No. 762,959. PATENTED JUNE 21, 1904.

W. S. TOTHILL.

AMUSEMENT APPARATUS.

APPLICATION FILED NOV. 17, 1903.

NO MODEL.

Fig. 1.

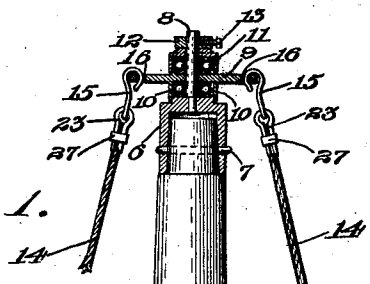
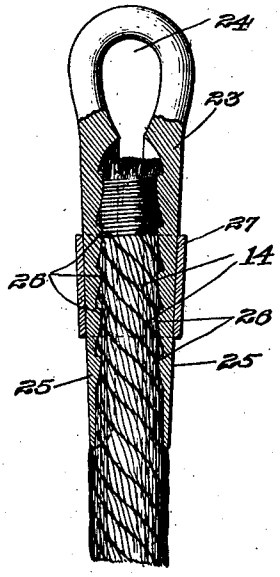


Fig. 2.



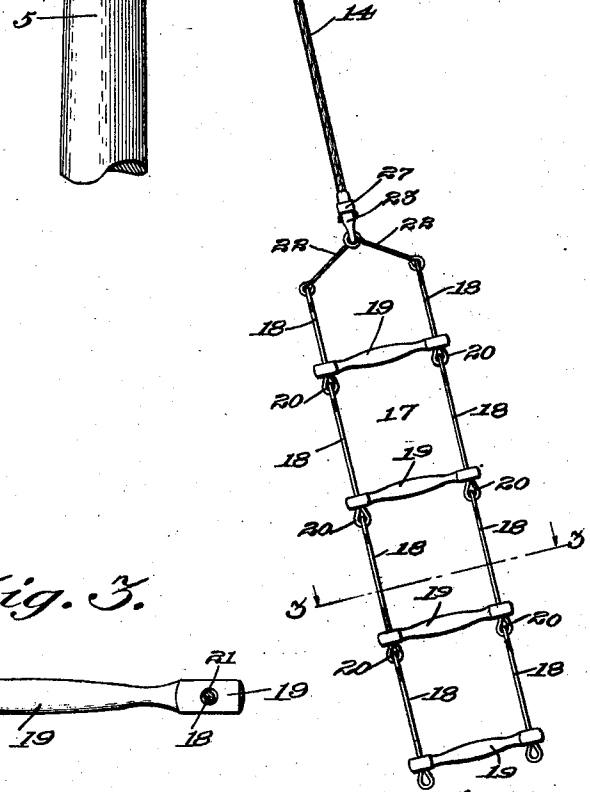


Fig. 3.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 762,959. Patented June 21, 1904.

UNITED STATES PATENT OFFICE.

WILLIAM S. TOTHILL, OF CHICAGO, ILLINOIS.

AMUSEMENT APPARATUS.

SPECIFICATION forming part of Letters Patent No. 762,959, dated June 21, 1904.

Application filed November 17, 1903. Serial No. 181,564. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. TOTHILL, residing in Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Amusement Apparatus, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to a type of amusement apparatus commonly known as a "giant-stride." Such devices are now very commonly employed for use by children on city playgrounds; and the object of my invention is to improve such apparatus so as to render the same strong and durable and easily operated; and the particular features to which my improvements more particularly relate are, first, the ladders upon which the children secure a firm hold while such ladders are being revolved around a central support; second, the clamps by which the ladders referred to are secured to their respective ropes, and, third, the means by which such ropes are supported at their upper ends.

Those things which I believe to be new will be set forth in the claim.

In the accompanying drawings, Figure 1 is a side elevation of the upper portion of a supporting-pole with the metal cap, revolving plate, and attached devices in section and showing also two of the ropes that are attached to such revolving plate, to one of which ropes is attached one of my improved ladders. Fig. 2 is a detail, partly in section, of my improved clamp employed at each end of each rope; and Fig. 3 is a section taken at line 3 3 of Fig. 1.

In the drawings, 5 indicates a supporting-pole, which may be of wood or metal and is usually about eighteen feet long, which pole is to be firmly fixed at its base, so as to stand in an upright position.

6 indicates a cap placed upon the upper end of the pole 5 and secured thereto by a pin 7 or in any other suitable manner.

8 indicates a heavy round pin securely fastened at its lower end in any suitable manner to the cap 6 and projecting upward from the center thereof.

9 indicates a heavy metal disk mounted to turn on the pin 8. As shown, there is formed with this disk 9 an annular downwardly-depending flange 10, which surrounds a series of antifriction-balls, as shown, which series of balls carry the weight of the disk 9 and the loads imposed thereon.

