No. 762,531. PATENTED JUNE 14, 1904.

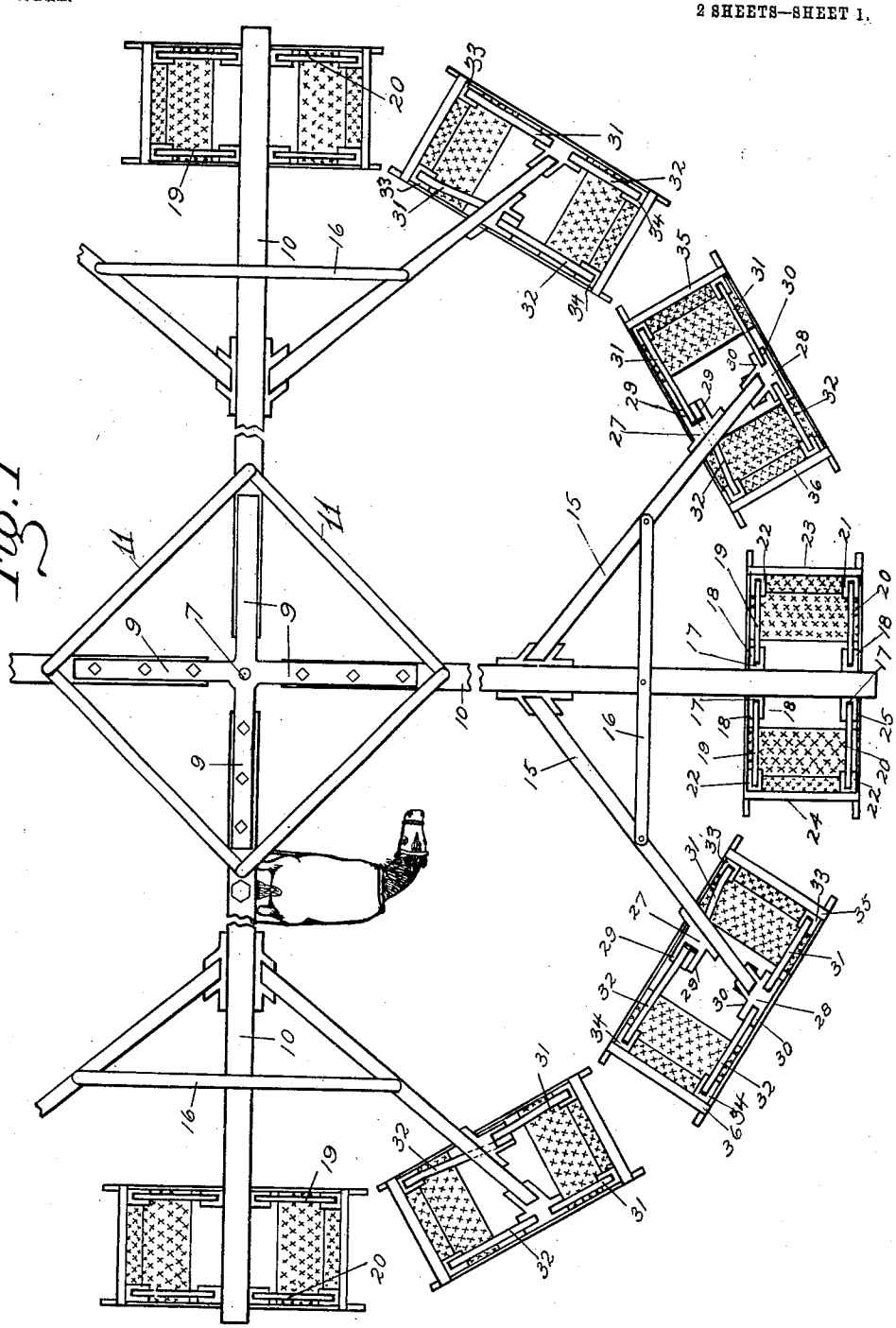
M. HOLTMAN.

MERRY-GO-ROUND.

APPLICATION FILED FEB. 16, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1



Witnesses.
Geo. A. Knox
L. Goostray

Inventor:
Martin Holtman
By Henry J. Miller
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NO MODEL. 2 SHEETS—SHEET 2.

