

M. M. MALLORY.

SWING.

APPLICATION FILED SEPT. 17, 1912.

1,068,353.

Patented July 22, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

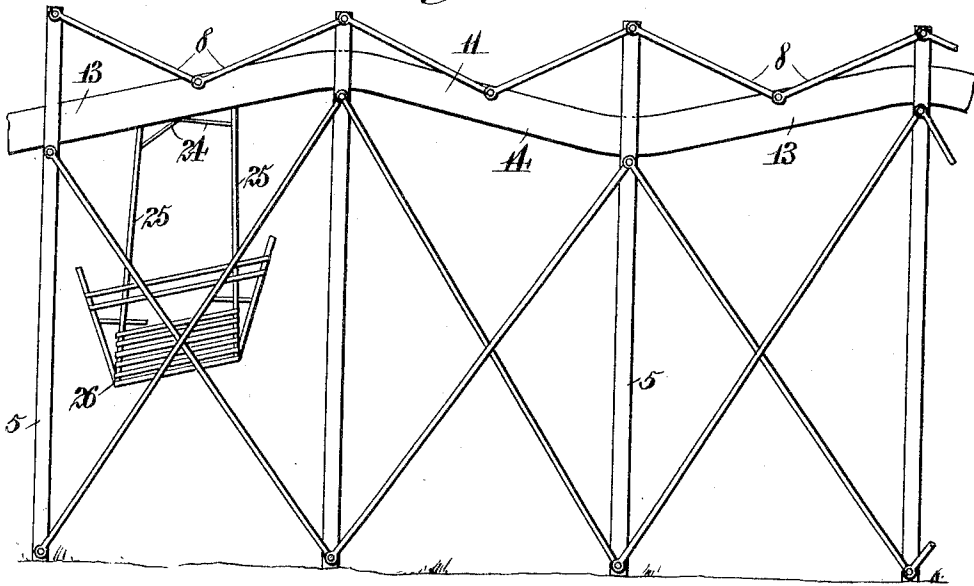
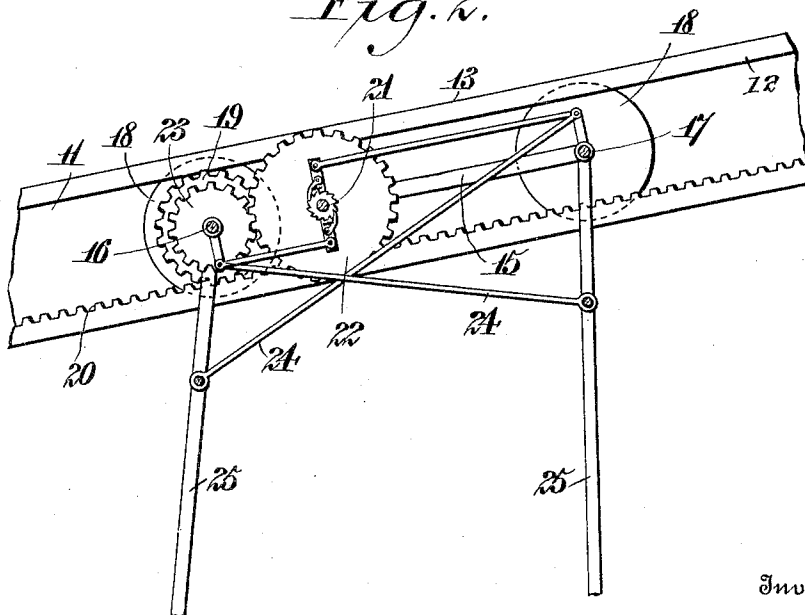


Fig. 2.



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2 SHEETS-SHEET 2.

Fig. 3.

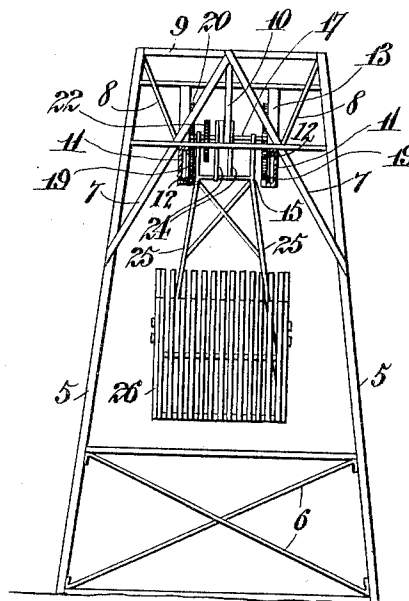
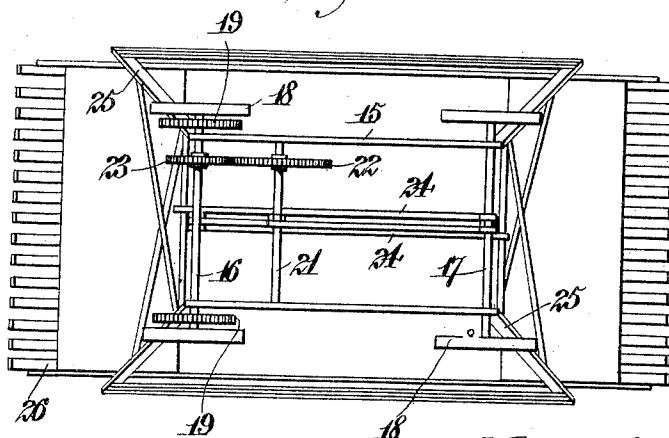


Fig. 4.



