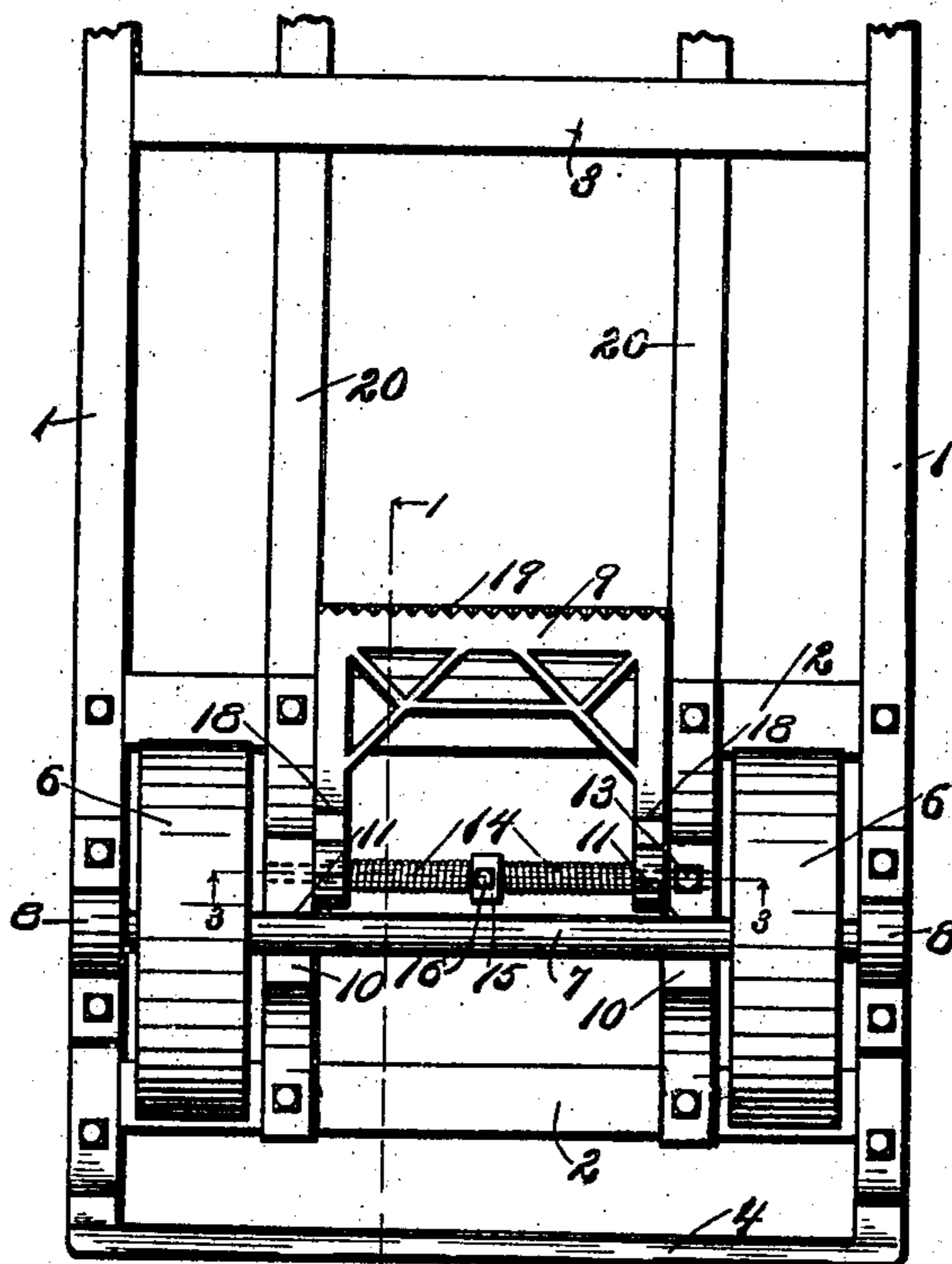


**TRUCK.**

