

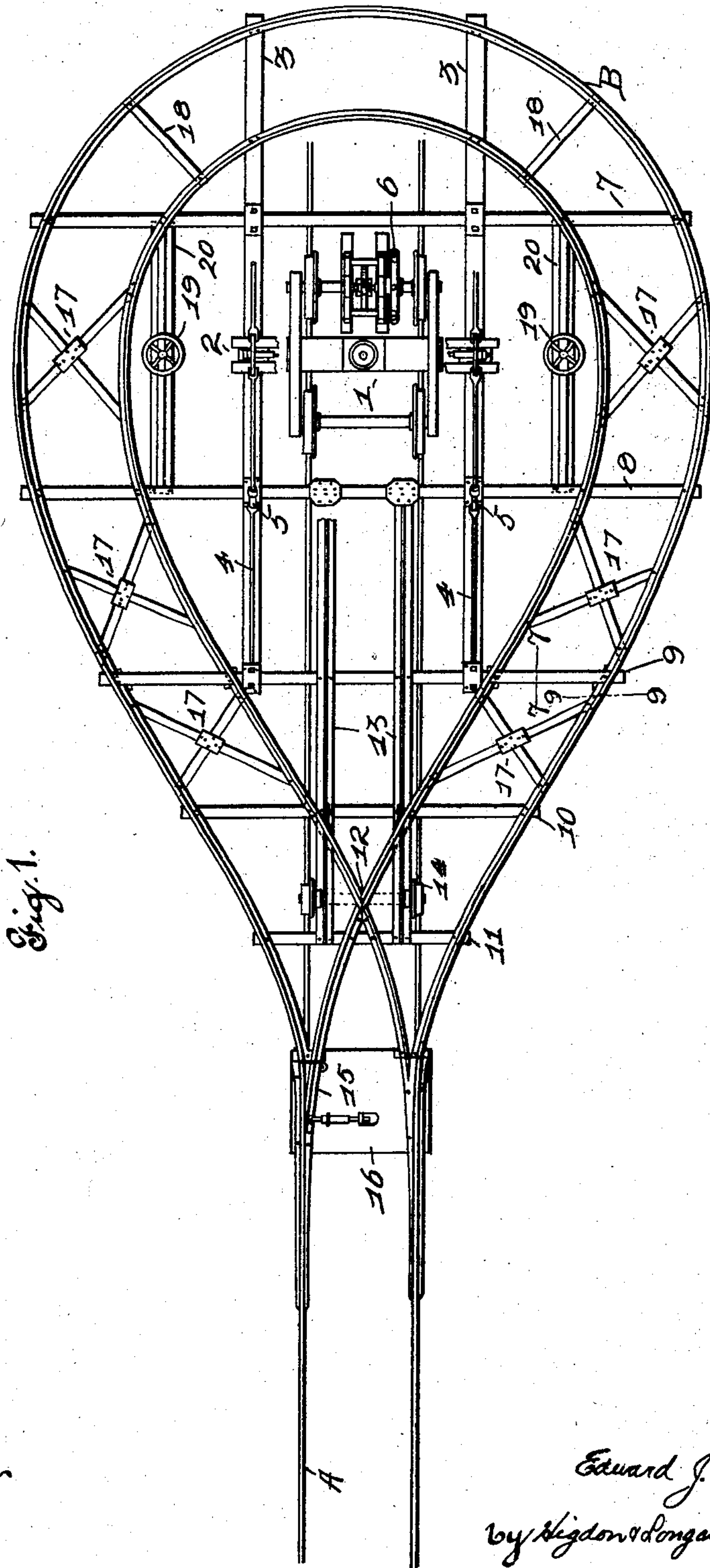
No. 750,152.

PATENTED JAN. 19, 1904.

E. J. BEARD.
CANTALIVER CAR TRACK.
APPLICATION FILED APR. 7, 1903.

NO MODEL.

