

No. 672,934.

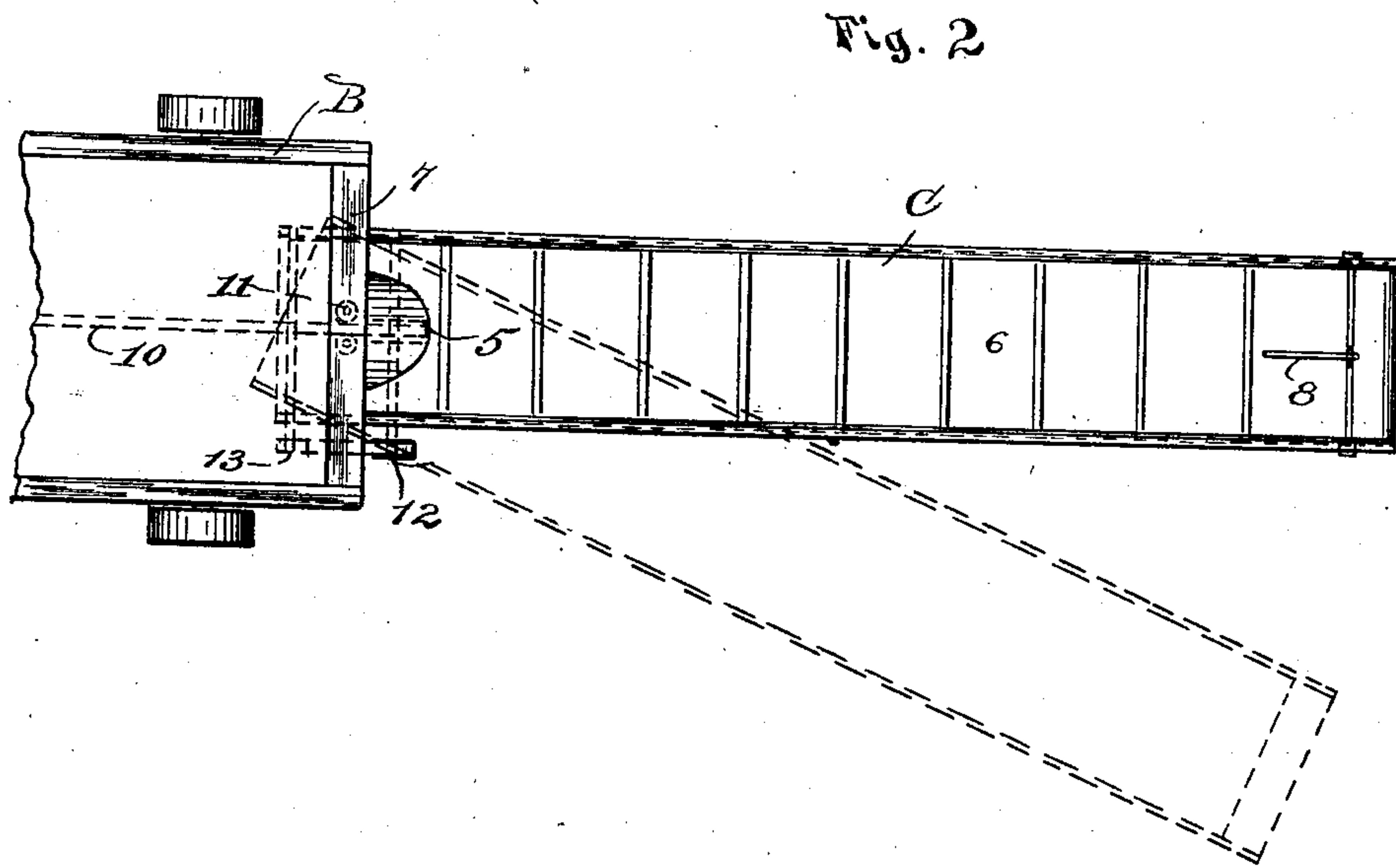
