

No. 751,312.

PATENTED FEB. 2, 1904.

P. G. LEISTNER.
REVERSIBLE CAR SEAT.

APPLICATION FILED MAR. 23, 1903.

NO MODEL.

4 SHEETS—SHEET 1.

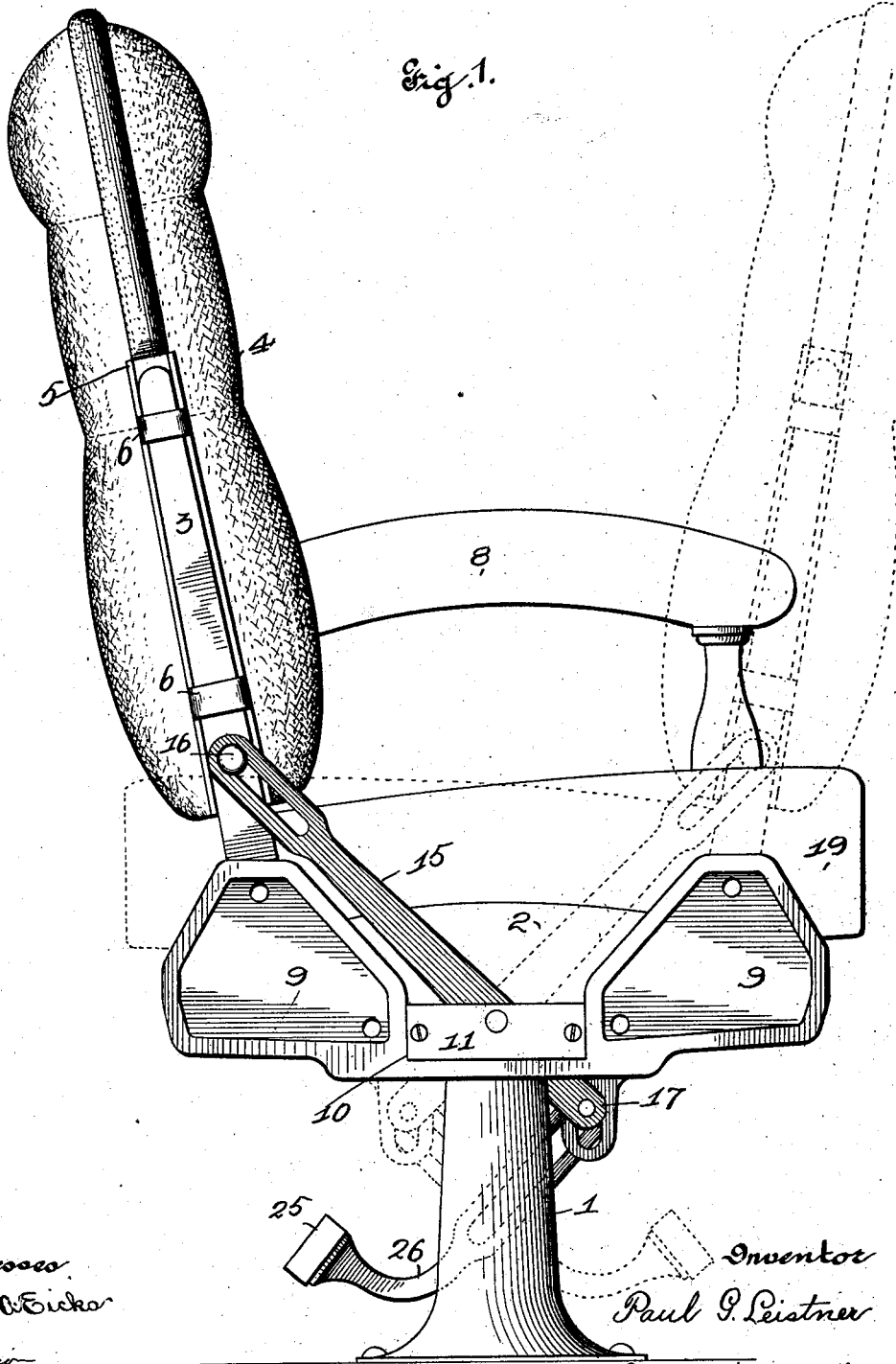


Fig. 1.

