

W. J. ANSON.

SLEEPING CAR.

APPLICATION FILED FEB. 16, 1910.

Patented Feb. 7, 1911.

4 SHEETS—SHEET 1.

983,528.

Fig. 1.

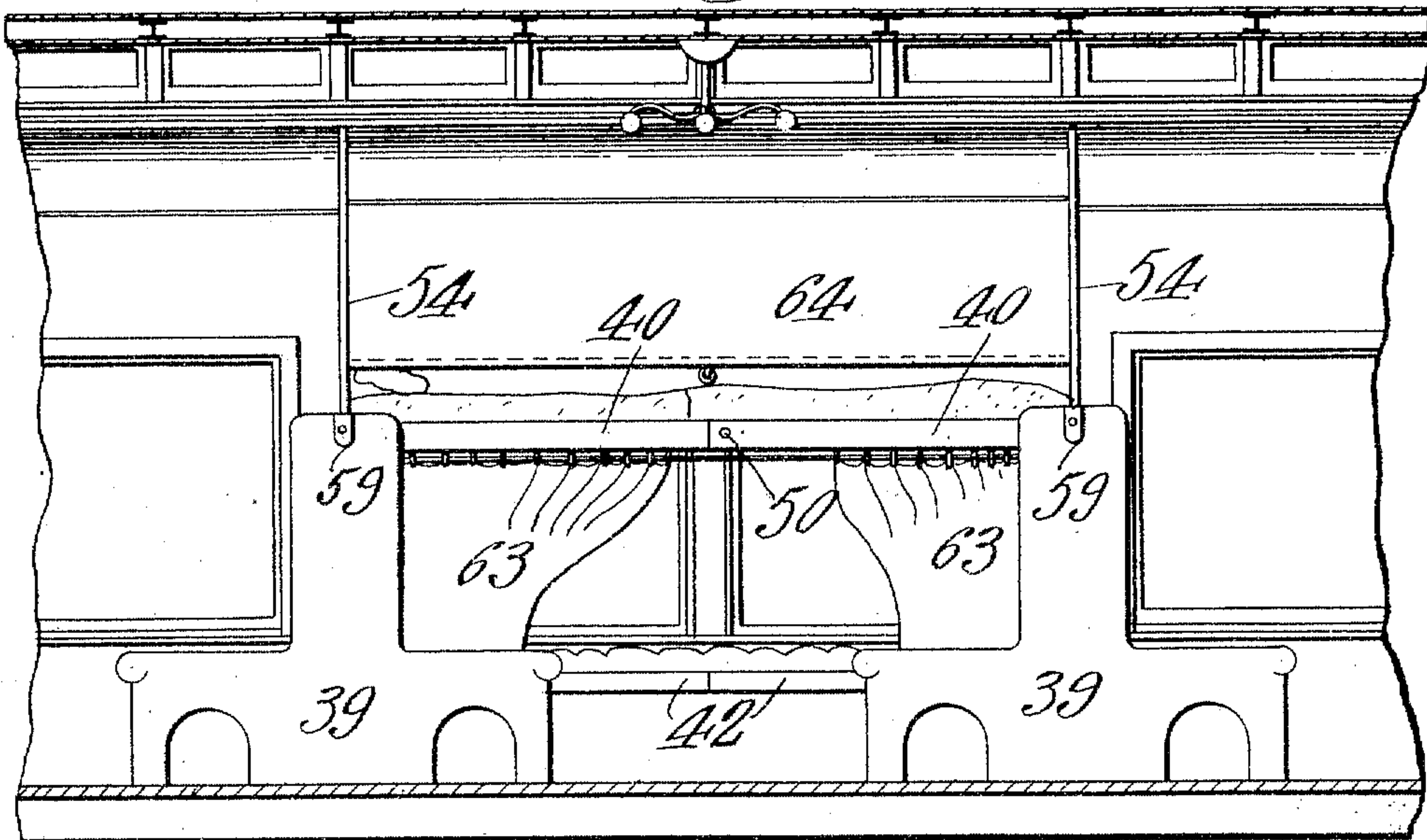
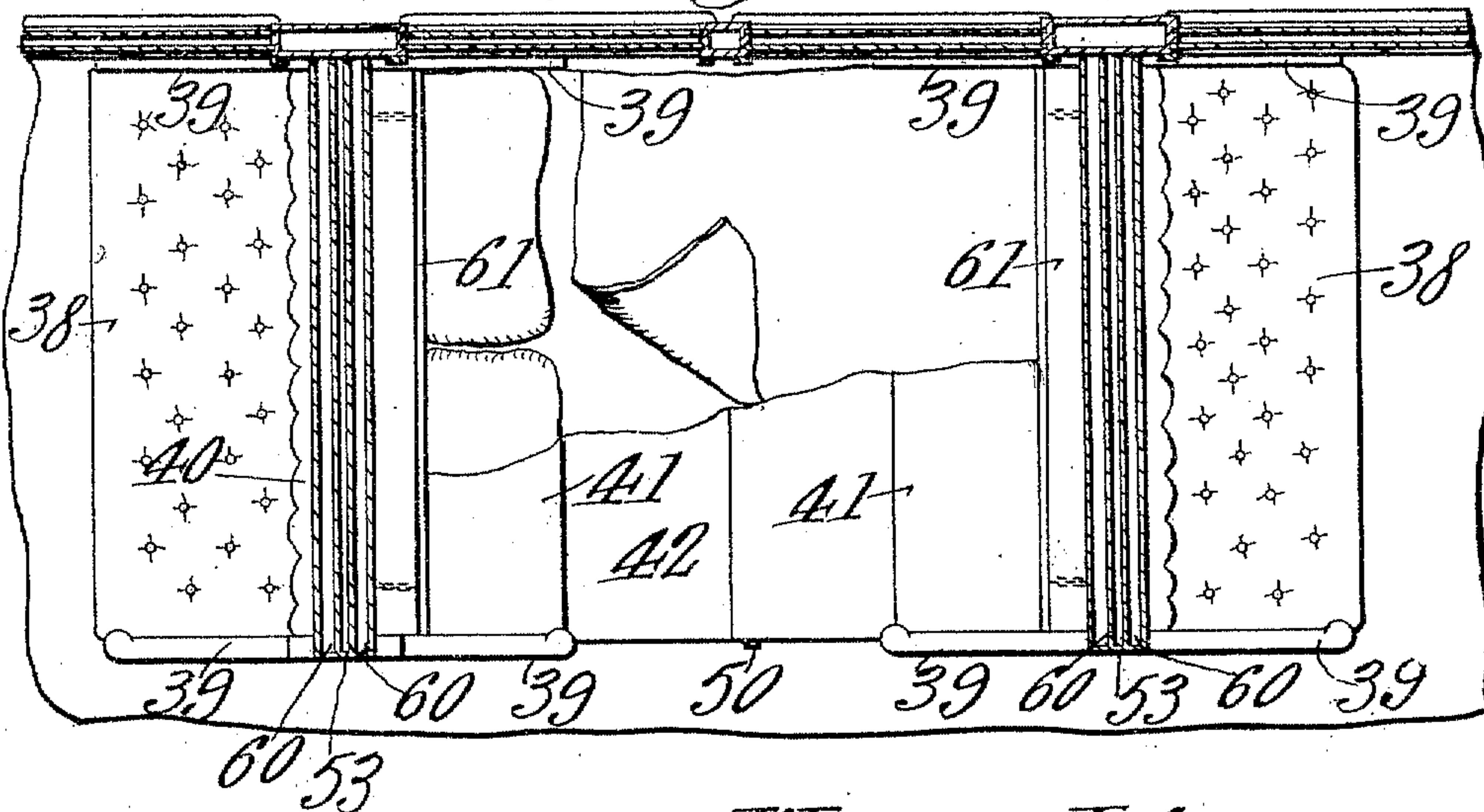


Fig. 2.