6 SHEETS—SHEET 1.



Witnesses
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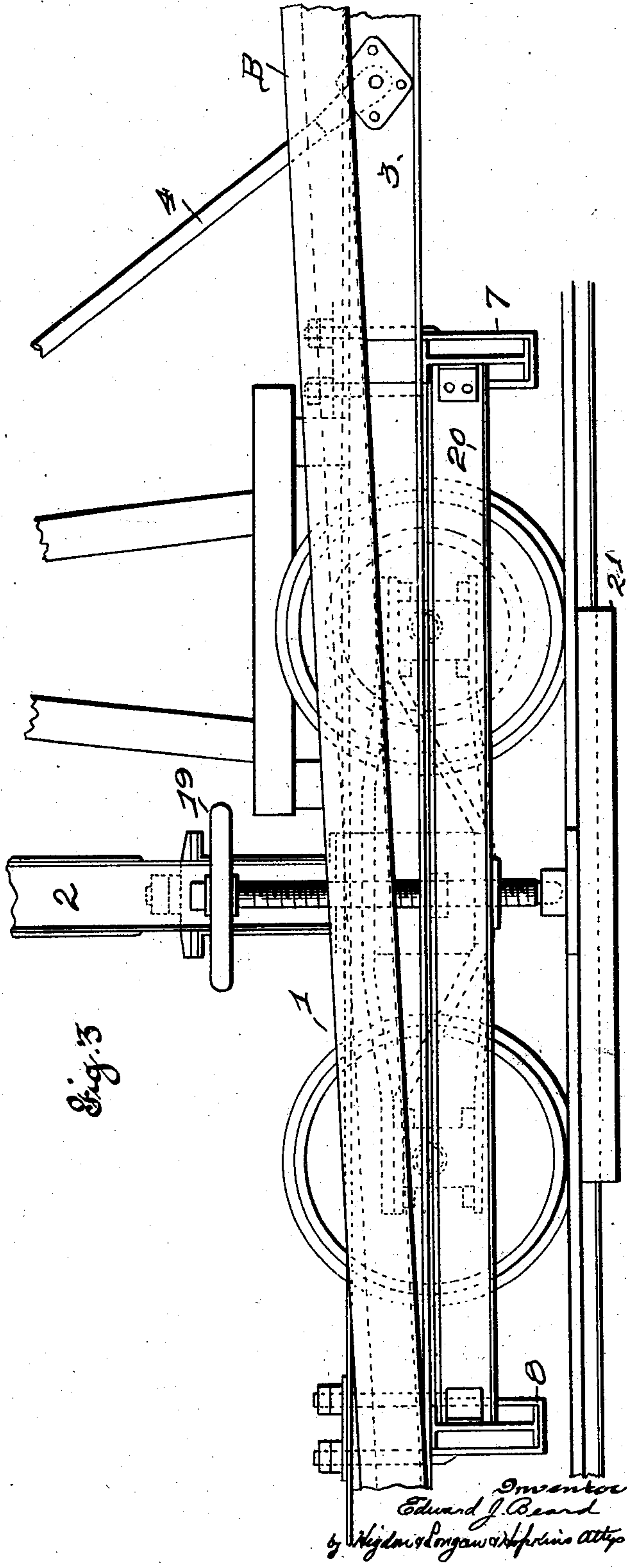
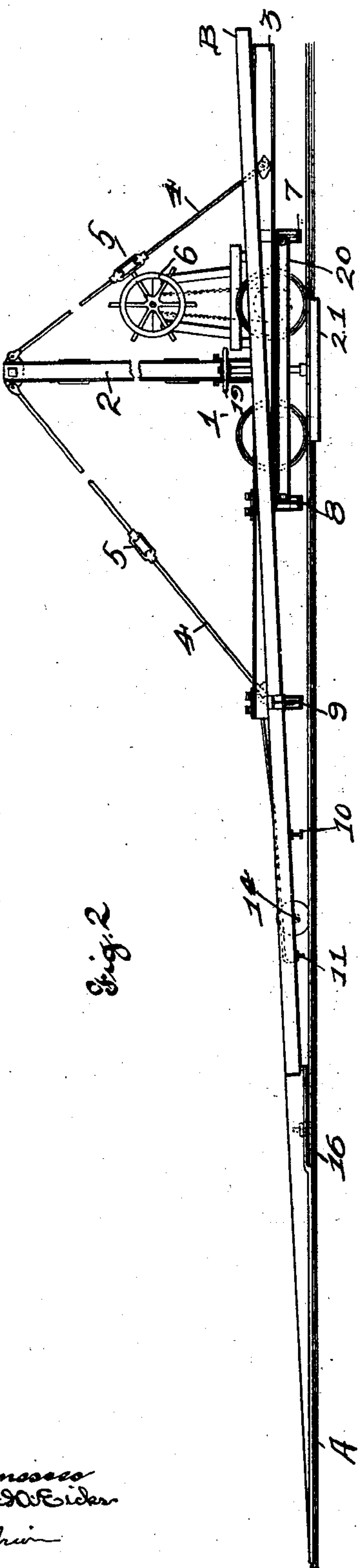
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6 SHEETS—SHEET 2.



