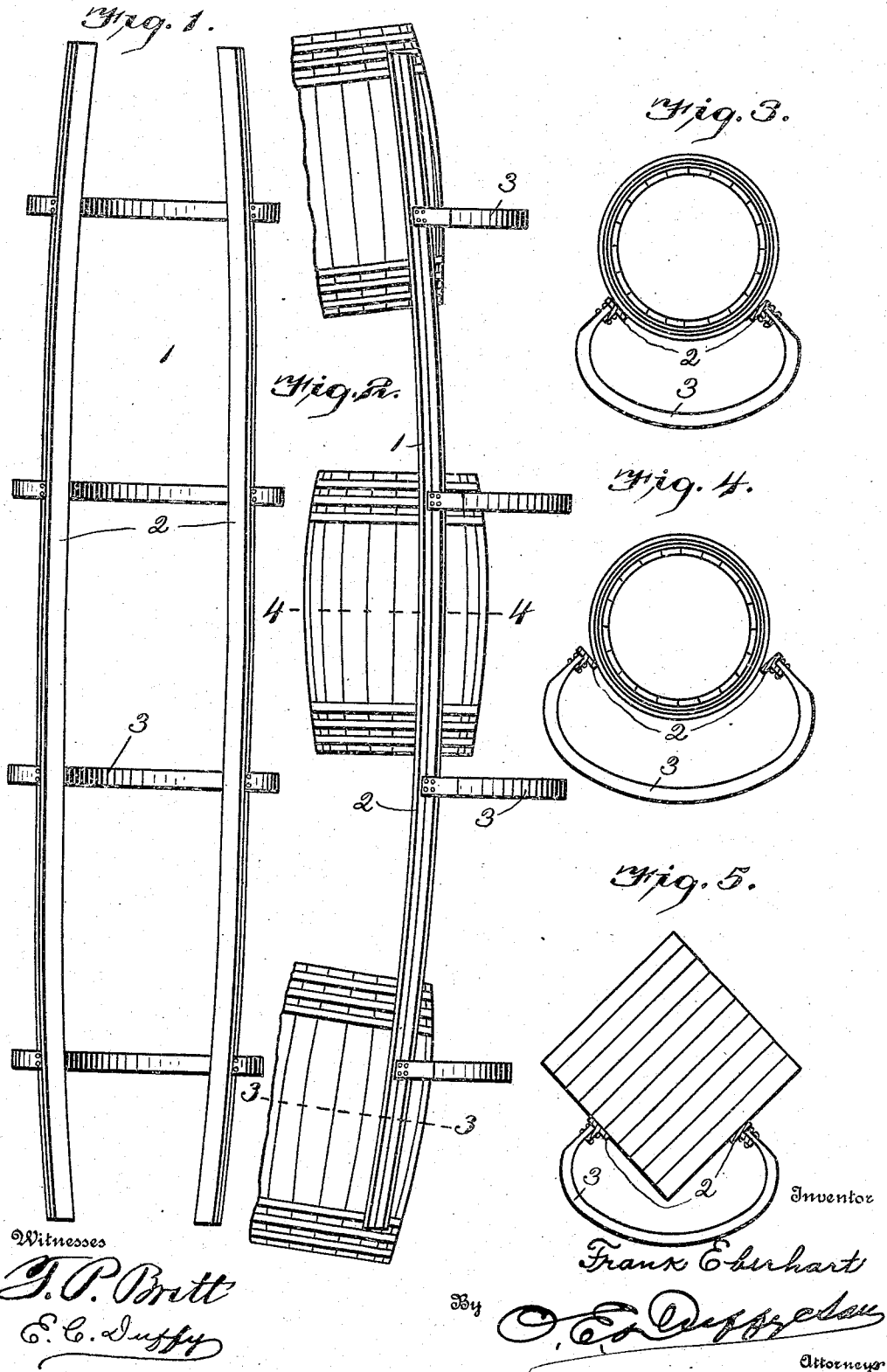


F. EBERHART.
CONVEYER.

APPLICATION FILED JAN. 21, 1909.

941,364.

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UNITED STATES PATENT OFFICE.

FRANK EBERHART, OF NEW YORK, N. Y.

