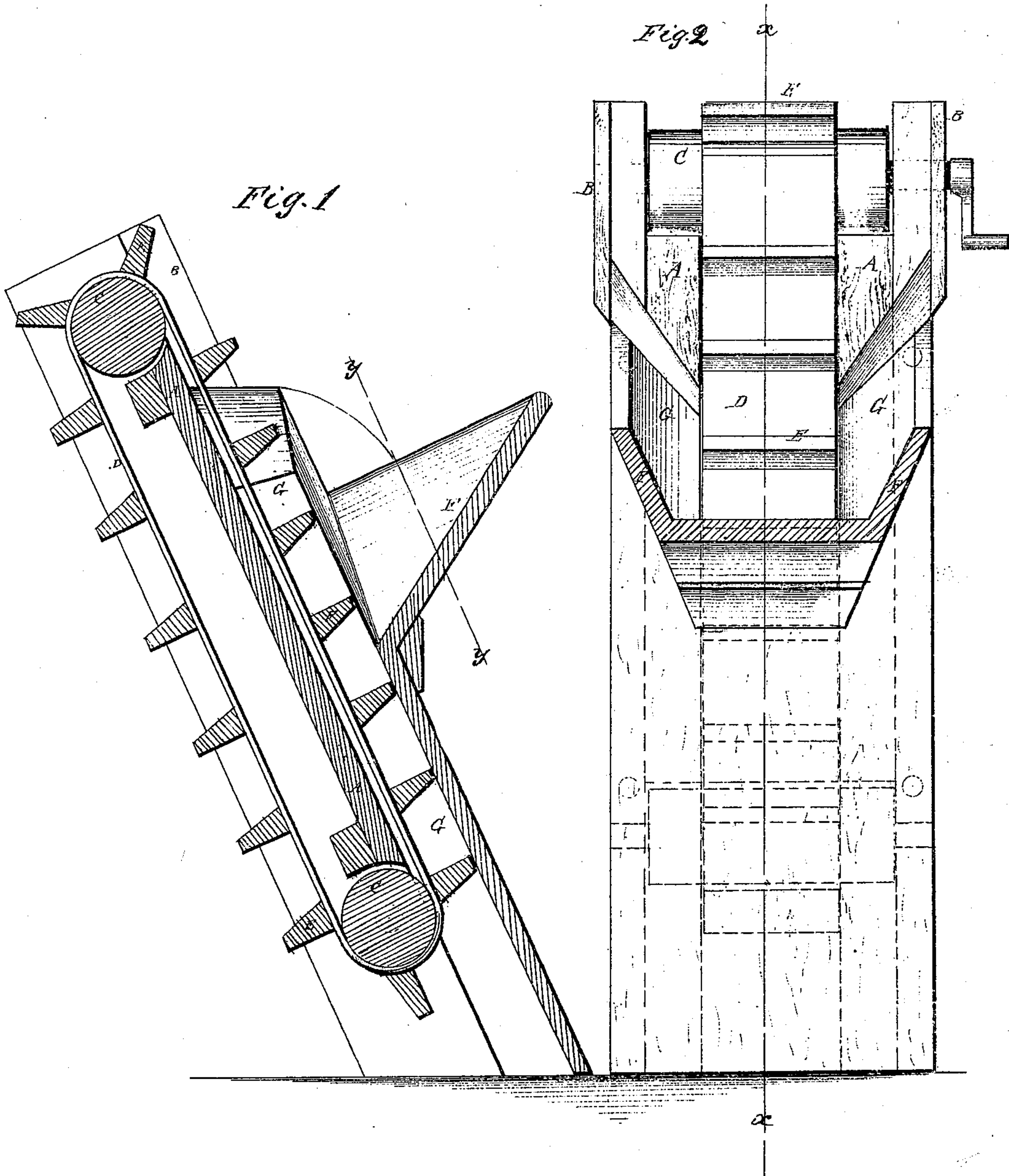


J. E. Kelsey,

Elevator.

No. 99,910.

Patented Feb. 15. 1870.



Witnesses:

A. W. Almqvist
Alex F. Roberts

Inventor:

J. E. Kelsey
Munn & Co
Attorneys.

PER

United States Patent Office.

JAMES E. KELSEY, OF BROOKLYN, NEW YORK.

Letters Patent No. 99,910, dated February 15, 1870.

IMPROVEMENT IN KINDLING-WOOD ELEVATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JAMES E. KELSEY, of Brooklyn, in the county of Kings, and State of New York, have invented a new and useful Improvement in Kindling-Wood Elevators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved elevator taken through the line *x x*, fig. 2.

Figure 2 is a front view of the same, partly in section, through the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved elevator, designed especially for elevating kindling-wood in the factory where it is prepared for market; and

It consists in the construction and combination of various parts of the apparatus, as hereinafter more fully described.

A is the floor of the elevator-way or spout which passes up preferably in an inclined direction from the lower to the upper parts of the building, as shown in fig. 1.

B are the sides of the way, which may be made straight or slightly inclined, and which I prefer to make continuous from the bottom to the top of the elevator.

C are two rollers, pivoted, the one at the upper and the other at the lower end of the floor A, in such positions that the forward sides of said rollers may be about upon a line with or only slightly in advance of the floor A, as shown in fig. 1.

Motion may be given to the rollers C by any convenient power.

D is an endless belt that passes around the rollers C, and which moves up the face of the floor A, as shown in fig. 1.

To the belt D, at suitable distances apart, are attached buckets, wings, or flanges, E, as shown in figs. 1 and 2, the length of which equals or exceeds the breadth of the belt D.

The belt D may be made of any desired or convenient breadth, and the floor A should be made considerably wider than the breadth of the said belt and buckets, so that the ends of the wood being elevated may project beyond the ends of the buckets E, without striking against the sides B of the elevator-way and being knocked off the buckets E, or wedging against said sides and thus choking or breaking the elevator.

F is the hopper, the throat of which is made of such a size as to fit upon the buckets E, allowing the said buckets to pass through freely, but preventing the downward passage of any wood past said buckets.

The throat of the hopper F should extend downward about the space of two buckets, so that at least one bucket may always be in the said throat to prevent the downward passage through said throat of any of the wood.

The hopper F may be permanently attached to the elevator-way, but I prefer to make it detachable, so that it may be shifted from one floor to another as may be required.

G are inclined side pieces extending upward from the hopper F, for about the space of two buckets, and the upper ends of which are made to incline inward toward the buckets E, and at the same time slightly incline toward the front or hopper F, as shown in figs. 1 and 2, so that any wood that may drop from the buckets while being carried upward, may be guided by said inclines back upon the lower buckets or into the hopper, and be again taken up by the buckets.

The forward sides of the pieces G may also be slightly inclined inward to further assist in guiding the wood that may happen to fall back into the hopper.

The pieces G may be connected with the elevator-way or with the hopper F, so as to be detached with said hopper, as may be desired or convenient.

The latter construction I prefer, as it leaves the elevator clear and unobstructed except at the single place where the hopper may be placed.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The combination of the guide-pieces G, constructed as described, with the hopper F and floor A of the elevator-way, whether said pieces be attached to said hopper or to said floor, substantially as herein shown and described and for the purpose set forth.

3. An improved kindling-wood elevator, formed by the combination of the wide floor A, either with or without the side pieces B, rollers C, belt D, buckets E, hopper F, and guide-pieces G, with each other, said parts being constructed and operating substantially as herein shown and described and for the purpose set forth.

The above specification of my invention signed by me, this 30th day of November, 1869.

JAMES E. KELSEY.

Witnesses:

GEO. W. MABEE,
JAMES T. GRAHAM.