

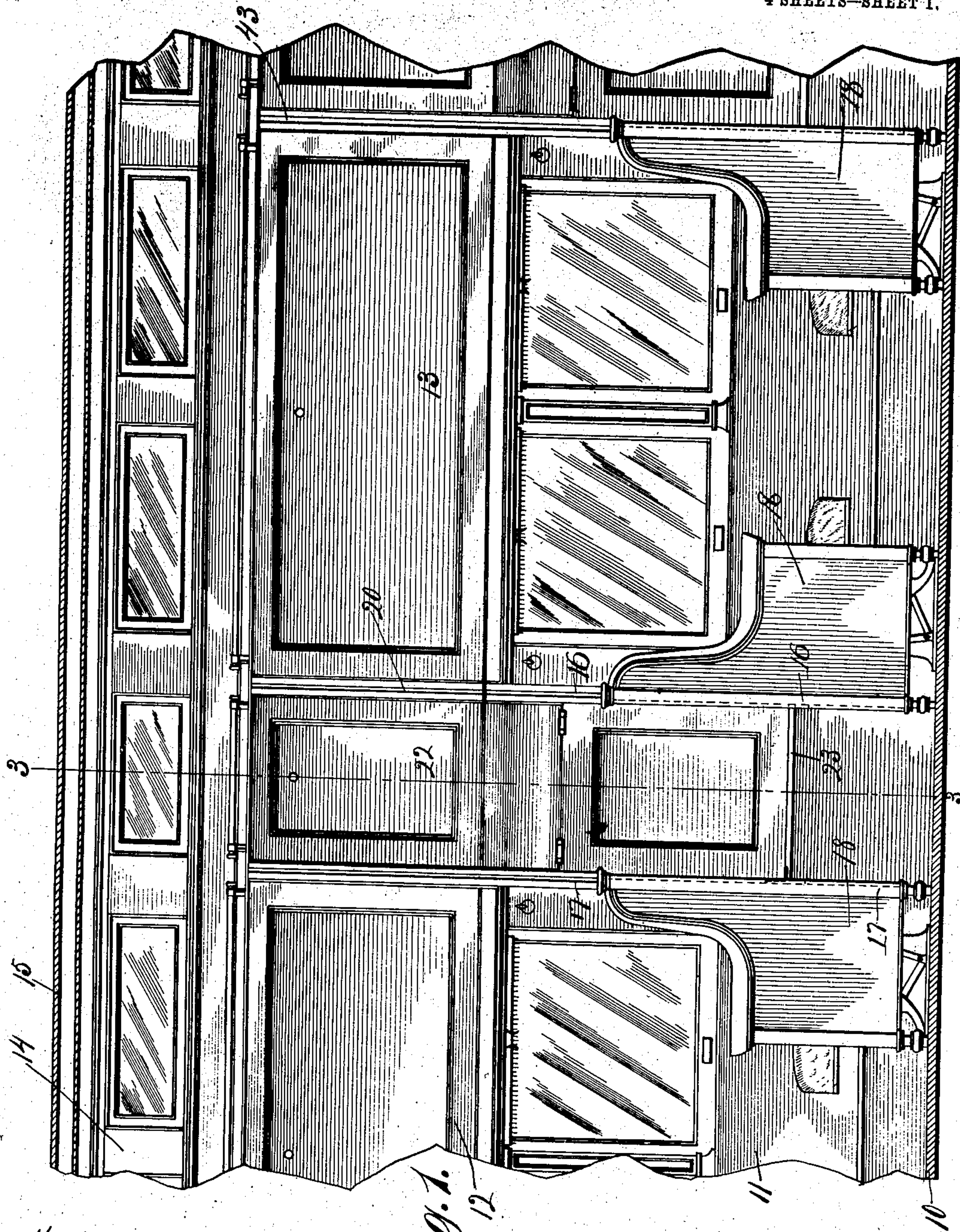
No. 816,037.

PATENTED MAR. 27, 1906.

H. M. PFLAGER.
SLEEPING CAR.

APPLICATION FILED DEC. 28, 1903.

4 SHEETS—SHEET 1.



Witnesses:
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Fig. 1.

