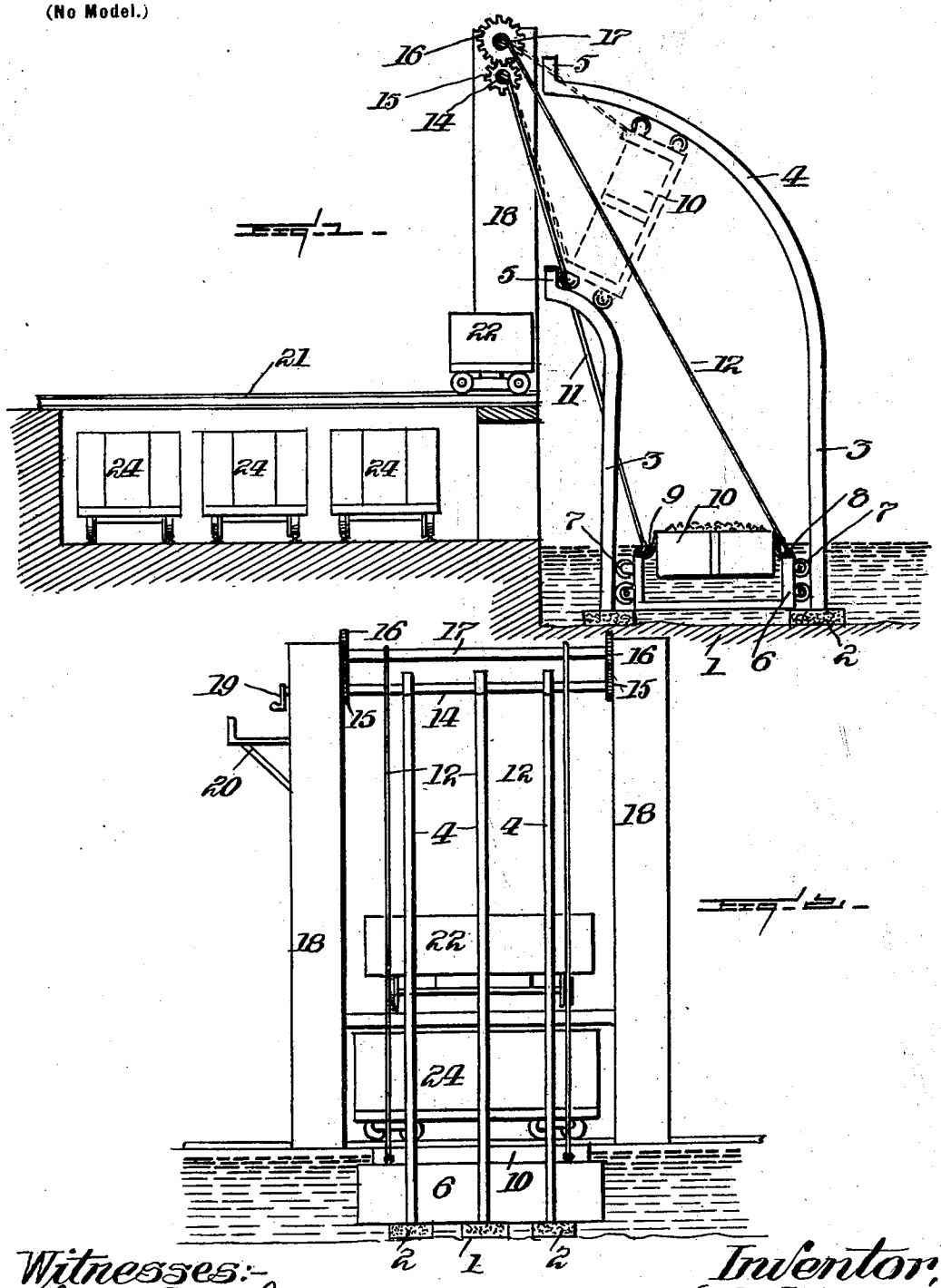
No. 710,194. Patented Sept. 30, 1902.

