

No. 639,923.

Patented Dec. 26, 1899.

J. S. JOHNSTON.

CAR SEAT.

(Application filed Nov. 30, 1898.)

(No Model.)

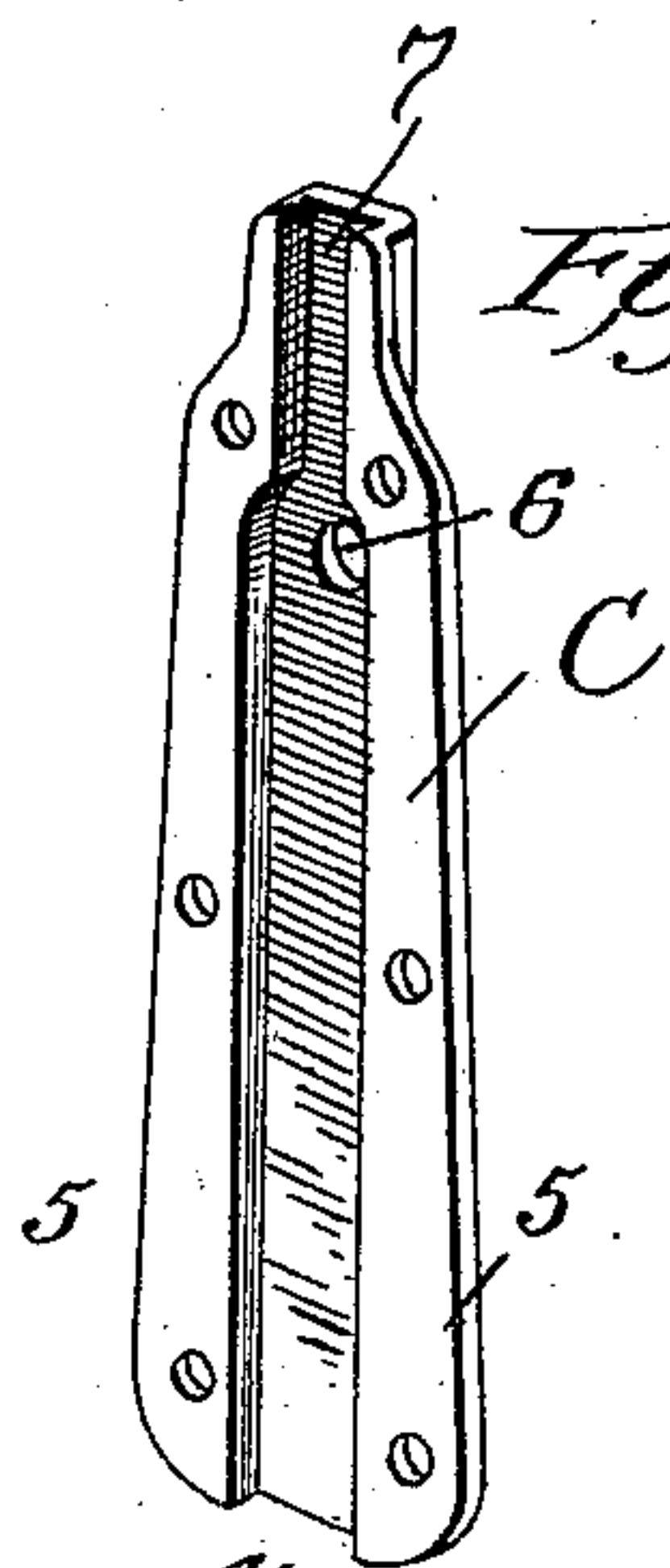
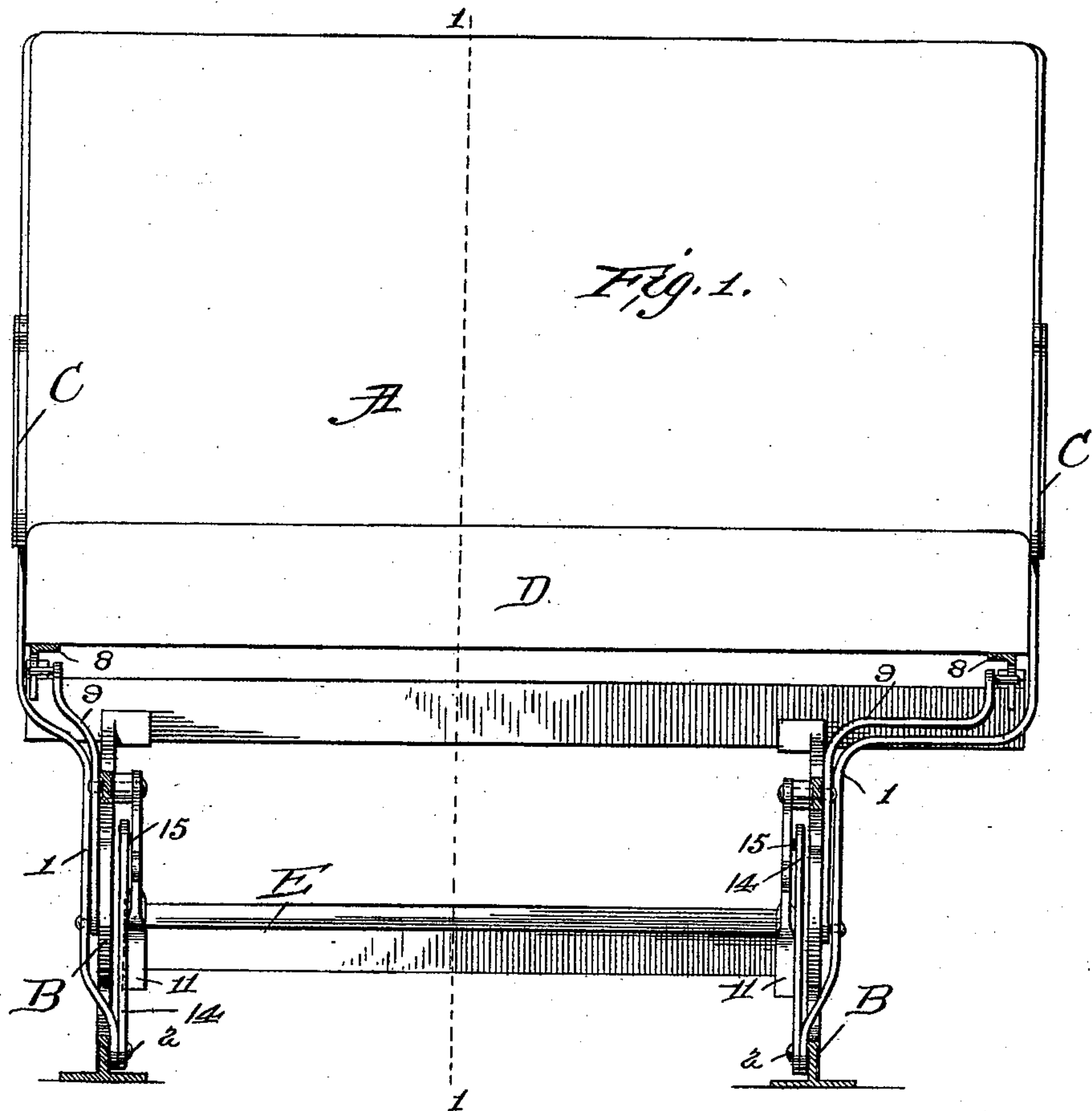
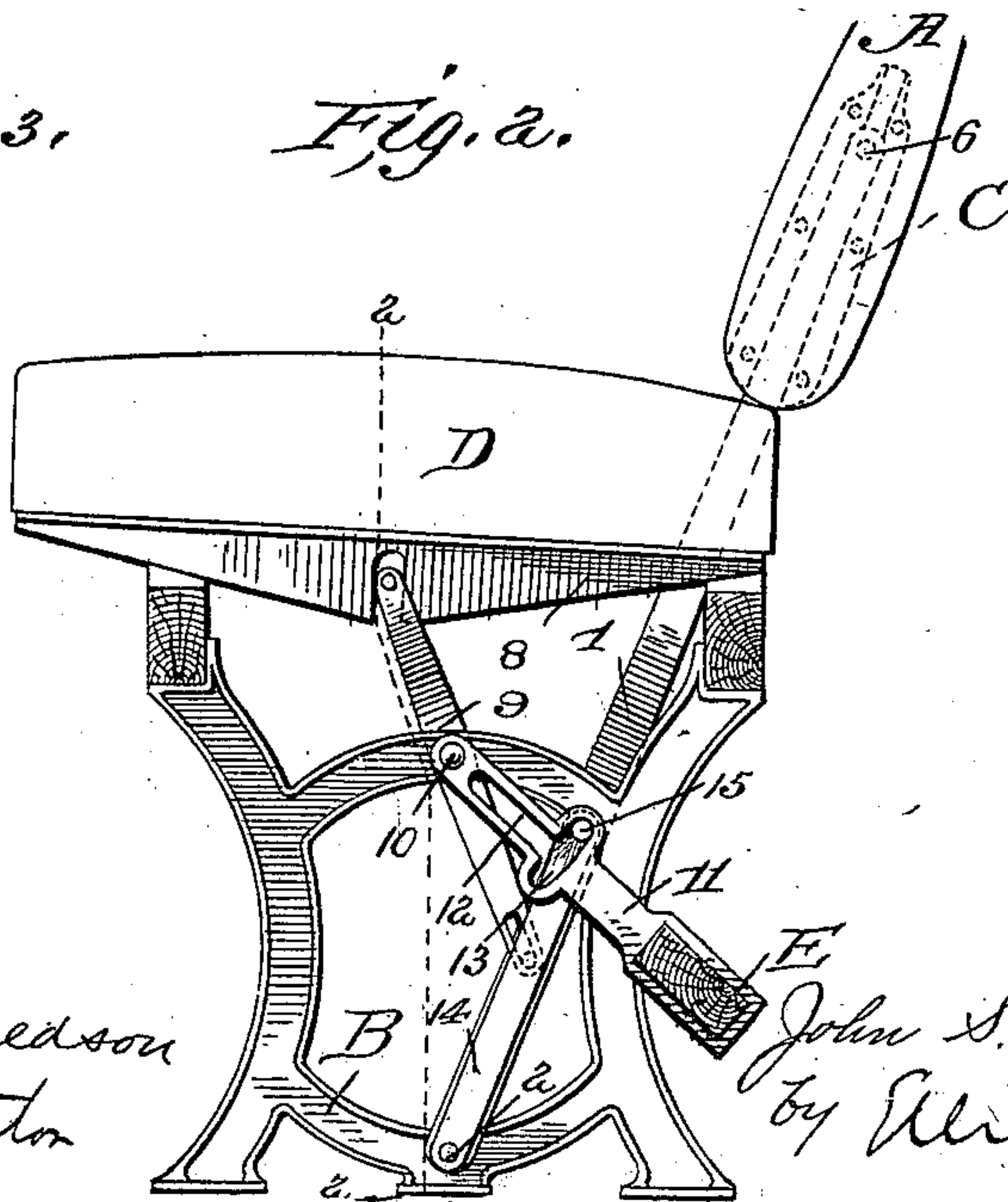