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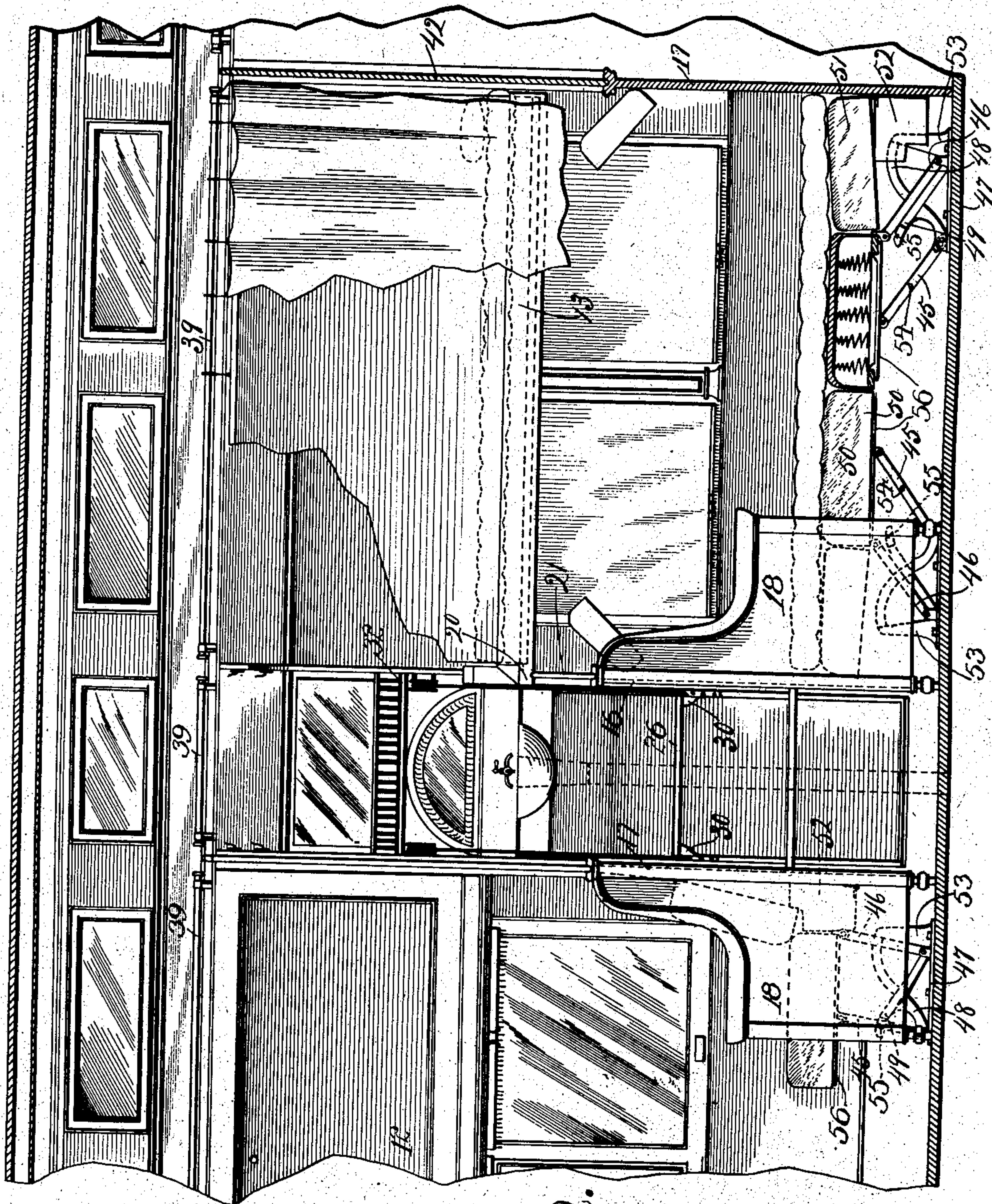
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4 SHEETS—SHEET 2.



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Fig. 2.

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4 SHEETS—SHEET 3.

Fig. 4.

