

No. 779,605.

PATENTED JAN. 10, 1905.

H. E. KEYES.
COASTING WAGON.

APPLICATION FILED SEPT. 22, 1902.

Fig. 1.

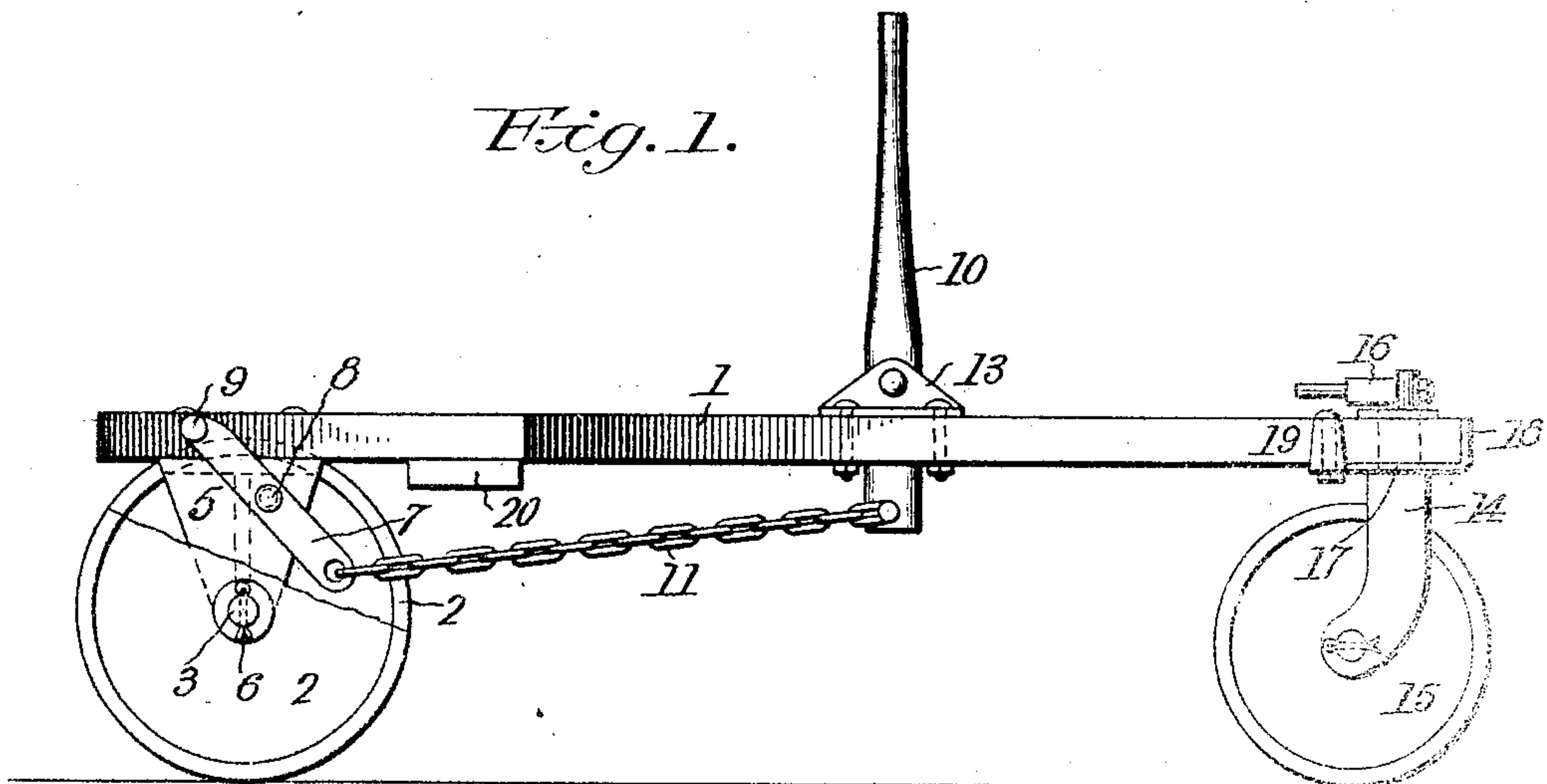


Fig. 2.

