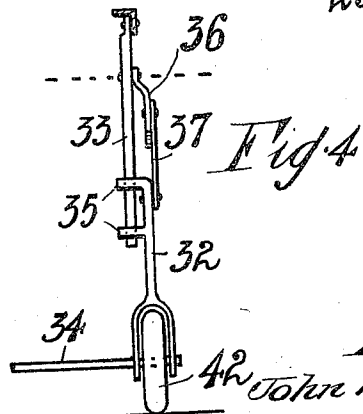
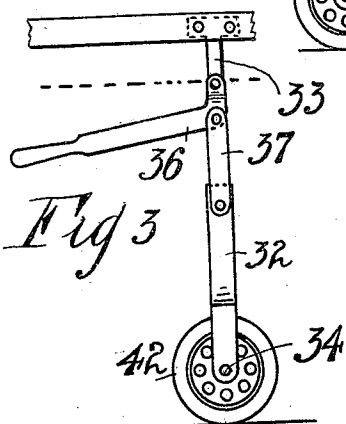
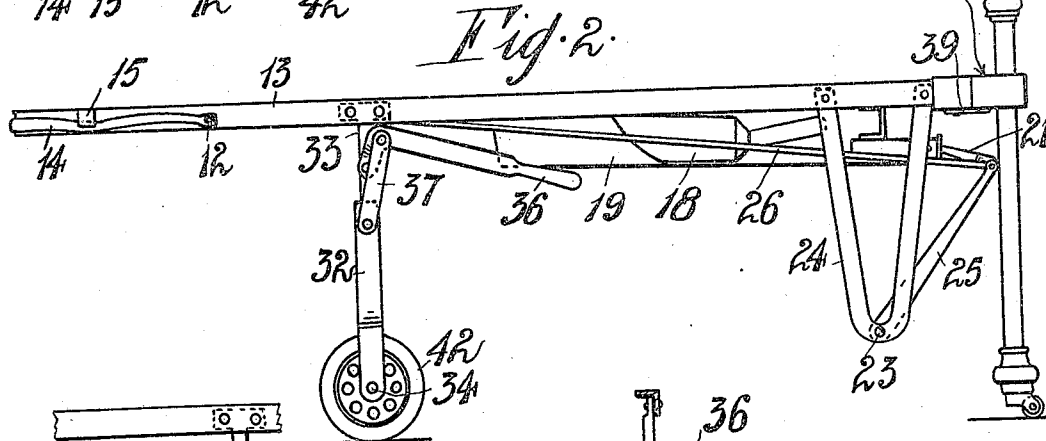
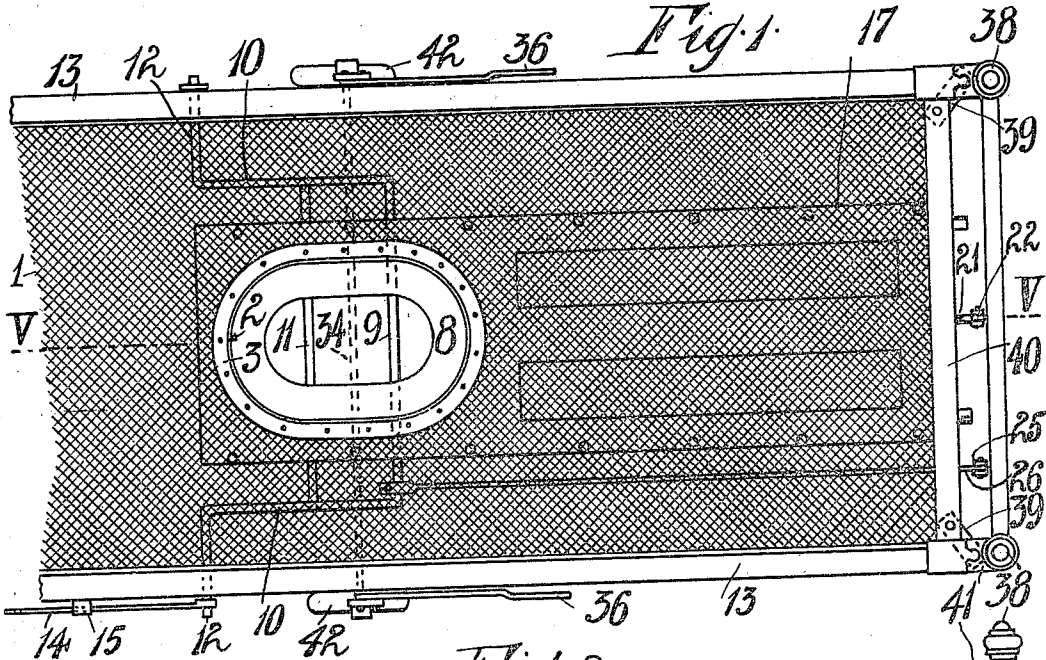


J. McKAY.
BED AND BEDSTEAD FOR THE USE OF INVALIDS.
APPLICATION FILED MAY 11, 1909.

Patented Dec. 21, 1909.