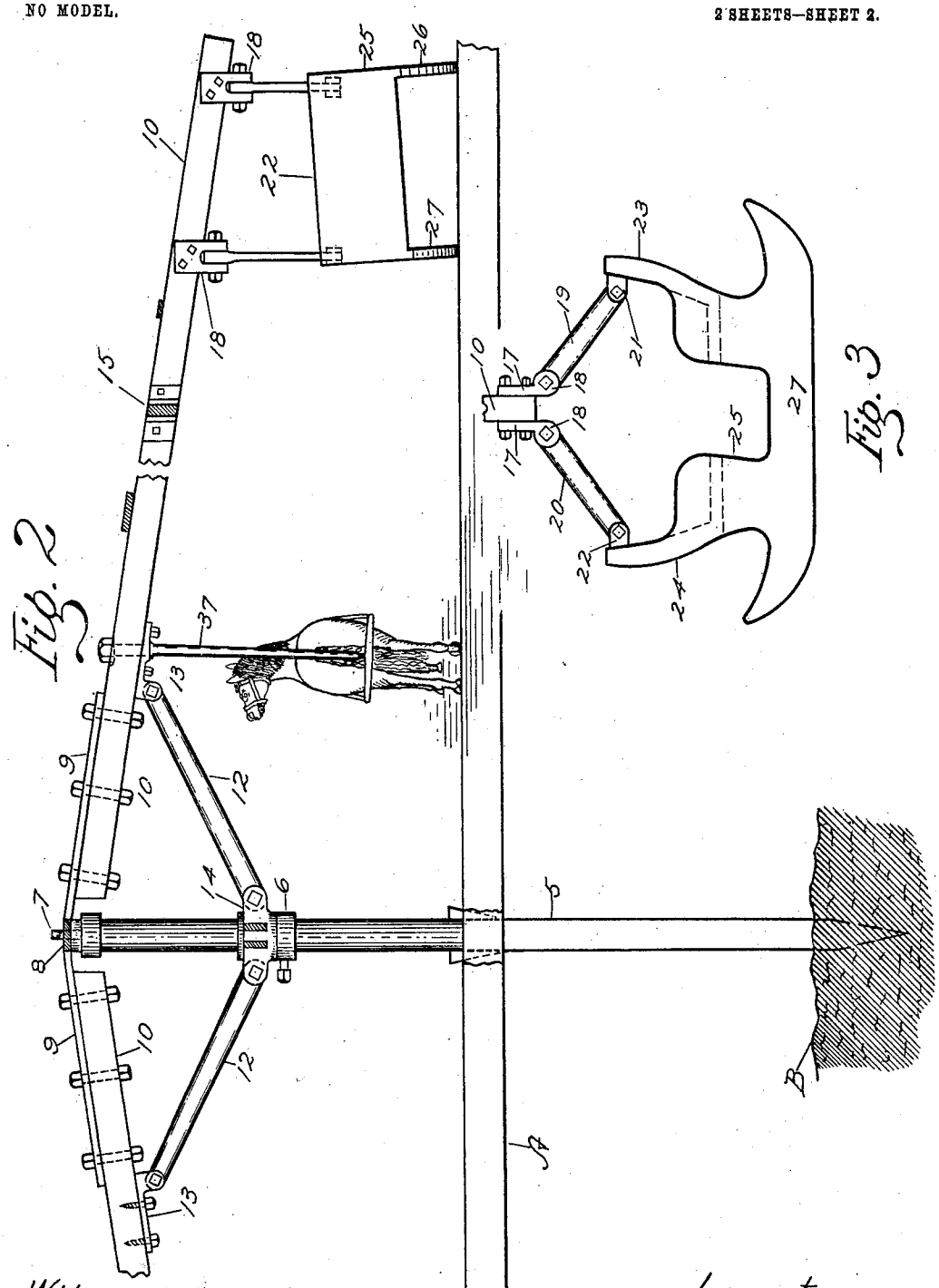

Fig. 2

Fig. 3

Witnesses.

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UNITED STATES PATENT OFFICE.

MARTIN HOLTMAN, OF ELLIS, MASSACHUSETTS.

MERRY-GO-ROUND.

SPECIFICATION forming part of Letters Patent No. 762,531, dated June 14, 1904.

Application filed February 16, 1904. Serial No. 193,828. (No model.)

To all whom it may concern:

Be it known that I, MARTIN HOLTMAN, of Ellis, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Merry-Go-Rounds; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to improvements in merry-go-rounds, and particularly to improvements in merry-go-rounds adapted for use on ice.

The object of the invention is to generally improve the construction of merry-go-rounds, whereby carriers, in the nature of sleighs, may be driven at a high speed on circular paths of ice or snow.

Other objects of the invention will be apparent from the following description.

The invention consists in the peculiar features of construction and combination of parts whereby the invention is carried into practice.

