

(No Model.)

2 Sheets—Sheet 1.

R. M. HUNTER.

CAR SEAT.

No. 389,514.

Patented Sept. 11, 1888.

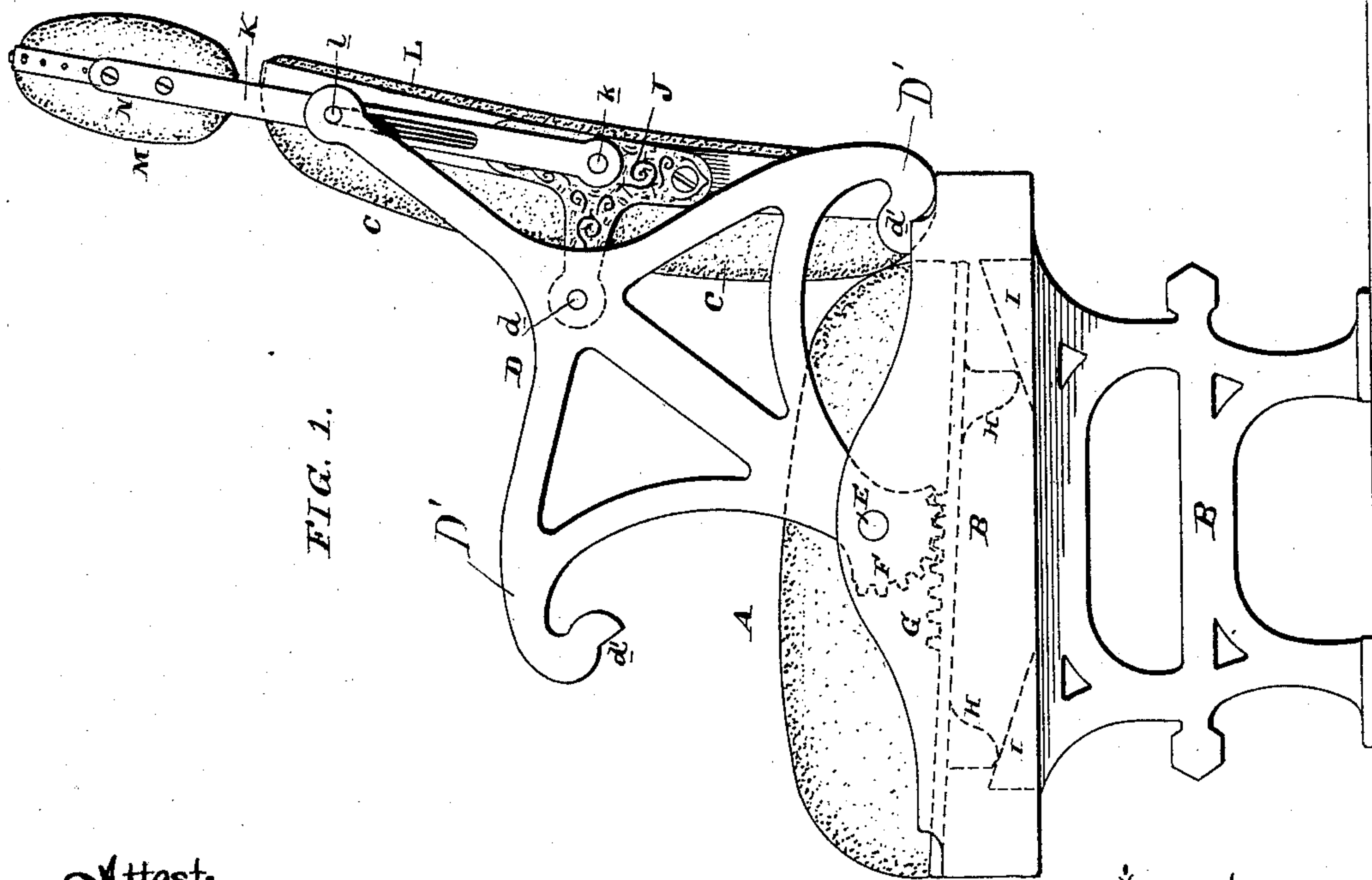
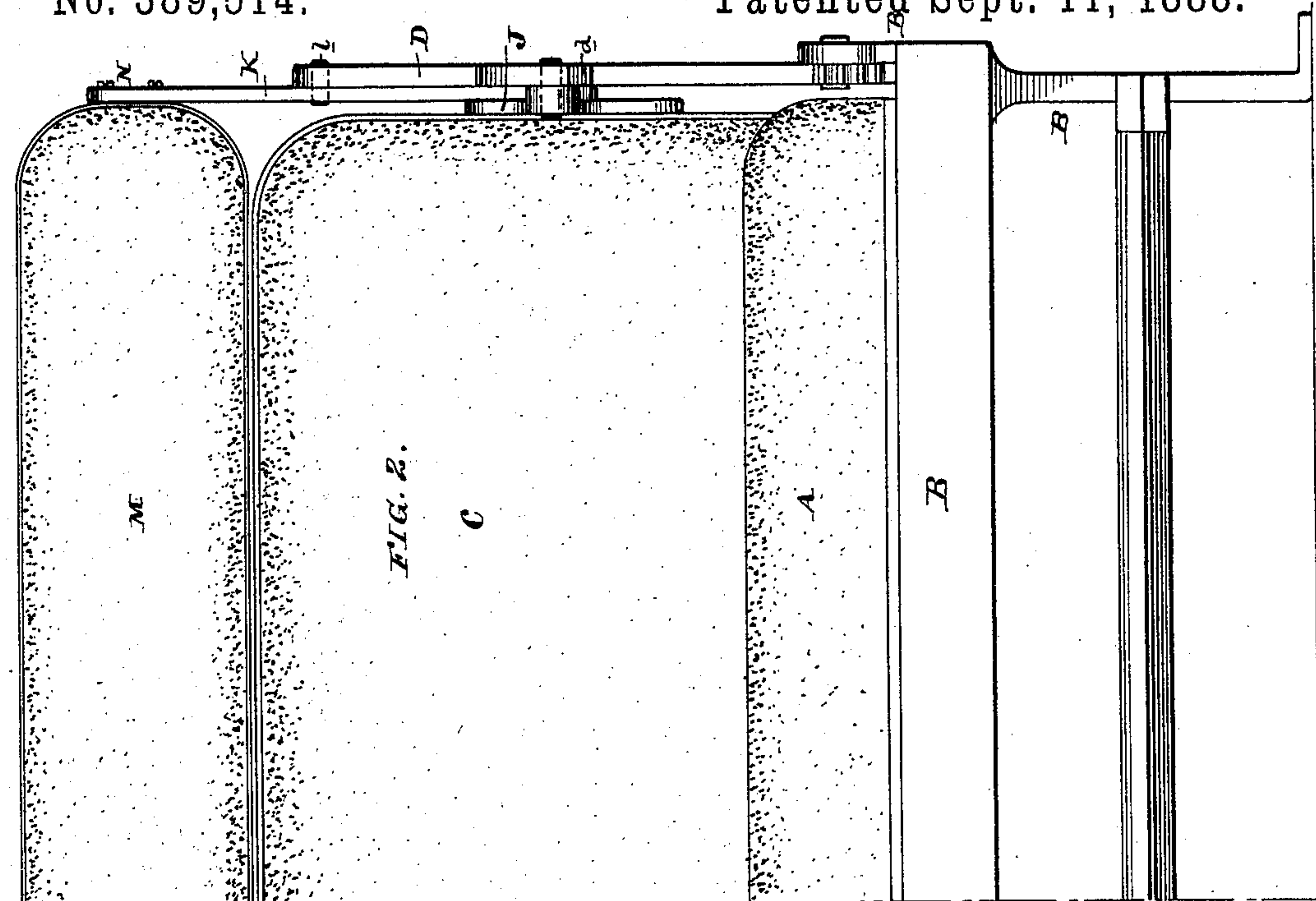


FIG. 1.

Attest:
Henry Dwyer
C. W. Breckinridge

Inventor:

R. M. Hunter

(No Model.)

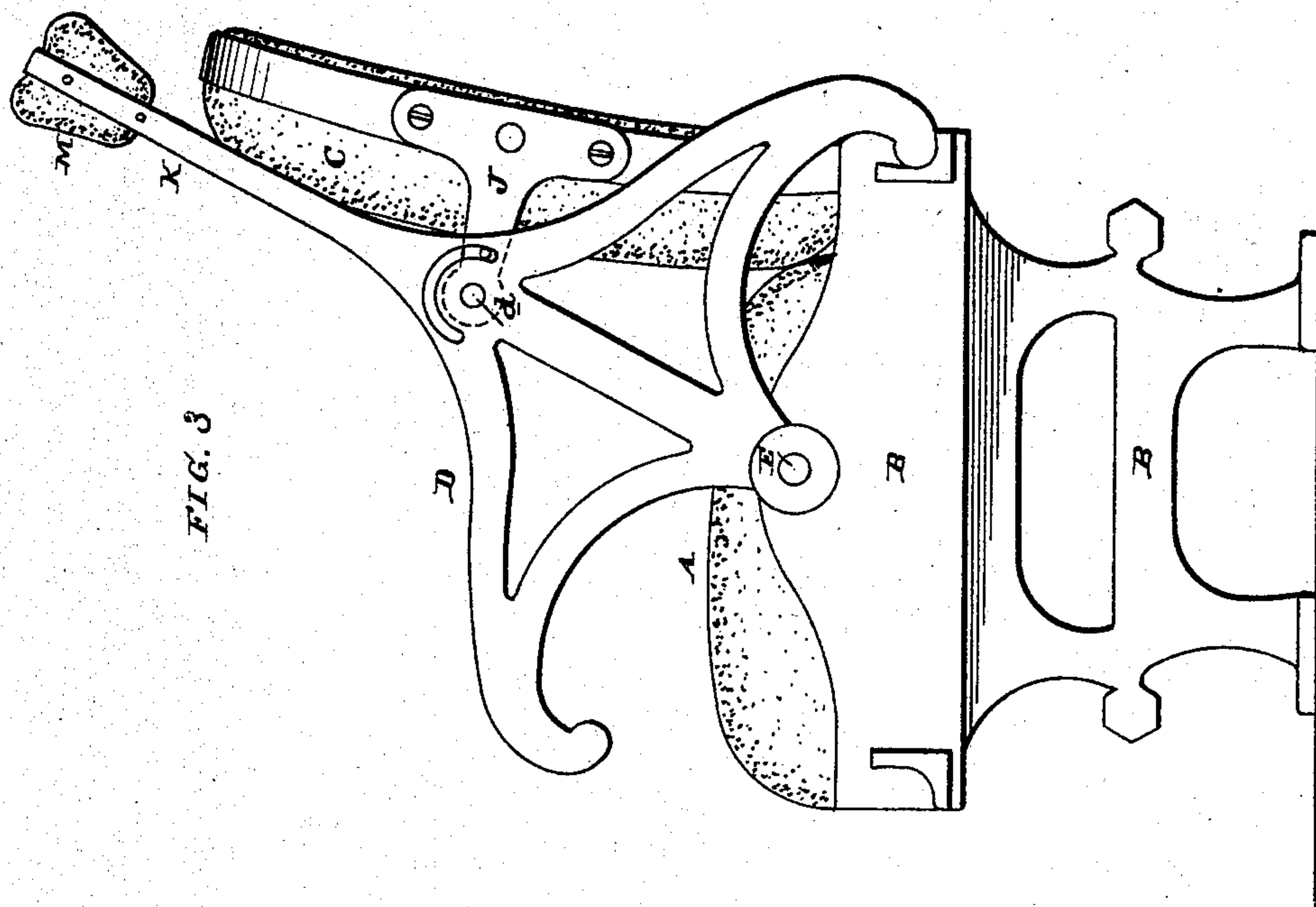
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2 Sheets—Sheet 2.

CAR SEAT.

No. 389,514.

Patented Sept. 11, 1888.



Attest:
Henry D. Dwyer
C. W. Breckinridge

Inventor:

R. M. Hunter

UNITED STATES PATENT OFFICE.

RUDOLPH M. HUNTER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
HENRY S. HALE, OF SAME PLACE.

CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 389,514, dated September 11, 1888.

Application filed November 16, 1887. Serial No. 255,295. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH M. HUNTER, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Car-Seats, of which the following is a specification.

My invention has reference to car-seats; and it consists of certain improvements, which are fully set forth in the following specification and shown in the accompanying drawings, which form part thereof.

A perfectly satisfactory head-rest for seats of railway-cars having reversible backs is not easily obtained, although it is most desirable, owing to the complication due to the reversibility of the seat-back. In consequence of this reversibility it is found necessary either to make two rests—one on each end of the seat-back—or to make the one rest independently movable, for if a rest were made rigidly secured upon the top of the back of a car-seat and the seat-back were reversed the head-rest would then be on the bottom of the seat-back, and the top now presented would be without any head rest.

It is the object of my invention, then, to devise a rest which will still be in position after the seat-back has been reversed, and which is preferably not detachable from the seat-back and placed thereon, but which automatically adjusts itself on whichever side the back may be, and no matter which end of the back is turned uppermost.

In my improvement the essential feature is that the head-rest swings from side to side with a movement incident to reversing the seat-back, the said head-rest always remaining above or higher than the seat-back, and the seat-back being adapted to be made narrow vertically, and rotatable, irrespective of any such similar movement in the head-rest. I do not limit myself to any particular construction, and show several modifications in the drawings, but prefer the construction which I will now specifically refer to.

In my preferred construction I use a head-rest which is secured to a pair of arms. These arms are in turn pivoted to the reversible seat-back at or about the middle point of each end; but otherwise the head-rest has no material

connection with the seat-back. These arms are provided with slots, in which they are connected with the hinge-arms of the entire seat-back. Thus the seat-back may be reversed and changed from one side to the other of the cushion of the car-seat without disturbing the head-rest.

The minute arrangement and operation of my invention will be observed by referring to the drawings, in which—

Figure 1 is a side elevation of a car-seat embodying my invention. Fig. 2 is a front view of the same. Fig. 3 is also a side elevation of a modification in which the head-rest is directly secured to the extended hinge-arms.

A is a car-seat cushion, removable from the frame B.

C is the reversible seat-back.

D are the hinge-arms of the seat, which are preferably shaped substantially as in Fig. 1, with two arm-extensions from the central piece terminating in the legs or rests D', by which the arms D may rest upon the frame B. These hinge-arms D are pivoted at their lower ends at E to the frame B, which I prefer to make slightly raised at this part, and are provided on their ends slightly below the pivotal points E with pinions F, the teeth of which mesh with the teeth of the racks G. These racks G are located on each end of the cushion A, or on a frame supporting it. The position of this seat-cushion A may be slightly changed or made to incline upward away from the seat-back C by means of the lugs or extensions H on the bottom of the cushion A and the inclined cam-extensions I in the frame B, as shown in the dotted lines in Fig. 1; but I do not claim these details specifically as my invention, and merely recommend their use or others of a similar character as giving more effectiveness to my invention as an entirety.

J are arm-extensions, preferably T-shaped, as shown in the drawings. These arms J are secured rigidly to the ends of the seat-back and are pivoted at *d* to the hinged arms D. This pivotal point *d*, I prefer to have located at or about the center of the said hinged arms D. Upon this pivotal point *d* the seat-back C revolves when it is desired to reverse it.

M is the head-rest, which is made, preferably,

with two cushion-faces, N and N. This head-rest M is secured to the arms K, which extend about half-way down on each side of the seat-back C and are pivoted to it at *k*. It will be observed here that the head-rest M and the seat-back C have no rigid connection with each other. These arms K are preferably provided with longitudinal slots L, into which pins *l* on the upper ends of the hinged arms D fit, and upon which pins *l* the arms are free to reciprocate longitudinally, so as to raise the head-rest vertically. Normally the head-rest M fits fairly close to the back C at its upper end, and I prefer to have it in practice fit as closely as is possible to prevent a draft of air or dust from passing between the head-rest and the top of the back upon the head or neck of the traveler. When it is desired to reverse the seat-back, the hinged arms D are pulled over, revolving on the pivot E, by means of the lifting and turning of the backs C. As the back C rotates on the hinge-points *d*, the bars or arms K are raised, and the hinged arms D are simultaneously moved over upon their pivot E. As the arms K rise, they carry up the head-rest and allow the back to be rotated without obstruction. As the back passes to the other side of the arms D and descends, it will have carried the lower end of the arms K over also and readjusted the head-rest for the new position assumed by the seat-back, and said head-rest is drawn down closely to the back, being preferably supported in its lowest position by the pins *l* and the weight of the seat-back, which is practically hung by the arms K from said pins.

It will be observed that the head-rest presents its other side or face in the position now assumed, it not having reversed, but only shifted, its position with the hinged arms. As the hinged arms swing over, the pinions F cause the racks G to shift, and with them the seat-cushion A, and such racks and cushion are caused to change their obliquity by means of the lugs H moving upon the oppositely-directed inclined or cam faces. Simultaneously, therefore, with the reversing of the back C and shifting of the head-rest M the seat-cushion A is also shifted and tilted so as to throw forward and upward the edge farthest from the back.

As shown, the hinge-arms D have arm-rest extensions D' so arranged that a small arm is presented whichever way the seat-back is placed and allows an easy entrance to the seat. These arms are so arranged that they alternately rest upon the frame B at *d'*, so as to support the hinged arms and limit their throw. If desirable, this head-rest M may be pivoted to the arms K and may be free to revolve upon that pivotal point, and it may be made with only one cushioned or soft face, N, and reversed when the back C is reversed; but I prefer the construction shown in Figs. 1 and 2.

In Fig. 3 is a modification in which I dispense with the slotted side arms, K, and secure

the head-rest M directly to the extension of the seat-arms D. In other respects the details of this modification are the same as in the construction shown in Figs. 1 and 2.

It is to be understood that the ordinary seat-arms of wood or iron may be used in place of the arms D' shown.

The mere details of construction here shown may manifestly be varied in many ways without departing from my invention and are not to be considered as limitations of it.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-seat, the combination of the main frame, two long hinged arms connected to the main frame, a head-rest, metal supporting-frames secured to the head-rest and connected to the upper ends of the hinged arms, a reversible seat-back, and independent metal frames secured to the seat-back and pivoted to the hinged arms between its two ends and at or about its middle.

2. In a car-seat, the combination of the main frame, two long hinged arms connected to the main frame, a head-rest, metal supporting-frames secured to the head-rest and connected to the upper ends of the hinged arms, a reversible seat-back, independent metal frames secured to the seat-back and pivoted to the hinged arms between its two ends at or about its middle, and a link-connection between the head-rest and the seat-back metal frames.

3. The combination of a reversible seat-back and a head-rest pivoted to said seat-back by means of arms on each end of said seat-back and head-rest, a main frame, and hinged arms pivoted to the main frame and extending obliquely upward to or near the top of the seat-back, and loose connections between the seat-back and middle of the hinged arms and the head-rest and upper part of the hinged arms.

4. In a railway-car seat, the combination of a reversible seat-back, two arms pivoted to the ends of said seat-back and provided with longitudinal slots, a head-rest secured to said arms, and hinged arms pivoted to the seat-frame and provided on their upper extremities with pins working in said longitudinal slots, and having a hinged or pivotal connection with said seat-back.

5. In a railway-car seat, the combination of the hinged arms D, the reversible back C, pivoted to said arms D, the head-rest M, the slotted arms or bars K, secured to said head-rest and pivoted to the seat-back at *k*, and pins *l*, carried by the arms D, pivoted to the seat-frame, and working in the slots of the arms or bars K.

6. In a railway-car seat, the combination of the main frame, two hinged arms pivoted to the main frame and having arm-rests, supports or stops on the main frame for said arms or rests to limit their throw, a head-rest supported by said hinged arms at their free ends, and a reversible seat-back pivoted to said

hinged arms at a point between their hinged connection with the main frame and the head-rest.

5 7. In a car-seat, the combination of the main frame, two hinged arms pivoted thereto, stops to limit the throw of said arms, and a head-rest having side arms, K, secured to the tops or upper parts of said hinged arms by a slot-and-pin connection, and a link connecting the
10 lower ends of said head-rest arms with the hinged arms.

8. In a reversible car-seat, the combination of long hinged arms connecting with the main frame at the bottom, a head-rest supported by
15 said hinged arms at their upper ends, a reversible seat-back pivoted to the hinged arms at or about their middle, and connecting-arms between said head-rest and ends of the seat-back midway between its top and bottom.

20 9. In a reversible car-seat, the combination of two extended hinged arms pivoted to the

seat-frame, a reversible seat-back hinged to said arms at or near their middle parts, and connections between the said back and the upper ends of said hinged arms to support the
25 back in position.

10. In a reversible car-seat, the combination of two extended hinged arms pivoted to the seat-frame, a reversible seat-back hinged to said arms at or near their middle parts, and links or
30 arms K, hinged to the back at k , and a loose connection between the said arms K and upper end of the hinged arms, to which the back is pivoted, whereby the back is hung from the
35 hinged arms.

In testimony of which invention I hereunto set my hand.

RUDOLPH M. HUNTER.

Witnesses:

ERNEST HOWARD HUNTER,
E. M. BRECKINREED.