A. J. BEELMAN, Jr.

ENDLESS WATER POWER PADDLE MOTOR.

APPLICATION FILED MAY 3, 1909.

953,455.

Patented Mar. 29, 1910.

2 SHEETS—SHEET 1.

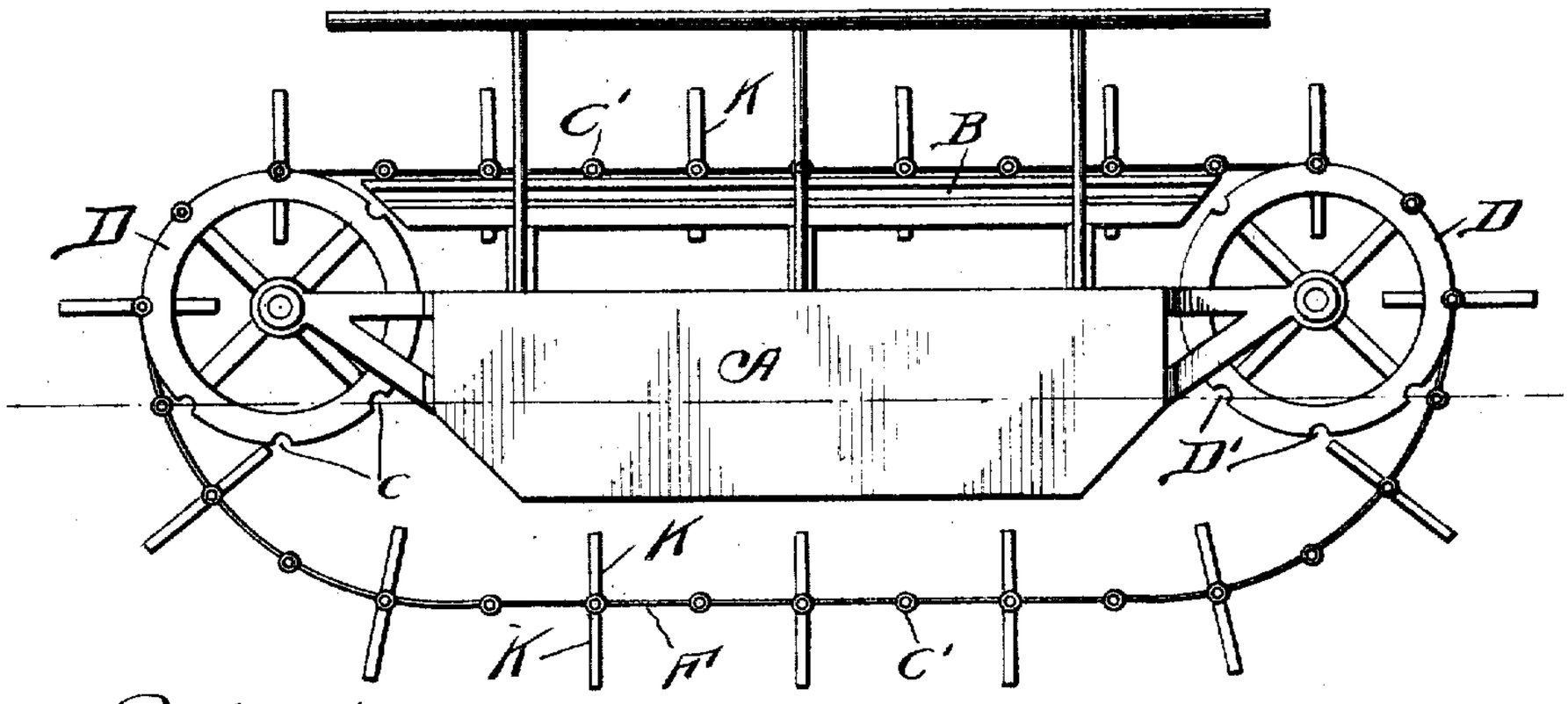


Fig. 1.