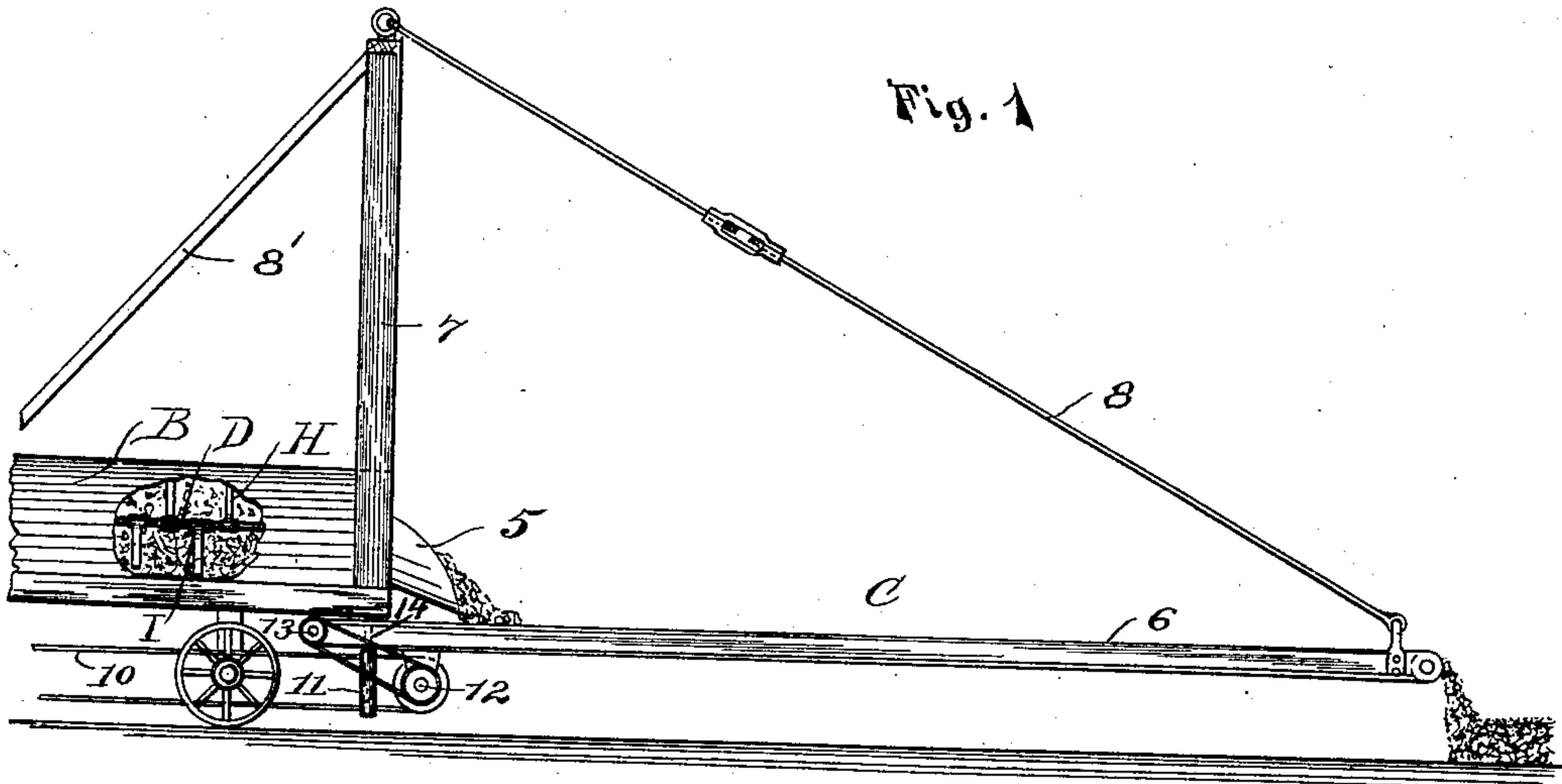
C. T. DRAKE.