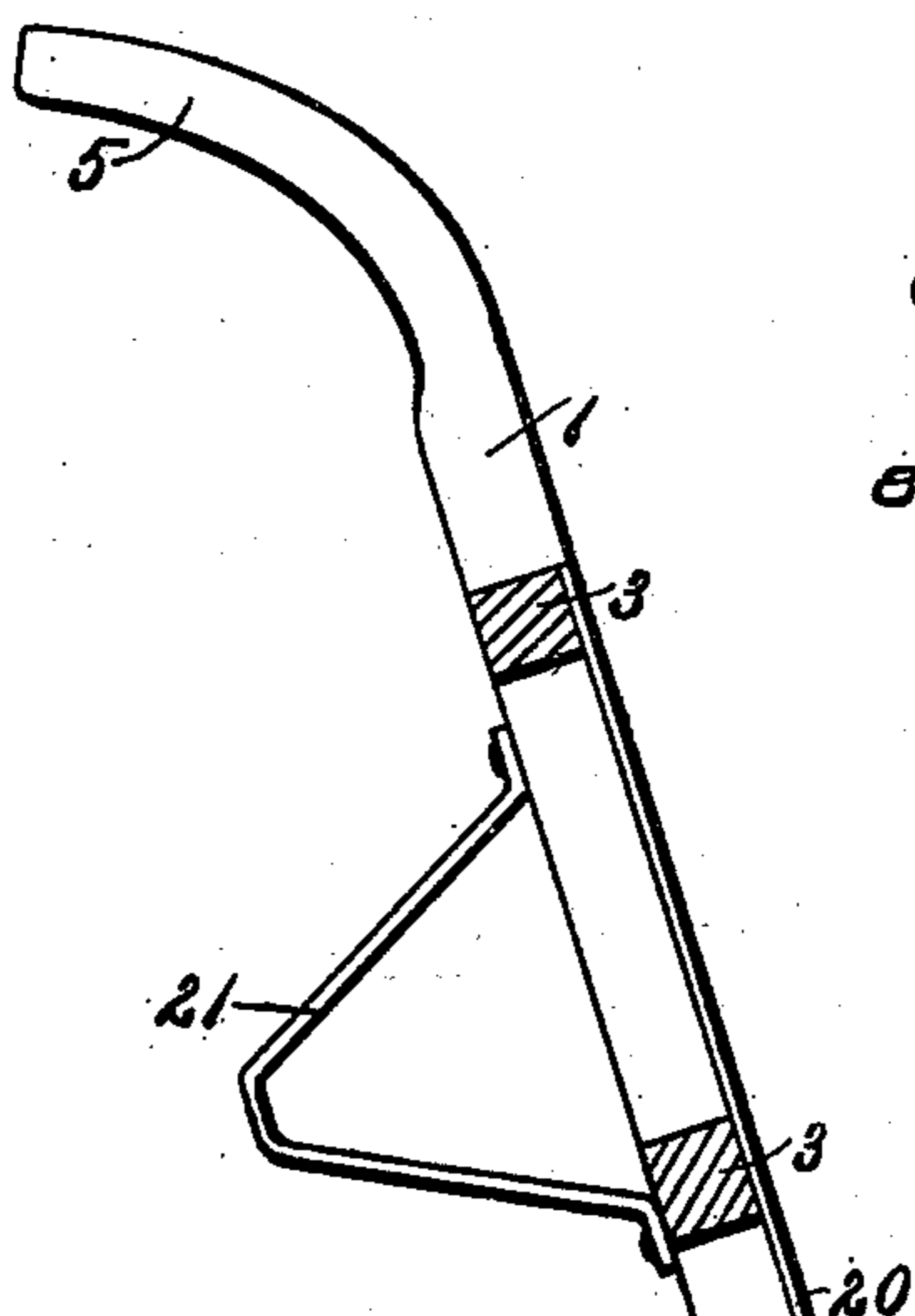
APPLICATION FILED DEC. 3, 1908.

