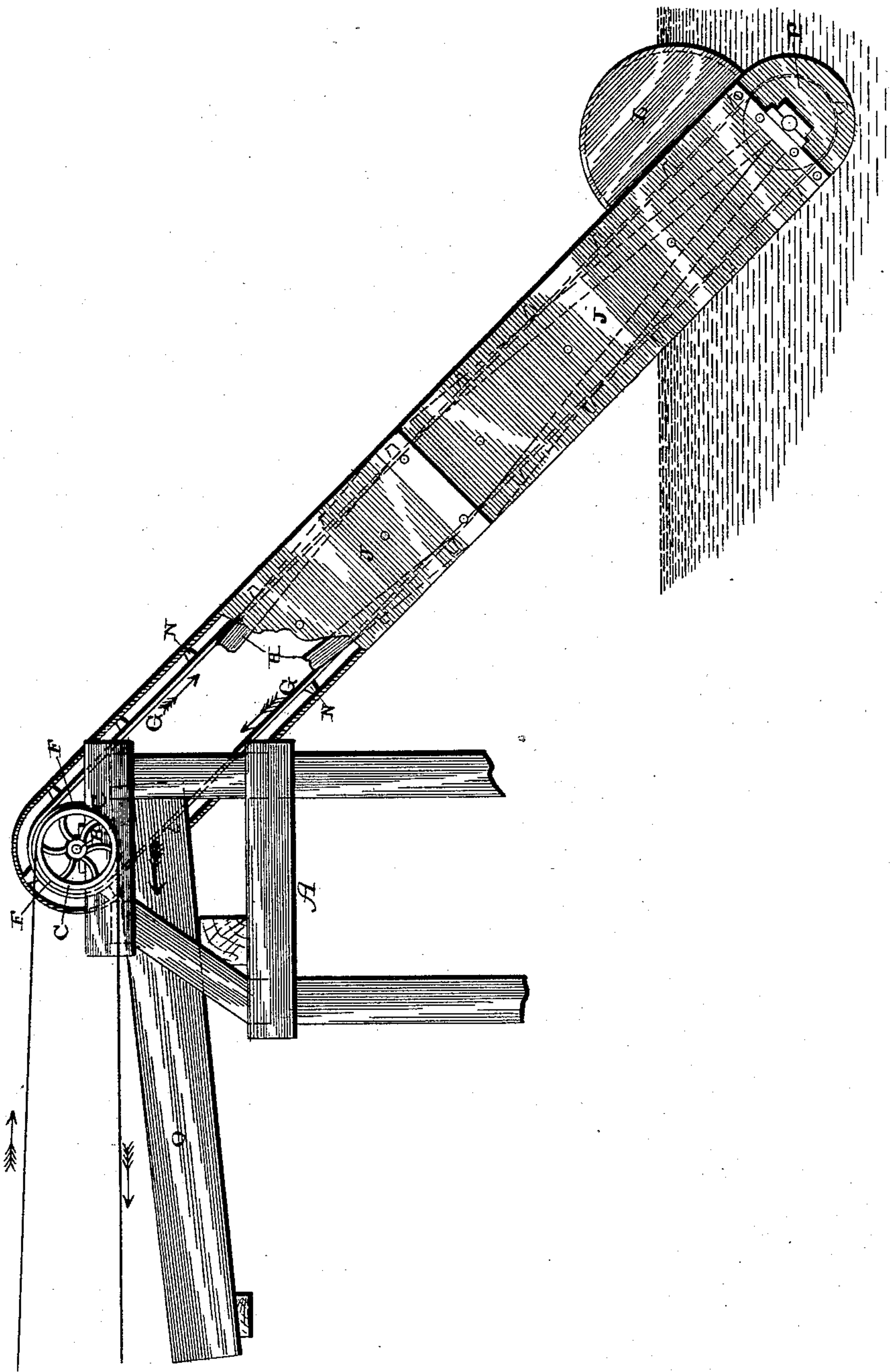


(No Model.)

R. P. HUFY.
ENDLESS CHAIN WATER ELEVATOR.

No. 427,997.

Patented May 13, 1890.



Witnesses:

C. P. Ellis,
B. Brookell.

Inventor:

R. P. Hufy,
per
J. A. Lehmann,
atty

UNITED STATES PATENT OFFICE.

ROBERT P. HUFEEY, OF MILES CITY, MONTANA.

ENDLESS-CHAIN WATER-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 427,997, dated May 13, 1890.

Application filed March 3, 1890. Serial No. 342,355. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. HUFEEY, of Miles City, in the county of Custer and State of Montana, have invented certain new and useful Improvements in Endless-Chain Water-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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in endless-chain water-elevators; and it consists in a water-elevator of the peculiar construction hereinafter fully described, and particularly pointed out in the claim.

The object of my invention is to apply to the lower end of the elevator just above that point where it enters the water an air-chamber which will hold sufficient air to form a float, and thus prevent the elevator from descending beyond a certain point into the water.

A represents a suitable frame-work or support, in the upper end of which the shaft B is mounted, and which passes transversely through and also mounted or journaled in the frame or casing of the elevator proper. Applied to one end of this shaft, outside of the casing of the elevator, is a driving-wheel C, around which the driving chain or belt passes for the purpose of operating the elevator. Upon this shaft, inside of the casing, is placed a suitable roller or drum F, over which the endless water-elevator G, of any suitable construction, passes. A second drum P is mounted at the lower end of the frame H of the elevator in the usual manner.

The entire elevator-frame H is inclosed at

all sides by a suitable casing J, and formed as a part of this casing near the lower end of the elevator is the air-chamber I, which holds a sufficient quantity of air to form a float, which prevents the lower end of the elevator from passing down beyond a certain point in the water. Where no chamber is used to float the lower end of the elevator and water is being raised from a shallow stream, the elevator will sink to the bottom of the stream and then dirty or muddy water will be raised. If the lower end of the elevator is kept away from the bottom of the stream, only the clear water will be raised. The water passes in through the opening at the lower end of the elevator and is then raised by the buckets N, secured to the endless chains, passes through an opening made in the upper end of the casing, and is then conducted through the spout O to any desired point.

Having thus described my invention, I claim—

The combination, with a water-elevator consisting of a closed casing having exit and inlet openings in its upper and lower ends, respectively, and a carrier placed therein, of an air-chamber connected to the upper side of its lower end, whereby its lower end is allowed to enter the water a suitable distance below the said chamber, and a support to which the upper end of the elevator is pivoted, substantially as specified.

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

ROBERT P. HUFEEY.

Witnesses:

ROBERT CRITCHESON,
THOMAS SCOTT.