

No. 607,414.

Patented July 12, 1898.

C. K. PICKLES.
STEP OVER CAR SEAT.

(Application filed Oct. 20, 1897.)

(No Model.)

Fig. 1.

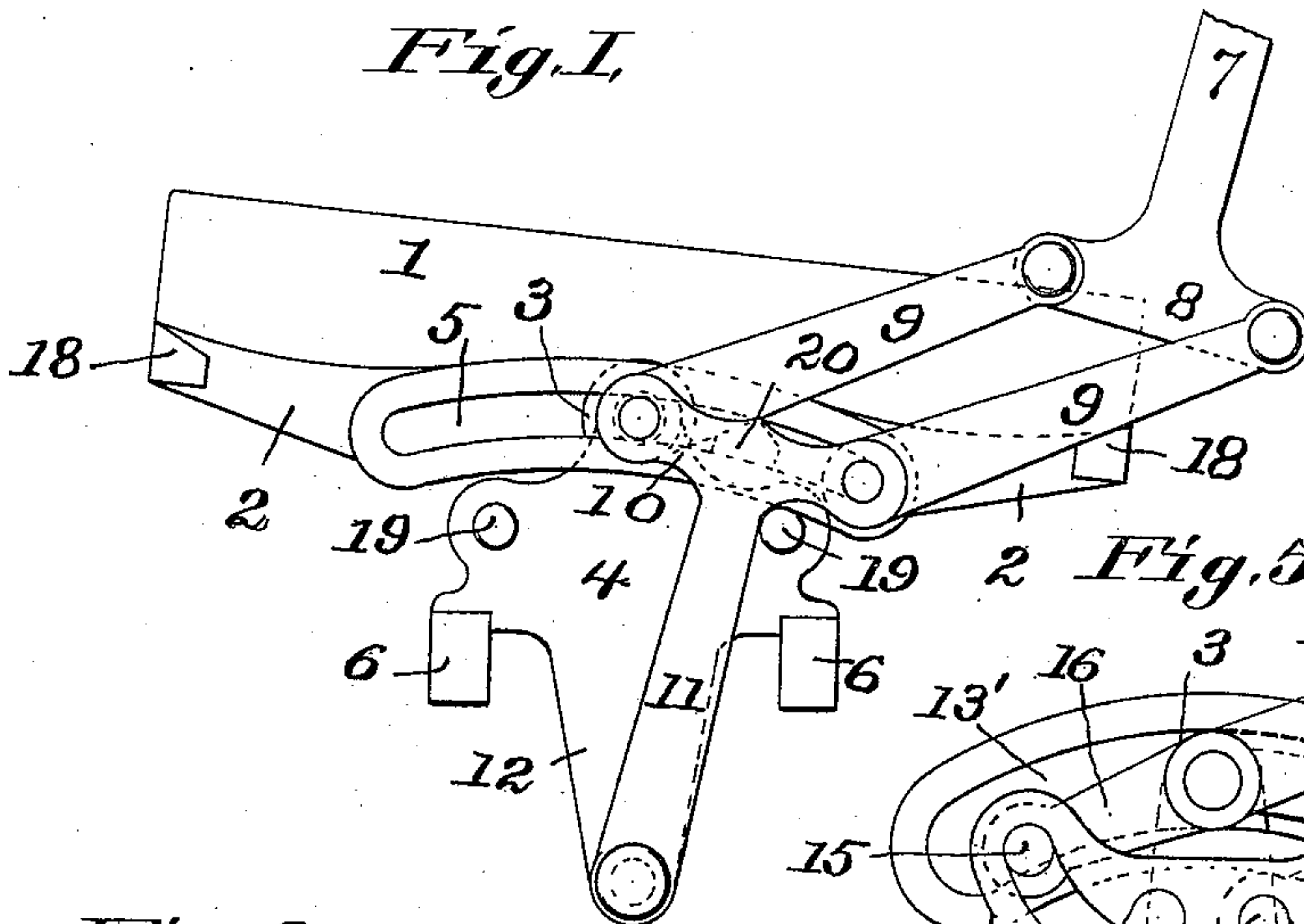


Fig. 2.

