

(No Model.)

W. E. HEDGES.
WATER ELEVATOR.

No. 251,583.

Patented Dec. 27, 1881.

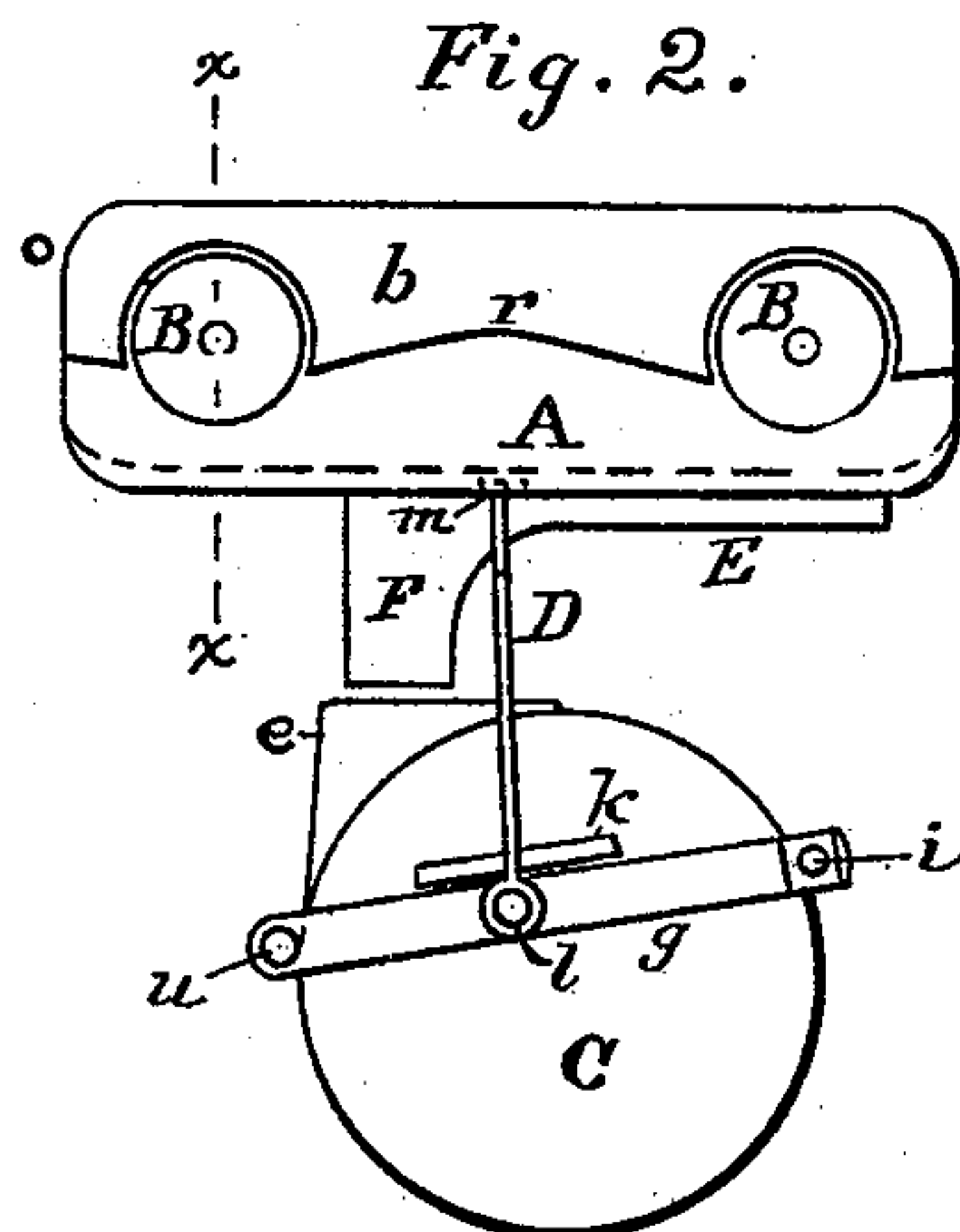
