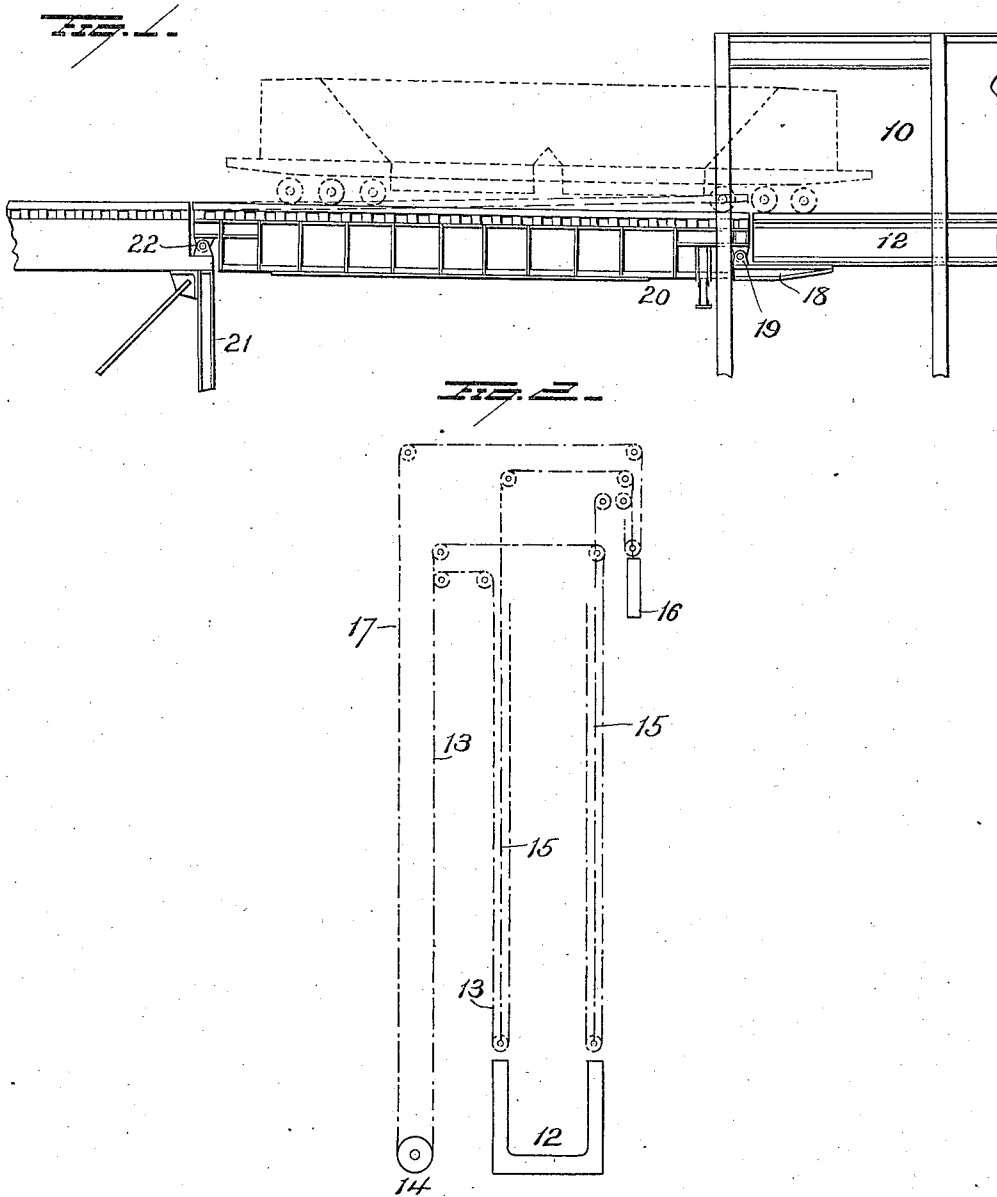


G. H. HULETT.
ELEVATOR.
APPLICATION FILED FEB. 11, 1913.

1,066,113.

Patented July 1, 1913.



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ELEVATOR.

1,066,113.

Specification of Letters Patent.

Patented July 1, 1913.