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by *Nichols & Longan* Attys.

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4 SHEETS—SHEET 2.

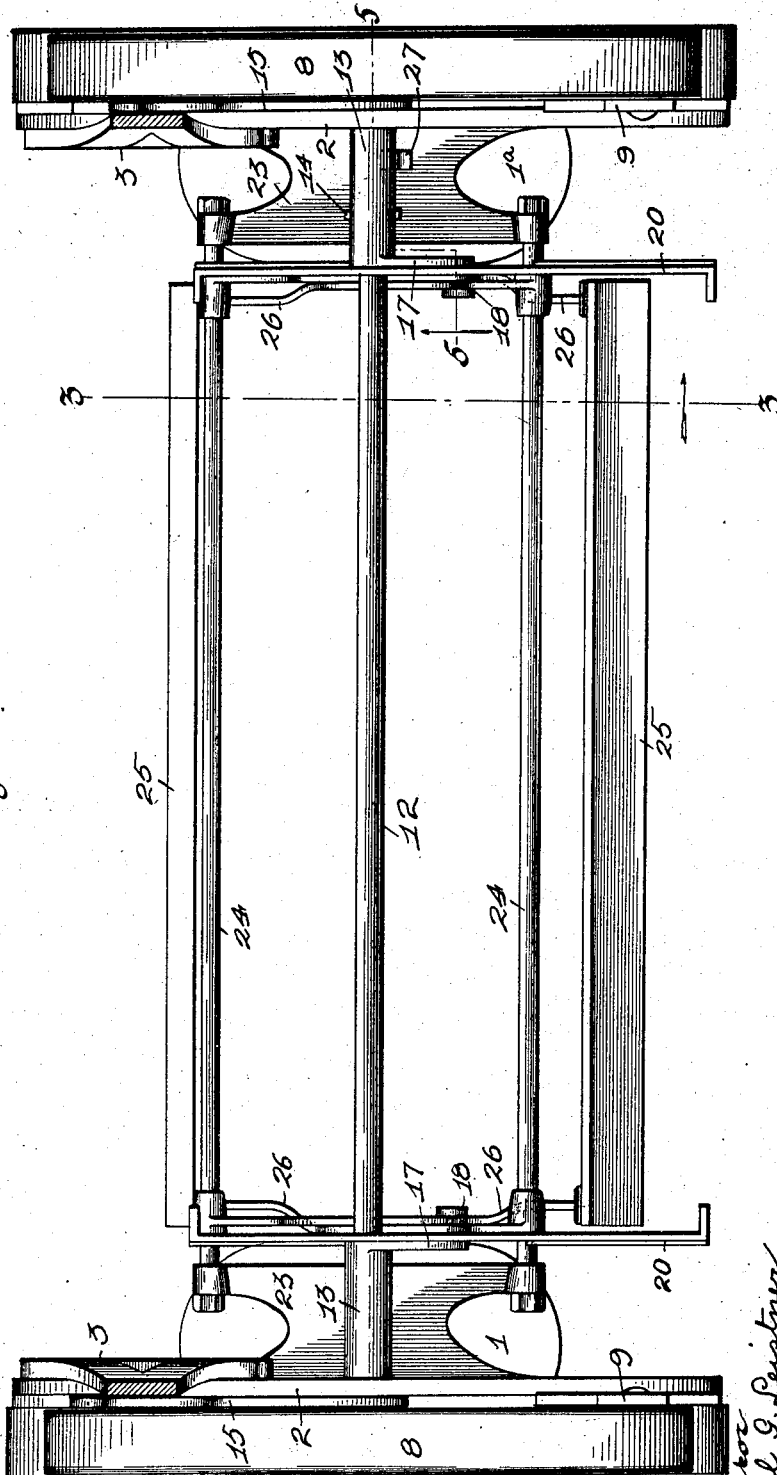


Fig. 2

Witnesses
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