2 SHEETS—SHEET 1.

944,204.



Witnesses:
[Signature]
[Signature]

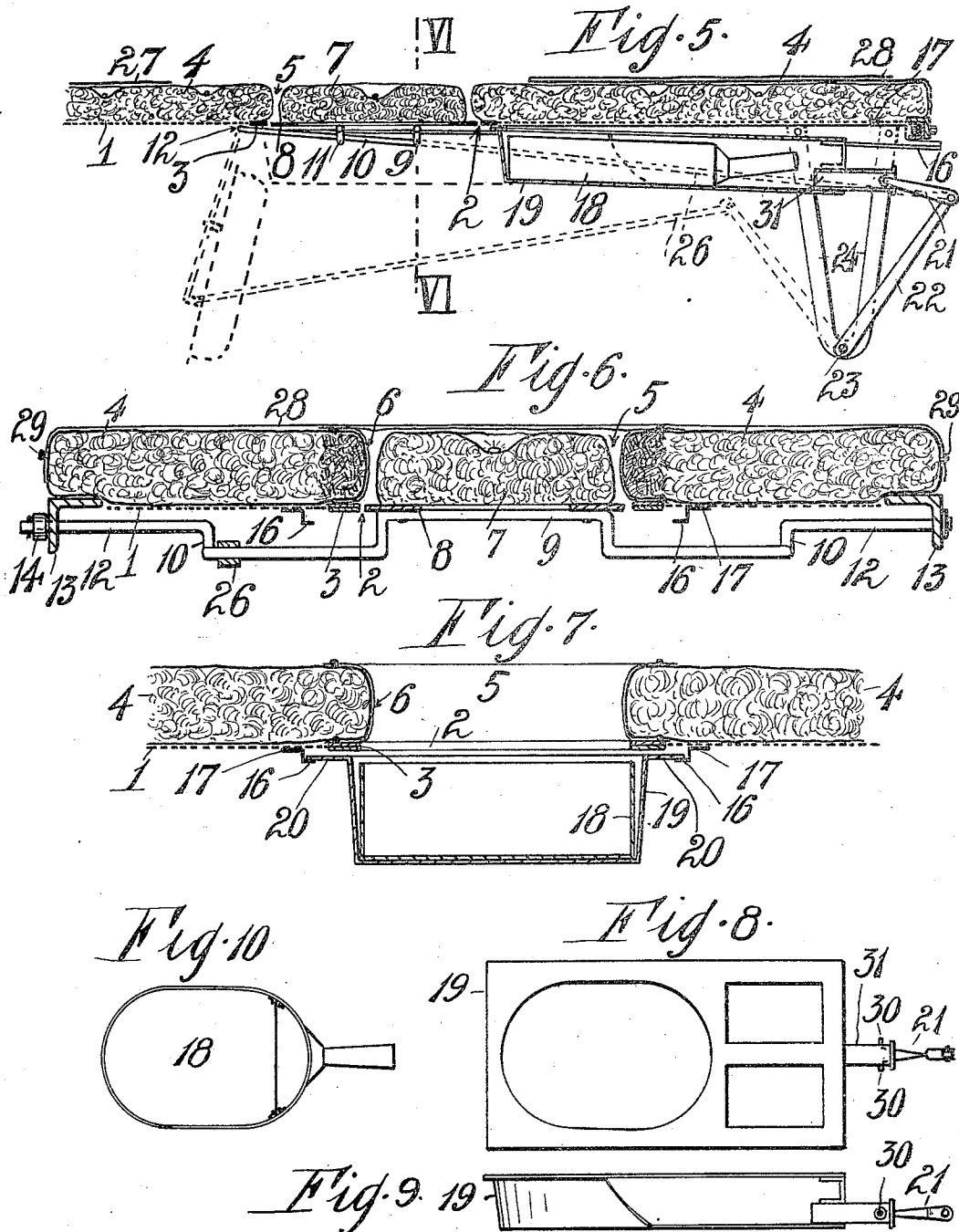
Inventor
John McKay
BY
James L. Norris

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Witnesses

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John M. McKay

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UNITED STATES PATENT OFFICE.

JOHN MCKAY, OF BENDIGO, VICTORIA, AUSTRALIA.

BED AND BEDSTEAD FOR THE USE OF INVALIDS.

944,204.

Specification of Letters Patent. Patented Dec. 21, 1909.

