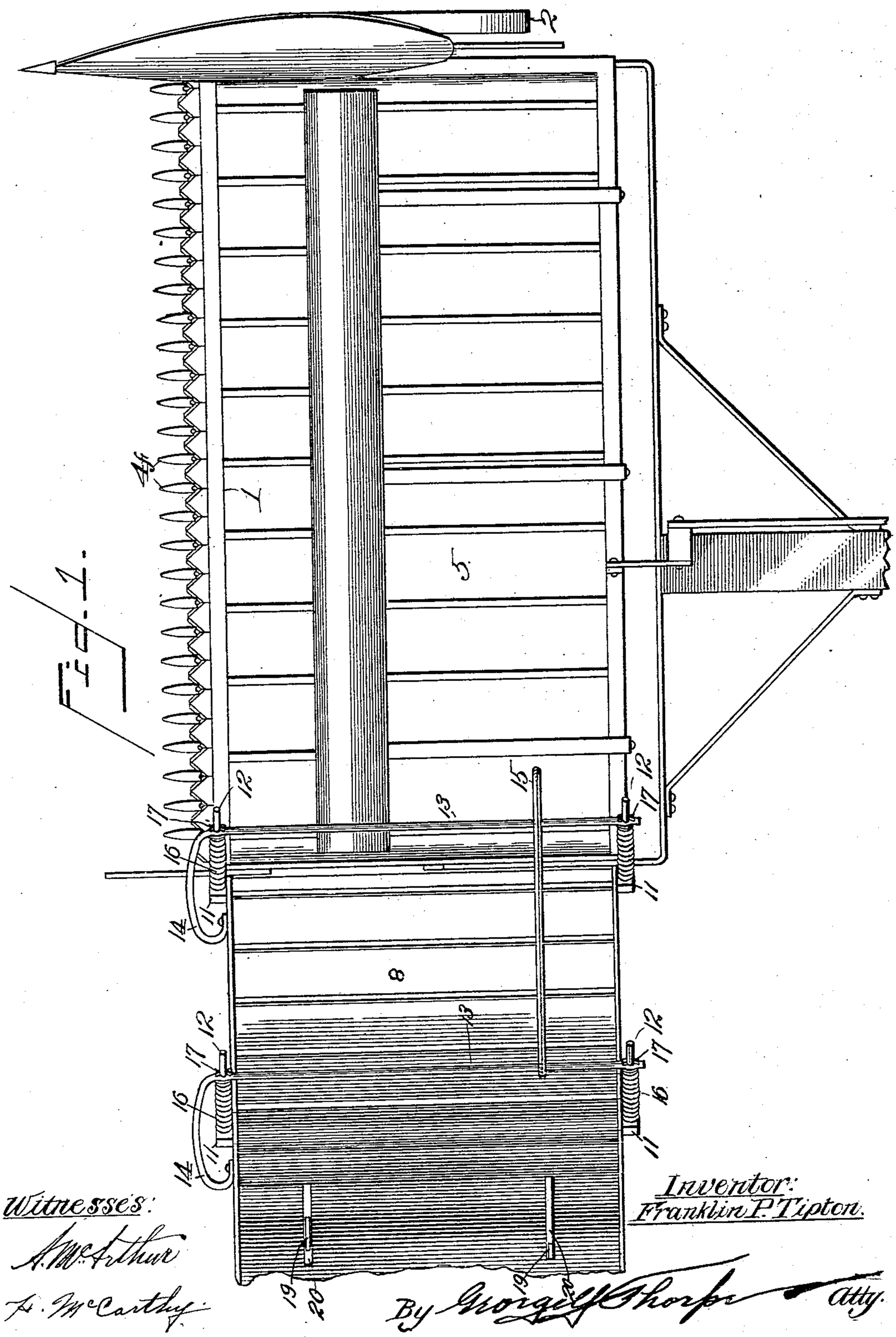
No. 751,122. PATENTED FEB. 2, 1904.

F. P. TIPTON.

HARVESTING MACHINE.

APPLICATION FILED FEB. 7, 1903.