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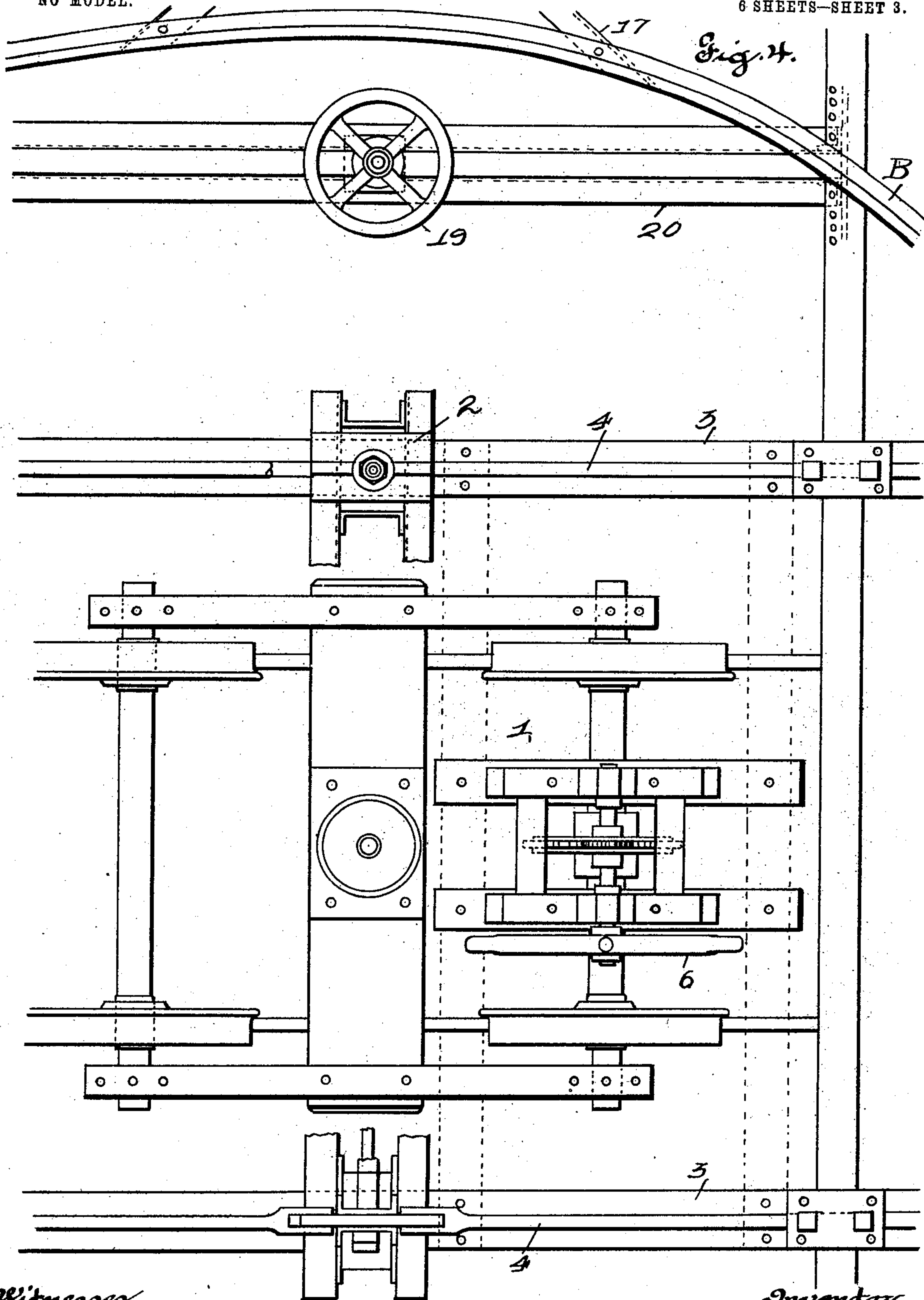
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6 SHEETS—SHEET 3.



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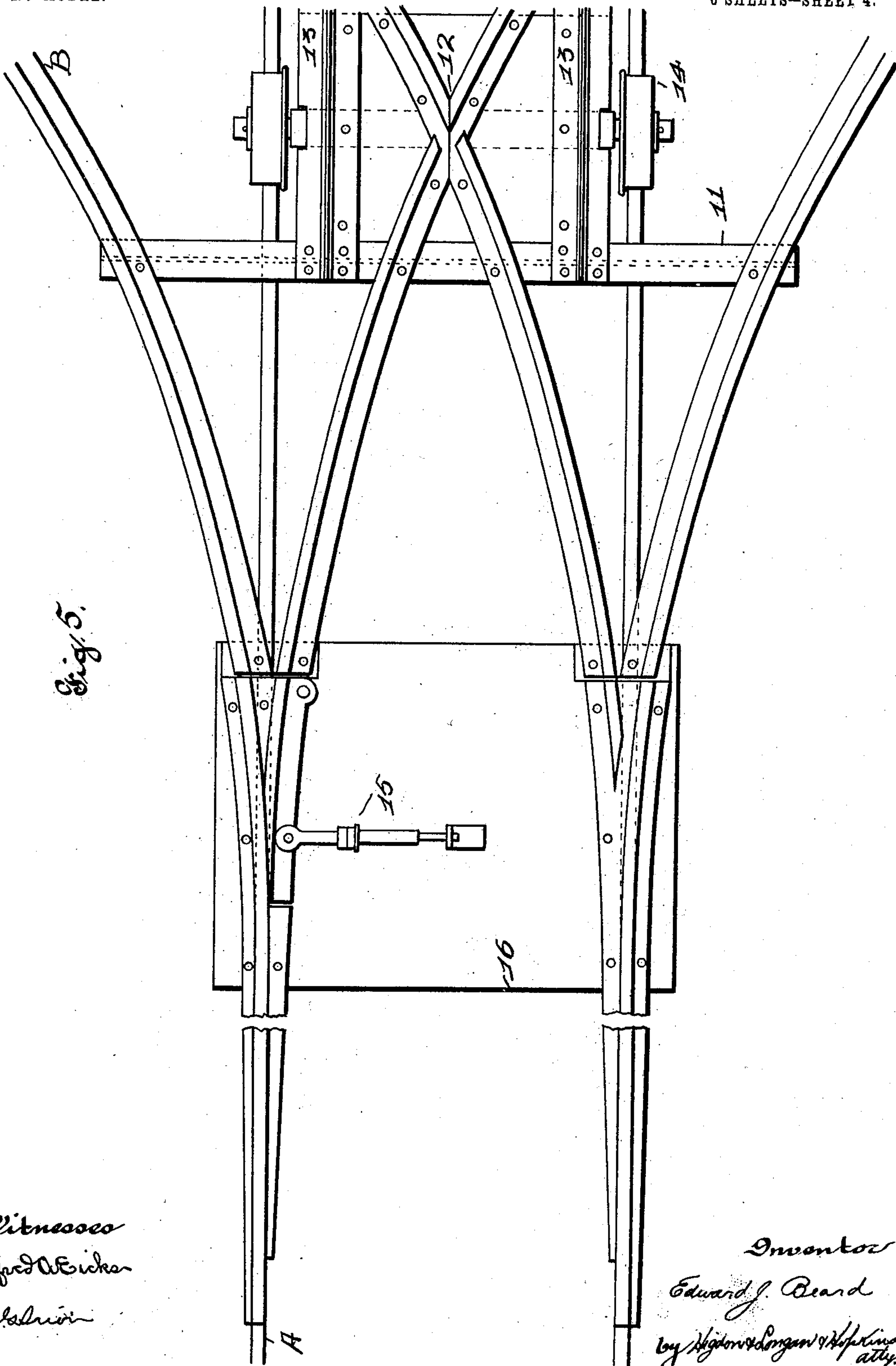
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6 SHEETS—SHEET 4.