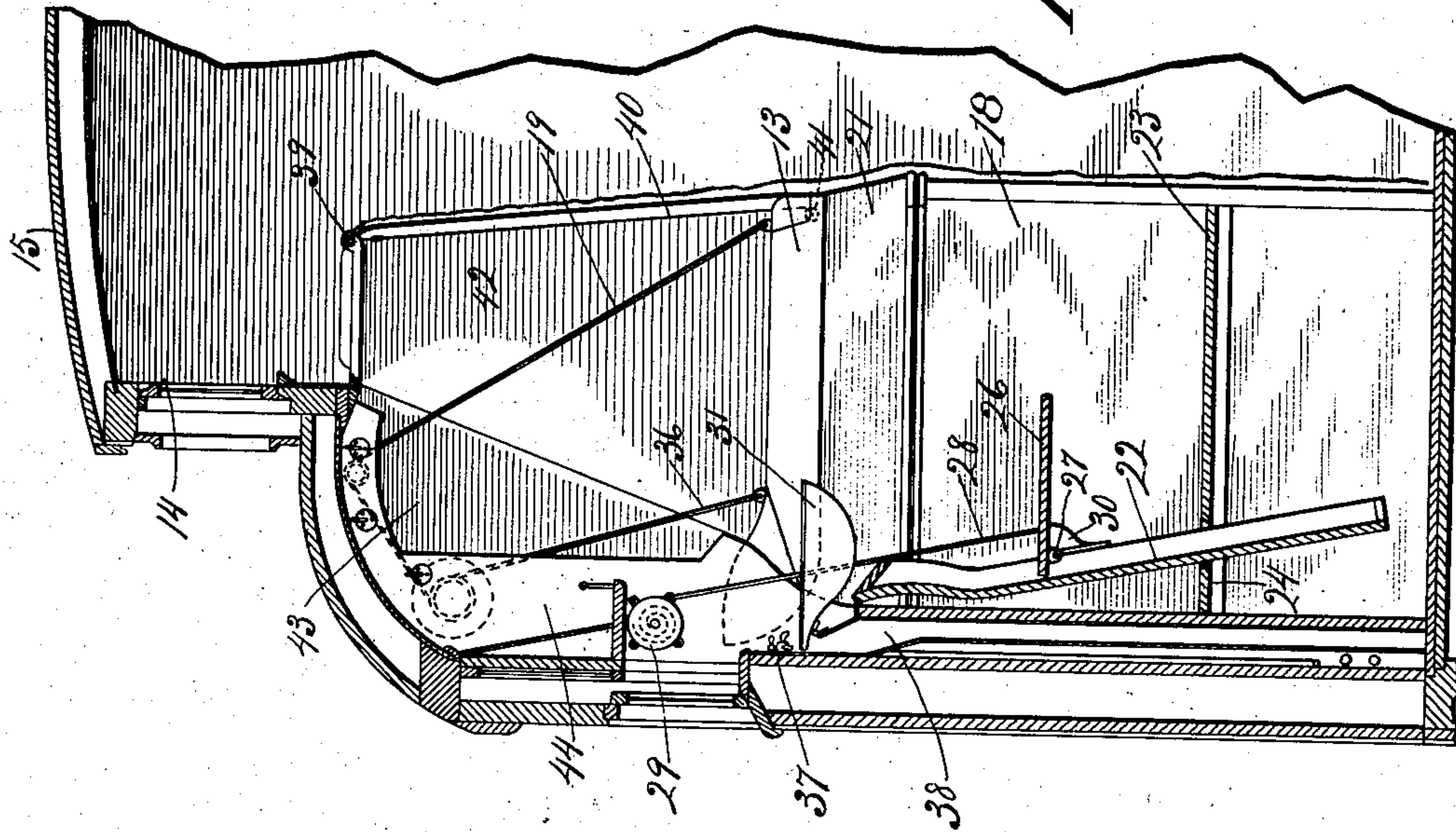