Application filed May 11, 1909. Serial No. 495,290.

To all whom it may concern:

Be it known that I, JOHN MCKAY, a subject of the King of Great Britain, residing at 103 Creek street, Bendigo, in the State of Victoria, Commonwealth of Australia, engine-driver, have invented Improvements in Beds and Bedsteads for the Use of Invalids, of which the following is a specification.

These improvements in beds and bedsteads for the use of invalids have been devised with the object of promoting ease and comfort of persons whom it is not desirable to move and to enable such persons to be relieved without being moved and this with very little trouble to the attendant, while furthermore another object is to enable the invalid's bed to be readily wheeled out of a room.

The essential feature of the invention consists in forming coinciding holes in the mattress and pailasse and providing a pad adapted to fit the hole in the latter, which pad is normally supported on a level with the pailasse but is capable of being lowered so that a pan may be temporarily placed under the hole either automatically or otherwise.

The drawings illustrating the invention comprise:—

Figure 1 a plan of bedstead with top end omitted, and Fig. 2 a side elevation thereof. Fig. 3 a side elevation of one of the elevating legs of the bedstead in its extended position, and Fig. 4 a side elevation thereof. Fig. 5 a longitudinal section on line V—V, Fig. 1 showing pailasse and lower sheet. Fig. 6 an enlarged transverse section on line VI—VI, Fig. 5, and Fig. 7 a section in the same direction showing bed ready for the purpose for which it is intended. Figs. 8 and 9 a plan and side elevation respectively of the pan carrier, and Fig. 10 a plan of pan.

According to this invention the wire mattress 1 is formed about its center with a hole 2 preferably of an oval shape and reinforced with an oval ring 3 of metal preferably made of duplicate pieces riveted together with the edges of the mattress between same.

The pailasse 4 is formed with a hole 5 coinciding with that of the mattress and its edge is stiffened and provided with a removable waterproof sheeting 6 secured by buttons or by other suitable means.

The hole 5 in the pailasse is normally

fitted with a removable pad 7 secured to an oval shaped ring 8 of metal and preferably attached to the transverse arm 9 of a crank 10 and to a bar 11 extending across the latter.

The pad 7 may be secured to the crank by any convenient means such as buckled straps to permit its removal and it may be covered also by a waterproof sheeting if desired.

The crank is formed on a shaft 12 journaled in the side bars 13, 13, of the bedstead or mattress, and said shaft is provided at one end with a lever 14 normally held in its lowered position by a catch 15 on one side bar 13.

The mattress is provided on its underside with longitudinal guide rails 16 and such are preferably formed on the sides of a thin skeleton metal plate 17 bolted to the mattress said rails being preferably slightly inclined downwardly from about the center to their bottom ends.

The pan 18 (Fig. 10) is placed upon a carrier 19 (Figs. 8 and 9), which latter has side flanges 20 adapted to engage with and slide upon the guide rails 16. The rear end of said carrier is removably connected by a spring clip 21 hinged to an arm 22 mounted on a rock-shaft 23 journaled in brackets 24 depending from the side bars of the bedstead and upon said rock-shaft is fixed a lever 25 joined to the crank by a connecting rod 26.

By the foregoing mechanism when the lever 14 of the crank is disengaged from its catch 15 and raised the pad 7 is turned down into the position shown by dotted lines, Fig. 5, while the carrier 19, and with it the pan 18, is drawn forward under the coinciding holes 2, 5, of the mattress and the pailasse and is ready for the invalid's use when the under sheet covering the pailasse is removed.

To facilitate the uncovering of the hole 5, the under sheet is preferably made in two pieces 27, 28, so that it is necessary only to turn back the top end of the lower piece 28 as in Fig. 5, while in order to keep the sheet normally in position it may be secured by buttons 29 to the sides of the pailasse, Fig. 6.

It will be obvious that the carrier and its gear could be dispensed with in which case when the pad is turned down a pan could be temporarily placed under the holes 5, 2, in the pailasse and mattress. Moreover it will be evident that the pad could be lowered by

other means than the crank and that the carrier and pan could be slid into position by hand.

The spring clip 21 above referred to may consist of two pieces joined at one end and provided with catches 30 at the other end adapted to pass through a tube 31 on the end of the carrier and spring through holes in the sides thereof.

When it is required to empty the pan, the clip 21 is released and the carrier 19 drawn back so that the pan 18 may be removed therefrom.

In order to enable the invalid's bed to be removed from the bedroom to avoid obnoxious smells arising therein the bedstead is provided about the center with a pair of elevating legs made in two pieces 32, 33, capable of being extended. The wheels 42 have a common axle 34 journaled in the sliding piece 32 and said piece is formed with eyes 35 through which projects the other piece 33, which is bolted to the side bars of the bedstead and acts as a vertical guide for piece 32. Upon said guide piece 33 is pivoted a bent lever 36 which is connected by a link 37 to the piece 32 of the leg.