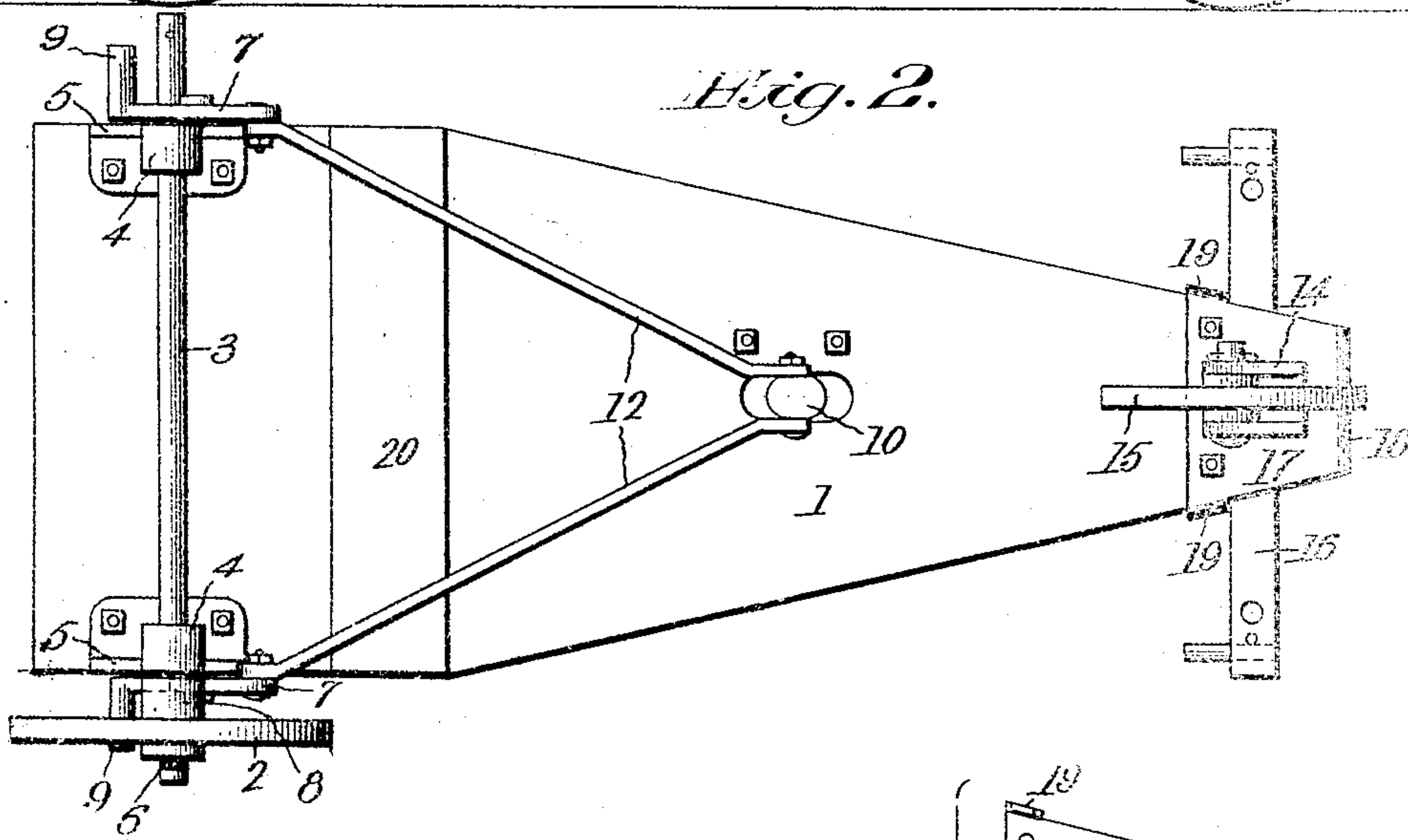


Fig. 3.