Fig. 3.

Fig. 2.



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# UNITED STATES PATENT OFFICE.

JOHN SAMUEL JOHNSTON, OF NEW YORK, N. Y., ASSIGNOR TO THE POTTIER & STYMUS COMPANY, OF SAME PLACE.

## CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 639,923, dated December 26, 1899.

Application filed November 30, 1898. Serial No. 697,855. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN SAMUEL JOHNSTON, a citizen of the United States, residing at New York, State of New York, have invented certain new and useful Improvements in Car-Seats, of which the following is a specification.

My invention relates to reversible car-seats of that class in which the back is shifted from the front to rear as the car is run in an opposite direction and in which also the seat is shifted to correspond with the position of the back.

The invention consists particularly of improved locking mechanism for the back and in mechanism connecting the seats with the back-supports, whereby one is shifted with the other, and, further, in certain details of construction, all as hereinafter explained. It is illustrated in the accompanying drawings, in which—

Figure 1 represents a longitudinal section of the supporting and shifting parts of the seat, said section being taken on line 2 2 of Fig. 2. Fig. 2 is a front-to-rear section of the same parts, taken on line 1 1 of Fig. 1. Fig. 3 is a perspective view of the socket-iron which holds the end of the striker-arm to the back.

In the drawings, A represents the back, which is of symmetrical form and adapted to serve either on the front or rear edge of the seat. It is mounted upon striker-arms 1, which are pivoted at 2 on the end frames B near the floor. These end frames are set in at both ends—at the outer end to a greater extent for general convenience of room and at the inner end to give space for the steam-pipes—and the strikers are bent to conform to these positions, as shown in Fig. 1. The upper ends of the striker-arms are attached to the back A by means of the casting C. This is formed with a groove 4 and flanges 5, which are fixed to the end of the back by means of screws. When they are fixed to the ends of the back, the groove 4 forms a socket to receive the upper end of the striker-arm, which is held in by means of a single screw through the hole 6, so that the back is held against displacement in case of accident, but at the same time may be easily

removed. A narrow continuation 7 of the same groove is adapted to receive the end of the finishing-band around the edge of the back.