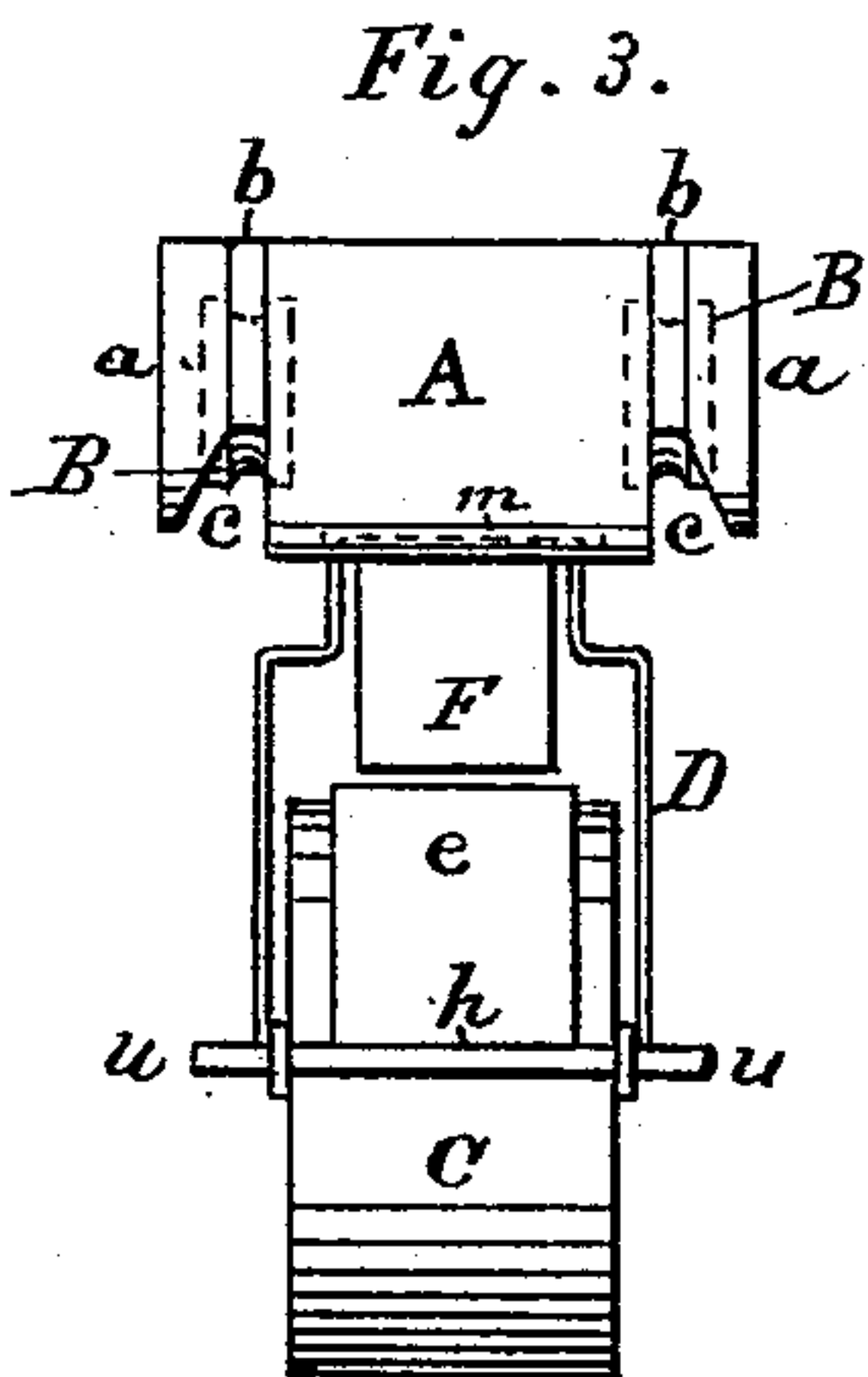
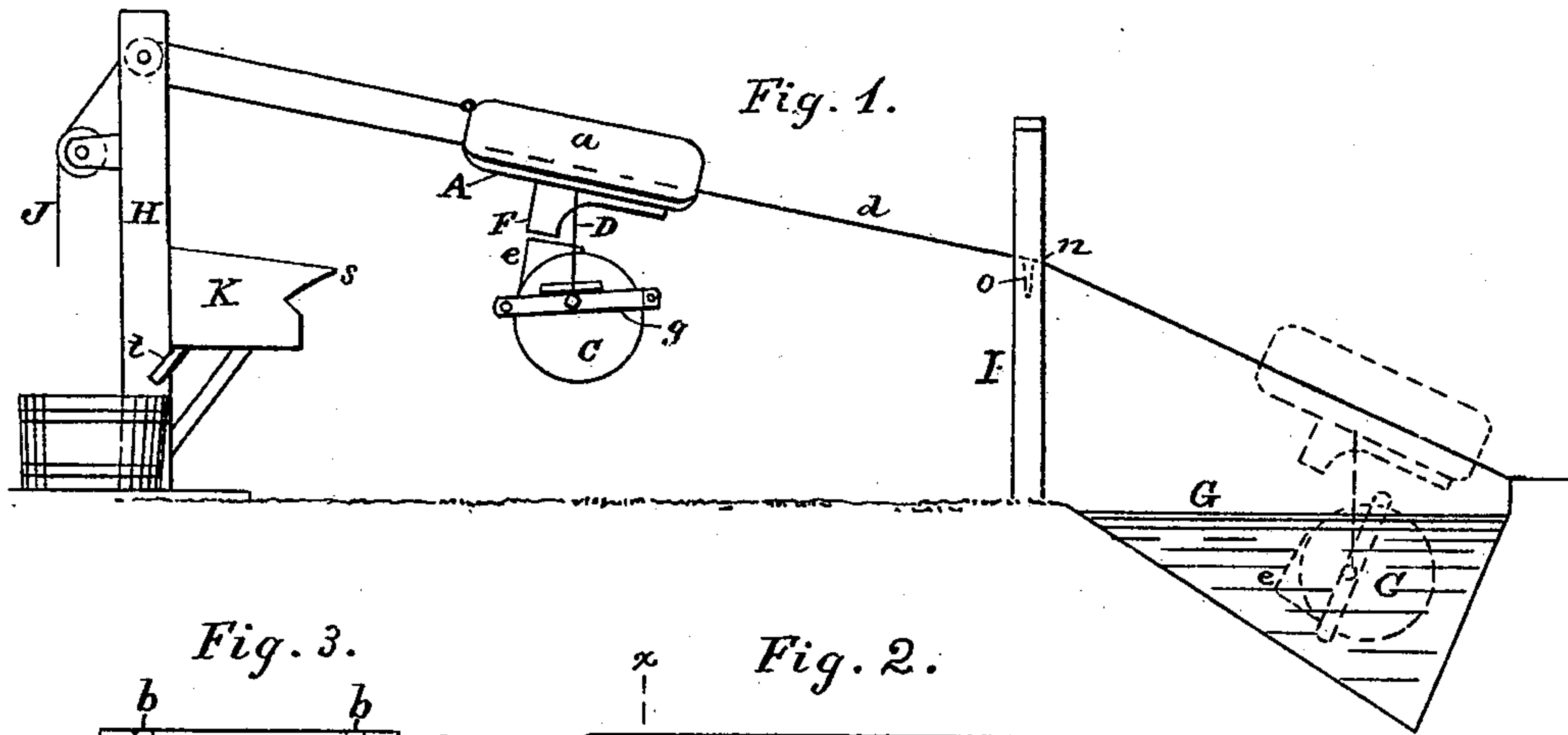
