

No. 789,874.

PATENTED MAY 16, 1905.

H. N. OWEN.  
REVOLVING TRACK.  
APPLICATION FILED OCT. 17, 1904.

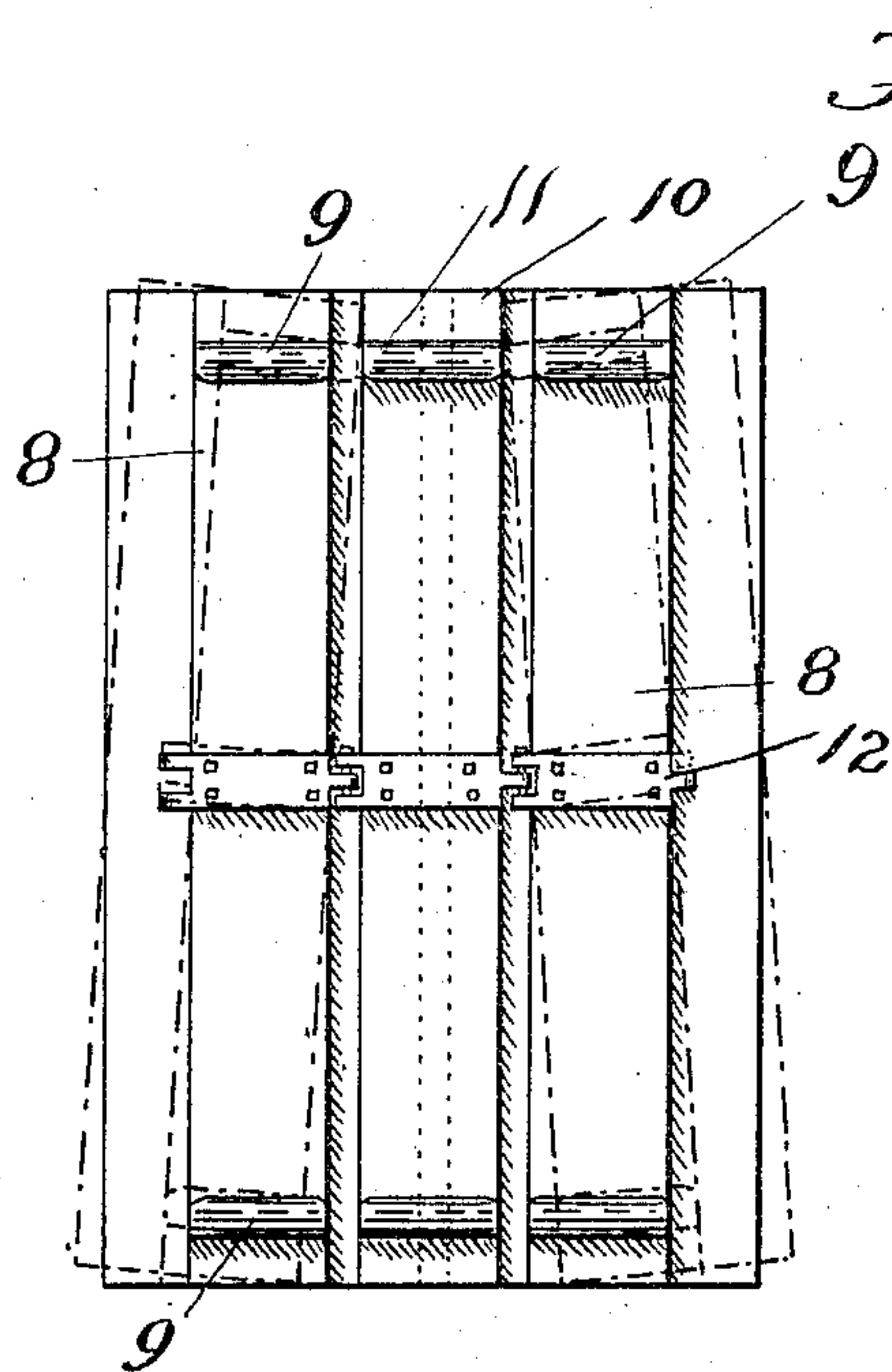
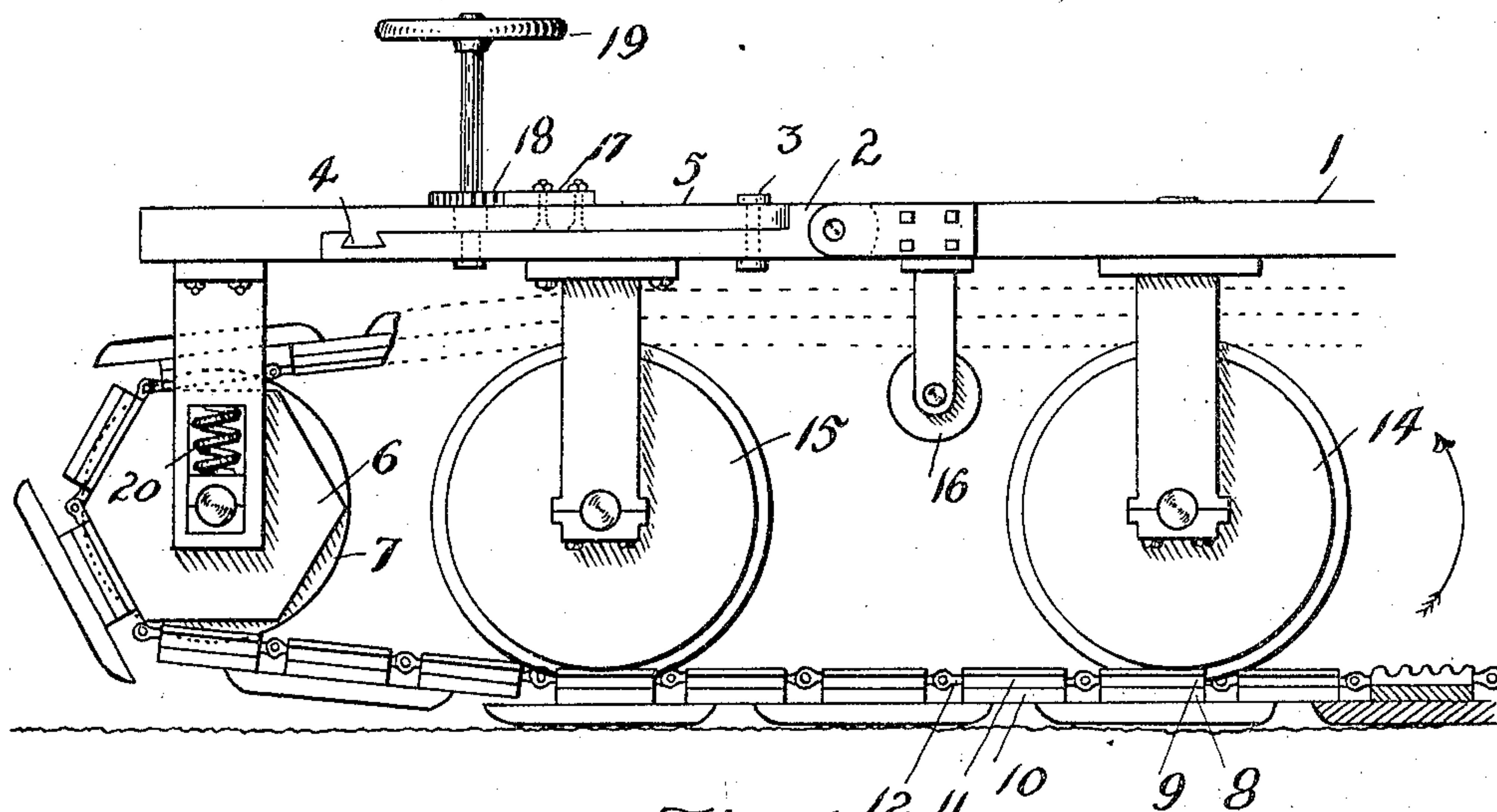