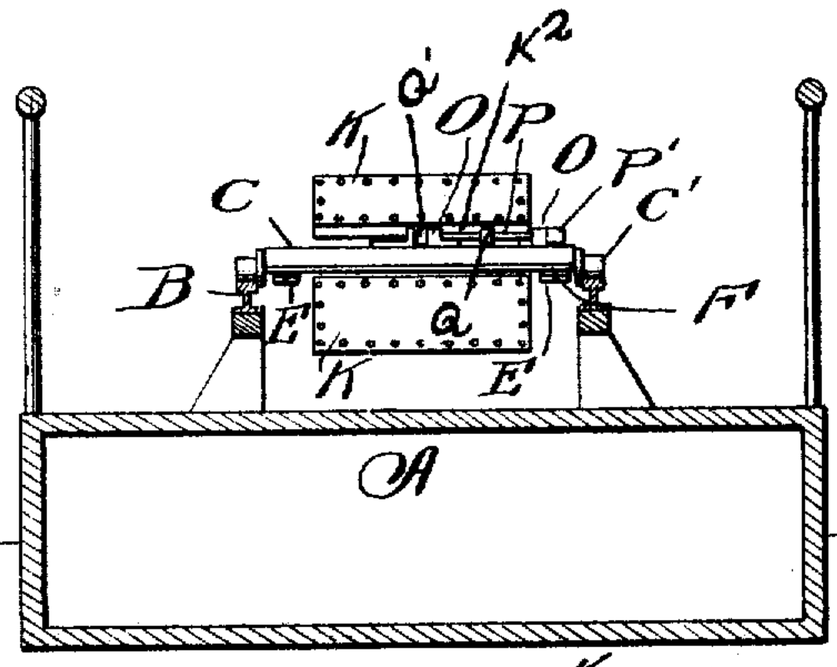
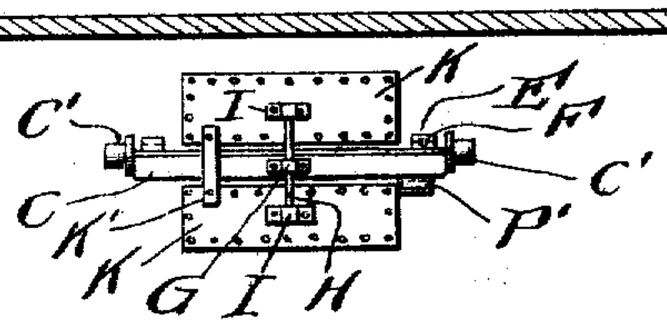


Fig. 2.