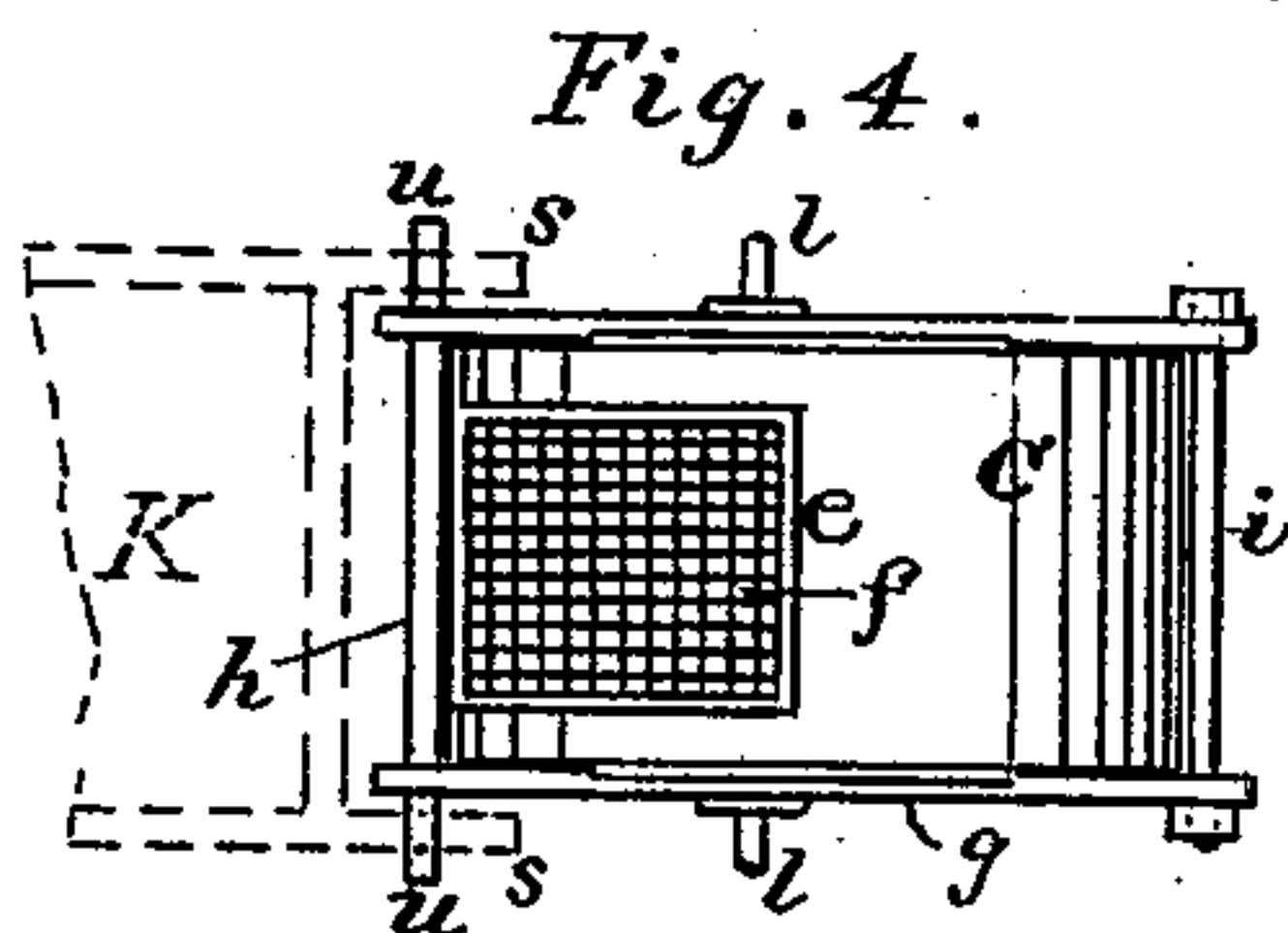