Fig. 2

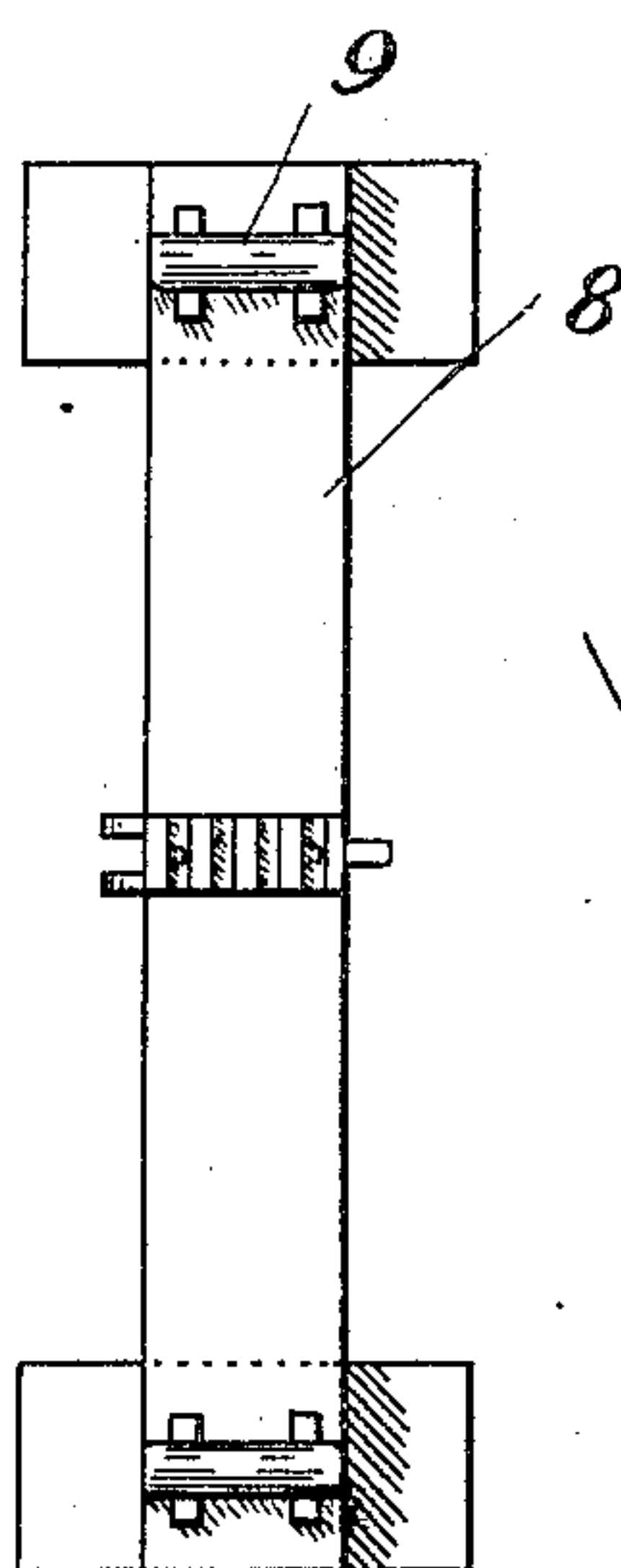


Fig. 3

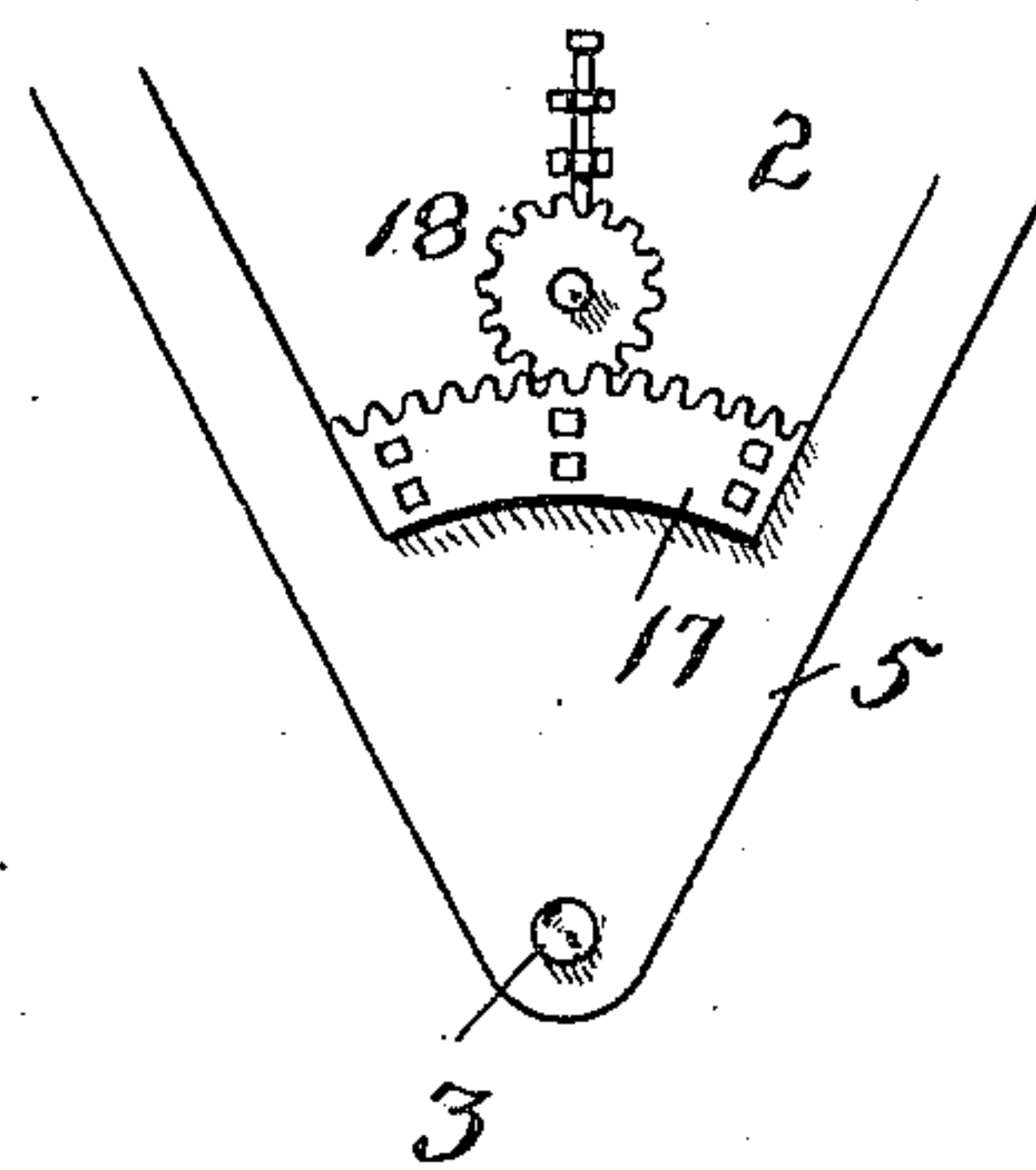


Fig. 4

WITNESSES:

Ediz. Kincaid.  
Orpha le Poor.

INVENTOR  
*Henry N. Owen*  
BY  
*Kincaid & Co.*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

HENRY N. OWEN, OF SAN FRANCISCO, CALIFORNIA.

## REVOLVING TRACK.

SPECIFICATION forming part of Letters Patent No. 789,874, dated May 16, 1905.

Application filed October 17, 1904. Serial No. 228,872.

*To all whom it may concern:*

Be it known that I, HENRY N. OWEN, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Revolving Tracks; 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 is an improvement over the revolving track shown in my former application for a patent, Serial No. 213,398, bearing date of filing of June 20, 1904.

The invention is particularly adapted for use in connection with ditchers, excavators, traction-engines, or other similar slow-moving devices.

My present invention embodies all the advantageous features of the device shown in my former application and in addition has other objects and advantages which add to the practical value and general efficiency of the machine.

I will describe more fully hereinafter the details of construction and the essential features of the invention and will point out the novel features thereof in the appended claims.