Inventor

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Witnesses

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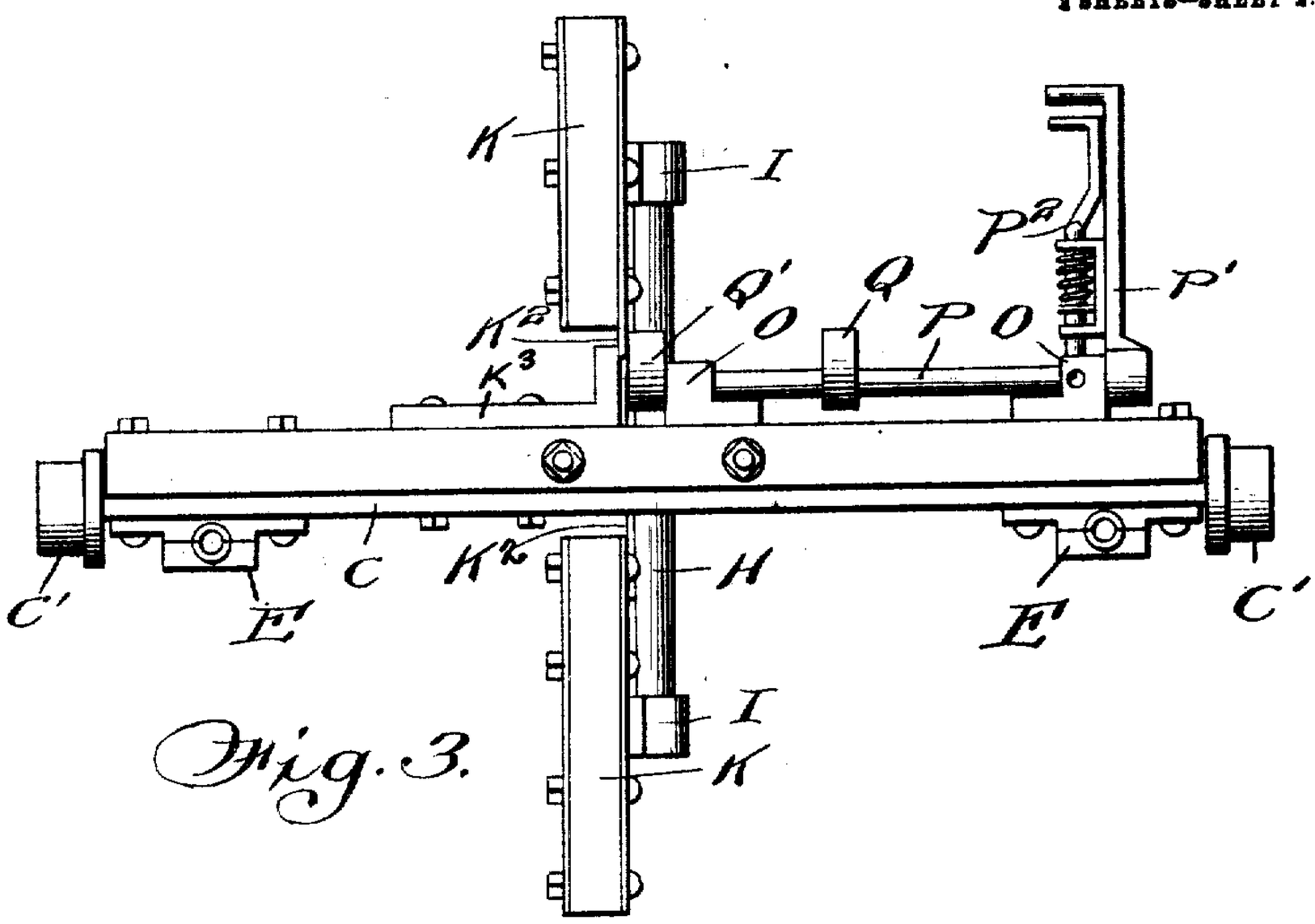

Fig. 3.

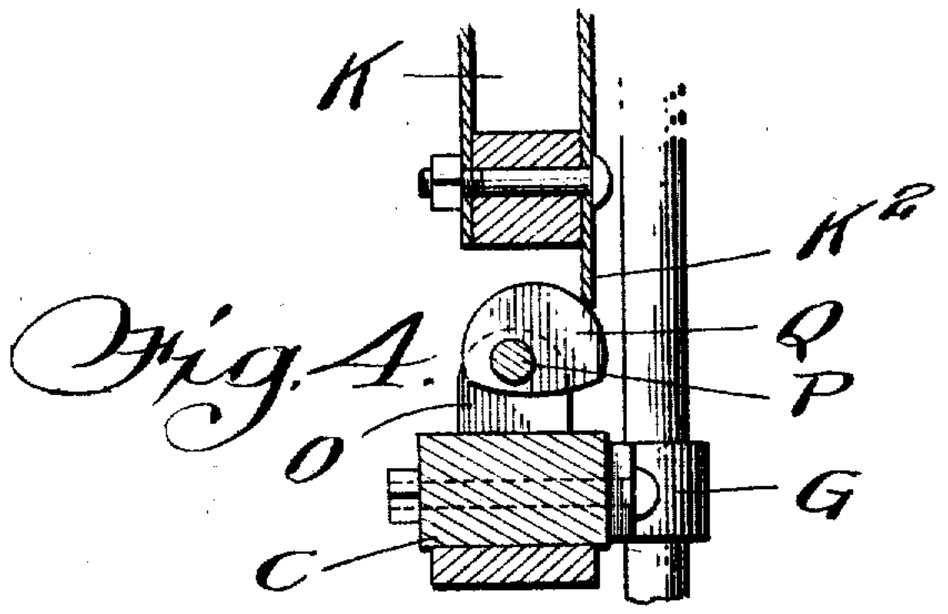

Fig. 4.