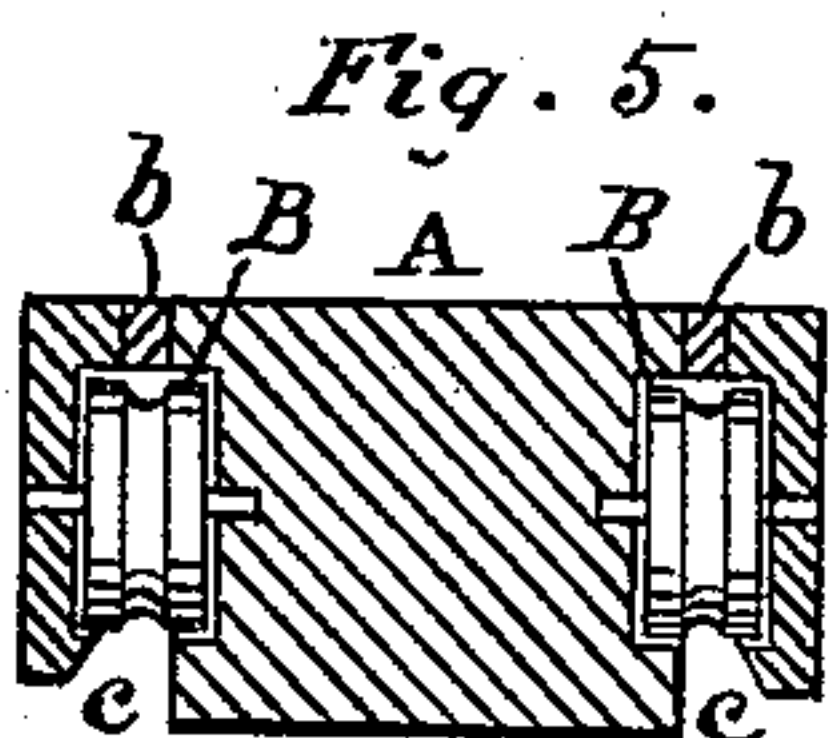
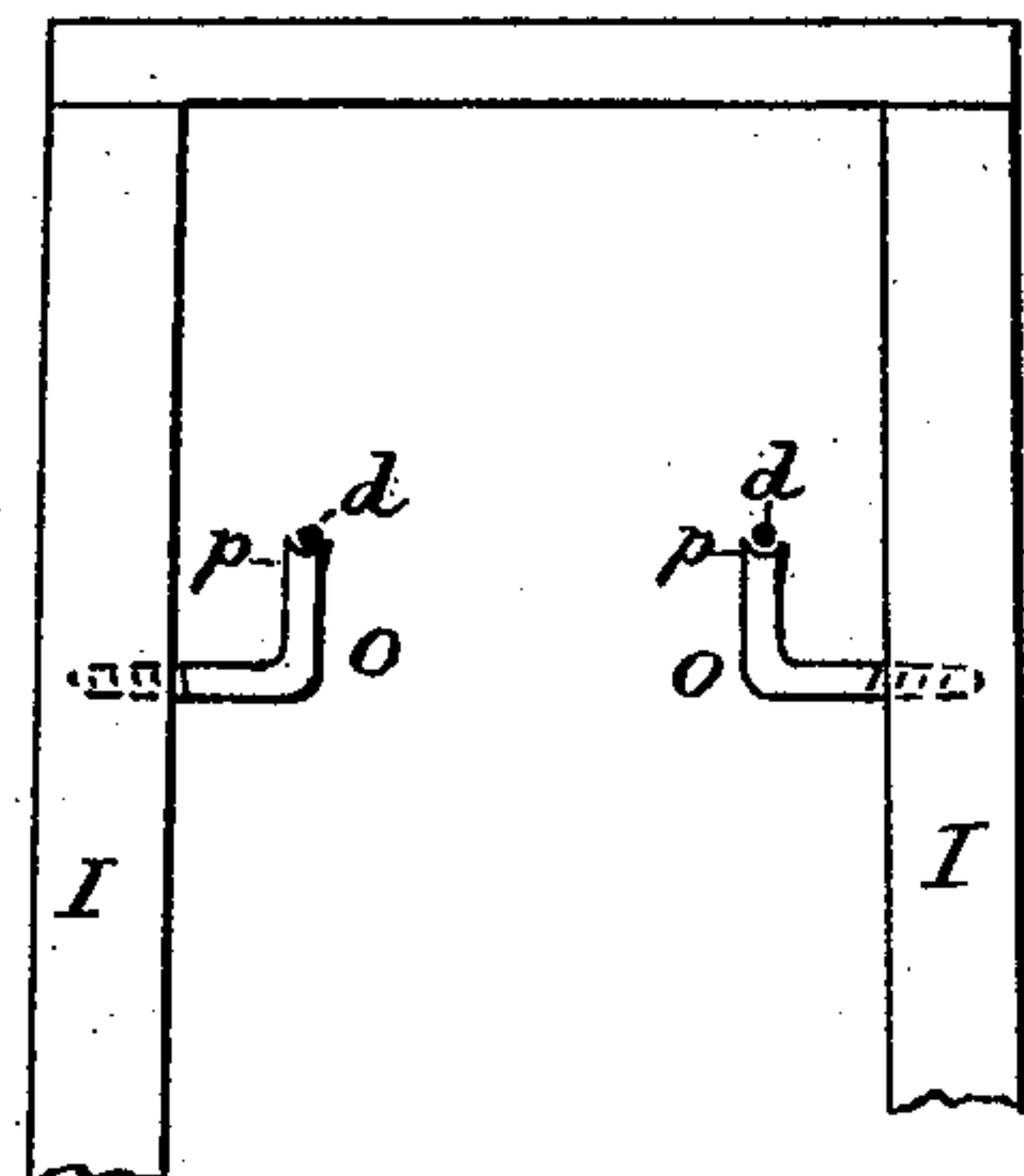