NO MODEL. 2 SHEETS—SHEET 1.



Witnesses:
A. W. McArthur
F. J. McCarthy.

Inventor:
Franklin P. Tipton.

By George H. Thorpe Atty.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

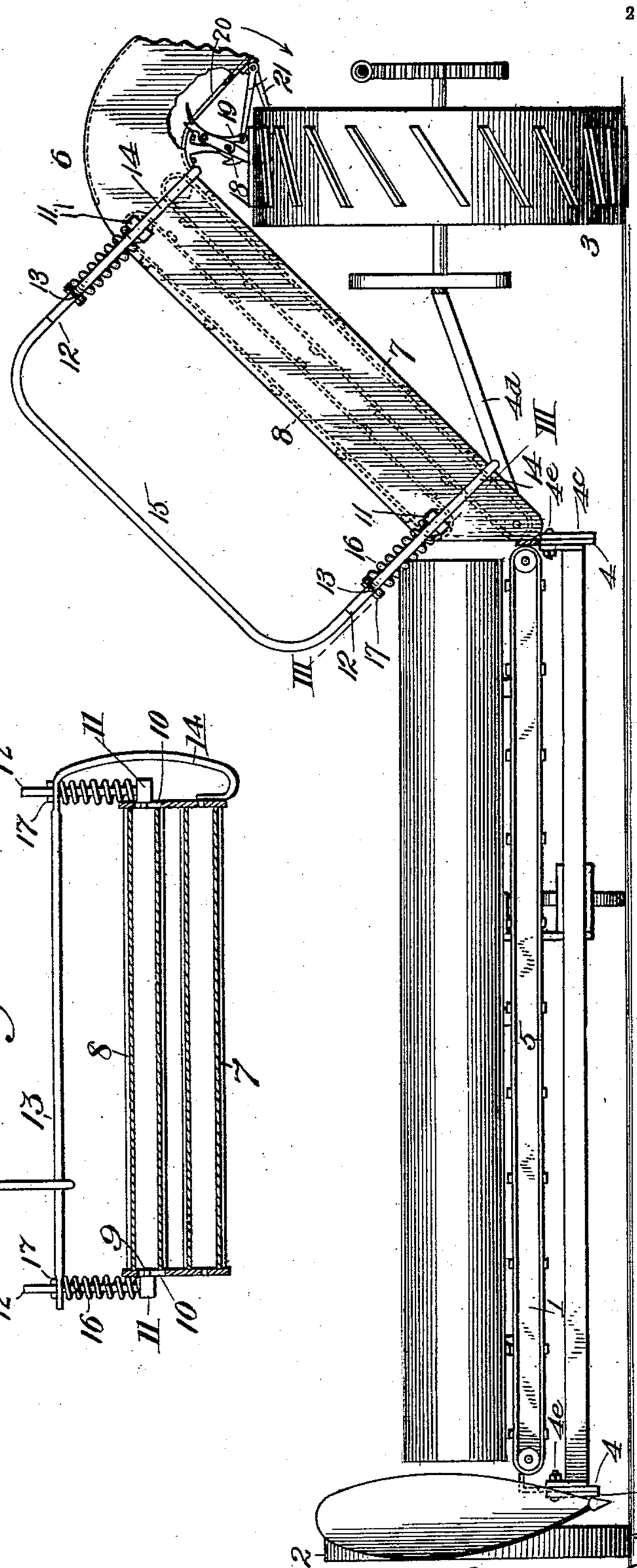

Fig. 3.

Witnesses:

A. McArthur

F. McCarthy

Inventor:

Franklin P. Tipton

By George F. Thorpe Atty.

No. 751,122. Patented February 2, 1904.

UNITED STATES PATENT OFFICE.

FRANKLIN P. TIPTON, OF CUNNINGHAM, KANSAS.

HARVESTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 751,122, dated February 2, 1904.

Application filed February 7, 1903. Serial No. 142,422. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN P. TIPTON, a citizen of the United States, residing at Cunningham, in the county of Kingman and State of Kansas, have invented certain new and useful Improvements in Harvesting-Machines, of which the following is a specification.

