

J. LUPPINO.
COUCH OR DIVAN.

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985,043.

Patented Feb. 21, 1911.

Fig. 1.

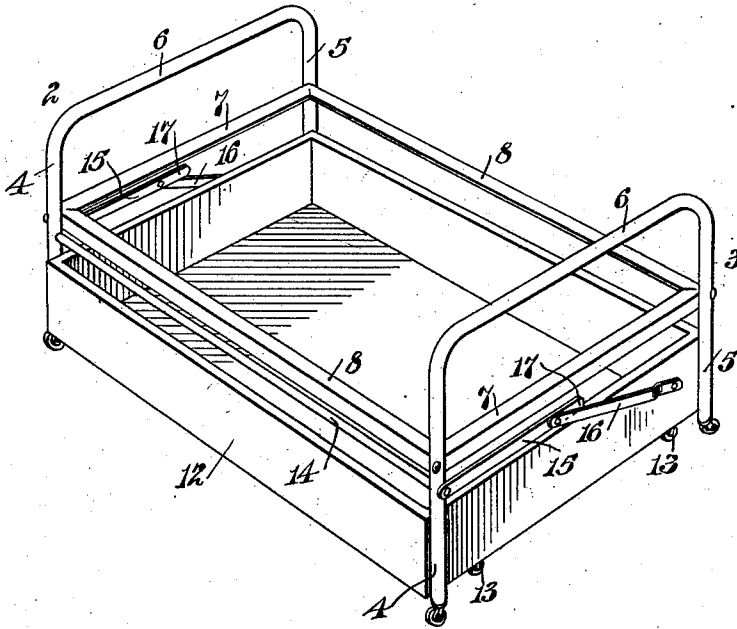
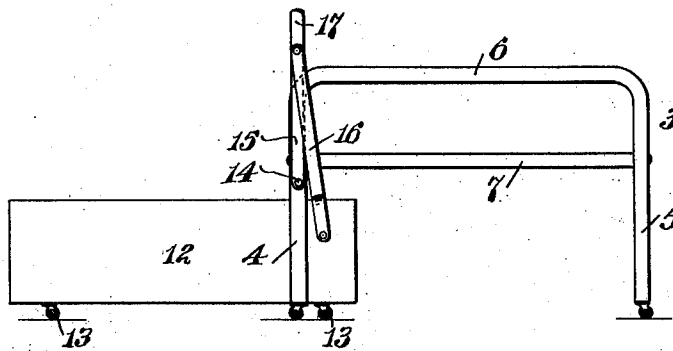


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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TO LUPPINO DAVENPORT COMPANY, A CORPORATION OF NEW YORK.

COUCH OR DIVAN.

985,043.

Specification of Letters Patent.

Patented Feb. 21, 1911.

Original application filed November 9, 1908, Serial No. 461,671. Divided and this application filed February 8, 1909, Serial No. 476,632. Renewed December 12, 1910. Serial No. 596,963.

To all whom it may concern:

Be it known that I, JOSEPH LUPPINO, a subject of the King of Italy, residing in Ridgewood, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Couches or Divans, of which the following is a specification.

This invention relates to couches or divans, the object of the invention being to provide, in connection with a couch, divan or other form of bed, a storage receptacle connected thereto in an improved manner, and especially to provide such a structure in which the connection between the bed and the storage receptacle will be comparatively simple, whereby the structure can be furnished at a low cost and may also be used as a means for shifting the receptacle, the present improvement being a division of my contemporaneously pending application Serial No. 461,671, filed November 9, 1908.

In the drawings accompanying and forming part of this specification, Figure 1 is a perspective view of a couch or divan having a storage receptacle connected thereto; and Fig. 2 is an end view of the structure shown in Fig. 1, illustrating the receptacle shifted beyond the front edge of the bed.

Similar characters of reference indicate corresponding parts in the figures of the drawing.