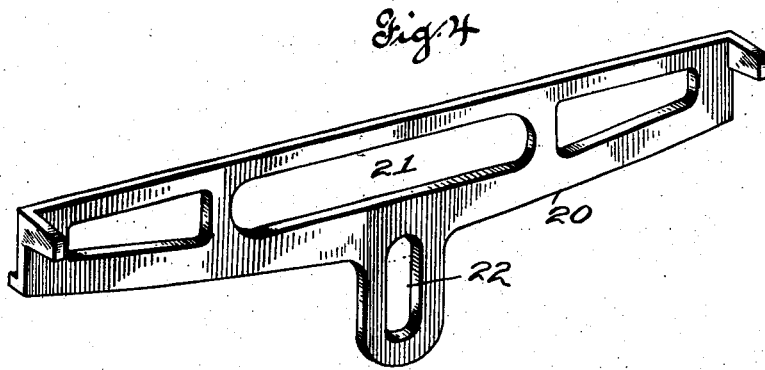
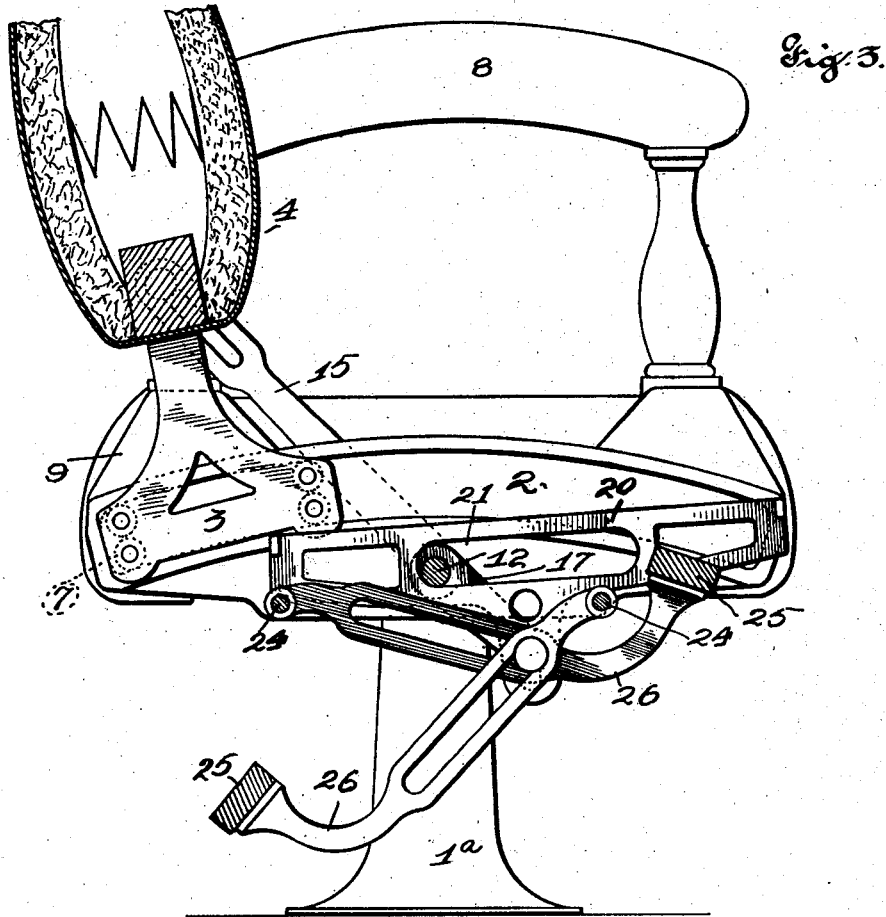
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NO MODEL.

4 SHEETS—SHEET 3.



Witnesses
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4 SHEETS—SHEET 4.