The seat D is provided with rockers 8, having under faces reversely inclined, which rest upon the front and rear beams of the seat-frames, and the seat is movable from front to rear, and as it moves the part extended is raised, while the side drawn in is lowered, as shown in Fig. 2. This movement is accomplished by means of levers 9, which are pivoted at 10 on the seat-frame. They are connected at their upper ends to the rockers by slots and pins and by similar connections at their lower ends to the striker-arms, and by observing Fig. 2 it will be seen that as the back is rocked on its pivots 2 from front to rear it operates, through the levers 9, to shift the seat in the opposite direction. The striker-arms rest against the beam when the seat reaches its limit of movement, and while the striker-arms are held in position they also hold the seat through the levers 9.

The striker-arms are locked in position by means of the foot-rest arms of special construction. The foot-rest is shown at E consisting, as shown, of a plain bar. It is supported upon arms 11, the inner ends of which are pivoted upon the pivotal bolts 10 of the levers 9. Each arm 11 has a longitudinal slot 12 and a transverse slot 13, opening into the longitudinal slot. An arm 14 is fixed to the lower end of each striker-arm and extends upward in the same transverse plane therewith, but inside of the standard or seat-frame B. On its upper end is a pin 15, which projects into the slot in the foot-rest arm and may move therein throughout the extent of both slots. When the back is in its position of rest, the foot-rest drops down, bringing the upper end wall of the transverse slot against the pin 15, which locks the back in position. When the foot-rest is raised to bring the pin in line with the slot 12, the back may be shifted, and on the other side the parts assume the same relative position as that shown in Fig. 2.

It will be observed that Fig. 2 is a view of the inner face of the left-hand frame of Fig. 1.



The seat above described is more particularly designed for street-cars, but is not necessarily confined to such use.

I claim—

5 1. In combination with a reversible-seat back, striker-arms rigidly attached thereto, supporting means to which the striker-arms are pivoted at their lower ends, a movable seat, a lever pivoted to the supporting means  
10 and connecting said striker-arms and the seat, locking mechanism consisting of locking-levers, the foot-rest on the locking-levers and a part connected with the striker-arms engaging therewith, substantially as described.

15 2. In combination with the back, striker-arms attached to the back, supporting means to which the striker-arms are pivoted at their lower ends whereby the back may be shifted, the arm 14 fixed to the lower end of the striker-  
20 arm and a locking-lever pivoted to the supporting means and engaging therewith, substantially as described.

25 3. In combination with the striker-arm and the arm 14 fixed thereto, the locking-lever having the longitudinal and transverse slot adapted to lock the striker-arm by engaging the arm 14, and supporting means for movably supporting the striker-arm and locking-lever, substantially as described.

30 4. In combination, the back, the striker-arms connected rigidly thereto, supporting means to which the striker-arms are pivoted at their lower ends, the arms 14 fixed to said lower ends, the slotted arms 11 connected  
35 with the supporting means and with the arms 14 and the foot-rest E, carried by said arms, all substantially as described.

40 5. In combination, the back, the striker-arms connected rigidly thereto, supporting means to which the striker-arms are pivoted at their lower ends, the arms 14 fixed to said lower ends, the slotted arms 11, the foot-rest E and the levers 9 connecting the striker-

arms with the movable seat, said slotted arms being connected with the supporting means 45 and with the arms 14, all substantially as described.

6. In combination with the seat-back and the striker-arms, the socket-piece C having the groove 4, the flanges 5 and the hole 6, and 50 an extended narrower groove 7, the said socket-piece fitting with its grooved side against the outer edge of the back, substantially as described.

7. In combination, the seat, the back, the 55 striker-arms pivoted to the frame a lock for the striker-arms and a foot-rest connected therewith.

8. In combination, the seat, the back, the striker-arms pivoted at their lower ends and 60 a lock arranged at a point intermediate of the upper and lower ends of the striker-arms and under the seat and connected with the striker-arms, said lock being accessible to the foot substantially as described. 65

9. In combination, the back, the seat, the striker-arms pivoted at their lower ends below the plane of the seat and the locking-levers having longitudinal and transverse 70 slots arranged under the seat at a point between the upper and lower ends of the striker-arms and connected therewith, substantially as described.

10. In combination, supporting means, the seat, the back, the striker-arms carrying the 75 back and pivoted to the supporting means, and a lock comprising slotted arms and a foot-rest connected therewith, substantially as described.

In testimony whereof I affix my signature 80 in presence of two witnesses.

JOHN SAMUEL JOHNSTON.

Witnesses:

I. ALBERT ENGLEHART,  
R. M. PAGE.