Witnesses

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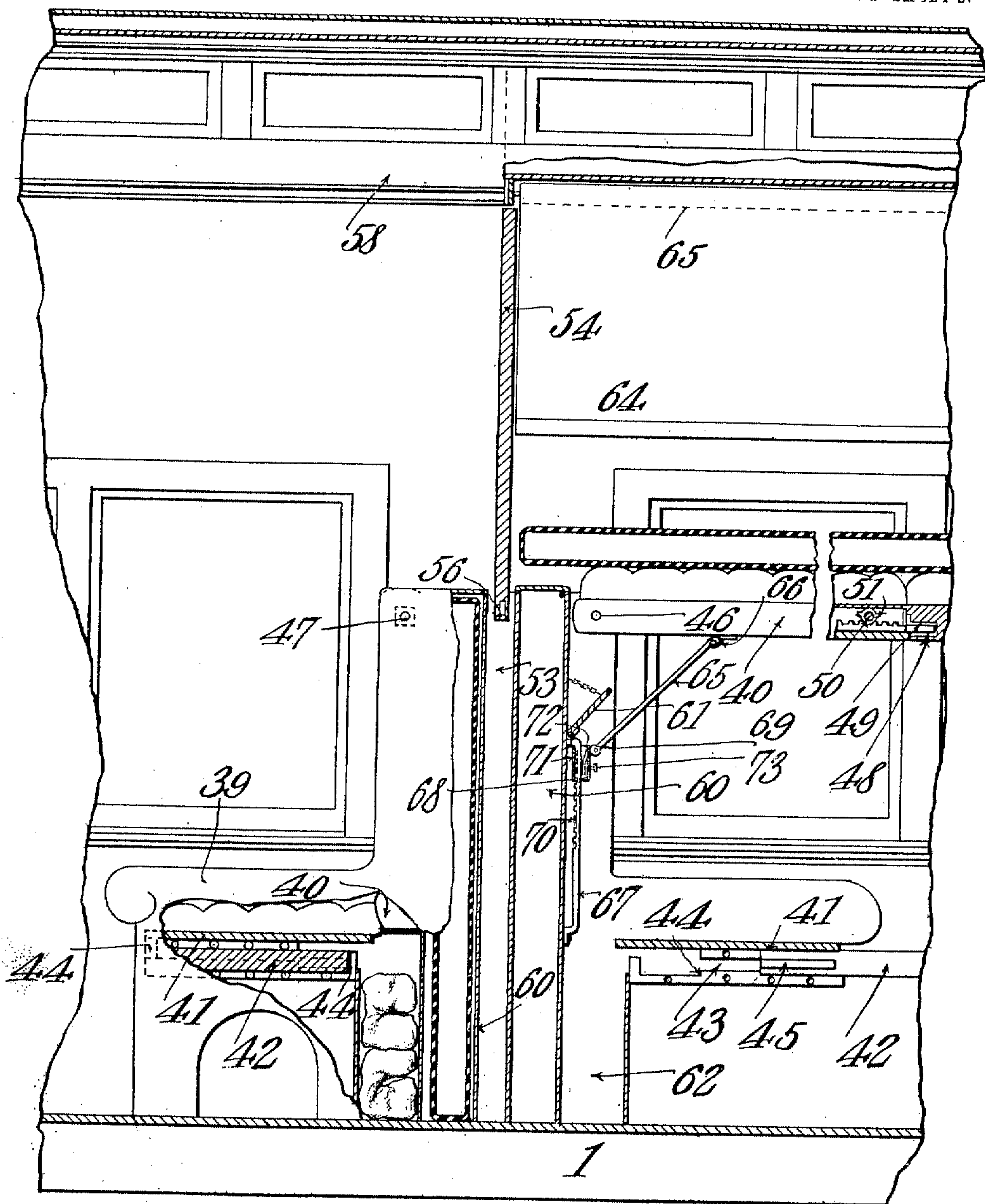


Fig. 3.