Fig. 6.



Witnesses :
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UNITED STATES PATENT OFFICE.

WILLIAM E. HEDGES, OF POLK BAYOU, ARKANSAS.

WATER-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 251,583, dated December 27, 1881.

Application filed August 19, 1881. (No model.)

To all whom it may concern :

Be it known that I, WILLIAM E. HEDGES, a citizen of the United States, residing at Polk Bayou, in the county of Sharp and State of Arkansas, have invented certain new and useful Improvements in 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to apparatus for raising and carrying water from springs or streams; and it consists in certain improvements in the construction of the same, as herein described, and specified in the claims herein.

In the accompanying drawings, Figure 1 illustrates the apparatus applied to a spring. Fig. 2 is a side view of the car with the water-bucket attached, a side piece of the car being removed. Fig. 3 is an end view of the car and bucket. Fig. 4 is a plan of the bucket. Fig. 5 is a transverse section of the car on line *x x* of Fig. 2. Fig. 6 represents the manner of supporting the wires on which the car runs.

The car and water-bucket are of peculiar construction, and move on an inclined way formed by two wires leading to the spring or stream from which the water is taken. The bucket is so constructed and attached to the car that when it is pushed into the water by the car it turns over far enough to become filled, and resumes its upright position as the car starts back toward the house or point to which the water is to be carried. The reservoir or receptacle into which the water is discharged from the bucket is provided with projections, which catch two projecting arms or pins on the bucket as the latter approaches, so that it is tilted over and discharges its contents into the reservoir.

The car, as usually constructed, consists of a block, A, two side pieces, *a*, and two intervening pieces, *b*, (see Figs. 3 and 5,) these parts being firmly bolted together after being recessed and shaped to receive the four wheels B. Grooves *c* are formed on the under side of the car by beveling the side pieces, *a*, so that

the grooved wheels B in the recesses may rest on the wires *d*, which form the way of the car.

