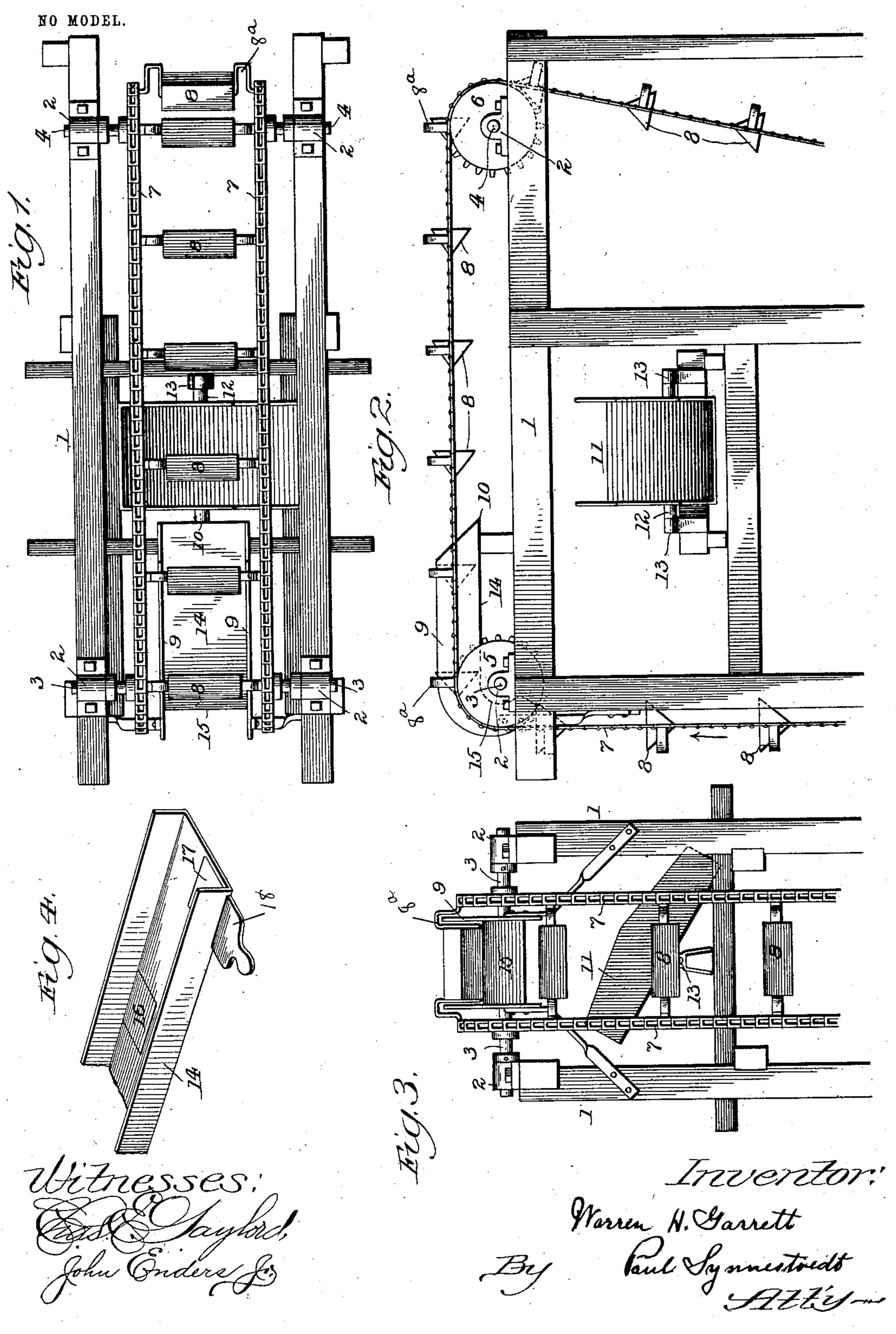
W. H. GARRETT. CONVEYER.

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WARREN H. GARRETT, OF LAGRANGE, ILLINOIS, ASSIGNOR TO FAIRBANKS, MORSE & COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

CONVEYER.

SPECIFICATION forming part of Letters Patent No. 747,546, dated December 22, 1903.

Application filed August 12, 1901. Serial No. 71,748. (No model.)