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6 SHEETS—SHEET 5.

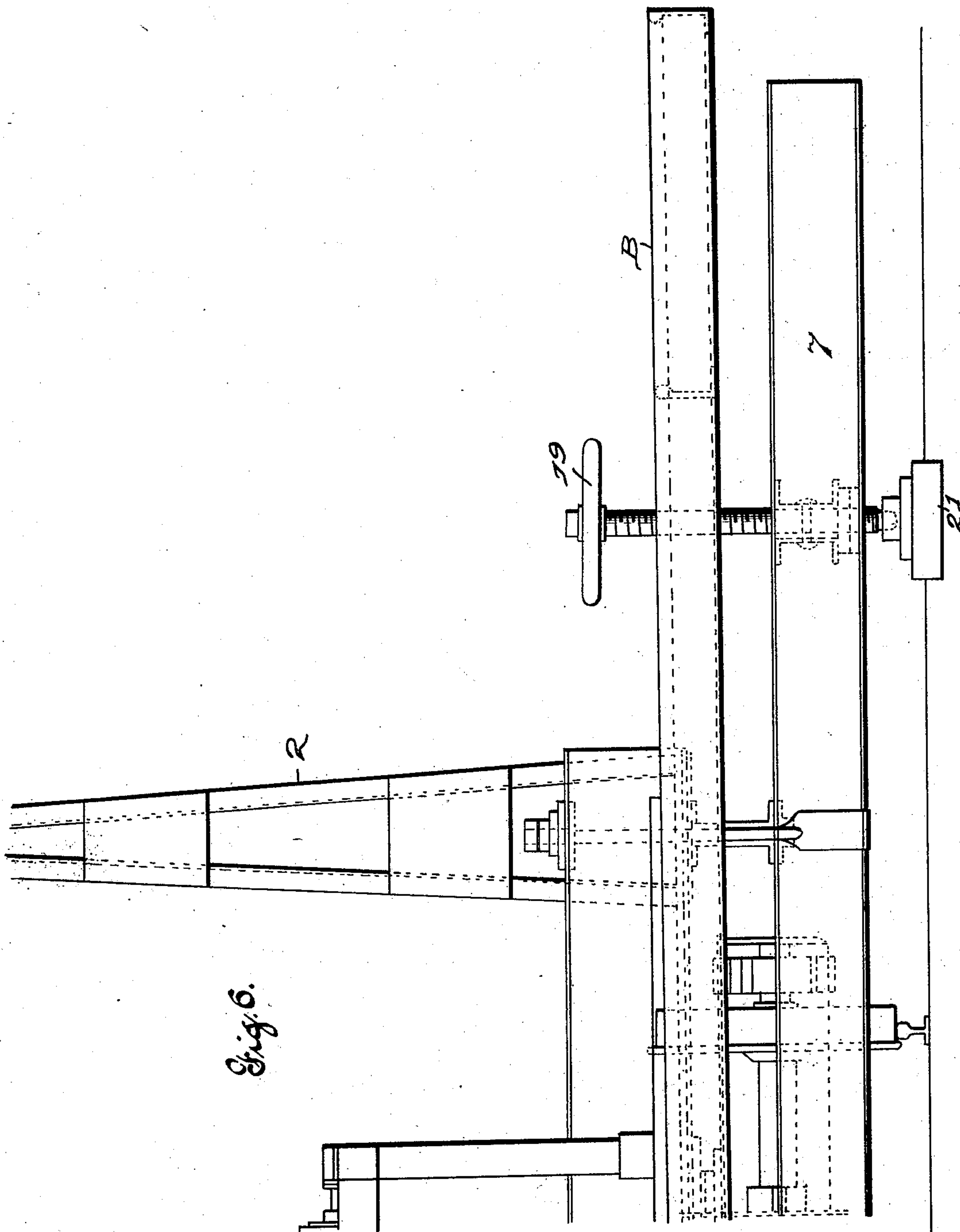


Fig. 6.