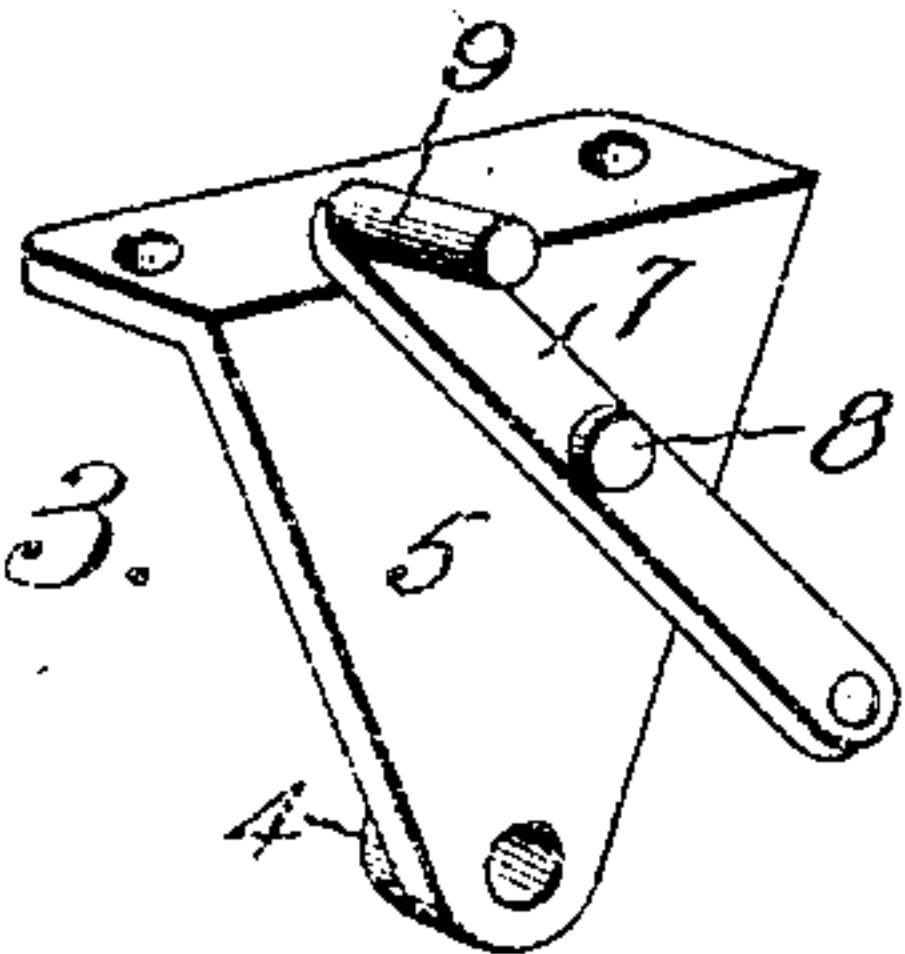
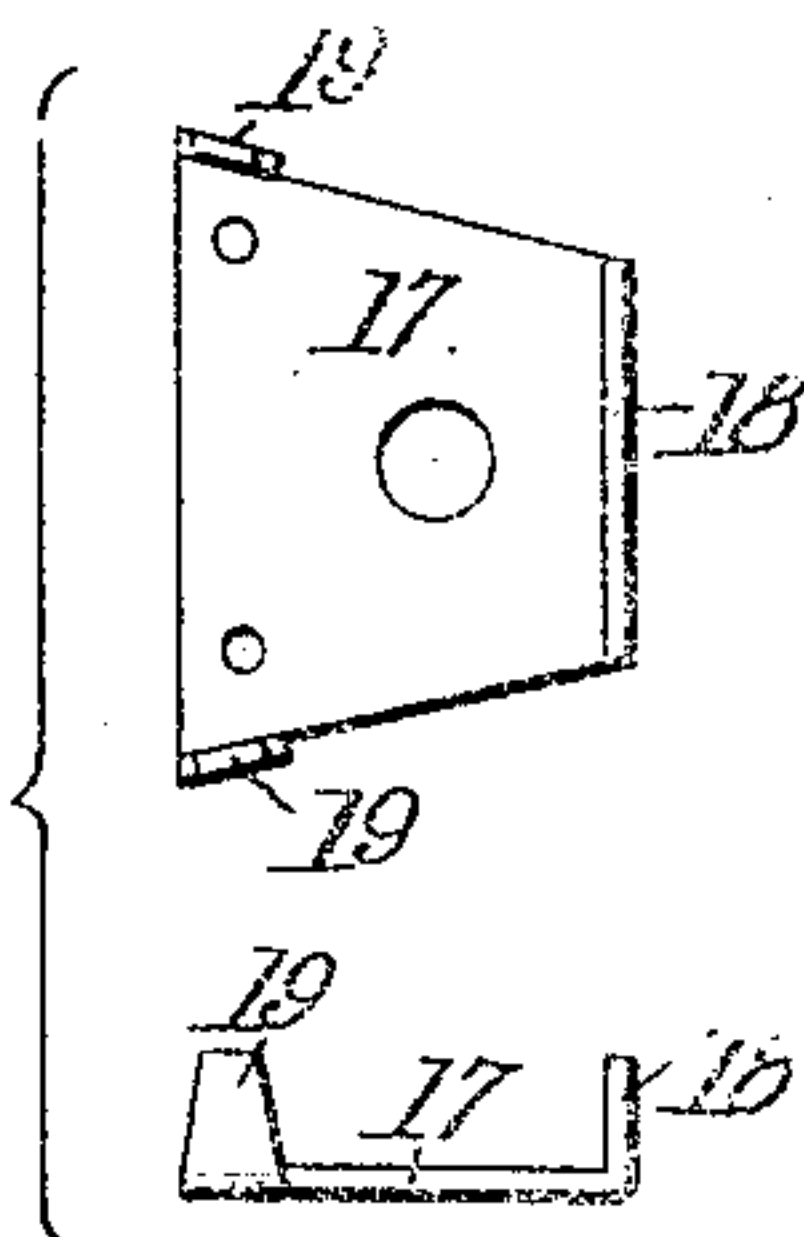