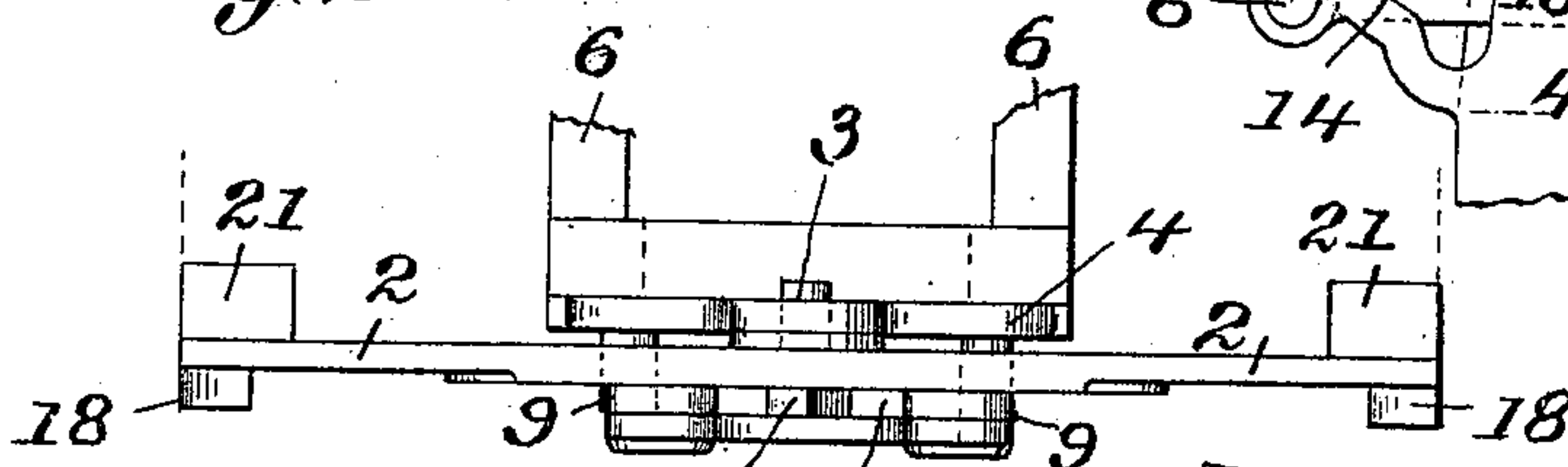


Fig. 3.