Patented Apr. 30, 1901.

APPARATUS FOR MIXING AND PLACING MATERIAL FOR CONCRETE PAVEMENT.

(No Model.)

(Application filed Dec. 22, 1899.)



Witnesses:

S. S. Noble  
J. Buehler

Inventor,

Chester T. Drake  
by Charles H. Wood,  
his Att'y.

# UNITED STATES PATENT OFFICE.

CHESTER T. DRAKE, OF CHICAGO, ILLINOIS.

APPARATUS FOR MIXING AND PLACING MATERIAL FOR CONCRETE PAVEMENT.

SPECIFICATION forming part of Letters Patent No. 672,934, dated April 30, 1901.

Application filed December 22, 1899. Serial No. 741,247. (No model.)

*To all whom it may concern:*

Be it known that I, CHESTER T. DRAKE, a citizen of the United States, residing in Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Apparatus for Mixing and Placing Material for Concrete Pavement, of which the following is a specification, reference being had to the accompanying drawings.

My invention is an apparatus for mixing and placing material for concrete pavement.

The nature of my invention consists in part in the apparatus provided to mix, carry, and place concrete material in a roadway to form concrete pavement.

It consists also in part in the combination of such mixing and carrying apparatus, so that it may be moved simultaneously over the ground without causing any interruption to the operation of any of the apparatus.

In the drawings, Figure 1 is a side elevation, and Fig. 2 is a plan view, of the carrier and a portion of the mixer.

It is a concrete-mixer mounted upon wheels, so that it may be caused to travel over the ground.

Any suitable motor or engine (not shown) may be mounted upon the frame of the mixer to furnish the power for driving the mixing mechanism and also to cause the ground-wheels to travel over the ground when desired to shift the apparatus.

The materials, such as stone and sand, are supplied to the hopper of the mixer in any suitable manner, and by the revolving of the mixing-shaft D, which is provided with knife-arms H and shovel-arms I, the materials are thoroughly mixed into concrete and discharged over the spout 5. The shaft D, the knife-arms H and the shovel-arms I, and a suitable inclosing hopper are the principal elements of said mixing apparatus required for the mixing of material for concrete pavement.

A strong upright frame 7 is provided at the discharge end of the mixer, and a guy rope or rod or a strong brace 8' is secured to the frame of the mixer and to the top of the frame 7, and a guy-rope 8 is secured to the top of

the frame 7 and to the outer end of the carrier-frame C, so as to support the outer end of the carrier and allow it to swing to the right or to the left as far as may be required upon the vertically-disposed pivot-bolt 14, (dotted lines, Fig. 1.) The other end of the carrier-frame is strongly secured to the discharge end of the mixer-frame by a suitable coupling which will permit such lateral motion of the carrier-frame.

Suitable pulleys or rollers and a carrier-belt are provided in the carrier-frame, and power from the mixer-motor is transmitted through the driving-chain 10 to the shaft 12, which is secured to the under side of the carrier-frame. The chain 10 passes between two loose rollers 11, which are secured to the under side of the mixer-frame, so as to retain the driving-chain at or near the vertical pivotal center of the lateral motion of the carrier-frame, and a driving-chain from shaft 12 transmits the power to the carrier-driving shaft 13 and to the carrier-belt 6, so as to cause it to revolve continuously and carry the mixed concrete, which falls from the spout 5 onto the belt, away from the mixer and deposit the concrete in any part of the pavement as the carrier is swung to the right or to the left, and then the concrete may be tamped in the usual manner.

Power may be applied to cause the ground-wheels to travel over the ground without any interruption of the operation of the mixer or of the carrier C, and the whole apparatus may be moved to any place to facilitate the work.

I claim as my invention—

1. In combination with a mounted mixer, of a carrier in close proximity to the mixer supported from the frame of the mixer in a manner to permit a lateral swinging movement thereof adapted to receive and convey the material discharged from the mixer, and means for operating the carrier comprising a driven chain geared to the rear end of the carrier, and guides through which said chain is adapted to travel, as and for the purpose described.

2. In combination with a mounted mixer,



of a carrier in close proximity to the mixer supported from the frame of the mixer in a manner to permit a lateral swinging movement thereof adapted to receive and convey  
5 the material discharged from the mixer, and means for operating the carrier comprising a power-driven chain, and intermediate gearing instrumentalities between said chain and

the rear end of the carrier, substantially as described.

Chicago, Illinois, December 9, 1899.

CHESTER T. DRAKE.

Witnesses:

OSCAR PETERSON,  
OSCAR MARTINSON.