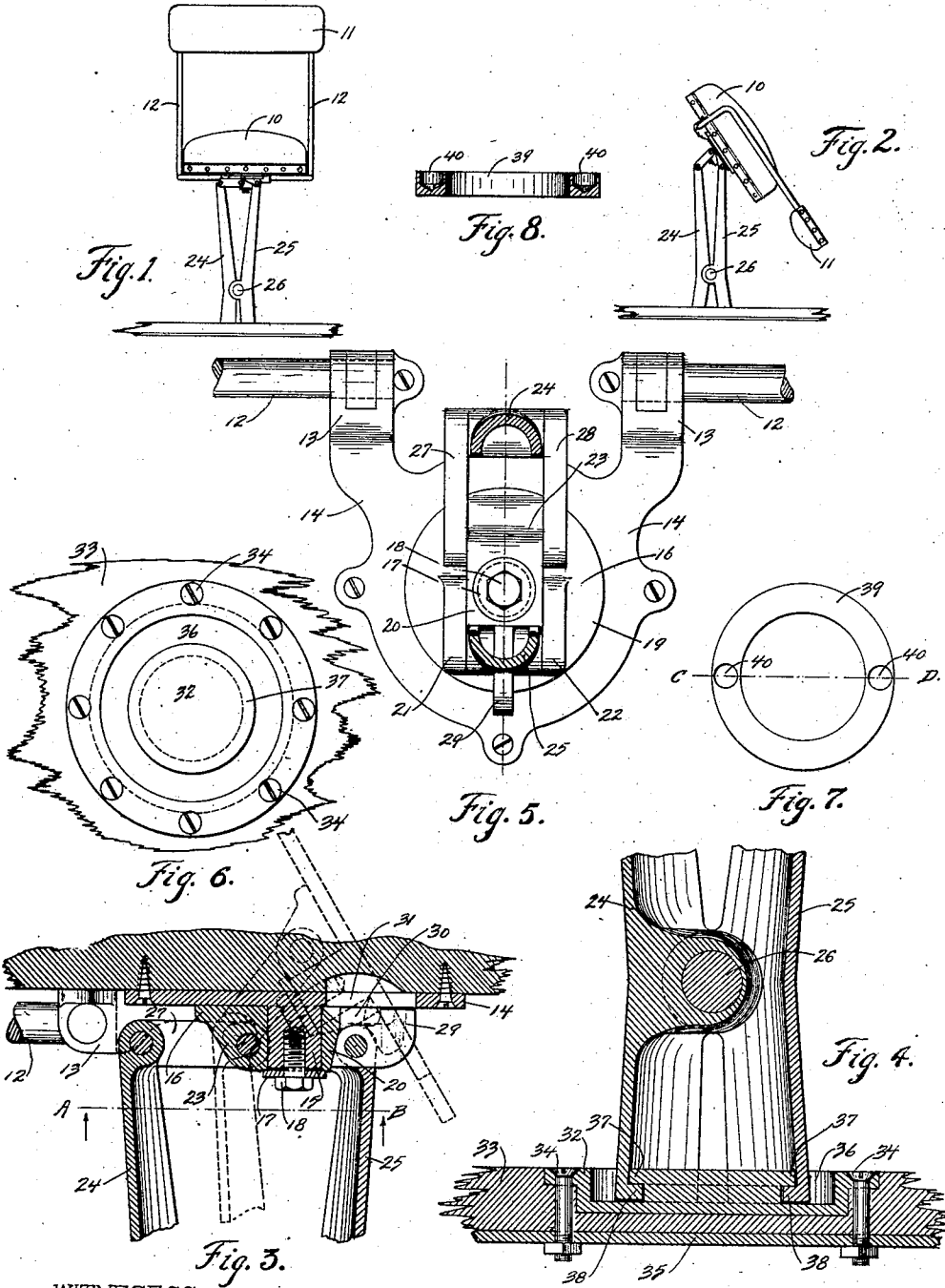


E. L. KUNZ.
CHAIR.

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WITNESSES:
Walter A. Kelly
Cathel A. Kelly

INVENTOR
Edward L. Kunz
BY *J. W. Allen*
ATTORNEY.

UNITED STATES PATENT OFFICE.

EDWARD L. KUNZ, OF BUFFALO, NEW YORK, ASSIGNOR TO JOSEPH H. MORGAN, OF
BUFFALO, NEW YORK.

CHAIR.

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To all whom it may concern:

Be it known that I, EDWARD L. KUNZ, a citizen of the United States of America, residing in the city of Buffalo, county of Erie, and State of New York, have invented new and useful Improvements in Chairs, of which the following is a full, clear, and exact description.

My invention relates generally to chairs and more particularly to foldable chairs which may be readily attached to and detached from a fixed floor plate.

Some of the objects of my invention are to provide a chair which, when in use, can be readily secured to a fixed floor plate and which, when not in use, may be detached from such floor plate and folded up so that when stowed away it will occupy a very small space. When in use my chair may be revolved through a complete circle and at the same time be securely locked and held in an upright position.

With this and many other objects in view, which will be apparent to those skilled in the art, my invention comprises the combination of parts herein shown and described.

Reference is to be had to the accompanying drawings forming part of this specification, in which similar characters of reference indicate similar parts in the different views, of which:

Figure 1 is a front view of my chair shown in position for use. Fig. 2 is a side view of the same and shows it partly folded up and ready to be removed. Fig. 3 is an enlarged vertical sectional view of the upper portion of my invention and shows the position of the parts when the seat is partly folded up. Fig. 4 is a similar sectional view of the lower part of my invention. Fig. 5 is a sectional view taken on line A—B of Fig. 3 and shows a bottom view of the upper portion of my invention. Fig. 6 is a plan view of the floor plate used with my device. Fig. 7 is a plan view of a filler ring to be used in the floor plate when the seat is removed. Fig. 8 is a sectional view of the same taken on line C—D of Fig. 7.

10 is a chair seat and 11 the back support which is secured to rods 12. The rods 12 extend beneath the bottom of the seat 10 where they are rotatably mounted in the lugs 13. Preferably the lugs 13 are made integral with the lock-plate 14 (Figs. 3 and

5). The rods 12 are provided with any suitable means for preventing their rotation beyond the point when the back support 11 is in the upright position shown in Fig. 1.

The lock-plate 14 is secured to the bottom of the seat 10 and is provided with an integral cylindrical stud 15, which rises and extends from the face of the said lock-plate for a considerable distance (Fig. 3). Rotatably mounted upon the stud 15 is a lock-flange 16 which is preferably held in place by means of the washer 17 and the cap screw 18, the latter fitting into the top of the stud 15 as clearly shown in Fig. 3. The lock-flange 16 comprises a flange 19 and a hub 20 made integral therewith. Extending from one side of the hub 20 are ears 21 and 22 and on the opposite side is provided a lug 23.

24 and 25 are the legs or standards of my chair and they are pivotally connected near their lower ends by the pintle 26. The upper end of the standard 25 is pivotally connected to the lock-flange 16 by being mounted between the ears 21 and 22. The upper end of the standard 24 is pivotally connected to lock-flange 16 by means of the links 27 and 28, which are connected at one end to the lug 23 and at the other end to the standard 24. A lock-dog 29 is fitted into a vertical slot in the upper end of the standard 25 and it is so secured that it cannot be rotated except by means of the said standard. The face of the hub 20 of the lock-flange 16, which is between the ears 21 and 22, bears against the upper end of the standard 25 and the inner end of the lock-dog 29 and these contacting faces are preferably beveled. These faces contact when the seat 10 is in its upper position and thus form a stop therefor. Slots 30 and 31 are provided in the lock-flange 16 and the lock-plate 14, respectively, with which the lock-dog 29 is engageable.

32 is a floor plate which is set flush with the top of the floor 33 (Figs. 4 and 6) and it is secured thereto, preferably by means of bolts 34 which pass through a metallic plate 35 placed beneath the floor 33 thus reinforcing the same. Obviously one or more of these floor plates may be set into the floor of an automobile or motor boat or one may be secured in a board which may be moved about as required. The floor plate 32 is provided with an annular L-shaped groove 36 which is partly formed by the flange or

ledge 37, (Fig. 4) integral with said floor plate.

The lower ends of the standards 24 and 25 are of a circular conformation and together form substantially a complete circle. An inwardly projecting lip 38 is made integral with the extreme lower ends of the standards, which fit into the annular groove 36 in the floor plate 32, the lips 38 being engageable with the ledge 37 of said plate.

39 is an annular filler ring which fits into the annular groove 36 in the floor plate 32 when the seat is not in use and prevents the collection of dust and dirt in said groove.

40 are holes provided in the ring by which the same may be grasped when withdrawing it from the groove 36 and is only one of the many means which might be employed for the purpose.

When my invention is to be used the lower ends of the standards 24 and 25 are placed in the annular groove 36 in the floor plate 32 while the seat is still folded and the lower ends of the standards are spread apart.

When this is done the seat 10 is raised to its horizontal position and as the lock-plate 14 is secured to the bottom of the seat it is obvious that the upper ends of the standards will be spread apart by the links 27 and 23 and thus force the lower ends together and make the lips 38 engage with the ledge 37 thereby firmly holding the standards in a vertical position. The seat 10 is now revolved so as to throw the lock-dog 29 out of register with the slot 31 in the lock-plate 14 and the back support 11 is raised whereupon the seat is ready for use. It will thus be seen that the seat cannot be folded up except when in the one position, *i. e.*, where the lock-dog will register with the slot 31.

Obviously some means might be employed whereby the slot 31 may be temporarily closed so that the seat could not be folded up until such means be removed or withdrawn, as for instance, the lock-plate 14 may be arranged to receive a slide which will close the slot 31 against the entrance of the lock-dog 29 and thus make it impossible for the chair to collapse or to be folded up, except when the said slide is withdrawn and the lock-dog is in register with the slot in the lock-plate 14. This and other modifications of the details herein shown and described may be made without departing from the spirit of my invention and I do not wish to be limited to the exact embodiment herein shown and described.

Having thus described my invention what I claim is:

1. As an article of manufacture, a chair comprising a seat, standards pivotally secured at their upper ends to said seat, an annular floor plate provided with an annular L-shaped groove, a pintle connecting said standards near their lower ends, lips

provided in the lower ends of said standards, whereby when said chair is closed the lower ends of said standards are closed and said lips are thereby lockingly engaged with said annular floor plate.

2. As an article of manufacture, a chair comprising a seat, a back support pivotally secured to the bottom of said seat, standards pivotally secured at their upper ends to said seat, an annular floor plate provided with an annular L-shaped groove, a pintle connecting said standards near their lower ends, lips provided in the lower ends of said standards and lockingly engageable with said annular L-shaped groove, and means whereby said chair may be folded up and said standards disengaged from said floor plate.

3. As an article of manufacture, a chair comprising a seat, a lock-plate secured to the bottom of said seat, standards pivotally and rotatably connected at their upper ends to said lock-plate, a grooved floor plate, the lower ends of said standards being lockingly engageable with said floor plate and means for unlocking and disengaging said standards from said floor plate.

4. As an article of manufacture, a chair comprising a seat, a lock-plate provided with a stud secured to the bottom of said seat, a lock-flange rotatably mounted upon said stud, standards pivotally connected at their upper ends to said lock-flange, a grooved floor plate, the lower ends of said standards being lockingly engageable with said floor plate and means for unlocking and disengaging said standards from said floor plate.

5. As an article of manufacture, a chair comprising a seat, a lock-plate secured to said seat and provided with a stud, a lock-flange rotatably mounted upon said stud, two standards, a pintle connecting said standards near their lower ends, links medially connecting the upper end of one of said standards to said lock-flange, a pintle connecting the upper end of the other standard direct to said lock-flange, a grooved floor plate, the lower ends of said standard being lockingly engageable with said floor plate, whereby said seat may be tilted thus drawing the upper ends of the standards together and disengaging the lower ends thereof from the said floor plate.

6. As an article of manufacture, a chair comprising a seat, a lock-plate, two standards having their upper ends medially connected to said lock-plate, a pintle pivotally connecting said standards near their lower ends, a floor plate provided with an L-shaped groove, lips provided in the lower ends of said standards and lockingly engageable with said L-shaped groove and means for unlocking and disengaging said standards from said floor plate.

7. As an article of manufacture, a chair

comprising a seat, a lock-plate provided with a central stud and at one point in its face with a radial slot, a lock-flange rotatably mounted on said stud, two standards pivotally connected near their lower ends, a grooved floor plate, the lower ends of said standards being lockingly engageable with said floor plate, links mediate-ly connecting the upper end of one of said standards with said lock-flange, a pintle directly connecting the upper end of the other of said standards to said lock-flange, a lock-dog mounted on said pintle and secured in a slot provided in the upper end of the said directly connected standard and engageable with said slot in said lock-plate, whereby said seat may be kept in its horizontal position at all times except when said lock-dog is in register with said slot.

8. As an article of manufacture, a chair comprising a seat, a back support, a lock-plate secured to the bottom of said seat, said back support being rotatably mounted in said lock-plate, two standards having their upper ends mediate-ly connected to said lock-plate, a pintle pivotally connecting said standards near their lower ends, a floor plate

provided with an L-shaped groove, lips provided in the lower ends of said standards and lockingly engageable with said L-shaped groove, a filler ring, and means for unlocking and disengaging said standards from said floor plate.

9. As an article of manufacture, a chair comprising a seat, a back support, a lock-plate provided with a central stud, a lock-flange rotatably mounted on said stud, two standards pivotally connected near their lower ends, a grooved floor plate, the lower ends of said standards being lockingly engageable with said floor plate, one of said standards being removably connected at its upper end to said lock flange; and means carried by the upper ends of the other of said standards whereby the seat may be kept in its horizontal position while the chair is in use.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

EDWARD L. KUNZ.

Witnesses:

JOSEPH H. MORGAN,
J. WM. ELLIS.