C indicates a bucket, usually of circular form, and provided with a spout, *e*, the mouth of which has a strainer, *f*, preferably of wire-cloth, to prevent leaves or anything floating on the water in the spring from entering the bucket when being filled. The bucket is suspended from the car by means of a bail, D, and a band formed of two side pieces, *g*, and the bolts or rods *h* and *i*, the forward ends of the side pieces being fastened to the rod *h*, extending across the front of the bucket, and the rear ends being secured to the rod *i*, extending across the rear of the bucket, as shown. The band, being placed about the bucket, may be secured thereto by means of rod *i* passing through apertures in the side pieces, *g*, and having a nut on its threaded end. A shoulder or cleat, *k*, formed on or fastened to each side of the bucket, serves to keep it in position within the band. The pins *l*, passing through eyes in the ends of the bail, are screwed into the side pieces, thus forming a loose connection of the bucket and bail. The upper part of the bail passes in a slot (indicated at *m*) in the lower side of the block A, a little forward of the center, where it is loosely secured by the piece E, fastened to block A, as shown. As will be seen, the points of connection of the bail with the bucket are somewhat higher and farther forward than the center of the bucket, the latter being sustained in proper position by the spout *e* coming in contact with the downward projection F of the part E.

The car runs to and from the spring G on an inclined way formed by the wires *d*, secured at one end to a post, H, and, descending to the spring, pass over the same and are fastened at a convenient point somewhat higher than the surface of the water. For a short distance before reaching its lower terminus the descent of the way is made more steep, (see Fig. 1,) so that the bucket will be plunged into the water with more force. Thus an angle is formed in the wireway at *n*, where the wires are supported by the rectangular bolts *o*, (see Fig. 6,) which are screwed into the posts I, and have their upward extremities *p* notched to receive the wires *d*. The rectangular bolts *o* are formed and adapted to support the wires and allow

the grooved car to pass over them without impediment. The curved form of the lower edge, *r*, of the pieces *b* in the body of the car enables it to pass over the angle *n* in the way without interruption. As the car descends to the water the bucket is plunged therein, and the bail *D* being connected with the bucket at points forward of the center, as shown, the bucket naturally tilts forward, as indicated in dotted lines in Fig. 1, and becomes filled through the spout *e*. On being raised from the water by the returning car the bucket resumes its upright position, the car being drawn toward the post *H* by means of a cord, *J*.

K indicates a trough or receptacle, into which the water is discharged from the bucket. It is provided with two projections, *s*, which are in position to catch the projecting ends *u* of the rod *h*. As the car approaches the post *H* the projections *s* of the trough catch the laterally-projecting ends *u*, and the bucket is thus caused to tilt forward and discharge its contents into the trough *K*, a short pipe, *t*, being usually provided to conduct the water from *K* to a suitable receiving-vessel.

The car is of simple and cheap construction, easily made by any person accustomed to wood-working, and the various parts of the appara-

tus are readily separated for repair or renewal of any part.

I claim—

1. In a water-carrying apparatus, the grooved car, recessed and provided with wheels *B* and projection *F*, in combination with a bucket having a spout, *e*, and a bail, *D*, connected with the bucket at points forward of its center and toward the spout, substantially as and for the purposes described.

2. The grooved car for carrying the bucket, the body of the car being composed of the parts *A*, *a*, and *b*, recessed and constructed substantially as shown, for the purposes set forth.

3. In combination with the car, a bucket, *C*, provided with the adjustable band having pins *l*, and a bail, *D*, substantially as set forth.

4. In a water-carrying apparatus, a bucket, *C*, having the adjustable band provided with lateral projections *u*, in combination with the fixed trough *K*, provided with projections *s*, substantially as shown and described.

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

WILLIAM E. HEDGES.

Witnesses:

R. H. LEE,

W. D. WHITE.