Fig. 6

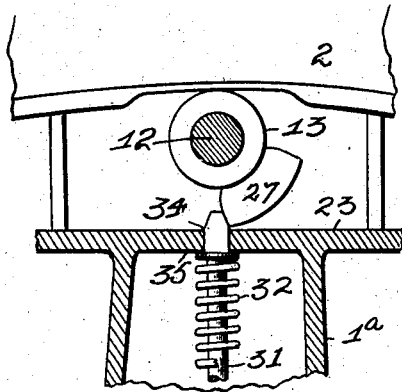


Fig. 5

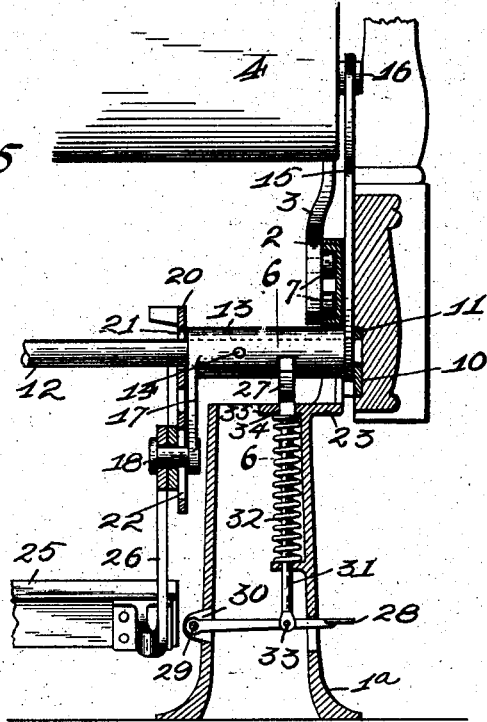
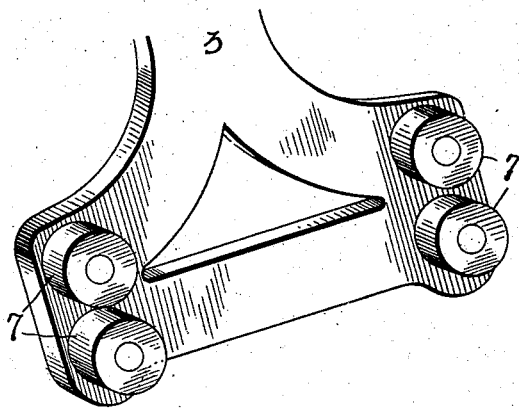


Fig. 7



Witnesses
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Witness

Inventor
Paul G. Leistner
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UNITED STATES PATENT OFFICE.

PAUL G. LEISTNER, OF ST. CHARLES, MISSOURI, ASSIGNOR OF ONE-
FOURTH TO HERMANN H. NIEMEYER, OF ST. CHARLES, MISSOURI.

REVERSIBLE CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 751,312, dated February 2, 1904.

Application filed March 23, 1903. Serial No. 149,231. (No model.)

To all whom it may concern:

Be it known that I, PAUL G. LEISTNER, a citizen of the United States, residing at St. Charles, St. Charles county, State of Missouri, have invented certain new and useful Improvements in Reversible Car-Seats, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in reversible car-seats, and has for its object to provide a car-seat in which the back portion may be reversed and when reversed alters the angle of the seat-section and places in position a foot-rest to be used by the occupants of the next adjoining rear seat.

In the drawings which form a part of the specification, Figure 1 is an end view of a seat embodying my invention. Fig. 2 is a top view of the same, with the seat-back removed, the side supporting-rails of the back member being shown in section. Fig. 3 is a vertical sectional view taken along the line 3 3 of Fig. 2. Fig. 4 is a perspective view of one of the supports for the seat-section. Fig. 5 is a vertical sectional view of portions of a seat embodying my invention, taken along the line 5 5 of Fig. 2. Fig. 6 is a vertical section of the locking device embodied in my invention, taken on the line 6 6 of Fig. 5. Fig. 7 is a perspective view of the base of the support for the back-section of my car-seat.