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NO MODEL.

6 SHEETS—SHEET 6.

Fig. 7

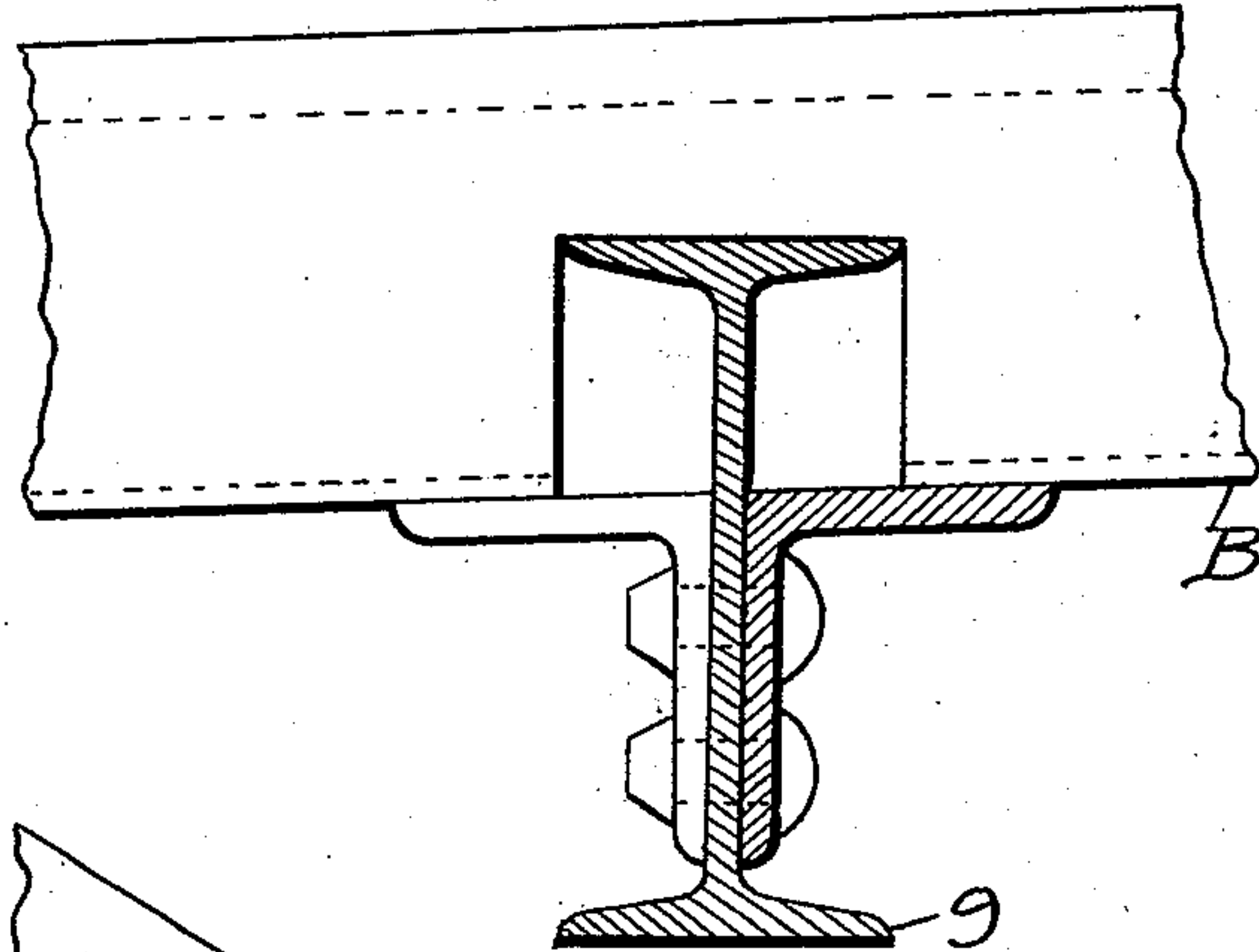