11 indicates a small cap through which the pin 8 passes and located directly over the disk 9 and surrounding a second series of antifriction-balls, as shown.

12 indicates a heavy nut slipped over the upper end of the pin 8 and held in place by a suitable set-screw 13.

The series of balls inclosed by the small cap 11 is provided, so as to insure the easy turning of the disk 9 in case the opening in the disk through which the pin 8 passes is large enough to allow the plate to be tilted slightly when the load suspended from such plate is unequally distributed on such plate, as will occur when, for example, only one child is using the device.

14 indicates ropes, two only being shown, but of which there may be a large number. Each rope is attached to the disk 9 by means of a hook 15, adapted to be inserted in one of a series of holes 16 near the edge of the disk 9.

17 indicates a ladder. One of these ladders is attached to the lower end of each one of the ropes 14, and each ladder consists of a series of metal links 18 and rungs 19. The links 18 at each side of the ladder are flexibly connected together by interlocking eyes 20, each link having one of these eyes formed at each end and the eyes of each link standing at substantially right angles to each other, so as to properly interlock with the eye of the adjoining link. The rungs 19 are preferably of wood and suitably shaped to permit of a good hold being obtained thereon by the user of the ladder, and, as shown, these rungs are each provided with holes 21 near their ends, through which a pair of links 18 can pass. Such holes, as shown, are somewhat larger than the diameter of the links, thus permitting the rungs to be properly moved up and down on their respective links. To the upper ends of the upper pair of links 18 is attached a pair of short links 22, to the ends of which one of the ropes 14 is connected, the

connection being made by means of a clamp 23. A similar clamp 23 is employed at the upper end of each rope for connecting such rope with its attaching-hook 15. It is of course highly important that the ropes be so connected with their hooks and ladders that such connections will remain securely in place on the rope notwithstanding that they may be subjected to the weight of heavy loads, and to provide such secure construction I form such clamps as illustrated in Fig. 2, in which it will be seen that each clamp is constructed of a single piece of metal bent on itself to form an eye portion 24 to receive the article to be attached to the rope end and arms 25, between which the rope end is secured. The inner faces of these arms 25 are concave to conform to the shape of the rope and have each a series of teeth 26 so formed as to resist any tendency of the rope to slip out from between such arms when the arms are tightly clamped upon the rope. To effect this tight clamping of the arms upon the rope and cause the teeth 26 to bite therein, I provide a collar 27, adapted to slide upon the arms 25. The outer faces of the arms are, as shown, slightly inclined, and the collar is also tapering or inclined, so that as such collar is forced up on the arms they will be tightly clamped upon the rope, as will be understood.

In use with the pole 5 supported in an upright position and with the series of ropes depending from the disk 9 the children each grasp one of the ladders 17 and run briskly around the pole, the disk 9 of course turning freely, and when under rapid motion they will leap in the air and climb to any desired point on the ladders or seat themselves upon the rungs thereof and will enjoy a rapid swing around the pole by reason of the centrifugal force keeping the ropes well out from the pole. When well under way, each player can swing several times around the pole in a large circle before the ladders begin to move inward toward the pole, and by providing the set of antifriction-rollers above the disk 9 it has been found that the device will operate practically as freely and easily with one child only using the apparatus as if a number of children equally distributed around the pole were so employed. By reason of the annular flange 10, carried by the disk 9, the lower set of antifriction devices are effectually protected from dust, &c., while the small cap 11, attached to said disk, equally well protects the upper set of antifriction devices.

I have called attention to the fact that the rungs 19 of the ladder are freely movable within the limit of the length of the links upon which they are respectively mounted, and this freedom of movement of such rungs is found to be a considerable advantage in that it enables a child to readily seat himself upon any one rung by moving the next one above upward, and at the same time the rungs when at their lower positions are separated from each other at the right distance to enable the child to readily climb the ladder. Furthermore, by having such rungs adjustable they can be moved away from the eyes 20, so that the ladder as a whole can be folded much more compactly for transportation or storeage.

That which I claim as my invention, and desire to secure by Letters Patent, is—

A giant-stride apparatus comprising a stationary standard, a cap attached to the upper end thereof, a pin secured at its lower end to said cap, a disk of greater diameter than the cap mounted upon said pin and provided with a depending flange resting upon the cap, bearing-balls interposed between the disk and cap, a cap located over the disk, bearing-balls arranged therein, means mounted upon the pin to prevent the removal of the disk and the cap located above the same, a cable, a hook secured to the upper end thereof and adapted to engage in said disk, an eye secured to the lower end of said cable, a pair of oppositely-extending links secured to said eye, a separate string of depending loosely-connected links attached to each of the oppositely-extending links, and a plurality of rungs loosely attached to said string of links.

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