It is of great advantage in the manufacture of metal beds, such as couches and divans, to provide the same with a storage receptacle or box located under the mattress supporting means and between the end frames of such couch for the reception not only of the bed clothing but of other articles, but if the receptacle is to be of any practical value at all it must be of large size, for instance, as long and as wide as the bed. When such a size of box is used it is, when loaded with its contents, naturally somewhat heavy, and notwithstanding it can be provided with casters to facilitate its movement it is more or less difficult to pull out and unless means are provided for facilitating an even movement thereof it will be apt, like a bureau or other furniture drawer, to stick owing to one end being pulled out in advance of the other, and thus it is rather difficult to handle. Not only this, but a box

of the size of the bed, usually about six feet long and two or more feet wide, when loaded would be quite difficult to pull out by a woman by merely grasping handles at the front thereof, as she must bend down almost to the floor in order to grasp the handles and must remain in such bent position while drawing out or pushing in the receptacle, and not only this, but must move backward as the receptacle is drawn out to make room for the receptacle, or move forward in such bent position as the receptacle is pushed in, and in this bent position she must exert considerable force to move a heavily loaded receptacle, all of which is liable to seriously injure her. It is essential, therefore, to a practical construction that it be easily operated by a woman without the necessity of her remaining in a bent position, and without the necessity of her moving backward or forward while in such bent position, and without the necessity of exerting great force while in such a position, and to avoid these disadvantages it is essential that the box be so connected with the bed that it may be shifted from either end thereof and while the user is only temporarily in such a bent position, and to permit it being shifted from either end it is essential that it be so connected with the bed that both ends thereof will move out evenly and not one in advance of the other, and it is also desirable that the connection be such that it will move out and in with very little exertion, since otherwise it would be impracticable to handle by a woman.

In the present instance I have provided a lever mechanism which is not only extremely simple, but so connects the box with the bed that both ends of the box will move evenly out and in, and which lever mechanism may be operated from either end of the bed, so that the user does not have to stand in front of the box and move backward as the box is drawn out or forward with the box as it is pushed in, nor remain bent over during the drawing out or pushing in of the box, and which lever system is of such character that the movement of the box is obtained with very little exertion, whereby it is readily operated even by a child, since it is free of connection with any other moving part of the bed other than the box, so

that it does not depend upon the shifting of any other heavy swinging or shiftable member.

In the present embodiment this improved box and its connection may be attached to any suitable form of bed, but in the embodiment shown the bed is of metal formation and made up in the form of a couch or divan comprising a pair of end frames 2 and 3, each comprising a pair of legs 4 and 5 and a head or foot rail 6. These end frames may be of tubular form and therefore integral if preferred. These end frames are connected in any suitable manner, as by a mattress frame comprising end bars 7 and side bars 8 for the reception of stuffed mattress supporting means, such as a metallic fabric, which may be stretched between the end bars of the mattress frame. Any other yielding mattress supporting means may be connected to the end bars, or the mattress frame may be made separate and independent of the end frames and rest on supports carried thereby and be connected or attached thereto in any suitable manner usual with metal formed beds or couches.

Located below the mattress supporting frame and between the end frames is a storage receptacle 12, usually of substantially the length and width of the bed, and this box or storage receptacle may be provided with casters 13 resting on the floor.

Carried by the bed and shown herein mounted in the front legs of the end frames is a rock shaft or rod 14, this rod extending to the outside of each of the front legs. Rigidly connected to each end of this shaft or rod, which runs lengthwise of the bed and therefore from end to end thereof, is a crank or crank arm 15 to each of which is pivoted, preferably intermediate its ends, a link 16, the opposite end of which is pivotally connected to the storage receptacle in the present instance adjacent to its rear side. Each crank arm is shown as extending beyond its pivotal connection with its link to form a handle 17 to assist in the manipulation of the linkage connection and the rocking of the shaft to shift the storage receptacle. The crank arms may be attached to the rod or rock shaft in any desired manner. By grasping the free end of either crank arm and lifting the same the box is shifted outward, and owing to the rock shaft connection between the crank arms both ends of the box will be moved simultaneously, thus avoiding the shifting of one prior to the other as is frequently the case with an ordinary bureau drawer when grasped by the handles and an unequal amount of force is exerted by the right or left hand of the user. Moreover, as this crank arm is raised it follows that the user does not have to remain in a bent position during the entire movement of the storage

receptacle, as she resumes an upright position as the crank arms are pulled upward. Not only this, but the storage receptacle, through the medium of the rock shaft, can be operated from either end easily, thus obviating the necessity of the operator stepping backward to make room for the box as it is drawn out or stepping forward when it is shifted under the bed as would be necessary if the box were pulled out or shoved in from the front thereof. In practice the rock shaft or rod will be of a suitable size for the work which is to be performed and may be in the form of a tube if preferred.

From the foregoing it will be observed that by very simple linkage connection the box may be shifted from either end of the bed and both ends of the box moved evenly, and this without the necessity of the user remaining in a bent position and moving forward or backward during the shifting of the box, while at the same time requiring no greater, and probably not as great, force to operate the box as would be necessary to manipulate it from the front. Moreover, it will be observed that the box can be shifted by this very simple lever system without the necessity of swinging or shifting a heavy supplemental frame, or back, or seat of the bed. It will also be observed that in the present improvement the receptacle is shifted beyond the front of the bed from the front or the rear of the bed as the case may be, and when so shifted it is not necessary to lift any part of the bed in order to obtain access to the receptacle.