914,427.

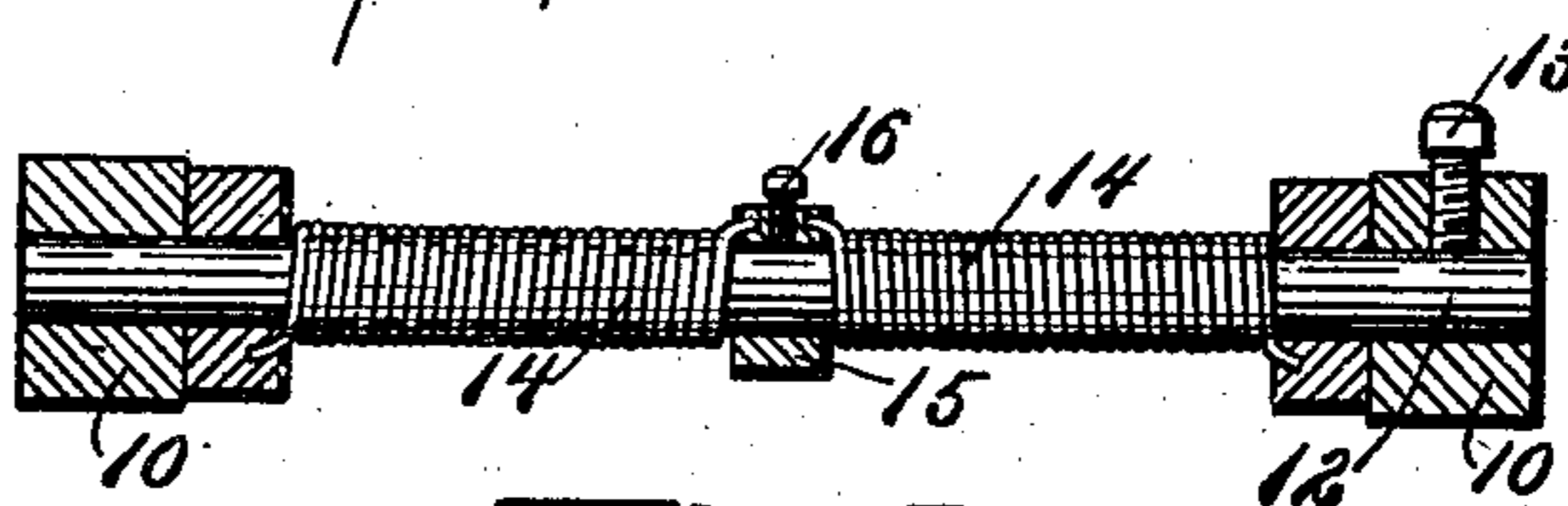
Patented Mar. 9, 1909.