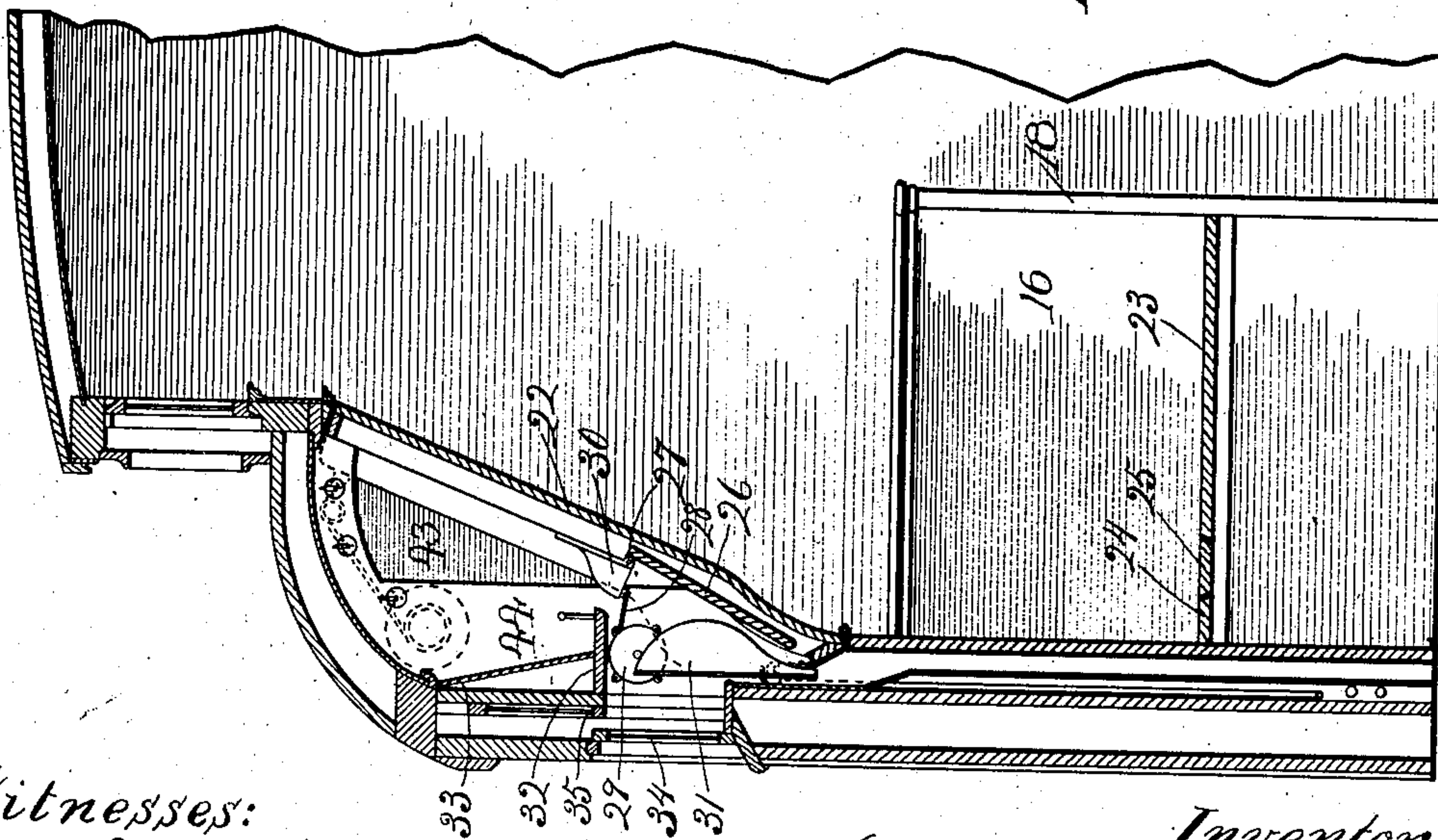