My invention relates to harvesting-machines; and my object is to produce a machine of this character having an elevator consisting of a pair of superposed endless conveyers with the upper one yieldingly depressed to permit grain in varying quantity to be elevated without danger of chokage.

A further object is to produce a harvesting-machine having an elevator of the type mentioned, which operates efficiently and reliably and which is of simple, strong, durable, and comparatively inexpensive construction.

With these objects in view the invention consists in certain novel and peculiar features of construction and organization, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 represents a top plan view of a portion of a harvesting-machine embodying my invention. Fig. 2 is a vertical section taken mainly just rearward of the front bar of the horizontal frame and showing certain parts in elevation. Fig. 3 is a cross-section taken on the line III III of Fig. 2.

In the said drawings, 1 designates the customary oblong rectangular frame, mounted at its right-hand end, as viewed from the rear, on the small wheel 2, and at its opposite end upon the large wheel 3. The frame is provided at each end with depending lugs 4, bolted, as at 4^e in Fig. 2, to the lugs 4^c of frame 4^d and the grain-wheel support, respectively. At the front edge of said frame 1 is the usual cutting mechanism 4^f, and said frame is also equipped with the usual slatted conveyer 5, driven in the customary manner and by any suitable means. At the left-hand end of said conveyer is the customary elevator-framework 6, which is arched over the grain-wheel and equipped with mechanism for bundling the grain, this mechanism, however, being omitted, as forming no part of the present invention.

Arranged within the elevator in the customary manner is the lower apron 7 and above the same the upper apron 8, the last-named apron having the front ends of its shaft-spindles 9 arranged to rise and fall in slots 10 in the walls of the elevator-framework, and thereby accommodate the volume of grain passing up through the elevator. The ends of the spindles are journaled in boxes 11, secured to the lower ends of rods 12, said rods extending slidingly through the transverse bars 13, overhanging the elevator, and provided at their front ends with depending arms 14, secured to the elevator-framework, as shown, or in any other suitable or preferred manner, the opposite ends of said cross-bars being connected by an arched brace 15. The upper apron of the elevator is held depressed with a yielding pressure by means of the springs 16 spirally encircling rods 12 and bearing at their upper and lower ends, respectively, against bars 13 and boxes 11, spring-cotters 17 or their equivalents limiting the distance which the apron may be depressed, and thereby preventing accidental dislocation of rods 12 from the guide and supporting bars 13.

18 designates a crank-shaft geared in any suitable manner (not shown) for operation in the direction indicated by the arrow, Fig. 2, the crank engaging pivotally the central portion of kickers 19, adapted to alternately project up and operate through the slots 20 in the lower portion of the elevator-framework, the action of the kickers being controlled by the swinging links 21, pivotally connected to the lower ends of the kickers at one end and at their opposite ends to a fixed point of the elevator-framework, as shown.

In the practical operation of the machine the grain is fed between the elevator-aprons by the main conveyer in the customary manner, and when the volume is excessive the yieldingly-depressed apron rises to accommodate such increased volume, dropping down to its original position when the supply falls to normal. The action is obviously automatic and renders the elevation of any kind of grain in any condition, wet or dry, positive and reliable.

While I have illustrated and described the preferred embodiment of the invention, it will be apparent that I may obviously resort to

various changes in the form, proportion, detail construction, and in the arrangement of the parts without departing from the essential spirit and scope or sacrificing any of the advantages of the invention.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a machine of the character described, transverse bars over the elevator and suitably-supported, spring-depressed rods extending slidingly through said bars and provided with bearing-boxes at their lower ends, and the upper endless conveyer of the elevator with its shafts journaled in said boxes.

2. In a machine of the character described, transverse bars over the elevator and suitably-supported, spring-depressed rods extending slidingly through said bars and provided with bearing-boxes at their lower ends, the upper endless conveyer with its shafts journaled in said boxes, and cotter-pins secured to said rods above the transverse bars.

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

FRANKLIN P. TIPTON.

Witnesses:
C. O'CONNELL,
C. D. WALTER.