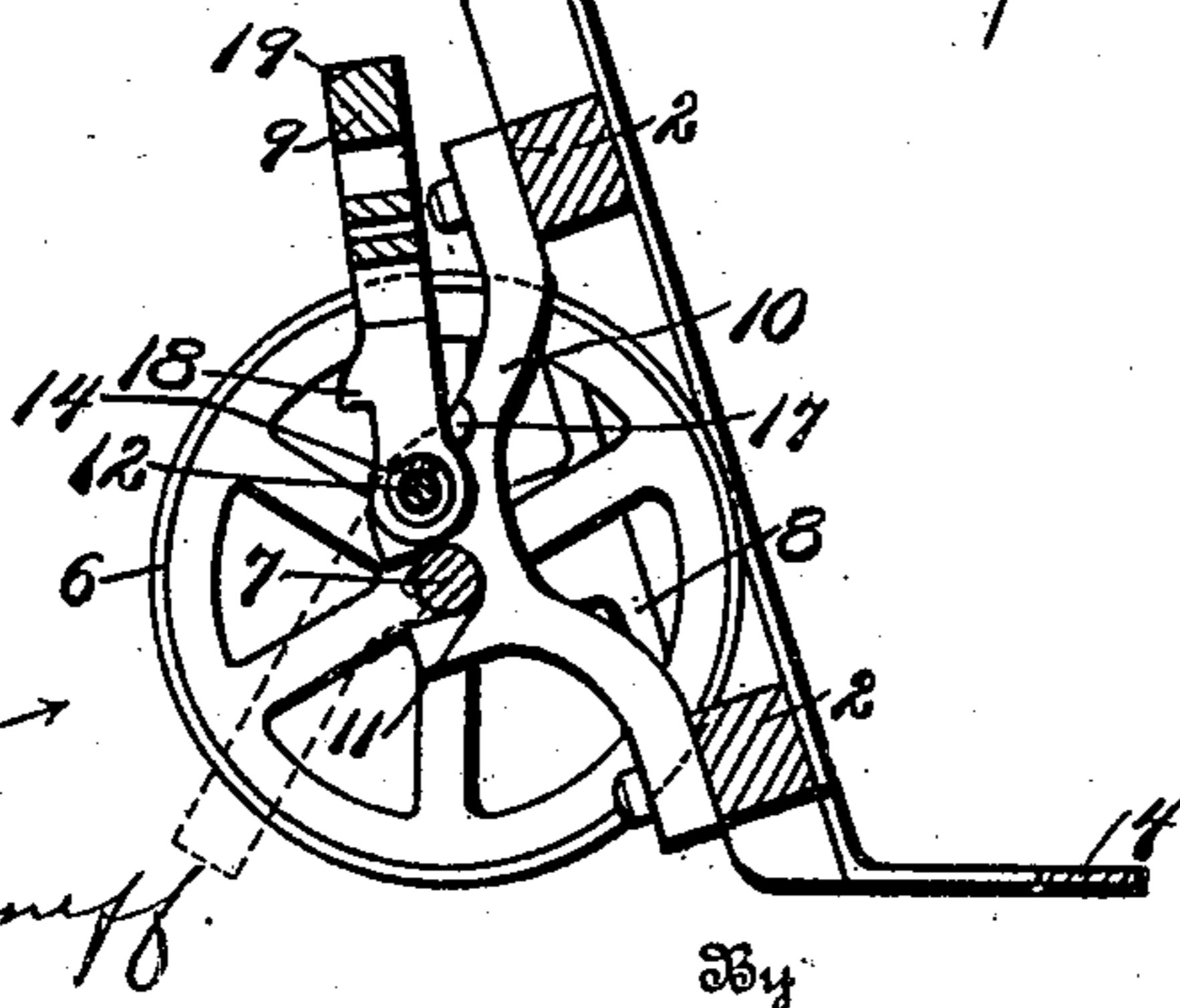
**F.L.E.**



**Fig. 1.**



**T. L. E.**



Inventor

**Witnesses**

Phineas Woodneff.  
F. G. Tallman

John F. King  
Chapman & East  
Attorneys

**Attorneys**

# UNITED STATES PATENT OFFICE.

JOHN F. KING, OF KALAMAZOO, MICHIGAN.

## TRUCK.

No. 914,427.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed December 3, 1908. Serial No. 465,866.

*To all whom it may concern:*

Be it known that I, JOHN F. KING, a citizen of the United States, residing at Kalamazoo, county of Kalamazoo, State of Michigan, have invented certain new and useful Improvements in Trucks, of which the following is a specification.

This invention relates to improvements in hand trucks.

The main object of this invention is to provide an improved hand truck having means for blocking it while loading, which is very easily manipulated and is also light in weight, and, at the same time, strong and rigid.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

Figure 1 is a vertical section of my improved hand truck, taken on a line corresponding to line 1—1 of Fig. 2. Fig. 2 is a detail rear elevation, looking in the direction of the arrow 2 of Fig. 1. Fig. 3 is an enlarged detail, partially in section, taken on a line corresponding to line 3—3 of Fig. 2.