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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COASTING-WAGON.

SPECIFICATION forming part of Letters Patent No. 779,605, dated January 10, 1905.

Application filed September 22, 1902. Serial No. 124,356.

To all whom it may concern:

Be it known that I, HARRY E. KEYES, a citizen of the United States, residing at Homestead, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Coasting - Wagons, (Case B,) of which the following is a full, clear, and exact description.

The object of this invention is to provide a wagon or truck for amusement purposes in coasting down hills or other inclines, natural or artificial.

In a concurrent case filed February 5, 1902, Serial No. 92,658, (patented October 14, 1902; No. 711,402,) I have set forth one embodiment of the principle of the invention, and in another case of even date herewith, Serial No. 124,357, another embodiment thereof is set forth.

In the present invention the braking mechanism includes a brake-shoe in the form of a lever pivoted to the rear-wheel bracket and having its pivotal and wheel-engaging points arranged in front and rear, respectively, of a vertical plane through the axis of the wheel and connected with the hand-lever by a chain or rod or other means by which it may be forcibly applied and adapted to be released by the motion of revolution of the wheel when lever-pressure thereon is removed. A brake-shoe may be and preferably is applied to each rear wheel, and both brake-shoes are operated from the same lever. The steering-gear comprises a wheel whose fork is curved and swiveled in position so as to cause the said wheel to trail, and thus facilitate guiding or steering. The end of the body-board is provided with a metallic shoe to reinforce it against the strains of the steering-wheel, and one or more battens may be applied to the bottom side of said board to strengthen it, prevent it from splitting, and restrain it from warping, all as I will proceed now more particularly to set forth and finally claim.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a side elevation with the near wheel broken

away in part. Fig. 2 is a bottom plan view with the near wheel removed and showing rods instead of chains for the brake-shoe connections. Fig. 3 is a perspective view of one of the brackets and the lever brake-shoe detached. Fig. 4 shows in plan and side views the front end reinforce or shoe detached.

