No. 759,985. PATENTED MAY 17, 1904.

P. GRABLER.

TRUCK.

APPLICATION FILED JULY 6, 1903.

NO MODEL.

Fig. 1.

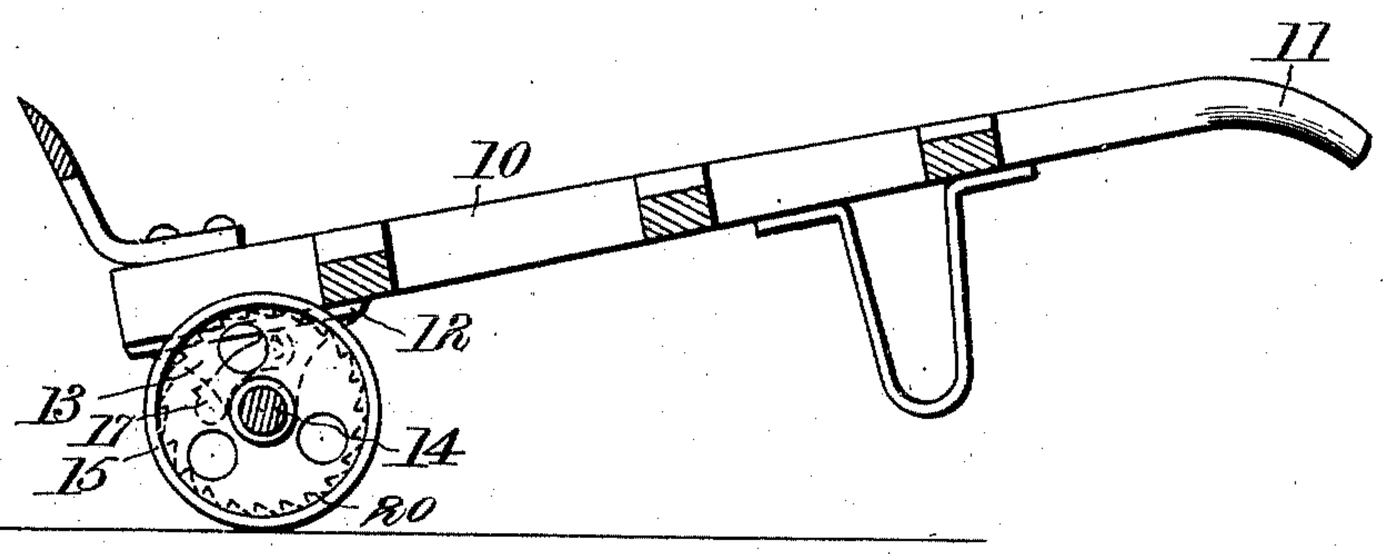


Fig. 2.

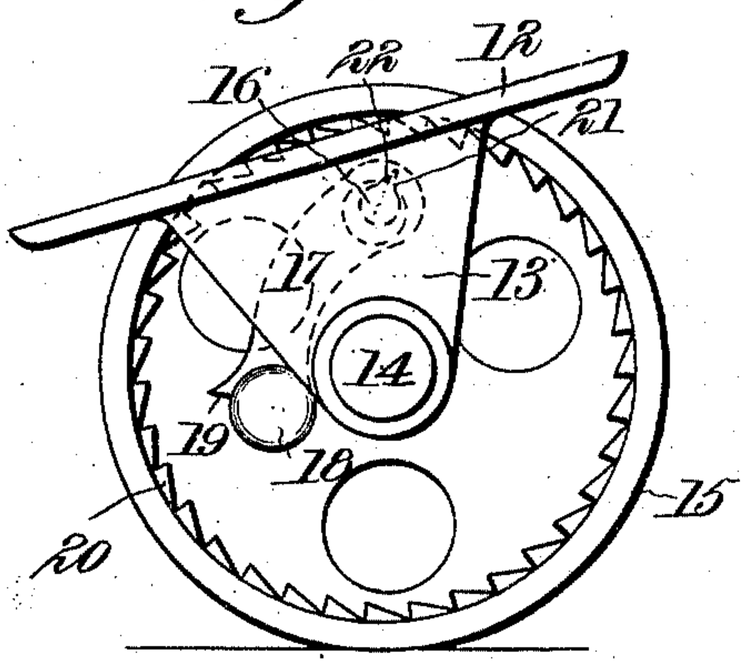


Fig. 3.

