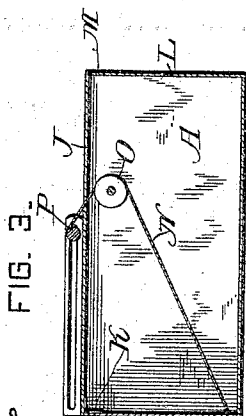
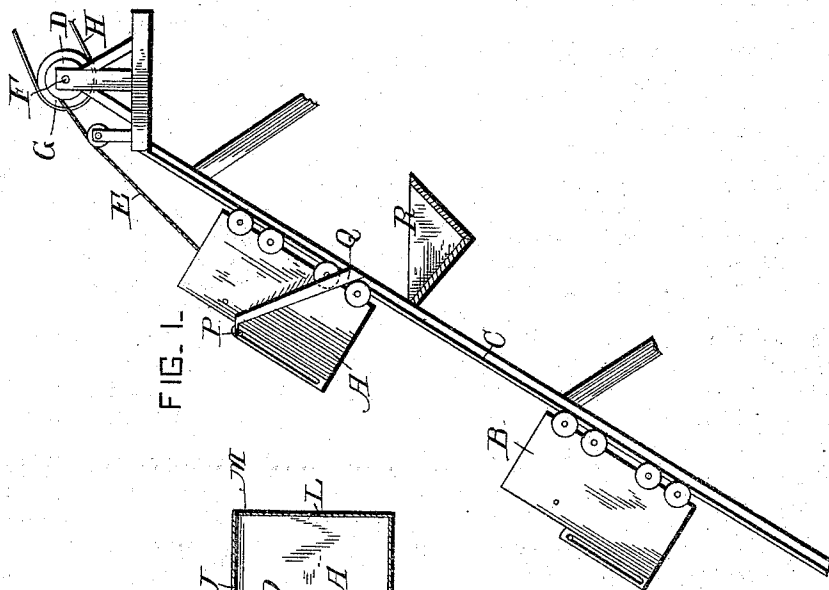
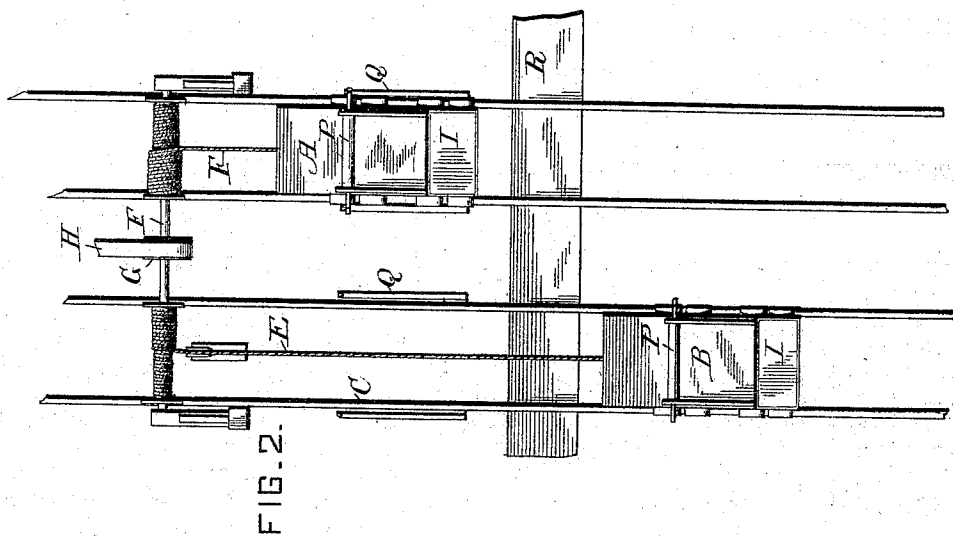


(No Model.)

J. NORTHWAY & T. E. HAMMOND.
HIGHLAND WATER CARRIER.

No. 500,936.

Patented July 4, 1893.



Witnesses

John D. Kincaid
Geo. F. Kincaid

Inventors
Jos. Northway
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their Attorney

UNITED STATES PATENT OFFICE.

JOSEPH NORTHWAY AND THOMAS E. HAMMOND, OF FORSYTH, MONTANA.

HIGHLAND WATER-CARRIER.

SPECIFICATION forming part of Letters Patent No. 500,936, dated July 4, 1893.

Application filed November 12, 1892. Serial No. 451,750. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH NORTHWAY and THOMAS E. HAMMOND, of Forsyth, in the county of Custer and State of Montana, have
5 invented certain new and useful Improvements in Highland Water-Carriers; and we 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
10 to which it appertains to make and use the same.

Our invention is an improvement in water elevators designed for greater simplicity and cheapness of construction and efficiency and
15 certainty of operation.

Our invention is especially adapted for irrigation purposes, in which the water is raised from a stream to a sufficient height above the banks to enable it to be conveyed and distributed
20 by means of ditches or sluice boxes.

We have set forth fully hereinafter the details of construction and the essential features of our invention, and illustrated them in the accompanying drawings in which similar
25 letters of reference designate corresponding parts.

Figure 1 is a side elevation of our invention. Fig. 2 is a front elevation of the same and Fig. 3 is a section of one of the cars.

30 A and B are two cars which travel on the inclined tracks C and are connected with drums D by ropes E in such a manner that when the drums D, which are secured to shaft F, revolve, one car is lowered while the other is raised. Between the drums D and secured
35 to the shaft F is the belt wheel G which is connected to an engine, horse-power or other suitable motive power by means of belt H. The lower end I of each car is hinged to the
40 upper surface J of the car by means of hinges K. It will be readily seen that when the car is lowered below the water, the gate I will be forced inward, thus allowing the water to enter the car. At the upper portion of the end
45 L of the car we have supplied an opening M which allows the air to escape when the water is being forced into the car.

The car after being filled is raised, by reversing the direction of the motion of the drums, and the weight of water in the car
50 closes the gate I. Thus when one car is being raised the other is being lowered. To the lower end of the gate I is attached one end of the rope N, which passes over the pulley O and is secured to the sliding bar P. At the
55 elevation on the sliding track at which it is desired to discharge the water, are situated the projecting braces Q against which the projecting ends of the bar P strike, and as the car is farther elevated, the bar P remaining
60 in a stationary position, the rope N draws the gate I open and the car discharges the water into the flume R.

The construction and arrangement of the several parts of our elevator, being thus made,
65 the operation and advantages of the same will it is thought be readily understood.

We are aware that changes in the form and proportion of parts herein shown and described as an embodiment of our invention,
70 can be made without departing from the spirit or sacrificing the advantages thereof, and we therefore reserve the right to make such changes and alterations as fairly fall within the scope of our invention.

75 Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

In an apparatus of the class described, the combination of cars A and B adapted to travel
80 on the inclined tracks C, the lower end of each of said cars being hinged and connected to the sliding bars P by means of ropes N, and projections on the side of said tracks adapted to engage with the ends of said sliding bars
85 substantially as and for the purpose set forth.

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

JOSEPH NORTHWAY.
THOMAS E. HAMMOND.

Witnesses:

C. M. HARRISON,
H. R. MARCYES.