The combined body and seat 1 may be made of a flat board or piece of lumber of any suitable kind and thickness or of other material and in the form of a truncated wedge, substantially as seen in Fig. 2. The rear wheels 22 are mounted upon an axle 3, carried in bearings 4 in brackets 5, which are bolted to the body. Cotter-pins 6 may be used to secure the wheels to the axle. A brake-shoe 7 in the form of a lever is pivoted to each bracket in front or in advance of a vertical plane through the axis of the wheel, substantially as shown in Figs. 1, 2, and 3, as by a rivet 8, with the shoe proper, 9, projecting laterally across the rim of the wheel and engaging the tread of the wheel at a point in rear or back of a vertical plane through the axis of the wheel, so as to be brought into forcible braking contact therewith, and also to obtain the greatest lifting action of the wheel upon the brake-lever when pressure is released.

Each brake-shoe is connected with the hand-lever 10 by a chain 11, Fig. 1, or a rod or link 12, Fig. 2, and this hand-lever 10 is mounted upon a bracket 13, fastened to the body, the lever projecting above and below the body. The brake-shoes are arranged to engage the wheels above their axes, and the motion of revolution of the wheels will tend to force off or release the brake-shoes, and hence it is not necessary to use rigid connections between the said shoes and their operating-lever. The chains 11 of Fig. 1 are shown, therefore, as an efficient medium of connection, but other flexible or jointed connections may be used, and in any case merely releasing the pressure upon the lever 10 will permit the wheels to lift and throw off the brake-shoes by the force of their revolution.

The front fork 14 is reversely curved, so as to cause the steering or pilot wheel 15 to trail,

as shown in Fig. 1, and thus facilitate steering. The front fork may be otherwise of any desired construction, and it is supplied with the combined foot-rest and steering-bar 16.

5 The fork is swiveled in the front end of the body in any suitable way.

In order to reinforce the narrow front end of the body against the strains to which it is subjected, I provide a shoe 17 of cast, pressed, stamped, or other metal bolted, riveted, or otherwise fastened to the body and having an upturned tip 18 fitted against the end of the body and lateral lugs 19 fitted to the sides, and this shoe may form a bearing in whole or in part for the front fork and in any case is designed to take the strains of the steering-gear off the board of the body.

The parts are assembled by means which will permit of their ready disconnection, so that the wagon may be knocked down for transportation and storage purposes, and since the parts are interchangeable repairs may be readily and cheaply effected.

In order to reinforce the body against splitting, warping, and other like damages, one or more transverse battens 20 may be applied to it.

In operation the user straddles and sits upon the body at the rear, and placing his feet upon the steering-bar and grasping the brake-lever gives a lunge forward, and so starts the wagon in motion, which is accelerated by momentum in descending an incline. The speed of the wagon is controllable by the brake mechanism and guidance is easily effected by the steering-gear.

Parts of the invention herein set forth are applicable to either or both of the wagons of the other cases, and vice versa.

What I claim is—

1. A coasting-wagon, comprising essen-

tially a body, steering-gear, a pair of rear wheels, lever brake-shoes pivoted at a point in front of a vertical plane through the axes of said wheels and arranged for action upon said rear wheels at a point in rear of said vertical plane, and means to apply such brake-shoes to said wheels, said brake-shoes adapted to be lifted out of action by said wheels when the applying means are released.

2. A coasting-wagon, comprising essentially a body, steering-gear, a pair of rear wheels, brackets in which they are borne, brake-shoes made as levers and pivoted to said brackets at a point in front of a vertical plane through the axes of said wheels and overhanging the rims of the wheels and engaging said rims at a point in rear of said vertical plane, and means for forcibly applying said brake-shoes to the wheels, such that when released the motion of revolution of the wheels will lift and throw off the brake-shoes.

3. In a coasting-wagon, a board body, a steering-wheel swiveled in said body, and a metallic shoe embracing the bottom, sides and end of the body adjacent to the wheel and provided with an opening for the swivel of said wheel.

4. A coasting-wagon, having a board body provided with a steering-wheel swiveled in its front end, and a reinforcing-shoe, provided with an opening for the swivel of said steering-wheel, applied to such end and having an end tip and lateral lugs embracing the front and sides respectively of the body.

In testimony whereof I have hereunto set my hand this 1st day of September, A. D. 1902.

HARRY E. KEYES,

Witnesses:

H. H. BEARDMORE,
JOHN B. JONES, Jr.