In the present embodiment the linkage connection between the rock shaft and the storage receptacle forms a toggle connection, but obviously the details of the present improvement may be more or less modified without departing from the scope of this improvement. It will also be observed that this rock shaft and the linkage connection therebetween and the storage receptacle at each end thereof constitutes a guiding means for the ends of the receptacle to insure an even movement of the box outwardly and inwardly whether shifted through the medium of the lever mechanism or in any other manner.

I claim as my invention:

1. A couch or couch bed having thereunder a storage receptacle, and means connecting said receptacle with the bed for insuring an even movement of both ends of the receptacle simultaneously and comprising a shaft carried by the bed and means connecting the receptacle and shaft.

2. A couch or couch bed having thereunder a storage receptacle, and means connecting said receptacle with the bed for insuring an even movement of both ends of the receptacle simultaneously and comprising a shaft carried by the bed, means con-

necting the receptacle and shaft, and means for operating said shaft thereby to shift the receptacle.

3. A couch or couch bed having there-
5 under a storage receptacle, and means connecting said receptacle with the bed for insuring an even movement of both ends of the receptacle simultaneously and comprising a shaft carried by the bed and means
10 connecting the receptacle at each end thereof with the shaft.

4. A couch or couch bed having there-
under a storage receptacle, and means connecting said receptacle with the bed for insuring an even movement of both ends of the
15 receptacle simultaneously and comprising a shaft carried by the bed, means connecting the receptacle at each end thereof with the shaft, and means for operating said shaft
20 thereby to shift the receptacle.

5. A couch or couch bed having there-
under a storage receptacle, and means connecting said receptacle with the bed for insuring an even movement of both ends of
25 the receptacle simultaneously and comprising a shaft carried by the bed, means connecting the receptacle and shaft, and means at each end of the shaft for shifting the receptacle.

30 6. A couch or couch bed comprising a pair of connected end frames adapted to support a mattress, a storage receptacle located below said mattress supporting means, a shaft extending lengthwise of such bed and
35 to the outside of said end frames, linkage connection between said shaft and storage receptacle at each end thereof outside of said end frames, and means for operating said shaft from either end thereof thereby
40 to shift the receptacle.

7. A couch or couch bed comprising a pair of connected end frames adapted to support a mattress, a storage receptacle located between said end frames, a shaft extending lengthwise of such bed and supported
45 by said end frames, means connecting said shaft and receptacle, and means for operating said shaft thereby to shift the receptacle.

50 8. A couch or couch bed comprising a pair of connected end frames adapted to support a mattress, a storage receptacle located between said end frames, a shaft sup-

ported below said mattress supporting means by said end frames at the front side of the
55 bed and having a pair of crank arms, one at each end thereof, and links connecting said crank arms to said storage receptacle adjacent to the rear thereof whereby the
60 receptacle may be shifted evenly from under the bed.

9. A couch or couch bed comprising a pair of connected end frames adapted to support a mattress, a storage receptacle located between said end frames, a shaft sup-
65 ported below said mattress supporting means by said end frames at the front side of the bed and having a pair of crank arms, one at each end thereof, links connecting said crank arms to said receptacle adjacent to
70 the rear thereof whereby the receptacle may be shifted evenly from under the bed, and means connected to said crank arms for shifting the same and thereby the shaft to
75 shift the receptacle.

10. A couch or couch bed having there-
under a storage receptacle, a rod pivotally connected to said bed and having a crank
at each end thereof, links connecting said
80 cranks with the receptacle, and means for operating said cranks simultaneously.

11. A couch or couch bed having there-
under a storage receptacle, a rod pivotally connected to said bed adjacent to the front
85 thereof and having a crank at each end thereof, links connecting said cranks with the receptacle, said cranks having means extending beyond their connection with the
90 links for shifting such cranks and thereby the receptacle.

12. A couch or couch bed having there-
under a storage receptacle, and means for insuring an even movement of both ends of
the receptacle simultaneously and comprising a shaft carried by the bed and linkage
95 connection between each end thereof and each end of the receptacle, the shaft being located adjacent to one longitudinal side of the receptacle and the rear of the linkage
100 connections being adjacent to the other longitudinal side of the receptacle.

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Witnesses:

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