In Fig. 2 the bedstead is shown in its normal position, but by turning the lever 36 over into the position shown in Figs. 3 and 4 the pieces carrying the wheels slide downwardly upon the guide pieces and so become lengthened thus elevating the bedstead and raising the end posts 38 off the floor so that the invalid may then be wheeled out of the room.

In order to prevent the mattress from being lifted off the bedstead when the latter is elevated, *i. e.* to insure the legs rising with the mattress, short metal pieces 39 are secured to the underside of the end bars 40 of the mattress, which project and bear against the underside of the socketed boss 41 of the ordinary corner posts 38.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is;—

1. The combination, with a bed having an opening, and a pair of guide rails arranged beneath the bed; of a plug arranged for movement into and out of said opening; a carrier slidable upon said rails into and out of position beneath said opening; a vessel carried by the carrier; and mechanism for operating said plug and carrier simultaneously.

2. The combination, with a bed having an opening, and a pair of guide rails arranged beneath the bed; of a pair of rock-shafts connected with the bed; a plug carried by one of said shafts and movable into and out of said opening; a carrier slidable upon said rails into and out of position beneath said opening and operatively connected with

the other shaft; a vessel carried by the carrier; connections between said shafts for effecting simultaneous movement thereof; and operating means carried by one shaft.

3. The combination, with a bed having an opening; of a rock-shaft journaled in the side rails of the bed and provided with a crank extending beneath said opening; a plug secured to said crank and movable into and out of said opening; a carrier slidable beneath the bed into and out of position in alinement with said opening; a vessel carried by the carrier; connections between said carrier and said shaft for effecting simultaneous movement thereof; and means for operating said shaft.

4. An invalid's bed comprising a bedstead having a mattress and a paillasse thereupon formed centrally with registering openings; a transversely-arranged crank shaft journaled in the side bars of the bedstead and provided with a lever and a catch therefor; a ring secured to said crank; a pad detachably secured to said ring and adapted to fit in said openings; longitudinal guide rails on the underside of said mattress; a carrier provided with side flanges adapted to slide on said guide rails; a removable vessel on said carrier; brackets depending from the side bars of the bedstead adjacent one end thereof; a transversely-arranged rock-shaft journaled in said brackets; an arm on said rock-shaft connected to the rear end of said carrier; a lever on said rock-shaft; and a rod connecting said lever to said crank.

5. In an invalid's bed, a bedstead, an extensible leg on either side and about the center thereof, wheels mounted on said legs, means to extend said legs and means to insure the whole bedstead rising bodily.

6. In an invalid's bed, a bedstead, a leg on either side and about the center thereof each leg being formed in two pieces, one being adapted to slide upon the other, wheels mounted on the slidable piece of said leg, means to slide said latter piece and means to insure the whole bedstead rising bodily when said leg is extended.

7. In an invalid's bed, a bedstead, a pair of extensible legs formed of two pieces, one piece being secured to each side bar of the bedstead and the slidable piece being provided with eyes through which said fixed piece passes, a wheel mounted on the lower end of said slidable piece, a common axle for said wheels, a bent lever pivoted on each of said fixed pieces and connected to each leg by a link, and short metal pieces secured to the underside of the end bars of the mattress which project and bear against the underside of the socketed boss of the corner posts.

8. An improved invalid's bed comprising a bedstead having a mattress and a paillasse

thereupon each formed about its center with
a coinciding hole strengthened by oval
shaped metal rings, a crank mounted on a
transverse shaft journaled in the side bars
5 of the bedstead and provided with a lever
and catch therefor, an oval shaped ring se-
cured to said crank, a pad detachably se-
cured to said crank and adapted to fit the
hole in said paillasse, longitudinal guide
10 rails on the underside of said mattress, a
carrier provided with side flanges adapted
to slide on said guide rails, a removable
pan on said carrier, a transverse rock-shaft
journaled in brackets depending from the
15 side bars of the bedstead, an arm on said
rock-shaft connected by a hinged spring

clip to the rear end of said carrier, a lever
on said rock-shaft connected by a rod to
said crank, an extensible leg on either side
and about the center thereof, wheels mount- 20
ed on said legs, means to extend said legs
and means to insure the whole bedstead ris-
ing bodily substantially as set forth and as
illustrated.

In testimony whereof I have hereunto set 25
my hand in presence of two subscribing wit-
nesses.

JOHN McKAY.

Witnesses:

WILLIAM GUEST HOLDEN,
JOHN F. JEWELL.