Figure 1 represents a plan view of portions of the improved merry-go-round. Fig. 2 represents a side elevation of portions of the same, showing one of the spider-arms and drivers for the carriers, also showing one of the carriers or sleighs. Fig. 3 represents a side view of the sleighs, showing the manner of securing the same to the spreader.

Similar characters of reference designate corresponding parts throughout.

In carrying this invention into practice my main object has been to produce a simple, strong, and efficient merry-go-round capable of driving a series of conveyances, such as sleighs, at a high speed, and by utilizing a circular path of ice or snow to support the conveyances independently of the spider-arms, by which motion may be imparted to the conveyances whereby as the weight of the conveyances and their contents is not sustained by the spider-arms such spider-arms may be of great length, thus enabling the driving of the conveyances over a circular path of large radius and at a high speed.

My object has also been to utilize each spreader for the driving of a group of the conveyances, whereby economy in driving power is effected, as also economy in the use of material.

As shown in the drawings, 5 indicates a standard adapted to be driven through a hole in the ice A and into the ground B at the bottom of the pond, on the ice of which the merry-go-round is to be erected. The standard 5 has the collar 6 adjustably secured thereto, and at the upper end of the standard is the pivot 7. For the purposes of the present device the standard 5 need not extend a very great distance above the ice A, and the proportion shown in Fig. 2 may be increased or diminished without affecting the invention.

On the pivot 7 is rotatably mounted the frame 8, having as many radially-extending plates 9 9 as the number of spreaders designed to be secured thereto. To each of the plates 9 9 is secured a spider-arm 10 10, preferably much longer than the spider-arms generally used in machines of this nature.

The spider-arms 10 10 are suitably braced and connected by the braces 11 11 and may be supported by the arms 12 12, pivoted in the fittings 13 13, secured to the spider-arms and to the frame 14, which embraces the standard 5 and is rotatably supported by the collar 6. The outer portion of each spider-arm is furnished with a pair of angularly-extending arms 15 15, secured to the spider-arms in any ordinary manner and suitably braced by the brace 16, secured to the spider-arms and to said arms.

On the end portion of the spider-arms are secured the brackets 17 17, each having ears 18 18 and a pivot extending through perforations in said ears. On such pivots are mounted the rods 19 and 20, having flattened ends working between the ears 18 to prevent the twisting of said rods, while permitting them to move vertically, the lower flattened ends of these rods 19 and 20 being similarly mounted in pivots of the brackets 21 and 22, secured to ends 23 and 24 of the sleigh-body 25, which body inclines toward the axis represented by the standard 5 by reason of the outer runner 26 being higher than that marked 27.

At the outer portions of the arms 15 15 are secured the brackets 27 and 28, having the lips 29 and 30, between which the upper ends

of the arms 31 and 32 are pivoted, the lower ends of said arms being pivoted in brackets 33 33 and 34 34, secured to the ends 35 and 36, respectively, of sleighs similar to those marked 25.

From one of the spider-arms 10 depends a member 37, to which a horse may be attached or any suitable and ordinary system of rotating the structure formed by the spider-arms and their related apparatus may be utilized.

As the spider-arms carry only their own weight, they may be of extreme length and the sleighs may be driven at a high speed over the raceway provided by the surface of the ice. The sleighs may yield to irregularities in such surface through their pivoted connections with the spider-arms 10 and with the arms 15, while these connections prevent the tangential movement of the sleighs with respect to their circular path.

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

1. In a merry-go-round, the combination with a central standard, spider-arms pivotally mounted thereon, and a pair of arms extending angularly from the outer portion of each spider-arm, of vehicles each provided with a pair of pivoted arms pivotally secured at their upper ends to said angularly-extending arms, and a sleigh provided with pivoted arms the upper ends of which are pivotally secured to the spider.

2. The combination with the standard 5 having the pivot 7, and the collar 6 adjustably mounted on said standard, of the plate 8 pivotally mounted on the pivot 5 and having the radially-extending members 9 9, the spider-arms 10 10 secured to such members, the frame 14 embracing the standard 5 and rotatably supported by the collar 6, the braces 12 12 pivotally connected with said frame 14 and with the spider-arms 10 10, the arms 15 15 mounted on the spider-arms and suitably braced, sleighs, each pivotally connected to one of said arms and a sleigh pivotally connected with the end portion of the spider-arms, as herein shown and described.

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

MARTIN HOLTMAN.

Witnesses:
H. J. MILLER,
S. GOOSTRAY.