

No. 676,499.

Patented June 18, 1901.

F. W. HUNTER.

SEAT.

(Application filed May 19, 1899.)

(No Model.)

Fig. 2

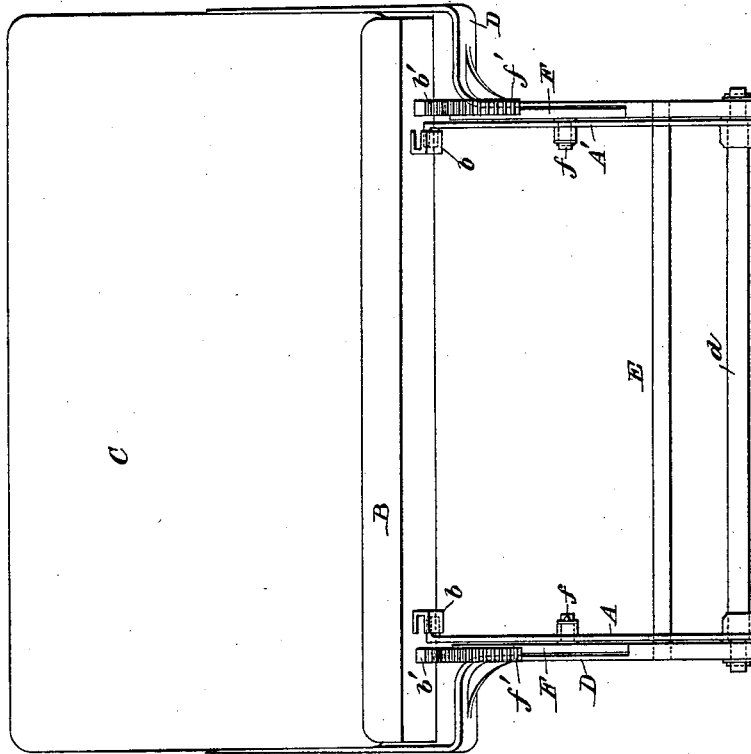
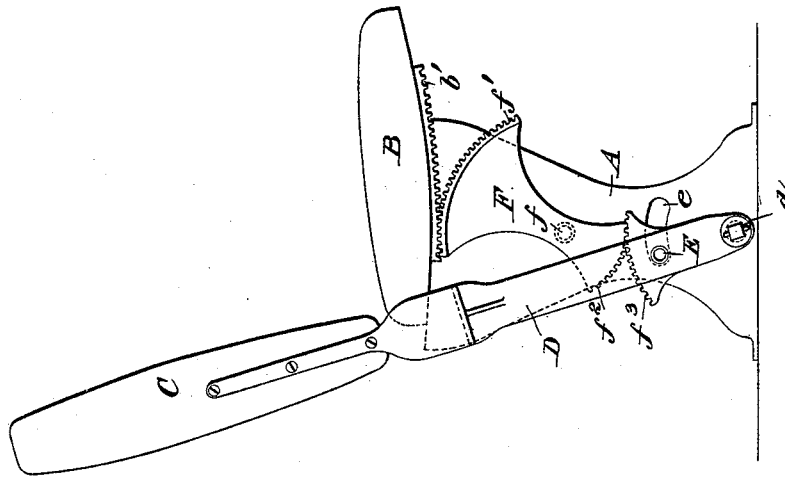


Fig. 1



Witnesses:

Jas. F. Coleman
Geo. R. Taylor

Inventor

Frederic W. Hunter
By Atty. Edmund & Dyer

Att'ys.

UNITED STATES PATENT OFFICE.

FREDERIC W. HUNTER, OF CRANFORD, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE HALE AND KILBURN MANUFACTURING COMPANY, OF PHILADELPHIA, PENNSYLVANIA.

SEAT.

SPECIFICATION forming part of Letters Patent No. 676,499, dated June 18, 1901.

Application filed May 19, 1899. Serial No. 717,522. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC W. HUNTER, a citizen of the United States, residing at Cranford, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Seats, (Case B,) of which the following is a specification.

The invention is especially applicable to seats for railway and similar vehicles and will be described herein in that connection. Its object is to produce a seat consisting of but few parts which shall be simple and durable in construction, inexpensive of manufacture, and which shall be easily and readily adjustable.

The invention concerns more particularly that type of seats occupying a fixed position and in which the seat-cushion and seat-back are adjusted or rearranged accordingly as the seat is designed to face one way or the other.