Fig. 8

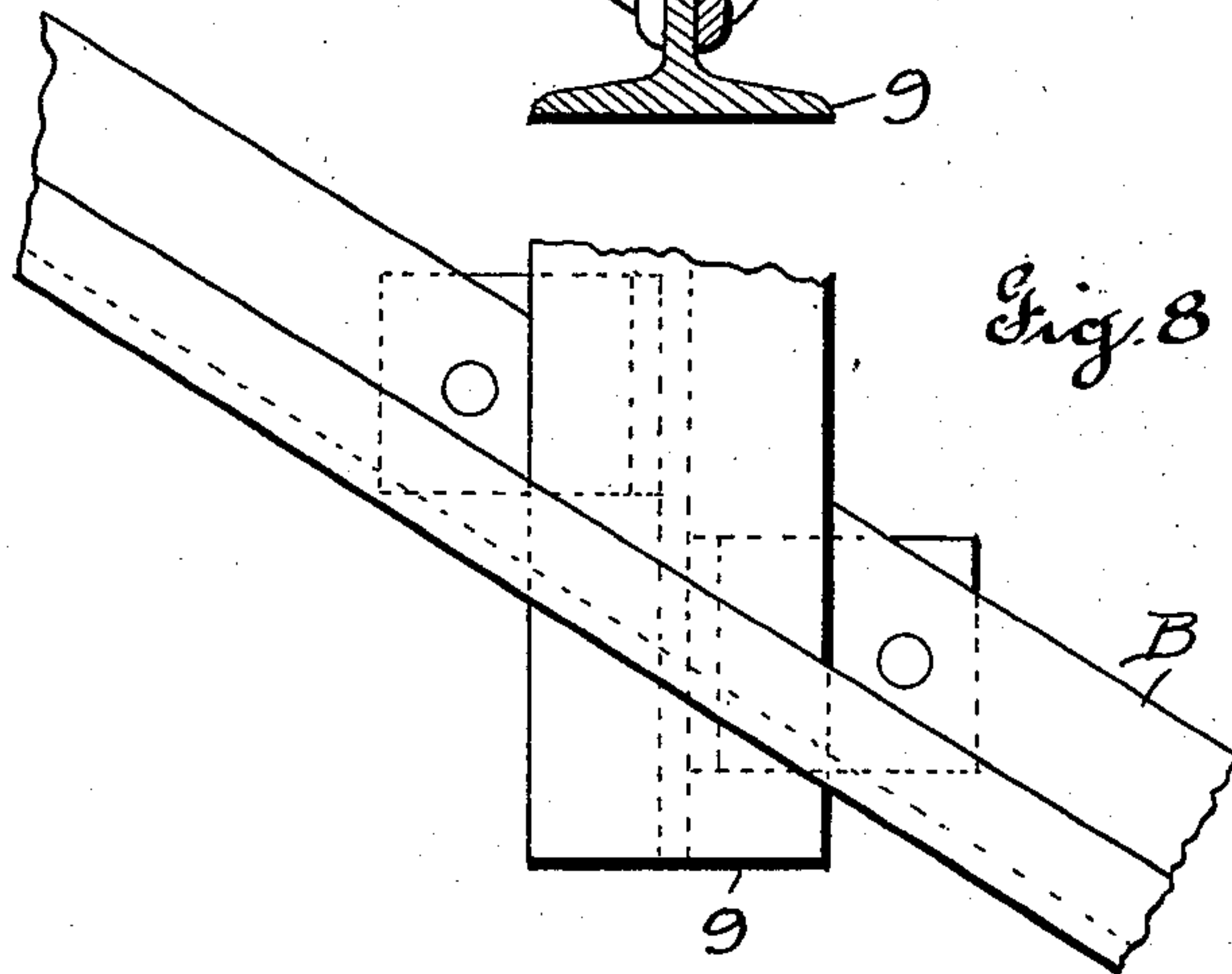
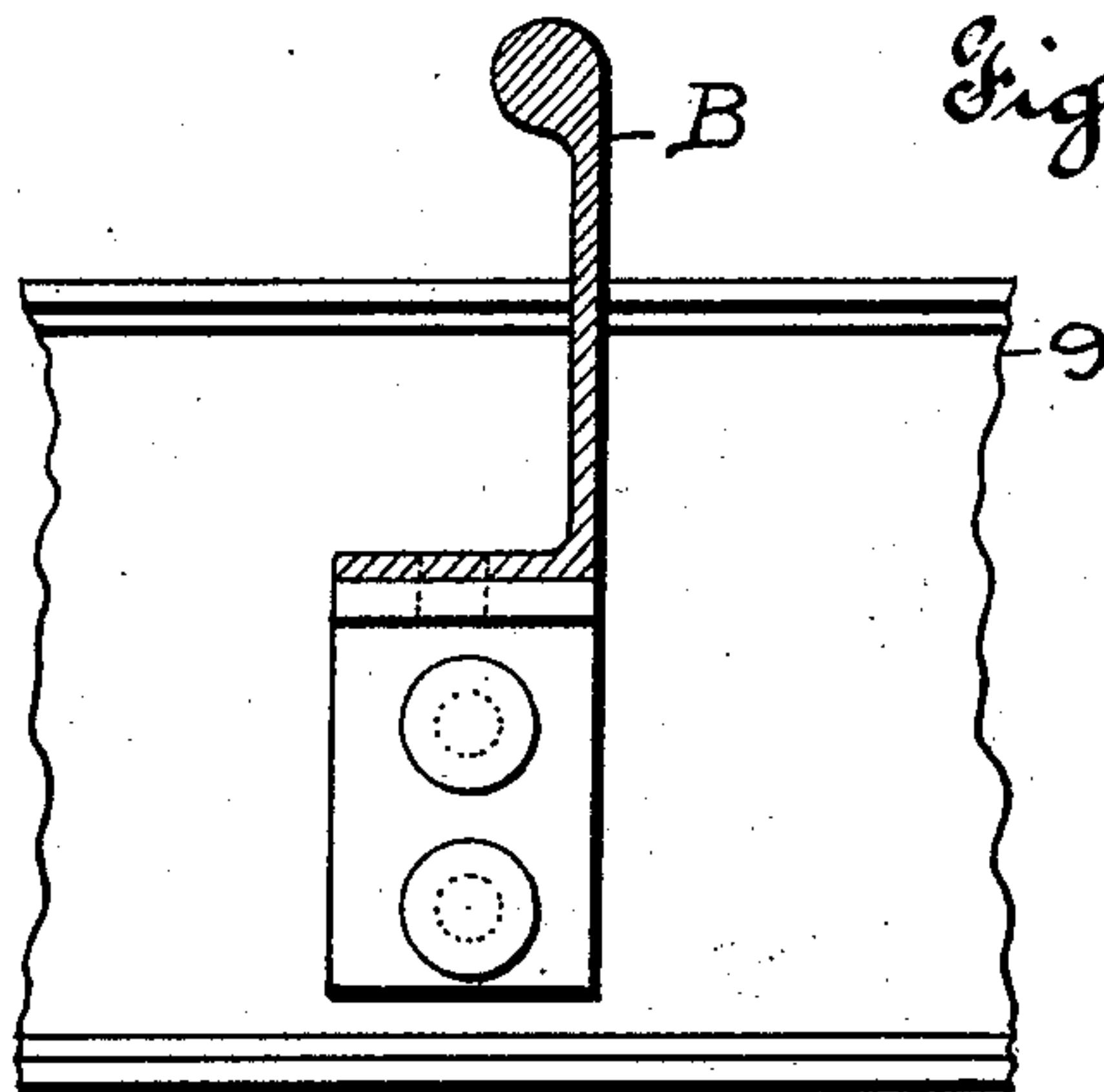