Fig. 3.



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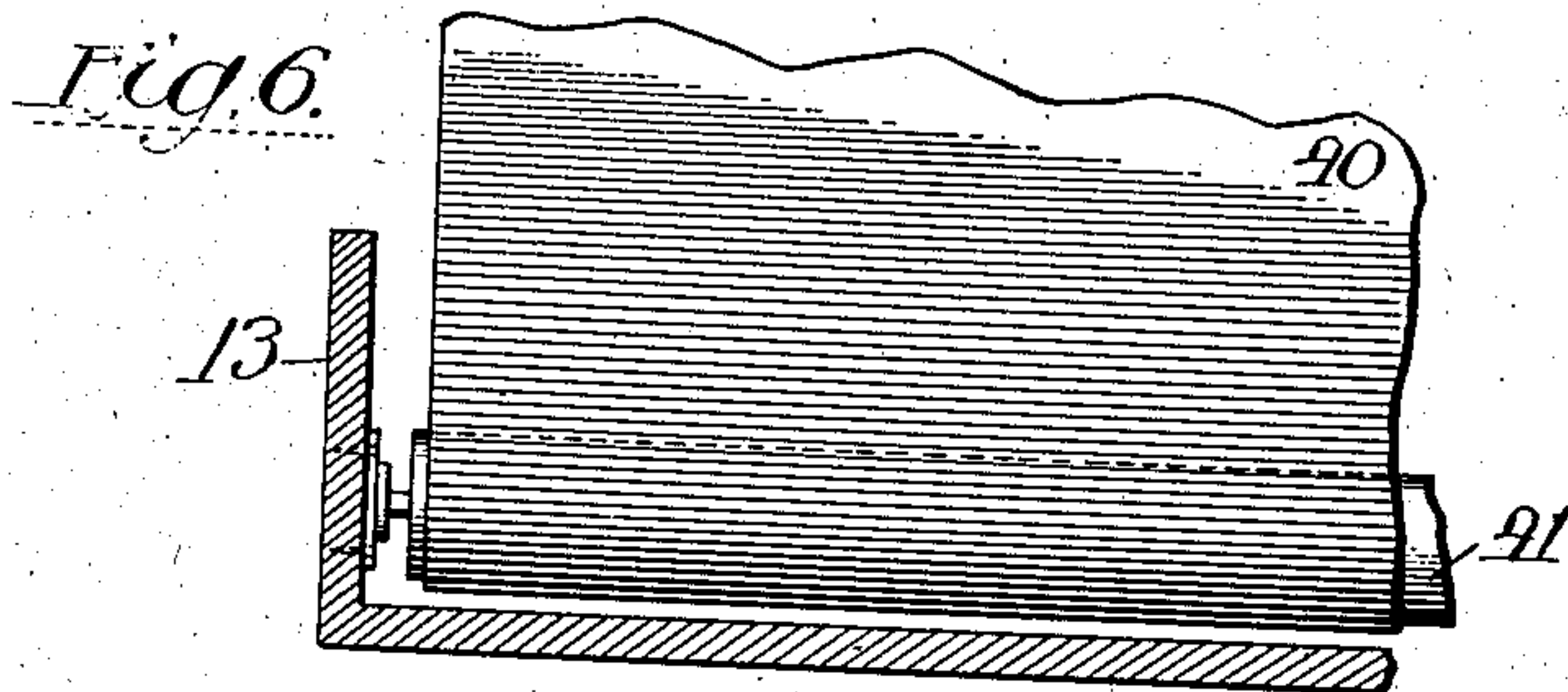
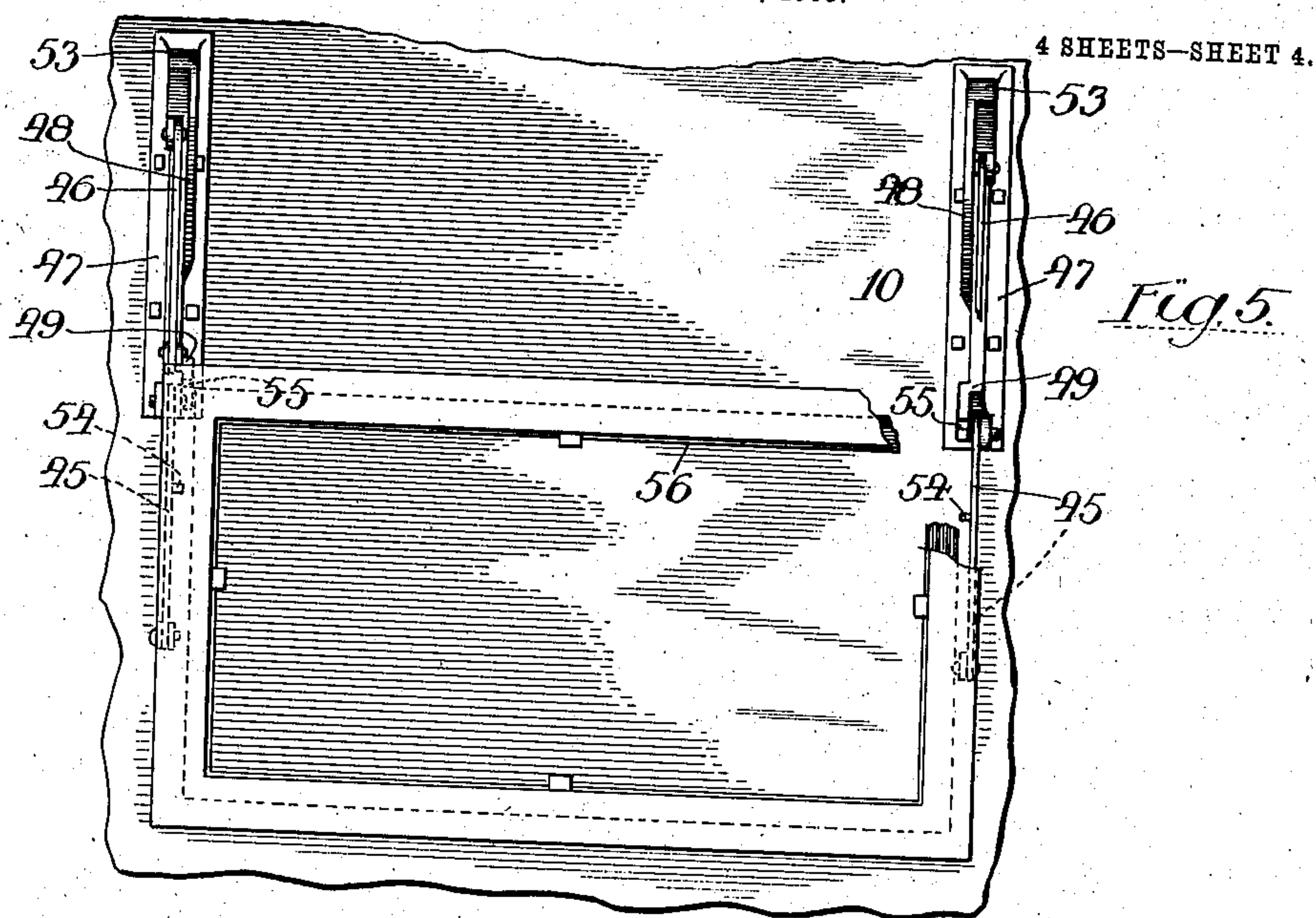
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UNITED STATES PATENT OFFICE.