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UNITED STATES PATENT OFFICE.

MILTON M. MALLORY, OF SPRINGFIELD, OREGON.

SWING.

1,068,353.

Specification of Letters Patent.

Patented July 22, 1913.

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To all whom it may concern:

Be it known that I, MILTON M. MALLORY, a citizen of the United States, residing at Springfield, in the county of Lane and State of Oregon, have invented new and useful Improvements in Swings, of which the following is a specification.

The general object of this invention is the provision of a swing having a driving mechanism connected thereto which is adapted for moving the swing longitudinally of suitable tracks; and to this end the invention consists of certain novel arrangements, constructions and combinations of devices which will be described hereinafter and then pointed out in the appended claims.

In carrying out the object of the invention generally stated above, it will be understood, of course, that the essential features thereof are susceptible to changes in details and structural arrangements, one preferred and practical embodiment being shown in the accompanying drawings, wherein:

Figure 1 is a side elevation of the swing and track support therefor. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is an end elevation of the swing, the tracks being shown in section. Fig. 4 is a top plan view of the swing showing the mechanism for driving the same upon the track.

Referring more particularly to the accompanying drawings in which like reference characters designate similar parts, it will be seen that the invention comprises a plurality of oppositely disposed uprights which are supported by means of the lower braces 6 and upper braces 7, said supports being connected longitudinally by means of the tie rods or trusses 8 and transversely, by means of the beams 9. Depending from the beams are a plurality of track hangers 10 which are adapted to have secured thereto the oppositely disposed tracks 11 which are preferably made of suitable metal and which are bent into substantially U-shape and provided at free edges with the inturned flanges 12 for preventing displacement of the wheels of the truck to be presently described. The tracks 11 are preferably given a wave formation whereby the same are provided with a plurality of upward and downward inclines 13 and 14 respectively.

The carrier or truck comprises a frame 15 preferably rectangular in formation and made of any suitable material, said frame having journaled adjacent the ends the

transverse axles 16 and 17, each shaft carrying the wheels 18 which are adapted to engage the tracks 11 whereby the truck is supported thereon. The axles 16 and 17 also have mounted thereon the cog wheels 19 which are adapted to engage the rack teeth 20 formed upon the lower flanges 12 of the tracks 11, said rack teeth being formed only upon the upward inclines 13 of said tracks, whereby the upward movement of the truck or carrier upon said inclines is facilitated. The longitudinal sides of the frame 15 also have journaled therein intermediate the ends thereof a crank shaft 21 upon which is fixed a gear wheel 22 adapted to mesh with the pinion 23 carried by the axle 16. The shaft 21 is driven through the medium of a plurality of driving rods 24 which are connected to said crank shaft 21 and also connected at their opposite ends to the uprights 25 of the swing 26, the upper ends of said uprights being pivotally connected to the frame 15 in any suitable manner. It is to be understood that the swing 26 may be of any usual construction and further description thereof is therefore deemed unnecessary.

It is to be understood that the tracks 11 may be endless and arranged in circular formation or may be straight and in either case it will be seen that when persons enter the swing 26 and rock back and forth, motion will be imparted to the driving rods 24 through the medium of the uprights 25 of said swing and said drive rods will cause the crank shaft 21 to rotate thus imparting a similar movement to the axle 16 whereby sufficient power will be imparted thereto in order to propel the truck or carrier up the inclines 13. Sufficient momentum will also be imparted to the truck or carrier when the same is on the downward inclines 14 to facilitate the upward movement of the said truck or carrier and hence it will be seen that the swing will attain a considerable speed in moving over the tracks.

From the foregoing description taken in connection with the accompanying drawings, it will be seen that the invention contemplates providing a swing which is comparatively simple in construction thus reducing the cost of manufacture of the same to a minimum and which is durable and effective in carrying out the purpose for which it is designed.

What is claimed is:—

1. The combination with a plurality of

uprights, and track supports carried thereby, of tracks depending from said supports, a truck including wheels adapted to travel upon said tracks, and a swing depending from said truck and adapted to drive the latter longitudinally of said tracks through the medium of its swinging movement.

2. The combination with a plurality of uprights, and track supports carried thereby, of tracks depending from said supports, a truck including wheels adapted to travel upon said tracks, a swing depending from said truck and adapted to drive the latter longitudinally of said tracks through the medium of its swinging movement, and a driving mechanism carried by said truck and adapted to be operated by said swing.

3. The combination with a plurality of uprights, of a plurality of tracks supported by said uprights, each of said tracks comprising substantially U-shaped beams having inturned retaining flanges at their free edges, a truck including wheels adapted to

travel upon said tracks, a swing depending from said truck, and a driving mechanism carried by said truck and connected to said swing whereby the latter is moved longitudinally of said tracks through the medium of its own swinging movement. 25

4. The combination with a plurality of uprights, of tracks carried by said uprights, said tracks constructed in wave formation to provide upward and downward inclines, rack teeth carried by said upward inclines, a truck including wheels supported by said tracks, a driving mechanism including gear wheels adapted to engage said rack teeth carried by said truck, and a swing depending from said truck and adapted to operate said drive mechanism. 35 40

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

MILTON M. MALLORY.

Witnesses:

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FRANK A. DE PUE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."