I have provided tubular standards 1 and 1^a, cast integral at the outer sides of their tops with the curved guide members 2, which guide members are adapted to receive and hold the shanks 3, which are attached to and support the back-section 4. The upper portions of the shanks 3 fit into the channelled members 5, which are fixed to the edges of the back-section 4, the shanks 3 being held in place therein by means of straps 6, so that the back-section 4 is made thereby vertically adjustable. The back-section may thus be swung back and forth to a degree predetermined by the length of the curved guide member 2, the base of the shank 3 being provided with rollers 7, which are arranged in two pairs, as

shown in dotted lines in Fig. 2 and in perspective in Fig. 7, and which are fitted snugly against the top and bottom flanges of the guide member 2 and which serve to render the movement of the back-section 4 easy and noiseless. The seat is provided at each end with the arms 8, which are screwed to the side castings which contain the curved guide members 2. The portions of the castings to which the arms are thus attached are indicated by the numeral 9 at the central portion of the side castings, and between the sections 9 I have provided a slot 10, which is adapted to receive the plate 11. The transverse bar 12 is pivotally mounted at each end in the plates 11. Within the plates 11 the collars 13 are mounted upon the bar 12 and held thereon by means of pins 14. At their outer sides the collars 13 terminate in the slotted arms 15. The members 3 are provided with pins 16, whereby the members 3 and arms 15 are slidably connected. At their inner ends the collars 13 are provided with depending arms 17, which terminate at their lower extremities in lugs 18.

The seat-section 19 rests upon the supports 20, provided with horizontal slots 21 and vertical slots 22, as shown in Fig. 4. The bar 12 passes through the slots 21 and the lugs 18 project inwardly through the slots 22. The standards 1 and 1^a are provided on the inner sides of their upper extremities with brackets 23. The brackets 23 are connected by the parallel transverse rods 24, upon the outer ends of which the supports 20 rest. The foot-rests 25 are pivotally attached to the rods 24 by means of the slotted arms 26, whose slots overlap, as shown in Fig. 3, the lug 18 extending through the slots of both of the members 26. By the means thus described the foot-rests 25 are connected to the back-section 4, so that the foot-rest beneath the side of the seat at which the back-section is placed in position is itself in position for use, so that it may be used by the occupants of the adjoining seat, while the opposing foot-rest 25 is thrown upward toward the seat-section 19, leaving the space beneath the seat at its front available for the storage of baggage and the like.

The movement of the back-section 4 and its attachments, moreover, causes the supporting-sections 20 to be tilted toward the back of the seat, as indicated by the dotted lines in Fig. 1, and by the position of the supports 20 (shown in Fig. 3) the adjustment of the foot-rests and seat-section being effected automatically by placing the back-section 4 in position.

I have provided the following means for locking the back-section 4 and its connected parts in position: I have provided that one of the collars 13, which is at the outer side of the seat, with a depending lug 27, and have provided the tubular support 1 with the foot-lever 28, connected by the pivot 29 to the lug 30 and provided with the vertical locking-bar 31, which is normally held upward and in engagement with the lug 27 by means of the spring 32, the locking-bar 31 and foot-lever 28 being connected by a pivot 33. The top of the locking-bar 31 projects vertically through the opening 34 in the bracket 35, which is cast integral with the top of the support 1. Thus the back-section 4 and its connections are securely locked when in position and released to be shifted to the opposing position by depressing the foot-lever 28.

Having fully described my invention, what I claim as new, and desire to have secured to me by the grant of Letters Patent, is—

1. In a reversible car-seat, standards provided with curved guide members, a vertically-adjustable back-section provided at its sides with channeled members, shanks adapted to fit within the channeled members, straps whereby the shanks are secured within the channeled members, two pairs of rollers mounted upon the bases of the shanks and adapted to fit within the guide members, and arms pivotally mounted within the standards in a plane without the plane of the guide members and provided at their upper ends with slots to engage with pins on the outer faces of the shanks, substantially as described.

2. In a reversible car-seat, standards provided with curved guide members, a vertically-adjustable back-section provided at its sides with channeled members, shanks adapted to fit within the channeled members, straps whereby the shanks are secured within the channeled members, two pairs of rollers mounted upon the bases of the shanks and adapted to fit within the guide members, arms pivotally mounted within the standards in a plane without the plane of the guide members and provided at their upper ends with slots to engage with pins on the outer faces of the shanks, foot-rests connected to the back-section, a locking-bar mounted in one of the standards and a foot-lever whereby the locking-bar is actuated; the back-section, seat-section and foot-rests being connected to move simultaneously, substantially as described.