HARRY M. PFLAGER, OF CHICAGO, ILLINOIS.

SLEEPING-CAR.

No. 816,037.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed December 28, 1903. Serial No. 186,890.

To all whom it may concern:

Be it known that I, HARRY M. PFLAGER, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Sleeping-Cars, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

The objects of the invention are to provide a practical sleeping-car the design and construction of which will be of such a character as to remove the present great objection to upper berths, rendering them equally desirable with the lower berths and providing a much greater percentage of desirable space in each car, thus securing a reduction of the number of cars required to handle the business. To accomplish this, a space is provided at the end of each section which allows easy entrance to and exit from the upper berth and also affords toilet facilities, including a folding washstand, clothes-hooks, and mirror, a window affording ventilation for the upper berth without danger of drafts, and also a space for the reception of hand baggage.

The invention also provides for mounting the seats of the lower berths so as to simplify the operation of transforming them into a bed and also to bring this berth to a lower level, so as to permit the upper berth to be mounted at a lower level, thus affording increased head room for both berths.

Further objects of the invention are to improve the sleeping-car by providing means for better conserving the privacy and safety of the upper berths.

These objects are attained by the structure hereinafter described and which is illustrated in the accompanying drawings, in which—

Figure 1 is a detail elevation of one side of the interior of a sleeping-car, the berths being closed. Fig. 2 is a similar view, partly in section, the berths being open. Figs. 3 and 4 are transverse details taken on the line 3-3 of Fig. 1, the former showing the upper berth closed, the latter showing it open; and Figs. 5 and 6 are details.

The invention is shown as applied to a sleeping-car which in most respects is of common construction, there being shown at 10 the floor of the car, at 11 its side wall, at 12 and 13 the fronts of two upper berths, at 14 the upper deck, and at 15 the car-roof. The

seats are arranged in pairs, each pair forming a section of the sleeping-car. The several sections are spaced apart to provide easy access to and a toilet-compartment connected with the upper berth of each of the sections. Each section has the usual permanent partitions 17 at one end and 16 at the other, the lower portions of these partitions serving as the backs of the seats when the berths are closed and as supports for the seat ends 18. The upper portion of the partition 17 is flush with the front plate of the upper berth when the latter is closed, as shown at 43. The upper portion of the partition 16—that is to say, the partition separating the section from the toilet-compartment annexed thereto—is cut away, as shown at 44, so as not to obstruct the passage between the upper berth and this compartment. For the same reason the movable headboard 21 at this end of the section does not extend above the lower berth, but merely cuts off the lower berth from the toilet-compartment of this section. The usual sliding headboard 42 is provided at the opposite end of the section cooperating with the partition 17 to separate both berths of this section from the toilet-compartment annexed to the next section.