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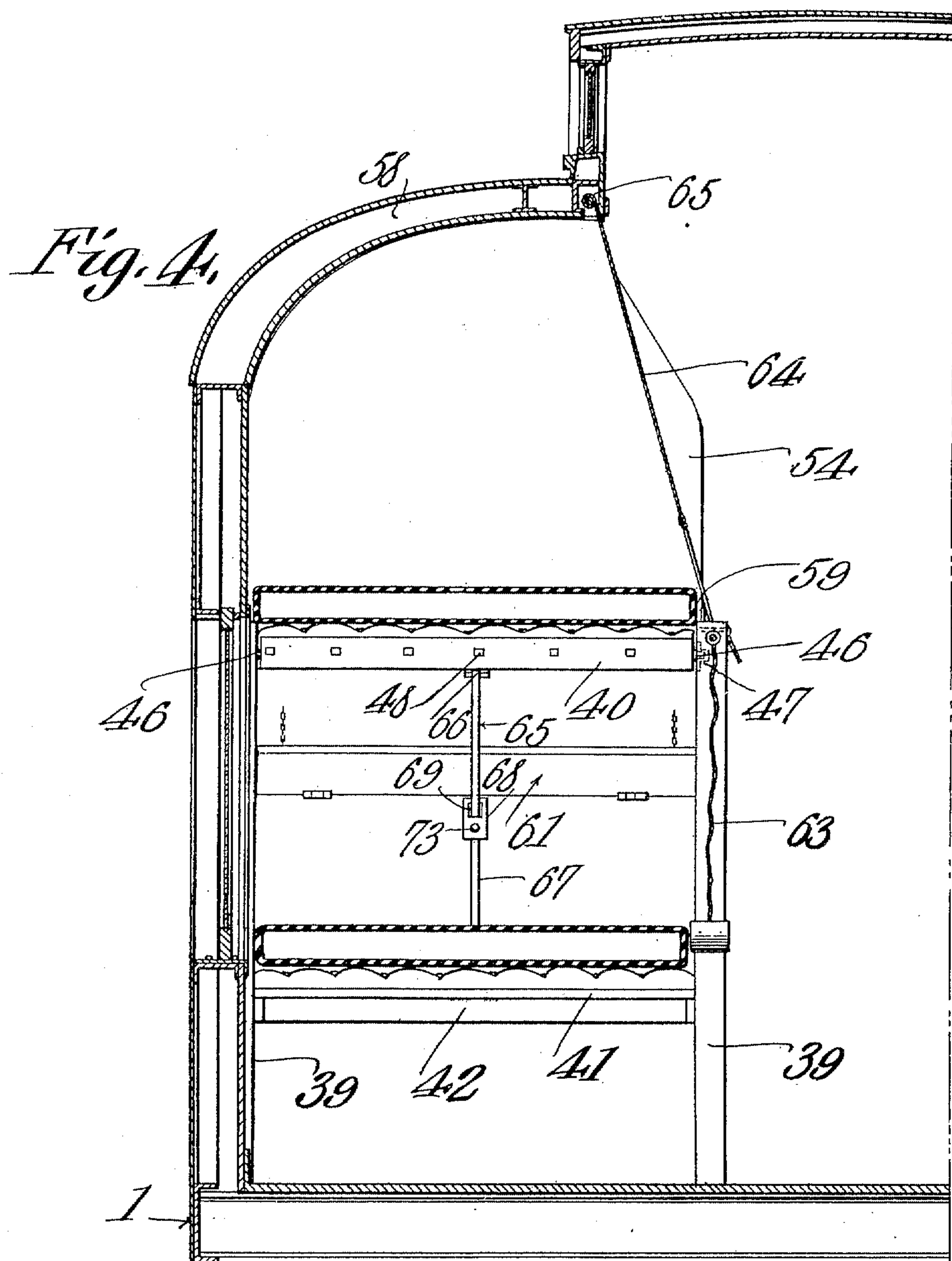
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4 SHEETS—SHEET 3.