In the drawings, similar reference characters refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the sectional lines.

Referring to the drawing, the frame of my improved hand truck preferably comprises side bars 1 and cross bars 2—2 and 3—3 arranged in pairs. At the lower end of the frame is the forwardly-projecting foot or rest 4 for the articles to be carried. The side bars are preferably extended at their upper ends into handles 5.

The carrying wheels 6 are mounted on the axle 7, which is arranged in bearings 8 secured on the inner sides of the side bars, the wheels being arranged between the side bars and between the lower pair of crosspieces 2, as clearly appears from the drawing.

To block the truck while loading, I provide

a blocking dog 9, which is adapted to be thrown down into engagement with the ground or floor, as is indicated by dotted lines in Fig. 1. This blocking dog is carried by the bracket-like hangers 10, which are arranged on the insides of the wheels, being, in the structure illustrated, secured to the cross bars 2. These hangers or brackets are notched at 11 to engage the axle, so that they serve as braces and supports therefor, the axle being thus supported on both sides of the wheel. They also serve as braces for the frame. The blocking dog 9 is mounted on the pivot rod 12, which is arranged in suitable holes provided therefor in the hangers or brackets 10, a set screw, as 13, being provided for securing the rod in place. The blocking dog is held normally upward by the springs 14, which are arranged on the pivot rod, their outer ends being secured to the dog and their inner ends to an adjustable collar 15. (See Fig. 3.) By turning this collar on the pivot rod, the tension of the spring 14 is regulated, a set screw, as 16, being provided for securing the collar in its adjusted position. Stops 17 are provided on the hangers for limiting the upward movement of the blocking dog, so that it is held in position to be conveniently engaged by the foot of the user to be thrown down into engagement with the floor. The blocking dog is provided with a pair of shoulder-like projections 18, which engage in the under side of the axle when the blocking dog is in its engaging position, thereby forming a direct support for the axle, and also serving as stops for the blocking dog. The lower edge 19 of the dog is preferably serrated or toothed to insure proper engagement.

By this construction and arrangement of the parts, I secure a hand truck which may be easily and effectively blocked for loading and further it is a construction which is simple and light, and, at the same time, is very strong and rigid.

I preferably provide the structure with a pair of slats 20 of bandiron, or the like, which coact with the side bars to form the body of the truck. The legs 21 are of the usual construction.

I have illustrated and described my improved hand truck in detail in the form preferred by me on account of the structural simplicity and strength. I am aware, however, that it is capable of considerable

variation in structural details, without departing from my invention, but, as these variations will readily appear to those skilled in the art to which this invention relates, I have not attempted to illustrate the same herein.

Having thus described my invention, what I claim as new and desire to secure as Letters Patent is:

1. The combination with the frame, of an axle; bearings therefor; wheels arranged on the inside of said bearings; a pair of downwardly-projecting hangers arranged between said wheels to engage said axle whereby it is braced and supported; a blocking dog; a rod on which said blocking dog is pivotally mounted carried by said hanger; a pair of coiled springs arranged on said pivot rod, the outer ends of said springs being secured to said blocking dog; a collar to which the inner ends of said springs are secured, adjustably mounted on said rod; means for securing said collar in its adjusted position; and stops on said hangers for said blocking dog.

2. The combination with the frame, of an axle; bearings therefor; wheels arranged on the inside of said bearings; a pair of downwardly-projecting hangers arranged between said wheels to engage said axle whereby it is braced and supported; a blocking dog; a rod on which said blocking dog is pivotally mounted carried by said hanger; a pair of coiled springs arranged on said pivot rod, the outer ends of said springs being secured to said blocking dog; a collar to which the inner ends of said springs are secured, adjustably mounted on said rod; and means for securing said collar in its adjusted position.