To all whom it may concern:

Be it known that I, WARREN H. GARRETT, a citizen of the United States, residing at Lagrange, Cook county, Illinois, have invented certain new and useful Improvements in Conveyers, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention has reference primarily to the provision of improved means whereby the bucket of an endless-chain-conveyer is arranged to deliver its contents along a horizontal plane, and discharge it therefrom on to a suitable direction spout arranged thereunder.

The objects of my invention will more fully appear from an examination of the accompanying drawings, which illustrate the same in preferred form, and in which in

In Figure 1 I have shown a plan view of an apparatus embodying my improvements, in

In Figure 2 I have shown a side elevation thereof, in

In Figure 3 I have shown an end view, and in

In Figure 4 I have shown a detail of the construction, showing a modification of my improvement.

In carrying out my invention, I provide, 30 first, a structure or support 1, carrying journal boxes 2, in which are mounted a couple of head-shafts 3 and 4, provided with sprocketwheels 5 and 6, which carry an endless chain 7, provided with a plurality of buckets 8, 35 which are attached by the looped arms 8a rigidly to the chain and are thus suspended to fit inside the trough as shown in Figure 3. The buckets 8 are constructed for the transportation of coal or other like material, and 40 for elevating the same in the direction indicated by the arrow in Figure 2, until they pass the head-shaft 3, when they discharge their contents into the trough 9, carrying the same along the bottom of this trough, which 45 is set in horizontal position, until they fall

off the end 10 into the direction spout 11.

The direction spout 11 is mounted upon trunnions 12, in supports 13, so as to be placed in a direction with the incline toward the right or the left, as shown in Figure 3, whereby

the discharge of the contents is secured at either side, as desired.

The trough 9 arranged at the head-shaft, is provided with a horizontal portion, 14, and a curved portion 15, shown in dotted lines, 55 whereby the bucket 8 may travel around along the curved part 15, and gradually discharge its contents on to the horizontal portion 14, along which the same will be carried until discharged off the end at 10 into the direction spout 11, before referred to.

From the above it will be obvious that if the horizontal portion 14 of the trough 9 be varied in length, it will change the point of discharge, at the end 10, and that by such 65 variation in length, the said trough 9 may be caused to unload its contents at any point desired, between the head-shafts 3 and 4. The direction spout 11 should of course be located in each case, so as to receive the dis- 70 charge from the end of the trough 9. If it is desired to distribute the materials raised by the elevating buckets 8, at several different points, at once it can be accomplished by providing the horizontal part 14 of the trough 75 9 with a plurality of openings, as shown at 16 and 17 in Figure 4, the opening 16 being on one side of the trough, and the opening 17 on the other, and placed a little further along in the same, than the opening 16. By 80 thus arranging a plurality of openings in the trough 9, the contents thereof can be distributed to a plurality of direction spouts placed under the respective openings, and the material thus distributed to any convenient 85 point desired, by the use of but one elevating device.

If desired, gates such as are shown at 18, may be employed to control the several openings, and the openings when provided with 90 suitable gates, may, if preferred, be extended entirely across the trough.

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

1. In conveyer mechanism the combination with a pair of head-shafts, and means for supporting the same, of a plurality of conveyer buckets constructed to move around said head-shafts, a trough arranged adjacent to 100

one of said head-shafts and constructed to permit travel of the buckets along the same, and a direction spout arranged under the extreme end of the horizontal portion of the trough between the head-shafts, substantially as described.

2. In conveyer mechanism the combination with a pair of head-shafts and a curved trough arranged around one of the head-shafts and provided with a curved portion and with a horizontal portion, of a series of conveyer buckets mounted on looped brackets so as to dip in said trough and fit the same, the conveyer chain itself being outside of the trough.

3. In conveyer mechanism the combination with a pair of head-shafts and a dumping trough, of a series of conveyer buckets of less width than the distance between the conveyer chains and mounted upon looped arms

so that the buckets may fit the trough and 20 the chains travel outside of the same, substantially as described.

4. In conveyer mechanism the combination of a pair of head-shafts and a chain carrying a series of buckets running around the same, 25 a curved trough with its bottom partly surrounding one of said head-shafts and fitting the bucket but lying entirely within the chain, a dumping chute placed under the end of the trough and adapted to tip in either direction and to slide lengthwise to adjust it under the end of the trough, substantially as described.

WARREN H. GARRETT.

Witnesses:

PAUL SYNNESTVEDT, H. W. SMALLEY.