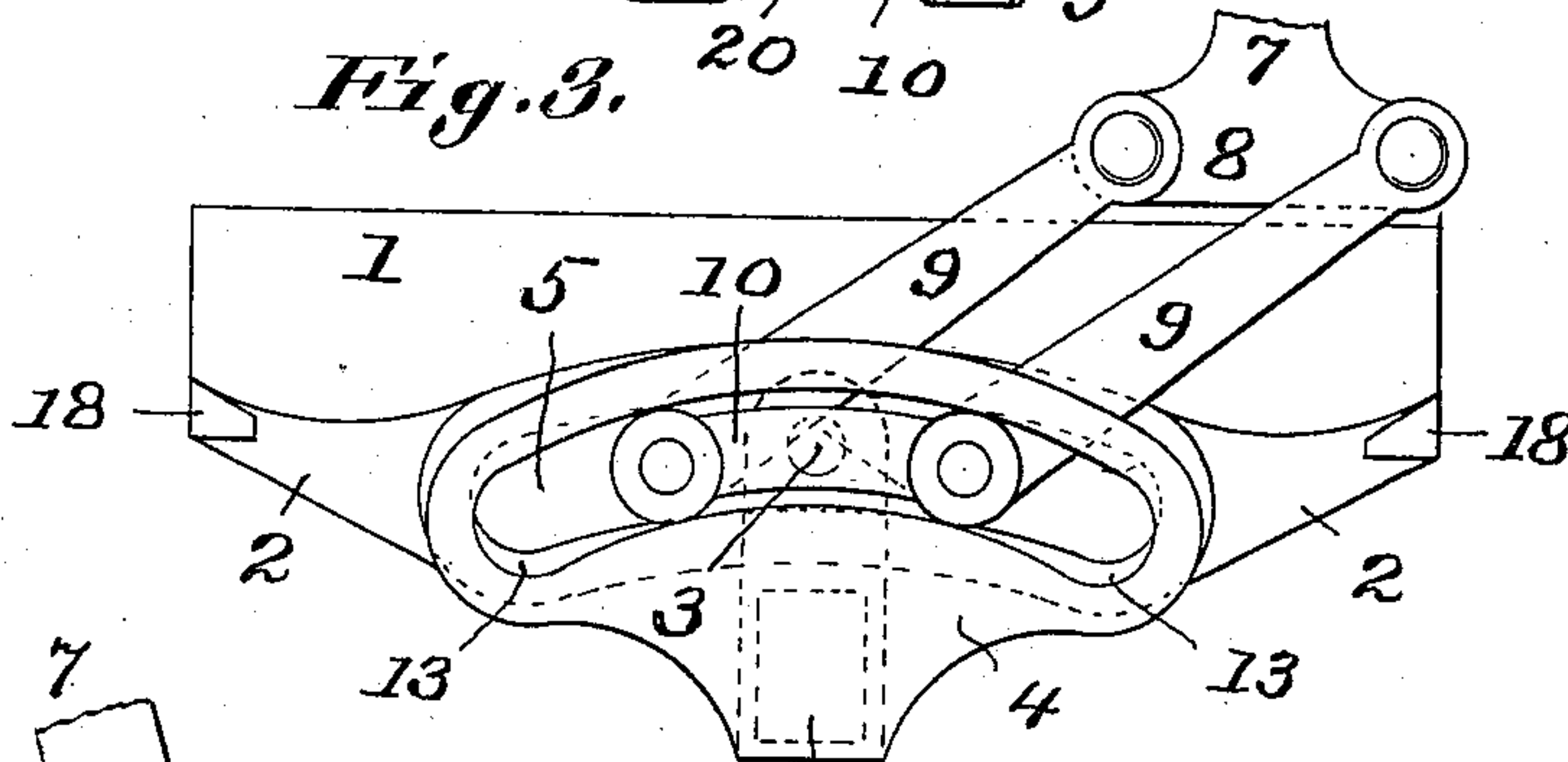
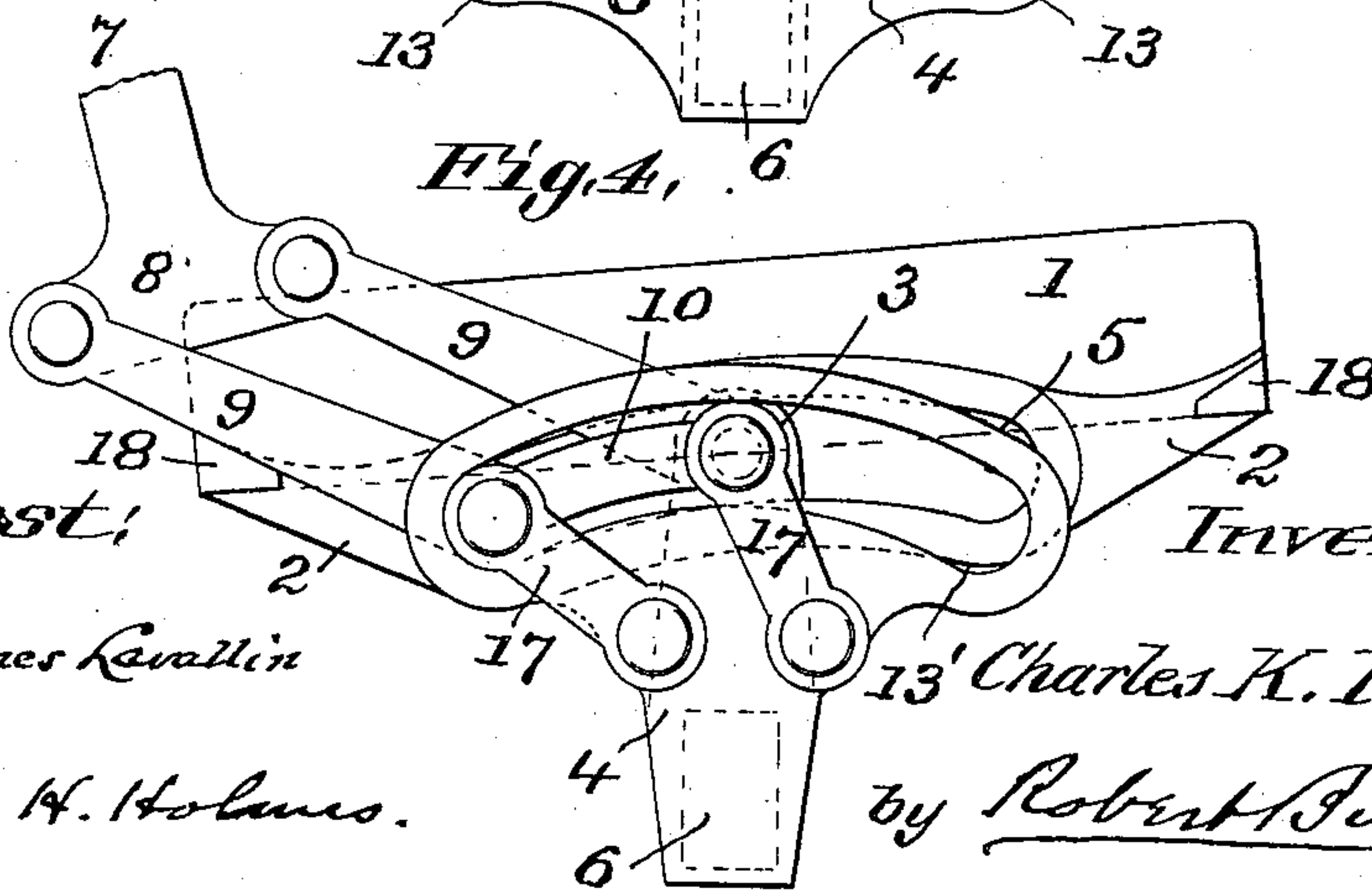