Fig. 9.



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UNITED STATES PATENT OFFICE.

EDWARD J. BEARD, OF KANSAS CITY, MISSOURI.

CANTALIVER CAR-TRACK.

SPECIFICATION forming part of Letters Patent No. 750,152, dated January 19, 1904.

Application filed April 7, 1903. Serial No. 151,550. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BEARD, of Kansas City, Jackson county, State of Missouri, have invented certain new and useful Improvements in Cantaliver Car-Tracks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved cantaliver car-track for use in embankment construction, and has for its object to provide means whereby embankments may be constructed without the use of trestlework and by the direct discharge of material at the desired points in the process of construction.

The objects of my invention are to construct a cantaliver-track of the kind and for the uses hereinafter described in a readily-portable form in order that it may travel as the work progresses, having self-contained means whereby said travel is effected, and which, furthermore, may be readily taken apart for purposes of transportation and readily reassembled for use.

In building embankments from cars it has heretofore been usual to first construct a trestle to carry the cars over the site of the embankment being built. Another method used in the art is to employ a single track which is shifted from side to side as the work progresses in order to obtain the desired width of embankment and raised from time to time to obtain the desired height of embankment. The first-mentioned method, in which a trestle is employed, is objectionable in that the desired width of embankment is secured by spreading the material after it has been dumped from the single track, such spreading being accomplished by manual labor. In the last-mentioned method, in which the track is shifted to secure the desired width of embankment, the elevation of the track to secure the desired grade as well as the shifting thereof to secure the desired width is accomplished by manual labor.

The object of this invention is to dispense with the necessity of using trestlework and to enable the cars containing the material from which the embankment is being built to be successively carried to the point where it is

desired to dump them by means of an endless track.

By means of my invention the embankment is built of any width that may be desired up to the greatest diameter of the annular track in use and at a fixed grade, so that manual labor is dispensed with and the track upon which the annular track is carried is at the desired grade throughout the entire operation of constructing the embankment. When a narrow embankment is desired of a width less than the greatest width of the annular track employed, the cars carrying the material are dumped at points within an arc of the circle at the front of the annular track, which will result in producing the desired width of embankment by the material deposited.

In the drawings, Figure 1 is a top view of a device embodying my invention. Fig. 2 is a side view of the same. Fig. 3 is a side view of that portion of my device directly above and about the trucks by which the main portion of the frame is carried. Fig. 4 is an enlarged top view of one side of the central portion of a device embodying my invention. Fig. 5 is an enlarged top view of the rear end of my cantaliver-track, showing the manner in which it is connected to the single track upon which it is seated. Fig. 6 is a front view of one side of my cantaliver-track. Fig. 7 is a vertical sectional view taken along the line 7 7 of Fig. 1. Fig. 8 is a detailed construction showing the manner in which the annular track is attached to the frame. Fig. 9 is a vertical sectional view taken along the line 9 9 of Fig. 1.