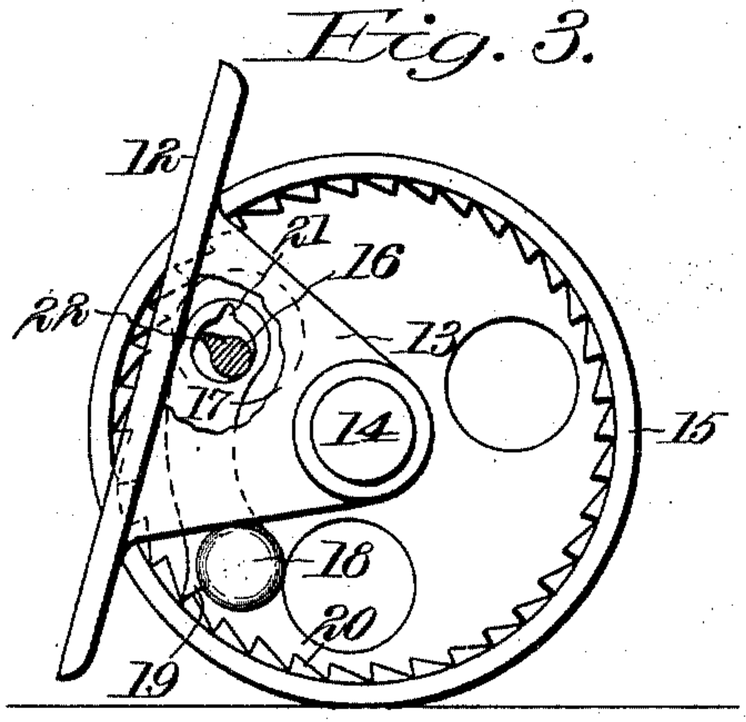


Fig. 4.

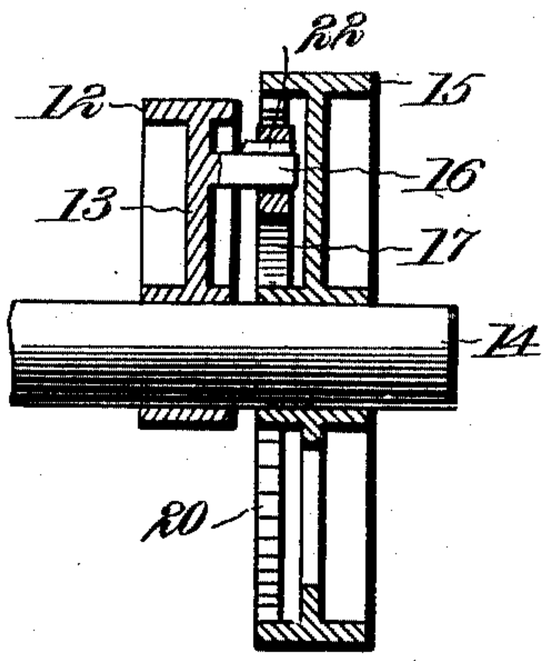
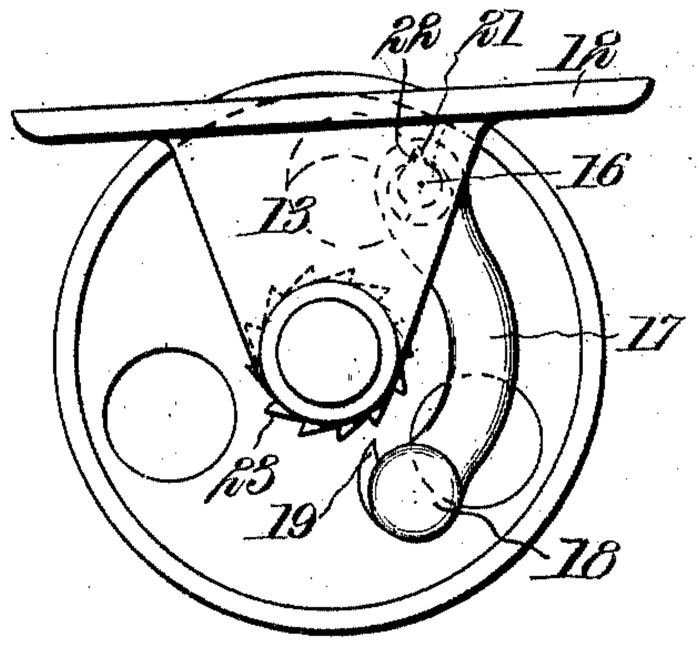


Fig. 5



Witnesses

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No. 759,985. Patented May 17, 1904.

UNITED STATES PATENT OFFICE.

PETER GRABLER, OF CLEVELAND, OHIO.

TRUCK.

SPECIFICATION forming part of Letters Patent No. 759,985, dated May 17, 1904.

Application filed July 6, 1903. Serial No. 164,336. (No model.)

To all whom it may concern:

Be it known that I, PETER GRABLER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Trucks; and I do hereby 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.

This invention relates to certain new and useful improvements in trucks; and it has for its object the production of simple and inexpensive means by which the wheels will be automatically locked against rotation while the load is being placed in position.

A further object is to produce means for holding the locking member against movement while the truck is in transit, and a further object is to provide means for protecting the locking member from injury at all times.