Fig. 4.



Attest:

James Kavanin

W. H. Holmes.

Inventor:

Charles K. Pickles,

by Robert Burns Atty.

UNITED STATES PATENT OFFICE.

CHARLES K. PICKLES, OF ST. LOUIS, MISSOURI.

STEP-OVER CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 607,414, dated July 12, 1898.

Application filed October 20, 1897. Serial No. 655,816. (No model.)

To all whom it may concern:

Be it known that I, CHARLES K. PICKLES, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Step-Over Car-Seats; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The present invention relates more particularly to that type of railway-car seats or chairs in which in effecting a reversal of the back the same will have a step-over movement above the seat portion and such seat portion will tilt or rock in unison with the step-over movement of the back, so that the free edge of the seat will have a raised position to afford the proper slope of the seat backward toward such back in either of the two positions thereof, the objects of the present improvements being to provide a simple, durable, and effective construction and arrangement of the parts, whereby the proper movements of the back and seat are insured in a simple and ready manner and with which the seating capacity is the full width of the seat from front to back, with no loss beneath the step-over back, in consequence of which less distance will be required between the centers of the seat, and a maximum space can be attained between the seats when arranged to face each other. I attain such objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a detail side elevation of a step-over seat embodying the present invention; Fig. 2, a detail plan view of one end of the same; Figs. 3, 4, and 5, detail side elevations of modified forms of the present invention.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 represents the seat proper, having a carrying-frame that will usually consist of end plates 2, that are centrally pivoted by trunnions 3 to the upper central portion of fixed end plates 4, so as to be capable of a limited tilting or rocking movement, and are formed with slots 5, in which a reciprocating carriage that carries the arms of the chair-back, as hereinafter described, has movement. The end plates 4 may form

a part of the usual pedestal or standards of the chair. They are preferably made separate therefrom and separately attached to the usual tie bar or bars 6, that tie or connect the chair-standards together.

The step-over chair-back 7 is of a straight formation and upholstered or otherwise finished on both sides, with its lower end provided with cross-heads 8, to which the back-carrying arms 9 have pivotal connection, as shown in the drawings.

The supporting-arms 9 of the step-over back are counterparts, with their lower ends having pivotal attachment with the reciprocating carriage 10, that has a positive movement imparted to it in a curved plane by either of the following means: an elongated extension 11 of said carriage pivoted centrally on a centrally-pendent portion 12 of the fixed end plate 4, as represented in Fig. 1; by a curved track slot or recess 13 in said end plate 4, as represented in Fig. 3; by a pair of irregular-shaped slots or recesses 14 in said end plate 4, in which lugs 15 on the extended ends 16 of the back-supporting arms 9 engage to impart, in connection with a curved track slot or recess 13' in the fixed end plate 4, the required movement to such carriage in a reversal of the chair, as illustrated in Fig. 5, or by the action of a pair of radius-links 17, combined with a curved track slot or recess 13' in the end plate 4, as illustrated in Fig. 4. In all these constructions a movement of the carriage is effected in a predetermined curved plane, and it is a material feature of the present invention that the slot 5 of the seat-carrying end plate be of a different formation, usually of a greater curvature, so that in such predetermined movement of the carriage in a curved plane, as heretofore stated, the said end plates and the seat proper carried thereby will be correspondingly rocked or tilted so as to assume the proper inclination of the seat relative to the step-over back of the chair.