H. N. HUGHES.

DEVICE FOR UNLOADING COAL FLATS OR THE LIKE.

(Application filed May 23, 1902.)

(No Model.)



Witnesses:-
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UNITED STATES PATENT OFFICE.

HARRY N. HUGHES, OF DUQUESNE, PENNSYLVANIA.

DEVICE FOR UNLOADING COAL-FLATS OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 710,194, dated September 30, 1902.

Application filed May 23, 1902. Serial No. 108,610. (No model.)

To all whom it may concern:

Be it known that I, HARRY N. HUGHES, a citizen of the United States of America, residing at Duquesne, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Unloading Coal-Flats or the Like, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in devices for unloading coal-barges and the like, and has for its object the provision of novel means whereby barges may be easily raised out of the water to a position that will allow the coal to be automatically dumped into a car or other suitable receptacle.

The present invention further contemplates to provide a device of the above-described character that will be extremely simple in construction, strong, durable, comparatively inexpensive to manufacture, and highly efficient in its use.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout both views, in which—

Figure 1 is a side elevation of my improved dumping device. Fig. 2 is a front view thereof.

In the drawings the reference-numeral 1 represents the river-bed, having suitable foundations 2 therein. Upon said foundations are attached standards 3 3, forming tracks. These standards extend upwardly, terminating in curved portions 4, carrying stops 5. Between the standards or tracks 3 is arranged a carriage 6, having trucks 7 engaging in the tracks. The upper end of the carriage 6 has secured therein eyebolts 9 or other suitable fastening means to receive ropes or chains, which are suitably fastened to the coal-barge 10. Lifting-cables 11 and 12 are also secured to the carriage 6, the lifting-cable 11 passing over a shaft 14, carrying small cog-wheels 15 on each end, said cog-wheels meshing with cog-wheels 16 on the shaft 17, over which pass the lifting-cables 12. The shaft 14, as well as the shaft 17 are suitably journaled in uprights 18, which are anchored upon the shore, and the shaft 14 extends through one of said uprights and is provided with a crank-handle 19, or said shaft may carry a driven pulley and any suitable power may be applied for the purpose of hoisting the barge. A platform 20 is also secured to the side of one of the standards 18, said platform being directly below the end of the shaft 14. Tracks 21 are arranged upon the standards 18, upon which the car 22 may be placed to receive the coal from the barge, which afterward may be dumped in the coal-cars 24, arranged under the track 21, as shown in Fig. 1. It will be noted that the rotation of the shafts 14 and 17 is in unison and that the same travel at differentiating speed in order to compensate for the lift of the outer cable 12 and for the purpose of obtaining the proper tilt or angle of the barge and carriage when the same is dumbed into the car, as shown in dotted lines in Fig. 1 of the drawings.

The many advantages obtained by the use of my improved device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

1. In an unloading device, the combination of suitably mounted and spaced standards having their upper portions curved, a carriage operating between said standards, and revoluble means movable in unison and having differential speeds suitably connected to the carriage whereby the latter may be simultaneously raised and tilted.

2. In an unloading device, the combination of standards suitably spaced and secured in the bed of the river, or the like, the upper portions of the standards being curved and having their ends extending in substantially vertical alinement with the shore, a carriage operating between said standards, and ac-

tuating means on the shore connected to said carriage whereby the latter may be raised and simultaneously tilted.

3. In an unloading device, the combination of standards anchored in the river-bed having their upper face curved, a carriage operating between said standards, a barge secured above said carriage, and means whereby said carriage and barge may be raised, lowered and tilted, substantially as described.

4. In an unloading device, the combination of standards anchored upon the shore, shafts secured therein, cog-wheels secured upon said shafts, means to rotate said shafts, standards anchored in the river-bed having their upper ends curved, a carriage operating between said standards, a barge secured above said carriage, lifting-cables operating over said shafts and secured to said carriage, and suitable connections between said barge and said carriage, all parts being arranged and operating substantially as described.

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

HARRY N. HUGHES.

Witnesses:
JOHN NOLAND,
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