, having the grooves *t*, *t'*, and *v*, and provided with a cover B, and hinged doors D, with the seat-supporting mechanism, consisting of the disk K, having guides *n*; locking-bars J, having pins *o*; a circular plate I, having segmental slots *p*; a disk G, having ears *s*, and notches *v'*; the key L, having a square shank; the arms E, pivoted between the ears *s*, and having projecting portions *m*, and shoulders *l*; the plate H; the metal fasteners N, attached to the seat M, and having ears *k*, between which the upper ends of the arms E, are fastened, and the slots *j*; the strap *i*, having the buckle *h*, and the seat M, all substantially as shown and described.

2. In a folding seat of the class described, the combination of the casing A, having grooves *t*, *t'*, and *v*, and the seat-supporting mechanism, with the leg-operating mechanism, consisting of the disk G', having guides *n'*, and ears *s'*; the notched plate H', having the key *g*; the sliding locking-bars J', having pins *o'*, and the legs F, having the projections *m'*, and notched shoulders *f*, substantially as shown and described.

3. In a portable seat, the combination of the casing A, having grooves *v*, *t*, and *t'*; with the locking-bars J, having pins *o*, the plain disk K, having guides *n*, the circular plate I, having segmental slots *p*, the sliding disk G, having notches *v'*, and ears *s*, the notched plate H, the seat-supporting arms E, which support the seat M; the key L, operating the disks K, and G, the plates H, and I, and the bars J; the spring O; the sliding disk G', having guides *n'*, and ears *s'*, to which are secured the legs F, the locking-bars J', the notched plate H', having segmental slots, the key *g*, and the legs F, substantially as shown and described.

4. In a folding seat, having an outer casing, the leg and seat operating mechanism comprising the circular plate I, the plain disk K, the sliding disks G, and G', the notched plates H, and H', the locking-bars J, and J', adapted to be projected into circular grooves in said outer casing, the keys L, and *g*, the seat-supporting arms E, and the legs F, both adapted to be locked by said plates, disks and bars, in combination with the seat M, secured to said arms E, by means of the fasteners N, attached thereto, substantially as set forth.

5. The combination in a folding seat, of the outer casing A, having the grooves *v*, *t*, and *t'*, the top cover B, hinged thereto, and the doors D, secured to the bottom thereof, the seat M, secured to the arms E, by the fasteners N, the arms E, pivotally secured to the disk G, the notched plate H, adapted to

rest upon the disk G. The circular plate I, beneath the disk G, and provided with the segmental slots *p*, the locking-bars J, having the pins *o*, and adapted to enter the groove *t*, the plain disk K, securing said locking-bars against the plate I, the key L, the spring O, the disk G', at the lower end, having ears *s'*, the locking-bars J', having pins *o'*, the plate H', having segmental slots to receive the pins

o', of the bars J', the legs F, secured to the ears *s'*, of the disk G', all as shown and described.

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

JOHN HEARTTAGEN.

Witnesses:

ARMAT W. LEO,

JAMES D. LEHR.