3. In a reversible car-seat, standards pro-

vided with curved guide members, a vertically-adjustable back-section provided at its sides with channeled members, shanks adapted to fit within the channeled members, straps whereby the shanks are secured within the channeled members, two pairs of rollers mounted upon the bases of the shanks and adapted to fit within the guide members, arms pivotally mounted within the standards in a plane without the plane of the guide members and provided at their upper ends with slots to engage with pins on the outer faces of the shanks, foot-rests connected to the back-section, a locking-bar mounted in one of the standards and a foot-lever whereby the locking-bar is actuated; the back-section, seat-section and foot-rests being connected to move simultaneously, and adapted to be locked in position by means of the locking-bar and foot-lever, substantially as described.

4. In a car-seat, a standard whereon the seat is supported, curved guide members mounted upon the standard, a seat-section, tilting supports whereby the seat-section is carried, parallel foot-rests, slotted arms whereby the foot-rests are slidably connected to each other and pivotally connected to the seat-supports, a vertically-adjustable back-section, shanks whereby the back-section is supported, rollers mounted upon the lower extremity of the shanks and extending into the curved guide members, and connecting-arms whereby the back-section, seat-section and foot-rests are engaged together to operate simultaneously, substantially as described.

5. In a reversible car-seat, connecting means between the back-section and the standards comprising curved guide members 2 mounted on the standards, collars 13 pivotally mounted in the standards, slotted arms extending upward from the outer ends of the collars 13, their slots engaging with pins on the outer sides of the shanks supporting the back-section, the slotted arms being disposed on the outer sides of the curved guide members; the shanks being disposed against the inner sides of the curved guide members, the bases of the shanks being provided with two pairs of rollers which fit within and against the top and bottom flanges of the guide members, substantially as described.

6. A reversible car-seat, comprising two standards, a transverse bar pivotally mounted between the tops of the standards, curved guide members mounted at the tops of the standards, collars mounted upon each end of the transverse bar and provided with depending arms terminating in lugs and at their outer sides in slotted arms, supports carrying the seat-section and slotted horizontally to admit the transverse bar and vertically to admit the lugs on the depending arms, shanks carrying the back-section and provided with pins to engage with the slots in the slotted arms, two pairs of rollers mounted upon the bases of

each of the shanks, the rollers fitting within the curved guide members and engaging with the inner sides of the tops and bottoms thereof, the slotted arms being disposed upon the outer
 5 sides of the curved guide members; brackets mounted at the tops and on the inner sides of the standards, parallel transverse rods connecting the brackets, foot-rests, slotted arms
 26 carrying the foot-rests, the slotted arms
 10 26 being pivotally mounted upon the parallel transverse rods, their slots overlapping, and being penetrated by lugs upon the depending arms, substantially as described.

7. A reversible car-seat, comprising two
 15 standards, a transverse bar pivotally mounted between the tops of the standards, collars mounted upon each end of the transverse bar and provided with depending arms terminating in lugs and at their outer sides in slotted
 20 arms, supports carrying the seat-section and slotted horizontally to admit the transverse bar and vertically to admit the lugs on the depending arms, shanks carrying the back-section and provided with pins to engage with
 25 the slots in the slotted arms, two pairs of roll-

ers mounted upon the bases of each of the shanks, the rollers fitting within the curved guide members and engaging with the inner sides of the tops and bottoms thereof, the
 30 slotted arms being disposed upon the outer sides of the curved guide members; brackets mounted at the tops and on the inner sides of the standards, parallel transverse rods connecting the brackets, foot-rests, slotted arms
 35 26 carrying the foot-rests, the slotted arms 26 being pivotally mounted upon the parallel transverse rods, their slots overlapping, and being penetrated by lugs upon the depending arms; a locking-bar mounted in one of the
 40 standards and a foot-lever whereby the locking-bar is actuated to lock the back-section and seat-section and foot-rests in position, substantially as described.

In testimony whereof I have signed my name
 to this specification in presence of two sub- 45
 scribing witnesses.

PAUL G. LEISTNER.

Witnesses:

M. G. IRION,
 EDW. HARRINGTON.