Witnesses

Witnesses
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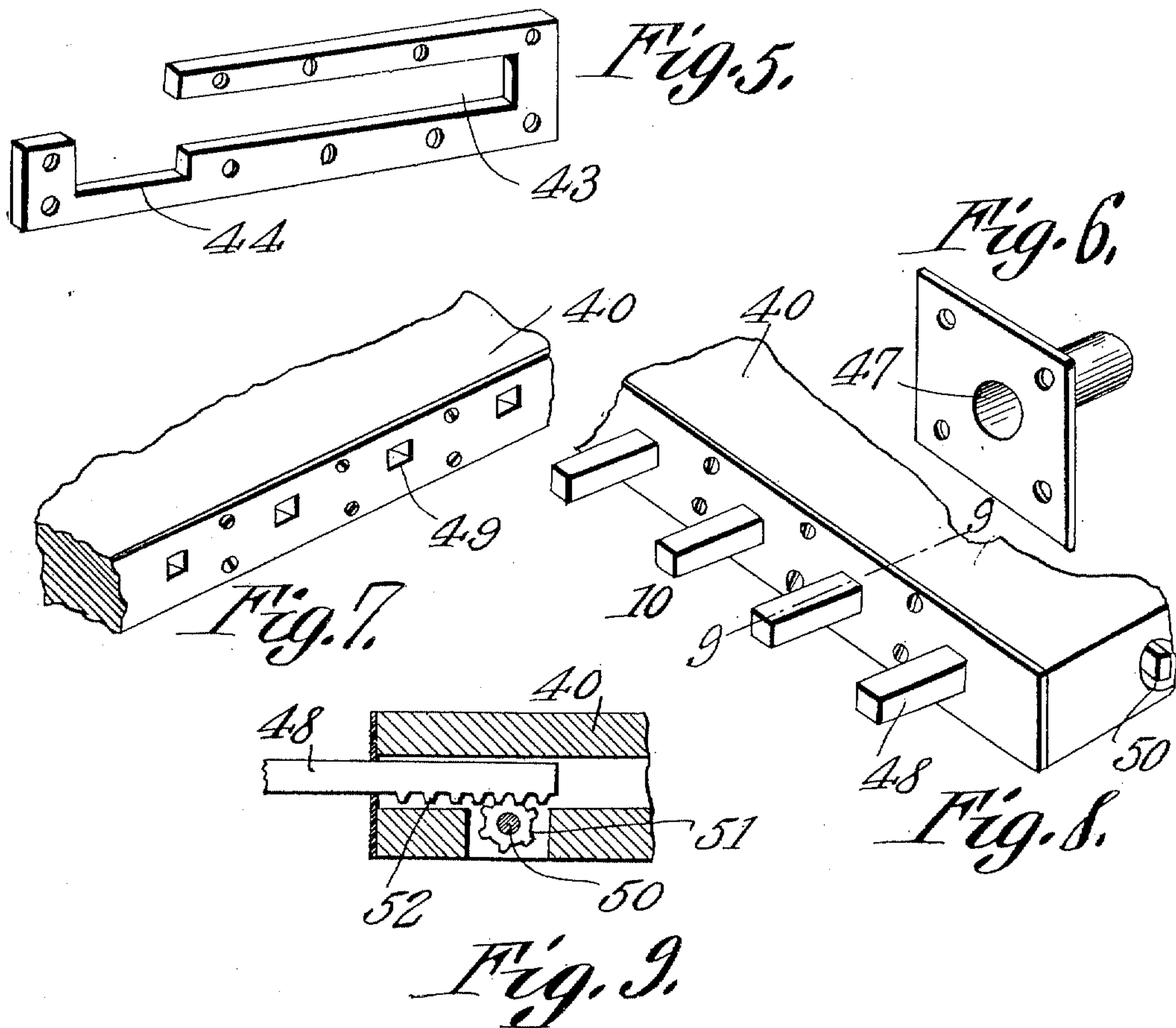
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4 SHEETS—SHEET 4.



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UNITED STATES PATENT OFFICE.

WARREN J. ANSON, OF EL PASO, TEXAS, ASSIGNOR OF ONE-FOURTH TO GEORGE E. BRIGGS, OF WARD COUNTY, TEXAS, AND ONE-FOURTH TO JOHN HOULIHAN AND ONE-FOURTH TO ANDERSON M. WALTHALL, OF EL PASO, TEXAS.