It further concerns that class of seats of the type mentioned in which mechanism is provided intermediate of the back and seat-cushion whereby the movement of the former produces a corresponding movement of the latter. In seats of this class the seat-cushion is adapted for lateral adjustment in order that in one or the other position of these seat elements each will bear to the other the proper relation.

In carrying out my invention I employ a supporting-frame carrying a seat-cushion capable of transverse movement. I also employ a seat-back provided with end arms pivoted at or near the floor or bottom of the supporting-frame, and intermediate of said end arms and cushion I provide mechanism whereby the movement of the former will result in the corresponding movement of the latter. I also provide a foot-rest extending from one to the other of the end arms and so located relatively to the floor as to answer its designed purpose. The intermediate mechanism herein referred to consists in this embodiment of my invention of a pivoted double segmental gear located at each end of the seat. The upper toothed surface of each gear coacts with a correspondingly-toothed surface upon or connected to the under side of the seat-cushion or the frame in which that cush-

ion is arranged. The lower toothed end of this gear coacts with a correspondingly-toothed segmental gear carried by or secured to an end arm of the seat-back. The movement of the seat-back and its supporting end arms secures, through the coaction of the gears, a corresponding movement of the seat-cushion.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 an end elevation, of a seat embodying my invention.

Referring in detail to the drawings, A A' designate two supporting members of the seat-frame. The lower ends of these may, if desired, be secured to the floor in the usual manner.

B designates a transversely-movable seat-cushion. This is supported upon the members A A', being provided with the rabbeted brackets *b*, with which coact intumed flanges secured to or formed integral with said members. The under side of the cushion B is also provided with the tracks *b' b'*, the purpose of which will be presently explained.

C designates the seat-back. This is here shown as supported upon end arms D, the latter being pivoted at *d* to the frame A A'. E designates a foot rest or support. This extends between and connects the end arms D of the seat-back and operates through elongated slots *e* in the frame A A'.

F F designate two double segmental gears. These are pivoted at *f* to the supporting-frame A A'. The upper end of each is provided with the toothed surface *f'*, adapted to engage with the tracks *b'*, secured to the under side of the seat-cushion or cushion-supporting frame. The opposite end of each segmental gear F is also provided with a toothed surface *f''* and coacts with the correspondingly-toothed surface *f''*, secured to or forming part of the end arms D. For the purpose of securing greater stability I have herein shown the pivot *d*, upon which the end arms D are mounted, as extending continuously from one end to the other of the seat-frame.

The operation of the seat above described will be readily understood. The drawings illustrate said seat in one of its two positions.

In order to reverse the seat so that it shall face in the opposite direction, it is only necessary to move the seat-back (shown in Fig. 1) to the right, whereupon the double segmental gears F will, by their action with the toothed surfaces f^3 and b' , cause a corresponding movement of the seat-cushion or cushion-supporting frame.

Having now described my invention, what I claim is—

1. In a seat, the combination with a supporting-frame and movable cushion, of a seat-back, pivoted supporting-arms for said back, double segmental gears, and connections between said gears and said cushion and arms, substantially as described.

2. In a seat, the combination with a supporting-frame and movable cushion, of a seat-back, pivoted supporting-arms for said back, double segmental gears, and mechanism co-acting therewith and with said cushion and arms to shift said cushion by the movement of said arms, substantially as described.

3. In a seat, the combination with a supporting-frame and movable cushion, of a seat-back, pivoted supporting-arms for said back, double segmental gears, connections between

said gears and said supporting-arms and movable cushion, and means for assuring synchronous movement of said gears, substantially as described.

4. In a seat, the combination with a supporting-frame and movable cushion, of a seat-back, pivoted supporting-arms, gears carried by said supporting-arms, double segmental gears pivoted intermediate of their ends and coacting with the gears carried by said supporting-arms and with said movable cushion, and means for assuring synchronous movement of said double segmental gears, substantially as described.

5. In a seat, the combination with a supporting-frame and movable cushion, of a seat-back, pivoted supporting-arms, a foot-rest extending between and connecting the said arms, double segmental gears, and connections between said gears and said cushion and arms, substantially as described.

This specification signed and witnessed this 10th day of May, 1899.

FREDERIC W. HUNTER.

Witnesses:

JNO. R. TAYLOR,
S. O. EDMONDS.