In the accompanying drawings, which form a part of this application, Figure 1 is a side elevation of the forward portion of an excavator or the like, showing the relative arrangement of the revolving track. Fig. 2 is a top view of several adjacent sections of the track, showing the manner of connecting the same together. Fig. 3 is a top view of a modified form of construction of one of the sections forming the track. Fig. 4 is a top view of the forward pivoted guiding-frame.

Referring now to the above views by numerals, 1 represents the main bed or platform of the machine, to the forward portion of which is hinged to swing vertically the secondary bed 2. On this bed 2 and arranged to swing horizontally by means of the pivot 3 and the dovetailed guide 4 is the guiding frame 5, from the forward extremity of which depend the revolving hexagonal guide-

wheels 6. These guide-wheels 6 are formed with outwardly-flaring flanges 7 in order to guide and confine the sections of the track.

The track is made up of a series of cross-ties 8, on which are the short rail-sections 9, the bases of said ties extending beyond the rails, while interposed and arranged to overlap the extending portions of the ties 8 is the secondary series of cross-ties 10, on which is arranged a secondary series of rail-sections 11. Now in order to unite these track-sections together to form a continuous track I have arranged the links 12, which are bolted to or otherwise secured to the ties 8 and 10 at a point midway between the opposite rail-sections. These links 12 are pivoted together in such a manner as to permit of a lateral swinging play, as shown by means of broken lines in Fig. 2.

From the description so far gone into it will be readily seen that, assuming that the track is made continuous or that, in other words, the forward portion of the track passes over the guide-wheels 6 and the rear portion passes over similarly-formed guide-wheels situated at the rear extremity of the machine, as the guide-wheels 6 are caused to advance along the track through the medium of any suitable motive power the track will necessarily be carried over the forward guide-wheels 6, thence rearwardly until they reach the rear guide-wheels, when they will pass upward and then forward over the wheels 14 and 15, as indicated by means of the dotted lines in Fig. 1. In order to prevent any sagging of the track between the wheels 14 and 15, I have provided the small wheel 16, which is pivoted to a bracket depending from the frame 1.

Now in order to provide means for guiding the track in any direction out of a straight line I have provided the guiding-frame 5. On this frame is secured a suitable arc-shaped rack 17, the teeth of which mesh with a suitable pinion 18, mounted on the secondary bed 2. This pinion is operated by means of a steering-wheel 19. By means of this arrangement the forward frame 5 can be turned either to the right or left, thereby guiding the track in the direction desired.



Should it be found desirable, I may form the links 12 with their upper surfaces in the nature of a rack, as shown at the lower right-hand extremity of the track in Fig. 1. This rack can be arranged to mesh with a suitable gear positioned on the machine, which arrangement would manifestly aid the motion of the track should it be found desirable to do so.

It will be readily seen from the above construction that any irregularities of the ground in the path of the machine can be compensated for by the vertical play of the bed 2, while the yielding bearing of the shaft of the guide-wheels 6 as afforded by the springs 20 is sufficient to respond to slight irregularities in the ground to be passed over.

From the above description it will be readily seen that I have obviated the necessity of connections between the rail-sections, thereby eliminating the excessive wear and strain found in the majority of this class of devices.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A device of the class described consisting of a suitable body, a series of wheels below and supporting said body, guide-wheels forward of said body and arranged to swing independent thereof, and a continuous track

adapted to encircle said guide and said other wheels and beneath said body, said track being made up of a plurality of sections pivoted together midway between the path of opposite wheels, substantially as and for the purpose set forth.

2. A revolving track made up of a series of parallel ties, opposite parallel rail-sections secured to each of said ties, said ties being pivoted together at points midway between said opposite rail-sections thereby leaving the opposite extremities free to assume an independent horizontal plane substantially as and for the purpose set forth.

3. A device of the class described consisting of a suitable body, a series of wheels supporting said body, guide-wheels forward of said body and arranged to swing vertically and horizontally independent of said body, and a single continuous track made up of parallel rail-sections connected together and encircling said wheels substantially as and for the purpose set forth.

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

HENRY N. OWEN.

Witnesses:

GEORGE PATTISON,  
ELIZ. KINCAID.