

No. 675,037.

Patented May 28, 1901.

C. T. DRAKE.  
CONCRETE MIXING MACHINE.

(Application filed Dec. 22, 1899.)

(No Model.)

Fig. 1

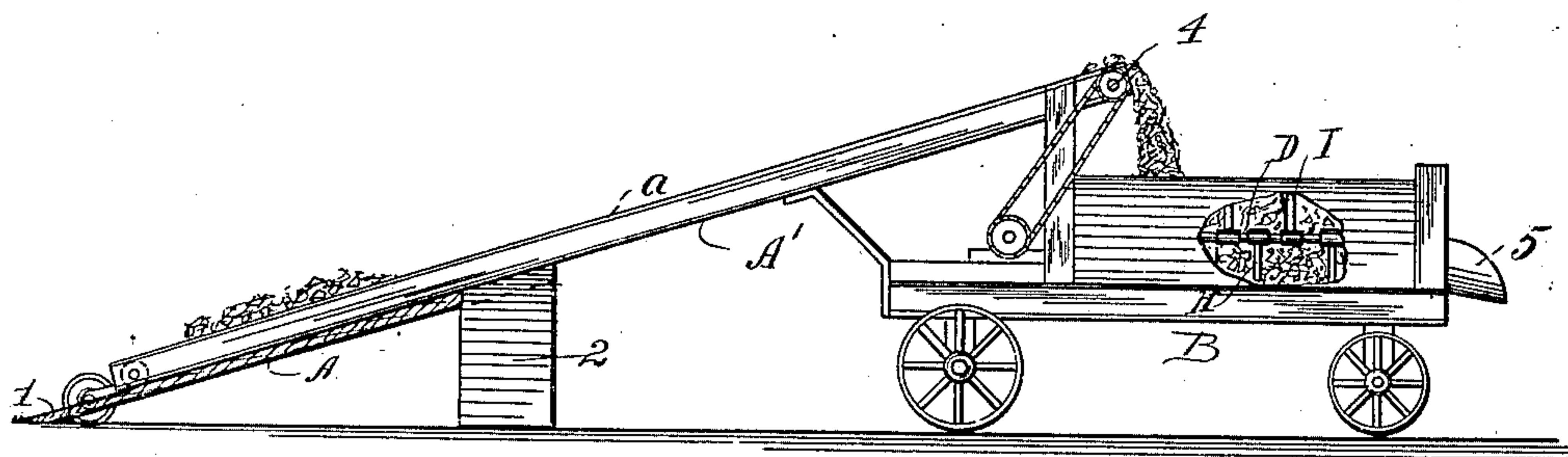
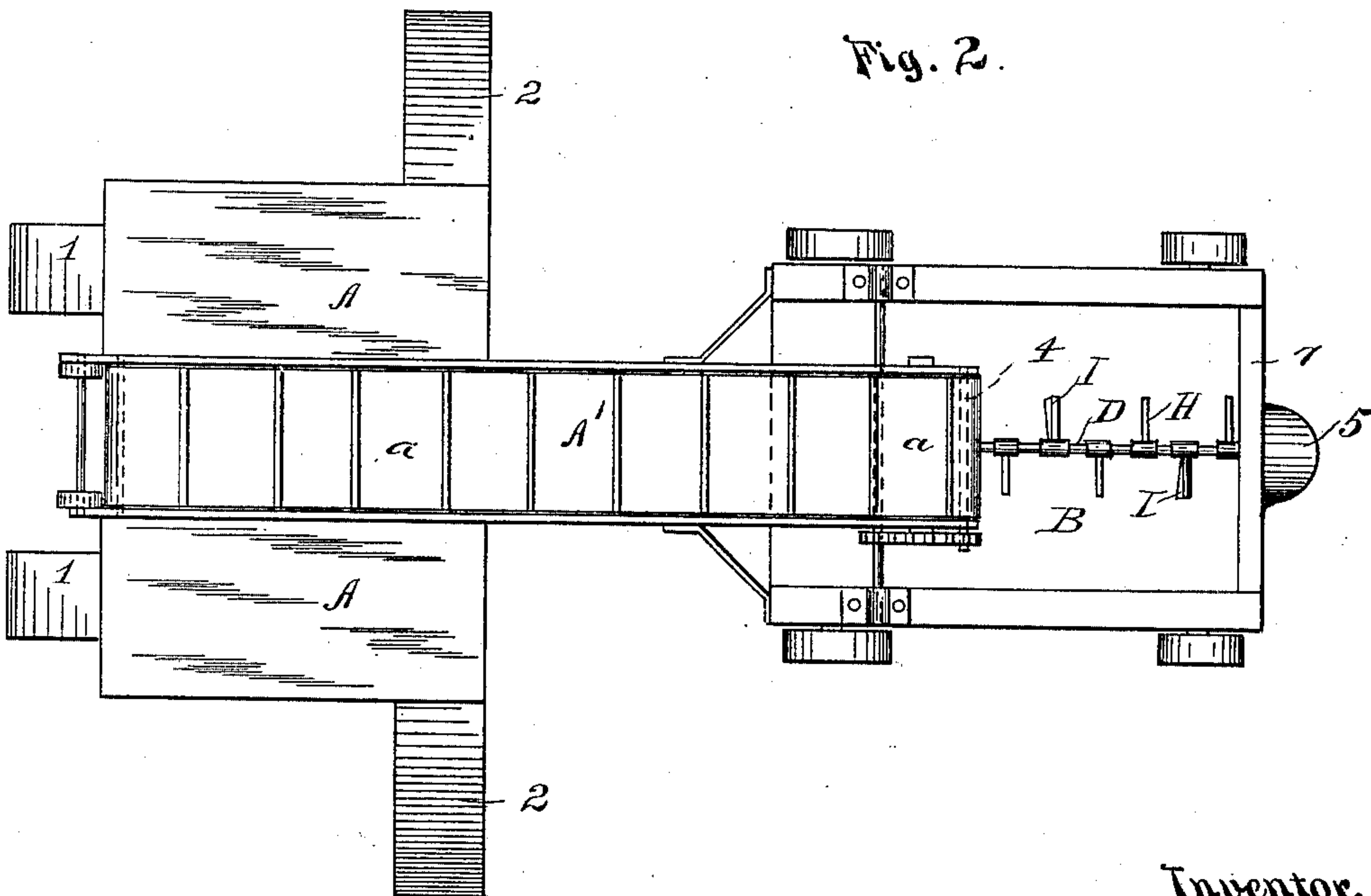