Original application filed June 17, 1912, Serial No. 704,159. Divided and this application filed February 11, 1913. Serial No. 747,752.

To all whom it may concern:

Be it known that I, GEORGE H. HULETT, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Elevators; and I do hereby 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.

My invention relates to an improvement in elevators and run off girders for the same, and is a division of application No. 704,159 filed June 17th, 1912 for an improved system for unloading cars into vessels.

The object of the present invention is to provide a trestle or other structure with a run off girder, the outer end of which is adapted to be engaged by and lifted with the elevator platform, so that the trackway on the run way will aline with the trackway on the platform.

A further object is to provide improved means for actuating the elevator platform whereby the cost of operating same will be greatly reduced.

With these ends in view my invention consists in the parts and combination of parts as will be more fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a part of the elevator and the run off girder, and Fig. 2 is a diagrammatic view of the elevator and its counterweight.

The elevator 10 comprises a shaft and platform 12, shown in side elevation in Fig. 1, and diagrammatically in Fig. 2. This platform is connected by cables 13 with the hoist drum 14, and by cables 15 with the counterweight 16. The counterweight is also connected to the drum 14 by the cable 17. The cables 13 and 17 are wound in opposite directions, so that when one is winding the other is unwinding. The weight of the counterweight is considerably in excess of the weight of the elevator platform, but is lighter than the combined weight of the platform and a loaded car thereon, and as the counterweight is connected to the elevator platform and also to the winding drum, it will be seen that by rotating the latter in a direction to positively lift the counterweight, it will unwind the elevator platform

ropes 13 and thus permit the elevator to descend.

I prefer to so proportion the weight of the counterweight and the loaded platform, as to about equally divide the power necessary to raise the platform and its loaded car and the power necessary to lift the counterweight and permit the empty platform to return to the track level. The principal advantage of this construction over the ordinary form of elevator is that it very largely reduces the size of the motors and engines necessary to lift the load, and greatly reduces the cost of installation and the subsequent cost of operating the elevator.

The elevator platform 12 is provided at its end adjacent the pier with projecting members 18, carrying the pivoted sill 19, which latter, as the elevator platform is raised, engages the underside of the adjacent free end of the run off girders 20, carrying that portion of the track between the pier trestle 21 and the elevator 10. The run off girder 20 is hinged at its outer end as at 22, to the trestle, and its inner end projects into the elevator shaft and in the path of the projecting members 18, so that as the elevator rises it engages the adjacent ends of the run of girder and lifts it so that the track on the elevator platform will aline with the track on the girder 20, thus avoiding the necessity of providing means for stopping the platform at a particular point, so as to have the track thereon aline with the track on the hinged run off girders, and also avoiding the necessity of stopping the apparatus to take up any slack due to stretching of the cables. The run off girders connect the elevator with a trestle 21 or other elevated structure onto which the car elevated by the elevator is run.

It is evident that many slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention. Hence I would have it understood that I do not wish to confine myself to the exact construction and arrangement of parts shown and described, but

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

1. The combination of an elevator shaft,

1 a trestle, a run off girder hinged to the trestle and extending to and into the elevator shaft and carrying a trackway, an elevator platform having a projecting member
5 adapted to engage the free end of the run off girder and carry the same up so that the trackway thereon will aline with the trackway on the elevator platform when the latter stops, and means for elevating and
10 lowering said platform.

2. The combination of an elevator shaft, a trestle, a run off girder hinged to the trestle and extending into the elevator shaft and supported by the latter, an elevator
15 platform having projecting members carrying a hinged sill adapted to take under the free end of the run off girder and lift same, and means for lifting and lowering said elevator platform.

3. The combination with an elevator platform and a counterweight, the latter being heavier than the platform, of hoist cables connected to the platform and hoist cable
20 connected to the counterweight, and means for winding and unwinding both sets of cables whereby when the counterweight is positively lifted the cable carrying the platform will unwind and permit the platform
25 to descend, and when the platform is lifted the cable carrying the counterweight will unwind and permit it to descend. 30

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

GEORGE HENRY HULETT.

Witnesses:

ADDIE HULETT,
F. E. HULETT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."