In carrying out my invention I provide wheel-brackets secured to the truck-frame and in which the axle of the carrying-wheels is mounted. Each bracket is provided with an inwardly-extending stud, which projects beneath the rim of the adjacent wheel and pivotally supports a pawl which is adapted to engage teeth formed in said wheel. The pawls are weighted at their lower ends and are provided with means to prevent them from swinging when not in engagement with said teeth.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal sectional view illustrating my invention. Figs. 2 and 3 are detail views of the wheel-bracket and wheel, illustrating the application of my improved locking device. Fig. 4 is a detail sectional view. Fig. 5 is a modification.

Referring to the drawings, 10 designates the body of my improved truck, the same being provided with the handles 11, the form illustrated being that commonly used about stores, wharves, and the like. On the under side of the body 10, at each side thereof, is secured a bracket 12, having a depending portion 13, serving as a support or bearing for the axle 14 of the carrying-wheels 15. On the inner face of each depending portion 13 is a stud 16, upon which is pivotally mounted a locking-pawl 17, having a lower weighted portion 18. Said pawl is provided with a shoulder 19, adapted to engage teeth 20, formed on the inner periphery of each wheel 15, as shown in Fig. 3. The pawls 17 fit loosely upon the studs 16 and are each provided with a shallow recess 21, adapted to fit over a lug 22, formed upon its supporting-stud, as illustrated in Fig. 2, whereby said pawls will be prevented from swinging while the truck is being moved from one point to another.

In Fig. 5 I have shown a slight modification of my invention, which consists in forming the teeth 23 on the hub of the carrying-wheel in lieu of the rim. In this form the teeth are inclined in a direction opposite to that of the teeth upon the rim of the wheel.

In practice when it is desired to load the truck the same is tipped until it assumes the position illustrated in Fig. 3, whereupon the momentum of the weighted portion of each pawl will disengage the lug 22 from recess 21 and allow the pawl to swing forward until it engages the teeth of the wheel. Thus as the handles of truck are moved downward in lifting the load the wheels are rigidly held against rotation and will serve as a fulcrum, whereby the weight can be easily raised. After the load has been placed and the truck is wheeled forward the pawls are automatically disengaged from the teeth and drop by gravity into the position illustrated in Fig. 2, the lug 22 entering the recess 21, thereby preventing the pawl from swinging or becoming accidentally engaged with the teeth.

The advantages of my improved truck are apparent to those skilled in the art to which it appertains. It will be particularly observed that the pawls extend beneath the peripheries of the carrying-wheels and are therefore out of the way and not liable to strike or be struck by passing objects. It will also be observed that by providing the pawl with a locking device the same will not swing while the truck is in motion, and thereby engage the racks

whereby the trucks will be blocked, which is one of the serious drawbacks to trucks of this character heretofore constructed.

I claim as my invention—

1. An improvement in trucks comprising a truck-body, carrying-wheels therefor, provided with ratchet-teeth, pawls mounted beneath the rims of said wheels and adapted to swing into engagement with said ratchet-teeth by gravity, and means for automatically engaging said pawl and adapted to normally prevent swinging thereof when released from the teeth.

2. An improvement in trucks comprising a truck-body, carrying-wheels therefor having ratchet-teeth, studs carried by said body and extending beneath the peripheries of said wheels, pawls pivoted to said studs and adapted to swing into engagement with said ratchet-teeth by gravity, and means carried by said studs for normally preventing the swinging of said pawls.

3. An improvement in trucks comprising a truck-body, carrying-wheels therefor provided with ratchet-teeth, weighted pawls adapted to swing into engagement with said teeth, by gravity, and means for automatically engaging said pawls and adapted to normally prevent swinging thereof when released from said teeth.

4. An improvement in trucks comprising a truck-body, carrying-wheels therefor provided with ratchet-teeth, pawls pivotally supported by said body and adapted to engage said teeth, and a locking device carried by the pivot of each pawl.

5. An improvement in trucks comprising a truck-body, wheel-brackets secured thereto, carrying-wheels mounted in said brackets and having ratchet-teeth, studs formed on said brackets, pawls pivotally mounted on said studs, and a locking device carried by each stud and adapted to engage each pawl.

6. An improvement in trucks comprising a truck-body, wheel-brackets secured thereto, carrying-wheels mounted in said brackets and having ratchet-teeth, studs formed on said brackets and provided with locking-lugs, and pawls pivotally mounted on said studs and provided with recesses adapted to receive said lugs.

7. An improvement in trucks comprising a truck-body, wheel-brackets secured thereto, carrying-wheels mounted in said brackets and having ratchet-teeth, studs formed on said brackets and extending beneath the peripheries of said wheels, pawls pivoted to said studs and adapted to swing into engagement with said ratchet-teeth by gravity, and means carried by said studs for normally preventing the swinging of said pawls.

8. An improvement in trucks comprising a truck-body, wheel-brackets secured thereto, carrying-wheels mounted in said brackets and having ratchet-teeth, and pawls pivotally supported at their upper ends by said brackets beneath the peripheries of said wheels, each of said pawls having a lower weighted end and an adjacent tooth-engaging spur.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

PETER GRABLER.

Witnesses:

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