Fig. 2.



Witnesses:

G. 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.

## CONCRETE-MIXING MACHINE.

SPECIFICATION forming part of Letters Patent No. 675,037, dated May 28, 1901.

Application filed December 22, 1899. Serial No. 741,249. (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 Concrete-Mixing Machines, of which the following is a specification, reference being had to the accompanying drawings.

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

The nature of my invention consists in part in the apparatus provided to perform by mechanical power and continuously certain parts of the work in handling and mixing material for concrete pavement and so that the whole apparatus may be moved to any convenient position while in operation and without any interruption of the work.

In the drawings, Figure 1 is a side elevation of my improved apparatus, and Fig. 2 is a plan view of the apparatus.

It is a concrete-mixer mounted upon wheels, so that it may be caused to travel over the ground. Any suitable engine or motor (not shown) may be mounted upon the frame of the mixer for supplying power to drive the mixing mechanism and also to cause the ground-wheels to travel over the ground when desired to move the apparatus.

The materials are supplied to the hopper of the mixer, 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, 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. These parts are shown in Fig. 1, a portion of the hopper being broken away for that purpose, and also in Fig. 2.

A strong frame A' is strongly secured upon the frame of the mixer, so that its upper end will extend over the top of the hopper, and its lower end is secured to supporting ground-wheels, as indicated.

A strong platform A is attached to and carried by the push-frame A', and approaches or runways 1 2 are secured to the platform A, so as to be held in place and carried along by the platform when moving over the ground.

The push-frame A' is provided with a series of rollers and a carrier-belt *a*, as indicated, and power is applied to the driving-shaft 4 to cause the belt to revolve continuously, so as to carry material up the incline and into the hopper.

The material—such as stone, sand, or other material—is put into wheelbarrows or wheeled vehicles and moved over a runway onto the platform A and dumped upon the carrier-belt or near to it and then shoveled onto the carrier-belt, which carries it up into the hopper, where it is continuously mixed and discharged from the other end of the hopper over the spout 5, and these operations may be continued without any interruption when power is applied to cause the mixer, the push-frame A', and the platform A to move simultaneously over the ground to any new position, so as to facilitate the work.

The proper proportions of cement and water are preferably added to the stone and sand after they are in the hopper of the mixer, or they may be added at any convenient time or place before they are put into the hopper.

I claim as my invention—

1. In a machine of the character described, the combination with a mounted mixer, of a carrier adapted to deliver material to the mixer, means for driving the carrier, a supporting-frame for the carrier extending from a point above the mixer outwardly and downwardly, and wheels or runners supporting the lower end of the carrier-frame upon the ground whereby the same is capable of being shifted with the mixer from place to place, substantially as described.

2. In a machine of the character described, the combination with a mixer, an elongated supporting-frame leading outwardly from a point adjacent the said mixer, a platform at the side of the outer end of said frame, and a carrier arranged longitudinally in said frame and alongside of the platform, substantially as described.

3. In a machine of the character described, the combination with a mixer, of means for conveying the mixer, a supporting-frame held with its end adjacent the mixer, a carrier extending outwardly and downwardly from the mixer and carried by said supporting-frame, means for operating the carrier,



and means independent of the mixer-convey-  
ing means adapted to rest upon the ground  
and support the outer end of the carrier-  
frame, substantially as described.

- 5 4. In a machine of the character described,  
the combination with a mixer, of a support-  
ing-frame thereon, platforms secured at the  
respective sides of the frame, and a carrier

adapted to receive material from both plat-  
forms and convey the same to the mixer, sub- 10  
stantially as described.

Chicago, December 9, 1899.

CHESTER T. DRAKE.

Witnesses:

OSCAR PETERSON,  
OSCAR MARTINSON.