SLEEPING-CAR.

983,528.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed February 16, 1910. Serial No. 544,330.

To all whom it may concern:

Be it known that I, WARREN J. ANSON, a citizen of the United States, residing at El Paso, in the county of El Paso and State of Texas, have invented a new and useful Sleeping-Car, of which the following is a specification.

This invention relates to railway sleeping cars having seats which are convertible into berths, the object of the invention being to provide an improved structure in which the bottom of the seats forms the lower berth, and the back rests the upper berth.

The invention also has for its object to provide improved means for securely locking the seat backs when extended into position to form the upper berth.

A further object of the invention is to provide a seat structure which can be readily converted into the berth, and which latter will be roomy and comfortable.

With the herein stated objects in view, the invention consists in a novel construction and arrangement of parts to be hereinafter described and claimed, reference being had to the drawings hereto annexed in which,

Figure 1 is an elevation of the made up berth. Fig. 2 is a plan view thereof. Fig. 3 is a longitudinal section of a portion of the berth. Fig. 4 is a cross section of the berth. Fig. 5 is a perspective view of one of the supports of the sliding seat section. Fig. 6 is a perspective view of the pivot socket of the back rest. Figs. 7 and 8 are perspective views of the meeting ends of the two back rests which form the upper berth. Fig. 9 is a section on the line 9—9 of Fig. 8.

The seats 38 extend cross-wise of the car, and are arranged in pairs on opposite sides of the aisle 14, the members of each pair facing each other. The seats are so constructed that each pair or section may be converted into an upper berth and a lower berth. Each seat comprises ends 39, a back rest 40, and a bottom consisting of a stationary portion 41, and a slidable portion 42, the latter being located beneath the stationary portion, and adapted to be extended outwardly from the seat to form a part of the lower berth. The fixed portion 41 is rigidly secured to the ends 39 between the same.

To the inner faces of the ends 39 of the seat are secured castings having each a longitudinal slot 43. The slot is closed at its

front end, and opens through the top of the casing at its rear end. The rear end of the slot also has a depression 44 which is for a purpose to be presently described. The slot is horizontally disposed. The seat portion 42 is slidably mounted between the ends 39, and on the opposite edges of said portion are lugs 45 extending into the slots 43. When the seat is to be made up into the berth, the portion 42 is pulled outwardly, the lugs 45 sliding along the slots 43, and as the front ends of said slots are closed, said closed ends limit the outward movement of the sliding seat portion. When the said portion is in retracted position, the lugs 45 seat in the depression 44, whereby it is prevented from working outwardly by the jarring of the car. The fixed portions 41 and the sliding portions 42 of two opposite seats 38 are adapted to form a lower berth when the sliding portions 42 are pulled from under the fixed portions 41 until the opposite edges of the portions 42 meet.

The back rest 40 has trunnions 46 at its side edges near its upper end, said trunnions being journaled in sockets 47 secured to the seat ends 39, the trunnions and sockets being arranged so that the back rest may be swung upwardly into horizontal position to form, in conjunction with the back rest of the other seat, the upper berth, the two back rests coming together at their edges when swung into this position.

For holding the back rests in horizontal position, a locking device is provided, comprising a plurality of sliding bolts 48 carried by one of the back rests, and adapted to enter keeper sockets 49 made in the opposite edge of the other back rest. These bolts and keeper sockets are on the lower edges of the back rest, so that they come into operative position when the back rests are swung upwardly into horizontal position. The bolts are adapted to be operated simultaneously by means of a transverse shaft 50 journaled in an opening made in the back rest, and carrying pinions 51 which mesh with racks 52 formed on the inner ends of the bolts. One end of the shaft 50 is squared to receive a key. Upon rotating the shaft in one direction, the bolts are shot forwardly into the keeper sockets, and rotation of the shaft in the opposite direction simultaneously retracts the bolts.