3. The combination with the frame, of an axle; bearings therefor; wheels arranged on the inside of said bearings; a pair of downwardly-projecting hangers arranged between said wheels to engage said axle whereby it is braced and supported; a blocking dog; a rod on which said blocking dog is pivotally mounted carried by said hanger; a spring arranged to hold said blocking dog normally elevated; and stops on said hangers for said blocking dog.

4. The combination with the frame, of an axle; bearings therefor; wheels arranged on the inside of said bearings; a pair of downwardly-projecting hangers arranged between said wheels to engage said axle whereby it is braced and supported; a blocking dog; a rod on which said blocking dog is pivotally mounted carried by said hanger; and a spring arranged to hold said blocking dog normally elevated.

5. The combination with the frame, of an axle; bearings therefor; wheels; a blocking dog; a rod on which said blocking dog is pivotally mounted; a pair of coiled springs arranged on said pivot rod, the outer ends

of said springs being secured to said blocking dog; a collar to which the inner ends of said springs are secured, adjustably mounted on said rod; a set screw for securing said collar in its adjusted position; and stops on said hangers for said blocking dog.

6. The combination with the frame, of an axle; bearings therefor; wheels; a blocking dog; a rod on which said blocking dog is pivotally mounted; a pair of coiled springs arranged on said pivot rod, the outer ends of said springs being secured to said blocking dog; a collar to which the inner ends of said springs are secured, adjustably mounted on said rod; and a set screw for securing said collar in its adjusted position.

7. The combination with the frame comprising side bars and cross pieces, of an axle; bearings therefor arranged on the under sides of said side bars; wheels arranged on the inside of said side bars and between a pair of said cross pieces; a pair of downwardly-projecting bracket-like hangers arranged on said cross bars between said wheels, said hangers being arranged to engage said axle whereby it is braced and supported; a blocking dog pivotally mounted on said hangers; a spring arranged to hold said blocking dog normally elevated; and stops on said hangers for said blocking dog.

8. The combination with the frame comprising side bars and cross pieces, of an axle; bearings therefor arranged on the under sides of said side bars; wheels arranged on the inside of said side bars and between a pair of said cross pieces; a pair of downwardly-projecting bracket-like hangers arranged on said cross bars between said wheels, said hangers being arranged to engage said axle whereby it is braced and supported; a blocking dog pivotally mounted on said hangers; and a spring arranged to hold said blocking dog normally elevated.

9. The combination with the frame comprising side bars and cross pieces, of an axle; bearings therefor arranged on the under sides of said side bars; wheels arranged on the inside of said side bars and between a pair of said cross pieces; a pair of downwardly-projecting bracket-like hangers arranged on said cross bars between said wheels, said hangers being arranged to engage said axle whereby it is braced and supported; a blocking dog pivotally mounted on said hangers, said blocking dog being provided with members adapted to engage said axle when said dog is in its operative position; a spring arranged to hold said blocking dog normally elevated; and stops on said hangers for said blocking dog.

10. The combination with the frame comprising side bars and cross pieces, of an axle; bearings therefor arranged on the under sides of said side bars; wheels arranged on the inside of said side bars and between a

pair of said cross pieces; a pair of down-  
wardly-projecting bracket-like hangers ar-  
ranged on said cross bars between said  
wheels, said hangers being arranged to en-  
5 gage said axle whereby it is braced and  
supported; a blocking dog pivotally mount-  
ed on said hangers, said blocking dog being  
provided with members adapted to engage  
said axle when said dog is in its operative

position; and a spring arranged to hold said 10  
blocking dog normally elevated.

In witness whereof, I have hereunto set  
my hand and seal in the presence of two  
witnesses.

JOHN F. KING. [L. s.]

Witnesses:

CLARA E. BRADEN,  
F. GERTRUDE TALLMAN.