The permanent track A is built to or near the point at which it is desired to commence the construction of the embankment.

The truck 1 is of any desired construction known to the art and carries the upright 2 and parallel bearers 3, which are connected to the upright 2 by means of rods 4, provided with turnbuckles 5. The truck 1 also carries the pilot 6, to which it is suitably geared for the purpose of moving the truck 1 forward or upward upon the rails A.

An annular or pear-shaped track B is mounted upon the bearers 3, its forward end being directly carried by the bearers 3 and the

remainder of it carried upon cross-bearers 7, 8, 9, 10, and 11. The inner rails of which the track B is composed intersect at the point indicated by the numeral 12. The beams 13 extend from the cross-bearer 11 to the cross-bearer 8, and a single truck 14 may be advantageously placed beneath the beams 13 at the point 12 where the inner rails of the annular track B intersect.

At the point of intersection of the rails of which the annular track B is composed an automatic switch 15 is provided, the switch and the ends of the annular track being carried by a base-plate 16, which base-plate contains corrugations adapted to fit over the track A.

The rails of which the annular track B is composed are held rigidly in place with reference to each other by means of X-braces 17 and ties 18.

As thus far described, the device embodying my invention is adapted without additional mechanical means to effect the carriage of light loads about and to any point on the annular track B for the purpose of building embankments. The track B is held suspended by its frame in a plane at an angle to that of the track A, as shown in side view in Figs. 2 and 3. It is, however, desirable to provide additional means whereby the annular track B may be supported at a point beyond its center of gravity and without the line of the rails of which the track A is composed. To this end I have provided the jacks 19, seated through cross-bars 20, which are slidably mounted between the cross-bearers 7 and 8. By means of the adjustability of the cross-bars 20 the jacks 19 may be moved toward or from the track A and are usually moved to a point near to the outer side of the embankment which is in course of construction, where the footing-blocks 21 are placed under them and the jack tightened to engage firmly therewith, thereby supporting the track B and the entire structure connected therewith at a point as nearly as possible under the track B.

In building embankments when the device of my construction is employed the track A is laid in position and extended as far as the ground is at the level of the desired permanent grade of the track. The annular track B is then assembled attached to its supporting-frame and mounted upon the trucks which are previously placed in position upon the track A. The jacks 19 are adjusted to the desired point and tightened to hold the cantaliver-track firmly in position.

The material to be employed is conveyed to the annular track B over the permanent track A from the source of supply at which the cars are loaded. Dumping-cars of any construction known to the art are employed in the process of transporting material and are admitted to the annular track through the automatic switch 15. As many dumping-cars are admitted to the annular track B at one time as

may be desired, their number depending upon the width of the embankment in course of construction. If but a narrow embankment is being built, the cars will be few in number and will be conveyed to a point on the annular track farthest from the switch 15 and directly over the track A and to each side of the track A to the desired width, while in the case of building a wide embankment cars of a sufficient number to occupy the entire front end of the annular track B and to the extent of its greatest width may be employed. After the cars have been dumped they are again returned through the switch 15 to the track A and the operation repeated. The dumping-cars may be propelled by dummy engines or any other desired source of motive power. As the embankment is filled in in advance of the annular track, the track A will be built to the edge of such fill, and the trucks and annular track will be propelled along the permanent track by means of the pilot 6. When the embankment is completed, the track B and its connections will again be disassembled for transportation to the next location at which work is to be executed.

By means of the jacks 19 the annular track B may be leveled up and brought into a horizontal plane transversely, the jacks being adapted to accommodate themselves to irregularities in the top of the embankment.

Having fully described my invention, what I claim as new, and desire to have secured to me by the grant of Letters Patent, is—

1. A device of the class named, consisting of an annular track slidably mounted upon a permanent track, substantially as and for the purposes specified.

2. A cantaliver car-track for use in embankment construction, consisting of an annular track, a truck carrying the frame, and means whereby the truck, frame and track may be propelled forwardly as the work progresses, substantially as and for the purposes specified.

3. A device of the class named, consisting of an annular track adapted to engage with a permanent track, an automatic switch seated in the track at the point of its engagement with the permanent track, a frame upon which the annular track is mounted, wheels whereby the frame is carried, and means whereby the annular track may be moved forwardly or backwardly with reference to the permanent track, substantially as described.

4. A device of the class named, consisting of an annular track, and means whereby the annular track may be adjusted to a horizontal plane transversely, substantially as specified.

5. In a device of the class named, jacks located in the frame whereby the annular track is carried at points outside the permanent track and within the width of the embankment being built, substantially as and for the purposes specified.

6. A device of the class named, consisting

of an annular track adapted to engage with a permanent track, an automatic switch seated in the track at the point of its engagement with the permanent track, a frame upon which
5 the annular track is mounted, wheels whereby the frame is carried, means whereby the annular track may be adjusted to a horizontal plane, and means whereby the annular track may be moved forwardly or backwardly with

reference to the permanent track, substantially as and for the purposes specified.

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

EDWARD J. BEARD.

Witnesses:

ALFRED A. EICKS,
M. G. IRION.