Between one of the seats of a section, and the adjacent seat of the next section, is located a vertically arranged casing 53 containing a head board 54 adapted to be elevated so as to extend between the sections to form a partition. Any suitable means (not shown) may be provided for elevating and lowering the head board. When the berths are not made up, the head board is lowered into the casing 53, and is then out of the way. To hold the head board in elevated position, a catch 59 is provided.

On each side of the casing 53 are located casings 60 adapted to receive the mattresses of the berths when the latter are not made up. The mattresses are preferably inflatable. To the outer faces of the casing 60 are hinged clothes racks 61 which swing outwardly into position for use when the seat backs 40 are swung upwardly to make up the upper berth. The racks fold up when the backs are lowered into position for use as a seat back rest. Beneath each seat is located a pillow box 62.

The lower berth is provided with a curtain 63 which may be supported between the seat ends 39. The curtain 64 of the upper berth is mounted on a spring roller 65 mounted in a housing formed by the walls of the lower deck 58, said wall being doubled as shown in Fig. 4, and the inner wall having a slit through which the curtain extends.

In order to hold up the back rests until they are locked in horizontal position to make up the upper berth, a holder is provided, said holder comprising a brace rod 65 hinged at one of its ends as indicated at 66 to the rear of the back rest, and having its other end adjustably connected to the casing 60. This adjustable connection comprises a stay rod 67 secured to the casing 60, and spaced therefrom, on which stay rod is mounted to slide up and down thereon a sleeve 68 to which the brace rod 65 is hinged as indicated at 69. One of the edges of the stay rod has notches 70 which are engageable by a tooth 71 formed on that portion of the sleeve which is opposite the notches. The opposite edge of the stay rod is engageable by one end of a flat spring 72 secured to the sleeve on the inside thereof, this spring being provided to lock the tooth in the notches. A thumb screw 73 carried by the sleeve, and connected to the spring, is provided for withdrawing the latter to release the sleeve, after which it may be slid up and down on the stay rod 67 to enable the seat back to be elevated or lowered.

What is claimed is:

1. A sleeping car having seats convertible into berths, said seats being arranged in

pairs to form berth sections, and each seat comprising ends, a bottom, and a back rest pivotally mounted between the ends to swing into horizontal position, means for locking the back rests of the section in horizontal position, a slide mounted beneath the seat bottom, and adapted to be extended therefrom, horizontally slotted members on the seat ends, and lugs on the slides working in the slots of said members.

2. A sleeping car having seats convertible into berths, said seats being arranged in pairs to form berth sections, and each seat comprising ends, a bottom, and a back rest pivotally mounted between the ends to swing into horizontal position, means for locking the back rests of the sections in horizontal position, a slide mounted beneath each seat bottom, and adapted to be extended therefrom, horizontally slotted members on the seat ends, and lugs on the slides working in the slots of said members, said slots having depressions at their inner ends entered by the lugs when the slide is in retracted position.

3. The combination with a support, of a seat back hinged thereto, a rod secured to the support in spaced relation therewith, one of the edges of the rod being notched, a sleeve slidably mounted on the rod, and having a tooth engageable with the notches, means for holding the tooth in engagement with the notches, and a rod pivoted at one of its ends to the sleeve, and at its other end to the seat back.

4. A sleeping car having seats convertible into berths, said seats being arranged in pairs to form berth sections, and each seat comprising ends, a bottom, and a back rest pivotally mounted between the ends to swing into horizontal position, a plurality of sliding bolts carried by one of the back rests of the section, and keepers on the other back rest engageable by the bolts when the said back rests are extended into horizontal position, and means for simultaneously operating the bolts.

5. A sleeping car having seats convertible into berths, said seats being arranged in pairs to form berth sections, and each seat comprising ends, a bottom, and a back rest, slotted members on the seat ends, a slide mounted beneath the seat bottom, and adapted to be extended therefrom to form the lower berth, and lugs on the slide working in the slots of the aforesaid members.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WARREN J. ANSON.

Witnesses:

HARRY W. BEATTY,
E. A. RIZOO.