CONVEYER.

941,364.

Specification of Letters Patent.

Patented Nov. 30, 1909.

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To all whom it may concern:

Be it known that I, FRANK EBERHART, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Conveyers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to the class of conveyers, but more particularly to a skid conveyer for handling kegs, boxes, barrels or the like, in such manner that the said kegs, boxes, barrels or the like are deposited at the lower end of the conveyer without any jar.

A further object of my invention is to provide a conveyer which is so constructed and arranged that a braking force is automatically applied to the keg, box, barrel or the like while the said keg, box, barrel or the like is in transit on the conveyer and before the same reaches its destination.

With these objects in view my invention consists in the novel construction and arrangement of the conveyer and particularly in the construction which provides for exerting a braking force upon the object in transit.

My invention also consists in certain other novel details of construction and in combinations of parts, all of which will be first fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawing: Figure 1 is a plan view of the conveyer constructed in accordance with my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a transverse sectional view taken on line 3—3 of Fig. 2. Fig. 4 is a transverse sectional view taken on line 4—4 of Fig. 2, and Fig. 5 is a sectional view showing a box on the conveyer.

Like numerals of reference indicate the same parts throughout the several figures in which:

1 indicates the conveyer which comprises two longitudinal skids 2, said skids being preferably constructed of T-iron as clearly shown in the drawing. Connecting the skids 2 at intervals are the connecting braces 3, said braces being, as shown in the drawing, pref-

erably substantially semi-circular but obviously may be formed in order to meet special requirements. The braces or supports 3 are secured to the skids 2 in any convenient manner in such a way that the structure will be strong and rigid.

As shown in Fig. 1 the skids 2 forming the runway are not arranged parallel with each other but slightly diverge toward the center from each end. It will also be seen from Fig. 2 that a slight dip or bow is preferably given to the skids although the skids may if desired be formed perfectly straight in side elevation, but in any instance must be diverged as shown in Fig. 1.

Having thus described the several parts of my invention its operation is as follows: A keg, barrel or the like is placed upon the conveyer at the upper end thereof in a position shown in Fig. 2 the force of gravity acting upon the keg, barrel or the like causing same to slide along the skids 2 with increasing momentum until the keg, barrel or the like reaches the greatest diverged point of the skids. At this point the skids being farther apart, the keg, barrel or the like drops or sinks lower in relation to the skids as clearly shown in Figs. 2 and 4. As the keg passes this point the skids converge and again cause a wedging effect upon the barrel or the like and at the same time cause the keg, barrel or the like to be raised relatively to the plane of the skids. This wedging action of the skids upon the keg, barrel or the like, and the simultaneous raising of the same relative to the skids cause a braking action upon the article reducing the momentum of the same and cause the article to be delivered at the end of the conveyer while moving at an extremely low rate of speed.

The length of the conveyer has no bearing upon this braking action, for the reason that no matter how fast the article may travel along the skids the momentum of the same is efficiently checked as soon as the wedging and raising effect is produced upon the object in transit. As a matter of fact the skids could be so arranged that an object in transit thereon could be brought to a full stop before reaching the bottom of the conveyer, and it is of course understood that conveyers constructed in accordance with my invention should be arranged to handle articles of uniform sizes, although a slight variation in the size of kegs, barrels,

boxes or the like would in no way interfere with the result.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. A conveyer comprising two skids constructed of T-iron, a series of braces connecting the same, said braces being arranged at intervals, said skids diverging from both ends toward the center and being provided with a dip, substantially as described.

2. A conveyer comprising two skids constructed of T-iron, a series of braces connecting the same, said braces being arranged at intervals, said skids diverging from both ends toward the center.

3. A conveyer comprising two skids, a series of braces or supports connecting the

same, said skids diverging toward the center from both ends.

4. A conveyer comprising two skids, means for bracing and supporting the same, said skids diverging from both ends toward the center.

5. A conveyer comprising a runway to receive an article to be conveyed, the supporting surfaces of said runway diverging from both ends of the conveyer toward the center thereof.

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

FRANK EBERHART.

Witnesses:

MARCUS EBERHART,
A. DAVID STAIGER.