18 are stop-lugs upon the end plates 2, against which the rocking or supporting arms 9 of the step-over chair-back abuts to aid in limiting the movement of the parts.

19 are stop-lugs on the plate 4, against which the carriage extension 11 is adapted to abut and aid in limiting the movement of the parts

in the construction illustrated in Fig. 1 of the drawings.

20 is a centrally-arranged stop on the carriage 10, against which the back-supporting arms 9 are adapted to abut in order to restrict the pivotal movement of said arms in the construction illustrated in Figs. 1 and 2.

21 are rest lugs or ledges upon the end plate 2 to form a support for the seat proper, 1.

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

1. In a step-over car-chair, the combination of a fixed supporting-frame, a seat pivoted thereto, and having a plate portion formed with a track slot or recess, a reciprocating carriage having engagement with said track-slot, the movement of the carriage being in a predetermined plane, that differs from the plane of said track-slot, a step-over back, supporting-arms pivotally connected to the back and to the carriage, and means for effecting a positive movement of the carriage in its predetermined plane, substantially as set forth.

2. In a step-over car-chair, the combination of a fixed supporting-frame, a seat pivoted thereto, and having a plate portion formed with a curved track slot or recess, a reciprocating carriage having engagement with said track-slot, the movement of the carriage being in a predetermined curved plane that differs from the plane of such curved track-slot, a step-over back, supporting-arms pivotally connected to the track and to the carriage, and means for effecting a positive movement of the carriage in its predetermined curved plane, substantially as set forth.

3. In a step-over car-chair, the combination of a fixed supporting-frame, a seat pivoted thereto, and having a plate portion formed with a track slot or recess, a reciprocating carriage having engagement with said track-slot, the movement of the carriage being in a predetermined curved plane that differs from the plane of such track-slot, a step-over back, supporting-arms pivotally connected to the back and to the carriage, and means for effecting a positive movement of the carriage in its predetermined curved plane, the same consisting of an elongated extension of said carriage,

having pivotal connection with the fixed supporting-frame, substantially as set forth.

4. In a step-over car-chair, the combination of a fixed supporting-frame, a seat pivoted thereto, and having a plate portion formed with a track slot or recess, and stop-lugs 18, a reciprocating carriage having engagement with said track-slot the movement of the carriage being in a predetermined plane that differs from the plane of said track-slot, a step-over back, supporting-arms pivotally connected to the back and to the carriage, and means for effecting a positive movement of the carriage, in its predetermined plane, substantially as set forth.

5. In a step-over car-chair, the combination of a fixed supporting-frame provided with stop-lugs 19, a seat pivoted to said frame and having a plate portion formed with a track slot or recess, a reciprocating carriage having engagement with said track-slot, the movement of the carriage being in a predetermined curved plane that differs from the plane of such track-slot, a step-over back, supporting-arms pivotally connected to the back and to the carriage, and means for effecting a positive movement of the carriage in its predetermined curved plane, the same consisting of an elongated extension of said carriage having pivoted connection with the fixed supporting-frame, substantially as set forth.

6. In a step-over car-chair, the combination of a fixed supporting-frame, a seat pivoted thereto, and having a plate portion formed with a track slot or recess, a reciprocating carriage provided with a centrally-arranged stop 20, and having engagement with said track-slot, the movement of the carriage being in a predetermined plane that differs from the plane of said track-slot, a step-over back, supporting-arms pivotally connected to the back and to the carriage, and means for effecting a positive movement of the carriage in its predetermined plane, substantially as set forth.

In testimony whereof witness my hand this 15th day of October, 1897.

CHARLES K. PICKLES.

In presence of—

H. G. GILMORE,

GEO. E. HOWARD.