The upper berths, as 13, are provided with counterbalancing and supporting cables or chains, as shown at 19 and 36, differing in no respect from present practice except that the latter cable is attached to the berth near its hinged side, as hereinafter explained. The front of each upper berth is prolonged at the end adjacent its toilet-compartment, as shown at 20, so as to extend over the partition 16, and when the berth is lowered it rests upon and is in part supported by the headboard 21.

The upper portion of the toilet-compartment is provided with a wall-cabinet for inclosing the toilet accommodations when the berth is closed. Preferably this cabinet comprises a portion of the side wall of the car and portions of the upper parts of the partitions 16 17, and preferably its door takes the form of a front plate 22, hinged to the side wall of the car, so as to swing downwardly and conforming in general to the front plate of the upper berths and being provided with the same style of lock used thereon. This plate 22 is, however, hinged somewhat lower than the berth-fronts, as shown, and is provided with counterbalancing cables or chains 28,

wound upon spring-drums 29 and attached to brackets 30, mounted upon the side walls of the plates. A platform crosses the lower portion of the toilet-compartment and forms the first step to be mounted in gaining access to the upper berth and is also occupied in disrobing, dressing, and making the toilet. The front portion 23 of this platform is hinged to one of the partitions 17, so that it may fold upwardly against the latter or be turned down to the position shown in Fig. 1, engaging the adjacent partition 16. The rearward portion 24 of this platform, however, is permanently fixed in a horizontal position, and an intermediate section 25 is independently hinged in line with the hinge of the section 23, its front edge slightly overlapping this section, so that it will be carried up by it and may remain in its vertical position, providing space for the plate 22 when the latter is lowered to the position shown in Fig. 4, the forward section 23 being folded down in front of the plate.

A step 26 is hinged, as shown, at 27 to the side rails of the plate 22, so that it may be folded up toward the hinge of this plate or be lowered to the position shown in Fig. 4 and resting on brackets 30, thus forming the second step used in entering the upper berth.

A washbasin 31 is hinged to the side wall of the car or an appurtenance thereof a little above the hinge of the plate 22, so that it may be folded upwardly to the position shown in Fig. 3 or thrown downwardly for use to the position shown in Fig. 4. A shelf 32 projects from the side wall of the car above the basin for carrying toilet articles, and a mirror 33 is mounted above this shelf.

At 34 there is shown a window located between the washbasin and the shelf 32, its sash running in vertical ways, so that it may be raised for ventilation, and before this window is a screen 35, running in vertical ways, so that it may be pulled down when the window is open.

At 37 there is shown a faucet for delivering water to the basin 31 and at 38 a waste-pipe, into the open upper end of which the rearward end of the basin enters when the latter is folded upwardly.

Curtain-rods 39 run longitudinally of the car and are supported in any desired manner, so that curtains may be hung before the upper and lower berths, as is usual, and also before the toilet-compartment. I also provide a curtain 40, wound upon a spring-roller 41, journaled within the front of the upper berth, so that the curtain may be drawn up and secured to the rod 39 in any desired manner, thereby screening the upper berth from the view of a person who may be dressing within the outer curtains, this curtain also serving as a means of safety to prevent the occupant from falling out.

In order to provide more head-room for

both upper and lower berths than has heretofore been practicable, I support the seat 50 upon a frame 45^a, carried by links 45 46, pivoted to suitable lugs rising from floor-plates 47. These links are of sufficient length to bring the cushion to the desired elevation for day use and swing downwardly as the seats are thrown forward, bringing the berth to a lower level. The rearward link 46 may be guided by a wear-plate 48, which rises from the bracket 47 and from which there projects a stop-arm 49, limiting the forward movement of the link, and a stop-arm 53, limiting the backward movement of the links. Each of the links 45 is provided with an elongated pivot-hole at its lower end and with a pin 54 near its top adapted to engage recesses 55 in the stop-arm 49 when the seats are up for day use. In order to lower the seats, the front end of the frame 56 is raised to disengage the pin 54 from the recess 55, the seat then being swung forwardly.

The back-cushions 51 rest upon the customary swinging block 52, hinged to the seat-rails. When in their upper position, this block serves also as a stop to limit the backward movement of the seat 50. In making up the berth for night use the block 52 is thrown down to the position shown at the right of Fig. 2 and then supports the rearward end of the cushion 51.

For day service the car presents the appearance of an ordinary sleeping-car except that the several sections are spaced apart, these interspaces serving as convenient receptacles for hand baggage. For night use the plate 22 is lowered to the position shown in Fig. 4. The platform 23 is lowered to the horizontal position, and the upper step 26 is lowered, so that easy access is gained to the upper berth through the toilet-compartment. The counterbalancing-cable 36 at the end of the upper berth adjacent the toilet-compartment is secured to the berth-frame well back from its front edge, as shown at 46, so that it does not offer any obstacle to free access to the berth.

The occupant in dressing or disrobing may stand upon the platform 23, having raised the step 26 out of the way, and finds the washbasin 31 conveniently located, so that it may be lowered for use and raised after use and also for the purpose of discharging its contents into the waste-pipe 38. The toilet-shelf 32 is available for the care of small toilet articles, and the mirror 33 is conveniently located for use in making the toilet. The window 34 not only affords light for the toilet, but also provides for ample ventilation of the upper berth without necessarily throwing a draft directly upon the occupant. The curtain 40 insures the strict privacy of the occupant of this berth, while affording the occupant of the lower berth free use of the space within the outer curtains in dressing. The described construction also provides space

for hanging the clothing of the occupant during the night, hooks 53 being provided for that purpose.

While I prefer to hinge the front of the cabinet, inclosing the toilet articles across its lower edge in order to preserve the symmetrical appearance of the car, it is obvious that if this symmetry be sacrificed a different form of cabinet and a different style of door therefor may be employed.

I claim as my invention—

1. In a sleeping-car, in combination, a plurality of sections, the permanent end walls of adjacent sections being spaced apart, and an openable wall-cabinet in the upper portion of the interspace and having its front plate or door hinged across its lower edge.

2. In a sleeping-car, in combination, a plurality of sections, adjacent sections being spaced apart, an openable wall-cabinet in the upper portion of the interspace and having its front plate or door hinged across its lower edge, and a folding step secured to the inside of the front plate.

3. In a sleeping-car, in combination, a plurality of sections, adjacent sections being spaced apart, an openable wall-cabinet in the upper portion of the interspace and having its front plate or door hinged across its lower edge, a folding step secured to the inside of the front plate, and a platform crossing the lower portion of the interspace.

4. In a sleeping-car, in combination, a plurality of sections, adjacent sections being spaced apart, an openable wall-cabinet in the upper portion of the interspace and having its front plate or door hinged across its lower edge, a folding step secured to the inside of the front plate, and a folding platform crossing the lower portion of the interspace.

5. In a sleeping-car, in combination, a sleeping-car section having a toilet-compartment at its end and an upper berth hinged to the side of the car, a headboard for separat-

ing the lower berth from this compartment, a headboard for closing the entire end of the section remote from the compartment, a downwardly-swinging plate covering the upper portion of the inner wall of the toilet-compartment, a folding step secured to the inner face of the plate, and a folding platform crossing the lower portion of the toilet-compartment.

6. In a sleeping-car, in combination, an upper berth, and a spring roller-curtain journaled within the frame of such berth.

7. In a sleeping-car, in combination, a seat-frame, and a pair of forwardly-swinging links supporting such frame at each end.

8. In a sleeping-car, in combination, a pair of seats facing each other, each seat being supported at each end upon a pair of links which swing forward and downward.

9. In a sleeping-car, in combination, a seat-frame, forwardly-swinging links supporting such frame, the links being longitudinally movable on their pivots, a fixed bracket having a shoulder, and a detent carried by the seat for engaging such shoulder.

10. In a sleeping-car, in combination, a seat-frame, forwardly-swinging links supporting the frame and being longitudinally slotted to receive their pivots, a fixed bracket having a recess, and a pin carried by one of the links for engaging the recess.

11. In a sleeping-car, in combination, a pair of facing permanent seats, the cushions of which are movable to transform the two seats into a bed, a folding berth immediately over such pair of seats, a platform back of one of the seats, a toilet-table above the platform, and a movable partition for closing the opposite end of the folding berth when the latter is in position for use.

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