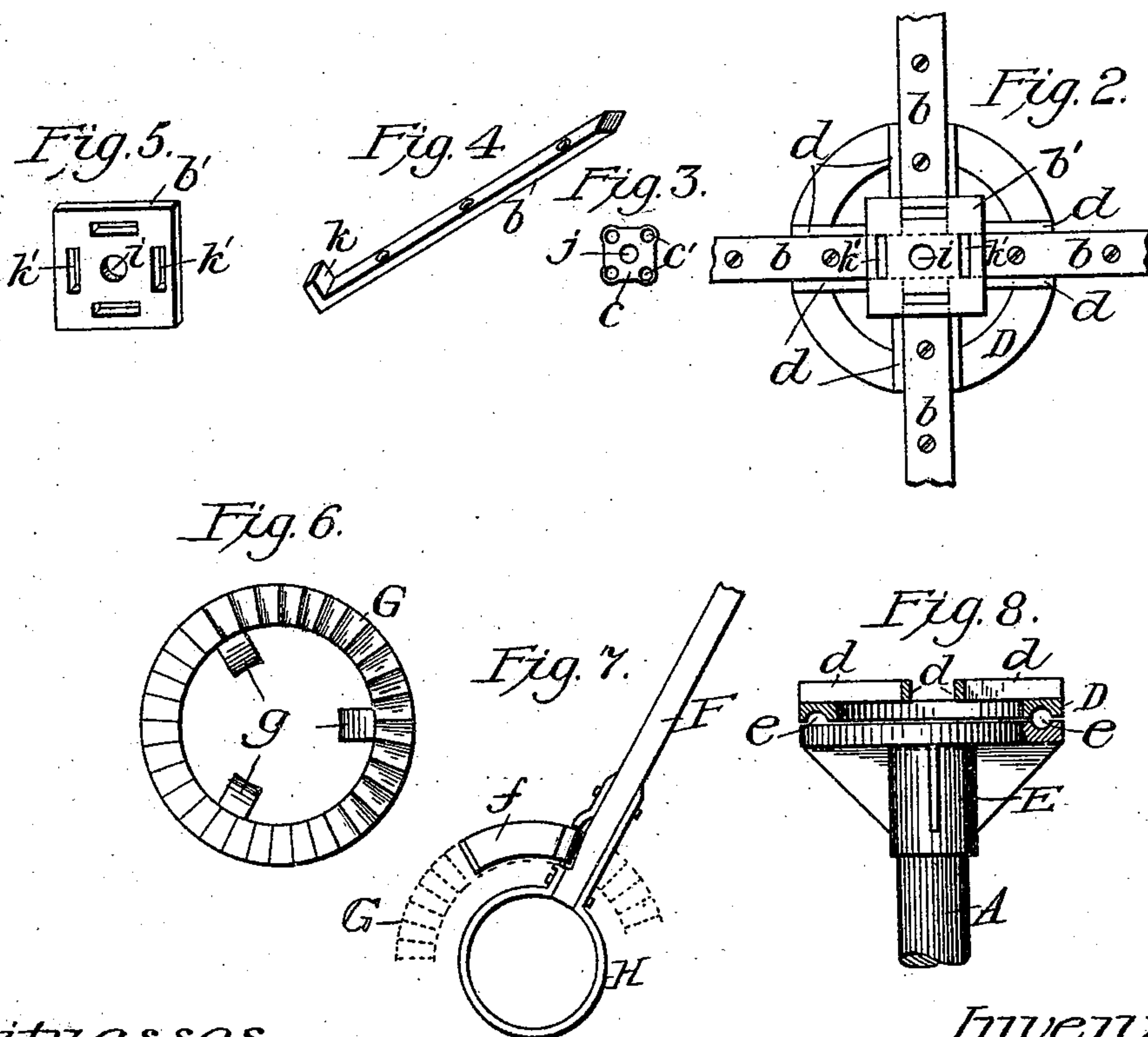
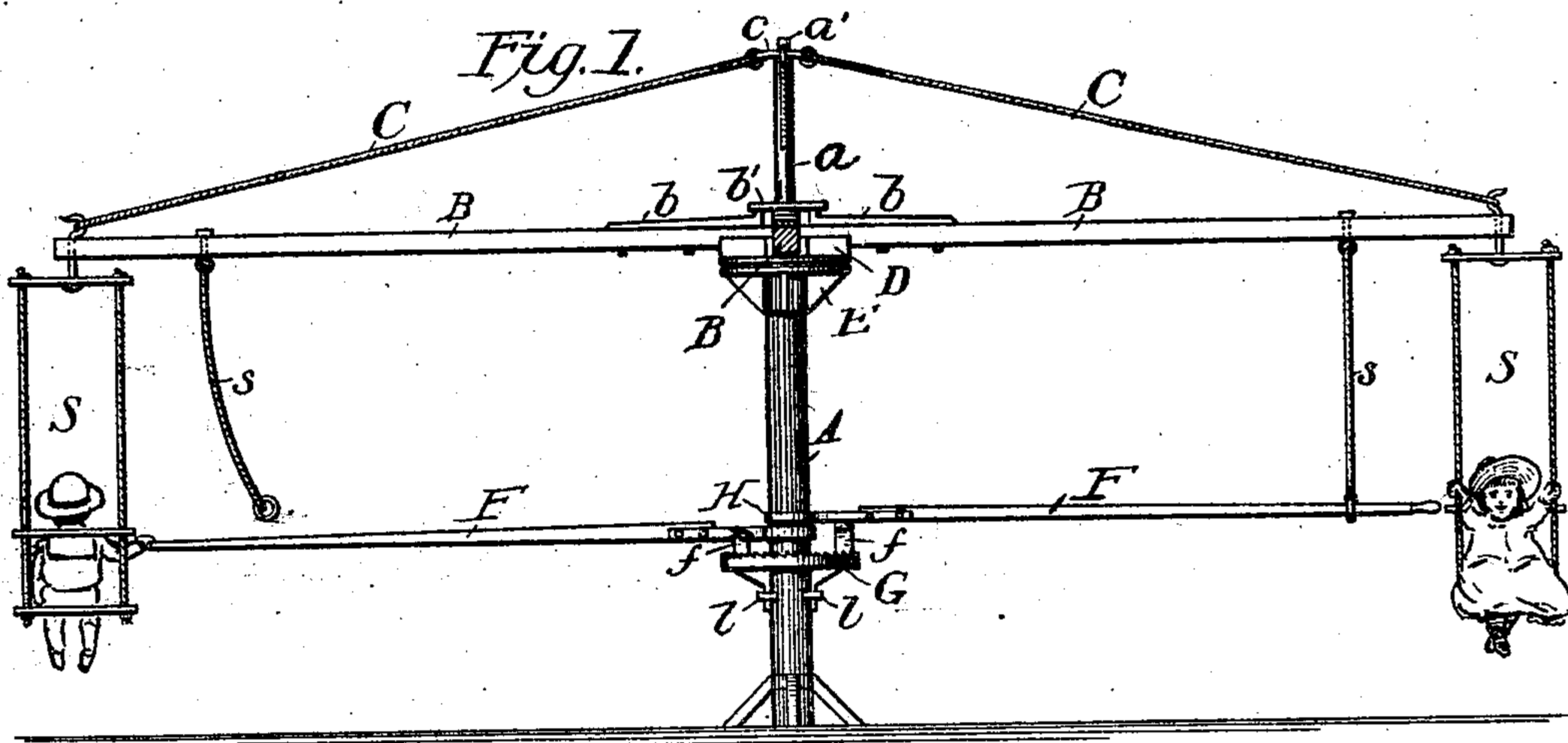


(No Model.)

J. MULLER.
MERRY-GO-ROUND.

No. 551,782.

Patented Dec. 24, 1895.



Witnesses.

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JACOB MULLER, OF HONESDALE, PENNSYLVANIA.

MERRY-GO-ROUND.

SPECIFICATION forming part of Letters Patent No. 551,782, dated December 24, 1895.

Application filed June 1, 1895. Serial No. 551,364. (No model.)

To all whom it may concern:

Be it known that I, JACOB MULLER, a citizen of the United States, residing at Honesdale, in the county of Wayne and State of Pennsylvania, have invented certain new and useful Improvements in Merry-Go-Rounds or Carousels; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of merry-go-rounds which are driven around by the persons riding upon or using the same, and the object of my invention is to provide a simpler, cheaper, and more health-giving merry-go-round for use upon home lawns, school play-grounds, and other pleasure grounds or places; and to this end it consists of the construction and combination of the several parts described as follows:

Referring to the drawings, Figure 1 is a side elevation of one of my carousels in use and showing one of the arms thereof in cross-section. Fig. 2 is a top view of the arm-plate, showing method of attaching the arms thereto. Fig. 3 represents a small cap-plate used on the top of the center-post extension for attaching braces used to brace up the arms. Fig. 4 represents a plate used on the inner ends of the arms for the purpose of attaching them to the arm-plate. Fig. 5 represents a supplemental piece to the arm-plate. Fig. 6 is a top view of a stationary ratchet-wheel to be fixed to the center post. Fig. 7 is a top view of the inner end of the lever used in propelling my carousel, showing the pawl which engages with the stationary ratchet-wheel. Fig. 8 shows the cap of the center post, partly in section, in its relation to the arm-plate, partly in section, the two constituting the main bearings on which my carousel is revolved.

The center post A is firmly set on the floor or ground in a vertical position, and consists of the larger portion and the extension *a* from the center of the top of A, the said extension terminating in the projection *a'*, which fits

into the hole *j* of the plate *c* and serves as an axis on which the said plate is revolved.

The extension *a* may be made integral with the cap E of the center post or it may be a piece of gas-pipe or other suitable material fixed into the top of the center post and extending through openings in the top of the cap E and at the center of the arm-plate D. The extension *a* also fits into and becomes the axis of the supplemental arm-plate *b'*. The arms B have their inner ends provided with the plates *b* having the hooks or projections *k*, which projections are adapted to be hooked into the slots *k'* of the plate *b'*, by which arrangement the arms of the carousel are easily removable yet held firmly in place while in use. The extension *a* fitting into the hole *i* of the plate *b'*, said plate is revoluble with arms B, attached about *a* as an axis. The inner ends of the arms B abut against one another, as shown by the dotted lines in Fig. 2. Disposed at their outer ends are the swings or seats S on which the occupants ride.

The braces C, which are subtended from the holes *c'* in the plate *c* to the hooks at the outer ends of the arms B, are not drawn tight, so that there is but little pressure on the bearings of the plate *c*, except in the case that there is much more weight on one side than the other, the arms being so disposed that the main part of the weight is always normally supported by the ball-bearings of the plates D and E. The plate D is provided with lugs or projections *d* to prevent lateral misplacement of the arms. No bolts or other fastenings are used to attach said arms to the arm-plate or hub D, and even the lugs may be substituted by a single nipple or projection fitting into a hole in the under side of the arm.

The contiguous flat surfaces of D and E have corresponding grooves *e* cut around their circumferences, the said grooves being adapted to receive balls of hardened metal, thus constituting the main bearings of my carousel. The ring or fixed ratchet G is fastened to the center post A by means of the lugs *g* and the staples *l*. The lever F is provided with the girdle H, to one portion of which the pawl *f* is pivotally attached, Fig. 7. The outer end of the lever F is provided with a handle by which it is operated, and is supported by the

support *s* suspended from the arm *B* when not in use.

The operation of my carousel is readily explained. The person sitting in the swing
5 takes hold of the handle of the lever *F*, reaches forward, the pawl *f* sliding over the teeth of the ratchet-wheel *G*. He now pulls on the lever and the pawl *f* engages with the ratchet-wheel, and the said wheel being fixed to the
10 center post the operator is drawn forward and the carousel caused to turn on its bearings. The operation is repeated until the desired speed is reached, and speed maintained in a similar manner. Levers *F* may be extended to several or all of the seats, the pawls
15 being lengthened so as to reach the ratchet-wheel if the girdles *H* are disposed above one another. The girdle *H* may be made of two semicircular pieces and have levers disposed
20 at two opposite sides, one pawl being sufficient for the two levers in that case, as they would have to be operated in unison.

It will be readily seen from the construction of the arm-plates and method of attachment
25 ments that the arms are held solidly in position when in use, but are easily separable by lifting the outer ends of each and raising the supplemental plate *b* so as to permit the projections on the ends of the arms to drop out
30 of the slots of the said supplemental plate. They are also readily replaced by opposite movements, thus affording a merry-go-round which may be readily taken apart and transported from one place to another and readily
35 set up again for use without the use of tools, except for setting the center post.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

40 1. In a merry-go-round of the kind described, the combination of the center post *A*, the cap *E* and extension *a* adapted to give width to the axis of the revolving part, the said revolving part consisting of the arm plate
45 *D* with the supplemental plate *b'*, the arms *B* and braces *C* subtended from the outer ends of the said arms to the revolving plate *c* on the upper end of the extension *a*—, and seats

disposed on the outer ends of the said arms; with the beveled ratchet *G* encircling the center post and attached thereto by means of
50 lugs *g* adapted to slide into staples *l*, the lever *F* extending from the center post outwardly, the said lever provided with the ratchet pawl *f*, by means of which occupants
55 of the seats may propel the merry-go-round substantially as shown and described.

2. In a merry-go-round of the kind described, the post cap *E* and arm plate *D* having the corresponding grooves *e* adapted to receive anti-friction materials, the said cap and
60 plate constituting the main bearings of the merry-go-round, in combination with the arms *B*, the supplemental arm plate *b'* having slots *k'* adapted to receive the hooks or projections
65 *k* on the inner ends of the said arms *B* adapted to hold them in position and permitting the arms to be readily removable for the purposes of transportation substantially as shown and described.
70

3. In a merry-go-round the combination of revolving arms with seats suspended from their outer ends, the said arms being attached to an arm plate *D* revoluble in a horizontal
75 plane on the upper end of a vertical mast, the said mast being provided intermediate of its upper end and the ground with a ratchet wheel *G* attached to the mast by means of
80 lugs *g* fitting into staples *l* permitting the same to be readily removable, and a lever *F* attached to the mast by the girdle *h* encircling the mast loosely above the ratchet-wheel *G*, the said lever provided with a pawl *f* by means
85 of which the rider or occupant of the merry-go-round may propel the same by direct muscular force, the said parts named being readily separable each from each for the purpose of transportation substantially as shown and described.

In testimony whereof I affix my signature
90 in presence of two witnesses.

JACOB MULLER.

Witnesses:

F. F. GIBBS,
CHAS. W. DAWSON.