

F. F. Wagner. Car-Seat.

N^o 82899

Patented Oct. 6, 1868.

Fig: 1.

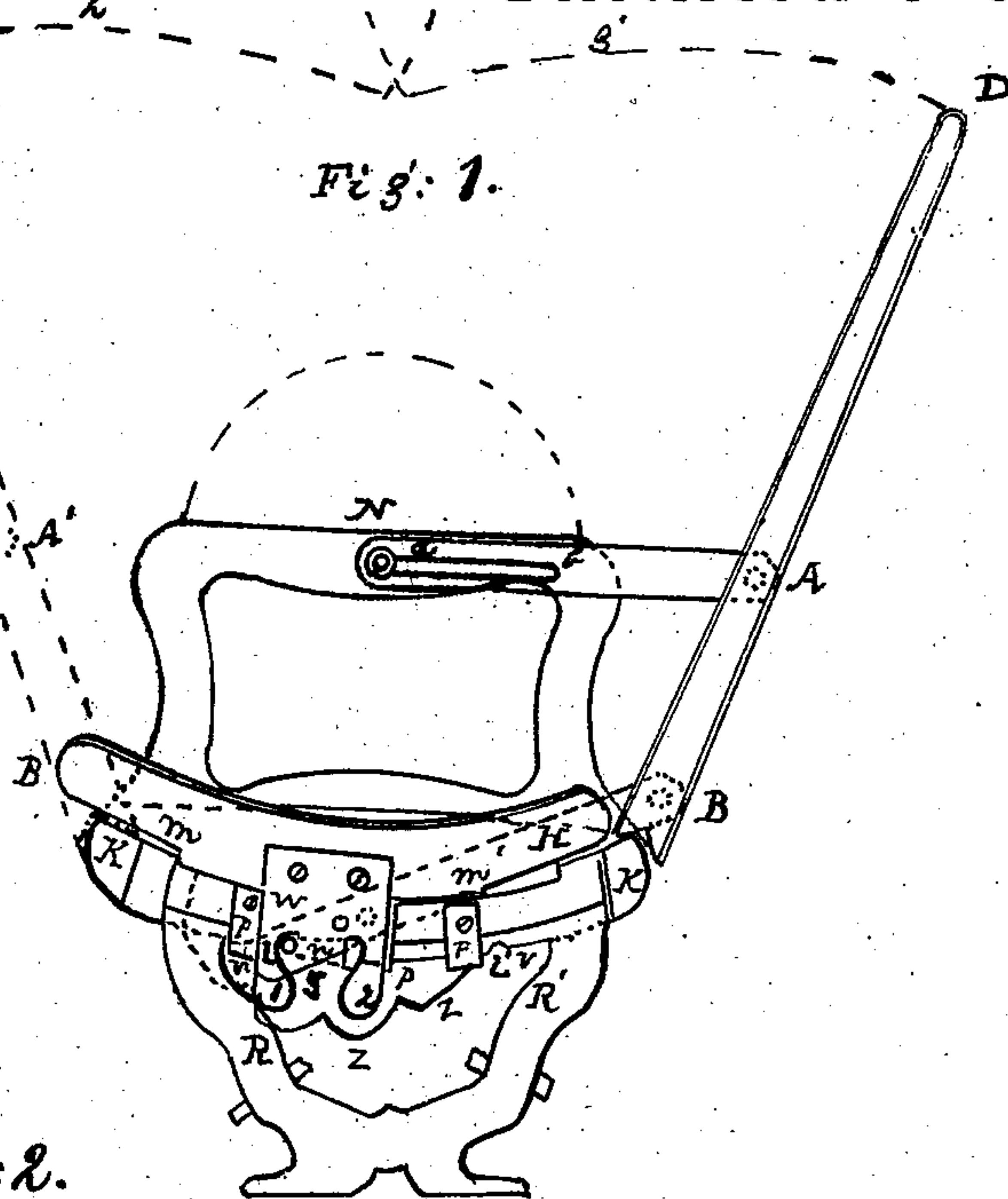


Fig: 2.

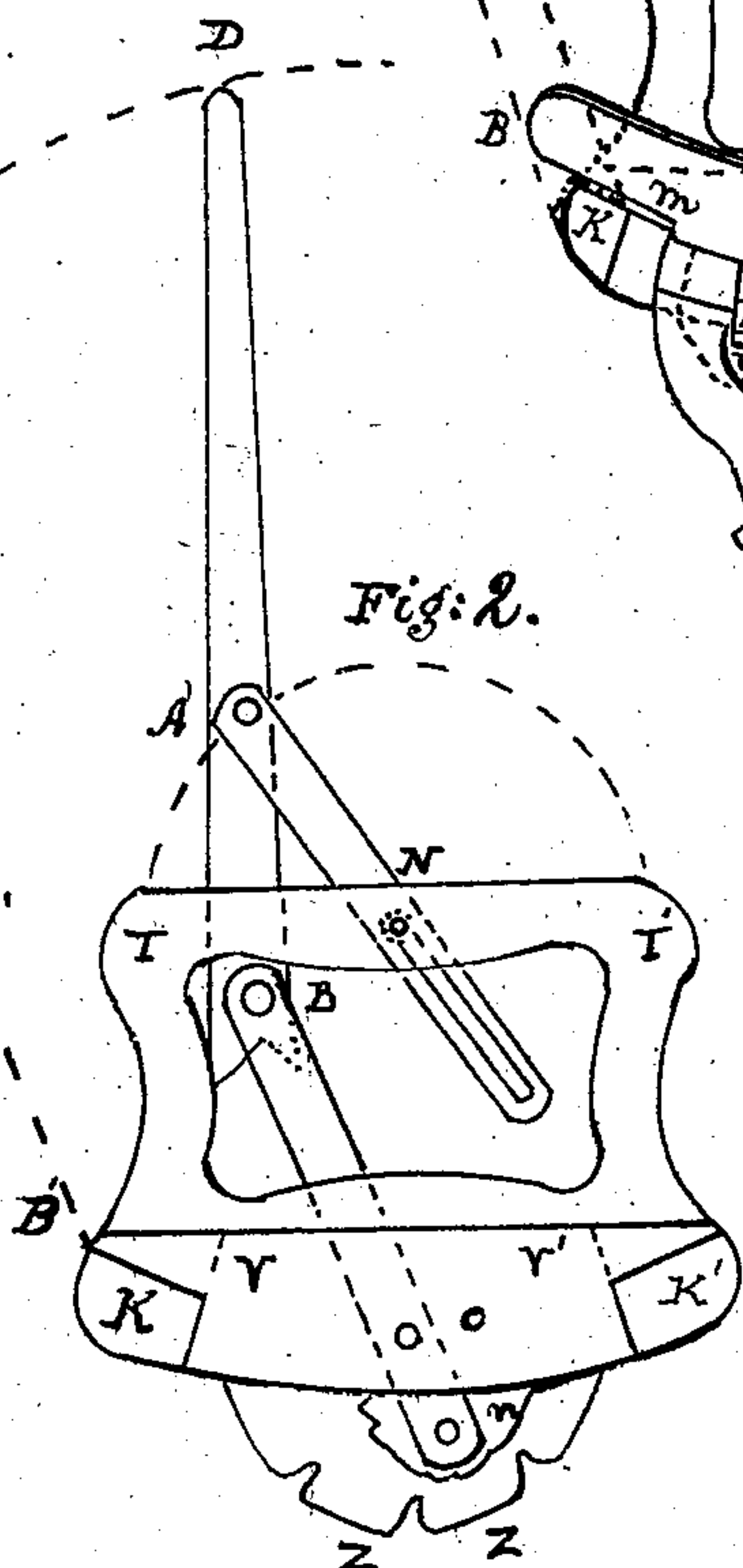


Fig: 3.

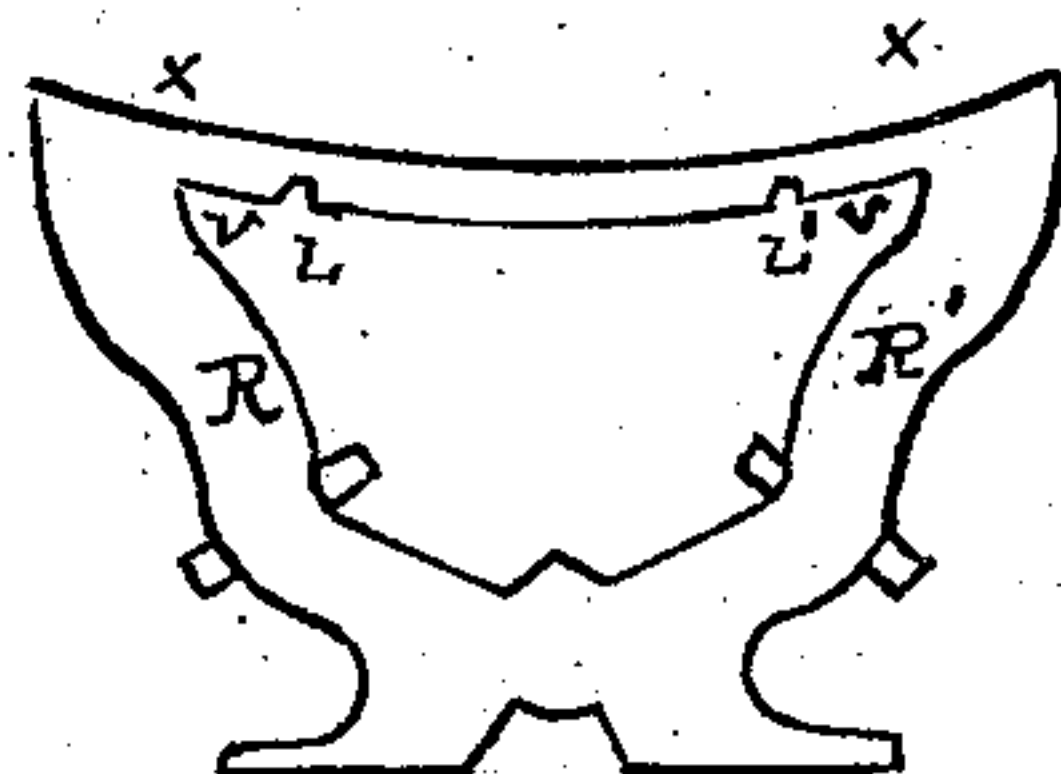
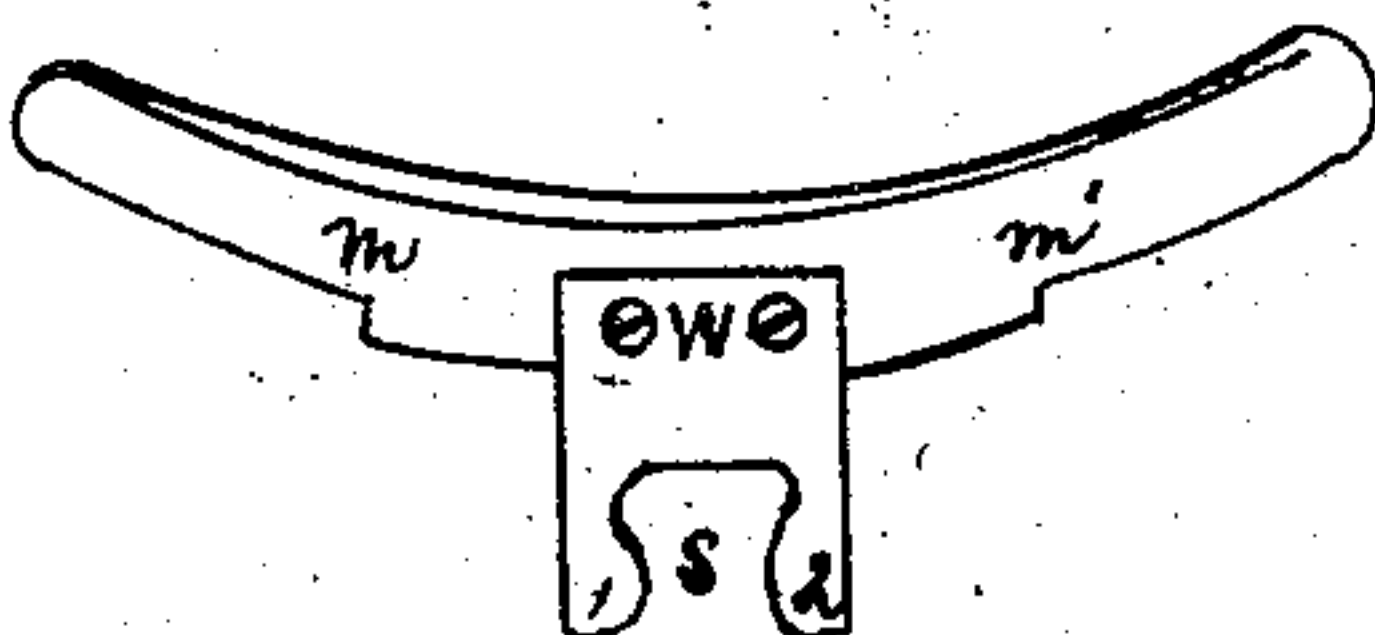


Fig: 4.



Witnesses :

David Harris

Theophilus Weaver

Inventor

F. F. Wagner

UNITED STATES PATENT OFFICE.

F. F. WAGNER, OF HARRISBURG, PENNSYLVANIA.

IMPROVED RAILWAY-CAR SEAT.

Specification forming part of Letters Patent No. 82,899, dated October 6, 1868.

To all whom it may concern:

Be it known that I, F. F. WAGNER, of the city of Harrisburg, county of Dauphin, and State of Pennsylvania, have invented an Improved Railroad-Car Seat; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical section of the seat. Figs. 2, 3, and 4 are vertical sections of the body, support, and seat of the same.

I construct my car-seat in such form and such adjustable parts as to secure a reversal of seats without inversion of the backs, and at the same time to secure the elevation of the front of the seat, automatically, for either position of the back. To attain these results, I construct the support of the seat shown in Fig. 3 so as to have an arc top rail, *x x*, and the body shown in Fig. 2 has its under side curved to fit and sweep said arc *x x* of the support. The body is held in contact and in proper position on said support by straps or clips, *P P P*, as shown in Fig. 1, which are a part of the sides of the body, and reach down on the inside of the end pieces of the frame of the body, and pass down likewise on the inside of the rails *x x* of the support, and have a claw or head to hold and slide on the under side of *x x*. The ends of said body-frame are joined together by rails *K K'*, which run parallel the length of the seat, and have their top edge inclined toward the center of motion *O*, as shown in Fig. 2 at *K K'*. By this means two benches are formed at *K K'* for the seat shown in Fig. 4, which has also the same curvilinear form, and has two abutments, *m m'*, on its under side, made by cutting away the ends beneath, which abutments are made to hold the seat against *K* or *K'* of the body, as shown in Fig. 1.

On the inside of each end of the seat-body are two pivoted arms, *A N* and *B O*, (shown in Figs. 1 and 2,) the former pivoted to the middle of the arm-rest, and connected with the back near the middle of it at *A*, Fig. 1, the latter pivoted to the center of the base *K K'* at *O*, and connected with the back at *B*, near its lower end, as shown in Figs. 1 and 2. The arm or connecting-rod *N A* has one end slotted

at *a b*, to admit of a flexure in the reversion of the back, in order to overcome the difference in the lengths of the connecting-rods *N A* and *O B* in their revolution about their pivots, and to give the back a proper slant when in place for use.

The connecting-rod *B O n*, Fig. 2, extends beyond *O*, its lower pivot to *n*, where is placed a pin, *n*, which reaches through from the outside of support to its inside at points *L L'*, as shown in Figs. 1 and 4, said rod being placed in a space made for it between the inner end of the body and outer end of the seat. Said pin *n* traverses a cam, *S*, in the plate *W*, Fig. 1, striking the sides 1 and 2, respectively, in reversing the back *A B D* from side to side. Said cam *S* has its sides 1 and 2 so curved inward near the open end that the pin *n* will throw the seat *m m'*, to which the plate is connected on its inner side before the back is entirely reversed, thus clearing the place for the base *B* of the back before it steps or falls. Said base *B*, Figs. 1 and 2, is cut or recessed to fit the sharp outer edge of the rails *K K'* when in rest on them. When said seat *m m'*, Fig. 1, has been shoved or moved by the cam *S* on it, by means of the pin *n* on said rod *O B*, the pin *n* also performs the office of locking the sliding body at rest, which is effected by sliding the body of the seat in the arc on the above-described support forward to its full extent, when the said pin *n* falls into a notch, *L* or *L'*, in said support arc rail, which, being stationary, holds said body. The said pin *n* falls right inside of the clip *P*, thus securing a firm hold, and the rod *B O*, being held down at the end *B* by weight of the back and by the back of the occupant, it cannot move until properly adjusted.

The movement which the back performs is indicated by the line *D g Q h D'*, Fig. 1. The rod *N A* is shoved in to end of slot *a b* in it. The back is then raised and pushed or lifted across to its place on the opposite rail *K* or *K'*, the position of the back and rods in partial reversion being shown in Fig. 2.

It will be noticed that the back is not inverted, as is usually done, but the movement is across the seat, passing from side to side by a species of parallelism, and here termed "reversion."

The advantages I obtain in mode of construction are, first, the backs can be made high and more comfortable to the occupant; second, the front of the seat being always elevated when the body or rack is adjusted, the occupant sits naturally inclined backward, and no effort is needed to sit; third, the movement of reversion of the back, as above described, can be effected noiselessly and without shocking the support; fourth, the ordinary car-seat locks can be readily applied to prevent tampering with the adjustment of the seat; fifth, the lower end of the back being always the lower end, if soiled by feet or otherwise, will not be as much a nuisance as is generally the case otherwise; sixth, more convenience and comfort are attained with little, if any, more expense.

I disclaim the use of pivoted connecting-

rods broadly, also the pivots in the edge of the back, also a detachable seat; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. The curved body-frame $K K'$, connected to the arc rails α of the support by means of the clips P , and with the sliding seat by means of the cams S , pins n , and the fulcrum-rods $B O n$, all constructed and arranged substantially as and for the purpose specified.

2. The slotted connecting-rods $N A$, in combination with the fulcrum-rods $B O n$, when arranged on the sides of the sliding frame $N K K'$, to effect reversion in the manner as herein expressed.

F. F. WAGNER.

Witnesses:

DAVID HARRIS,

THEOPHILUS WEAVER.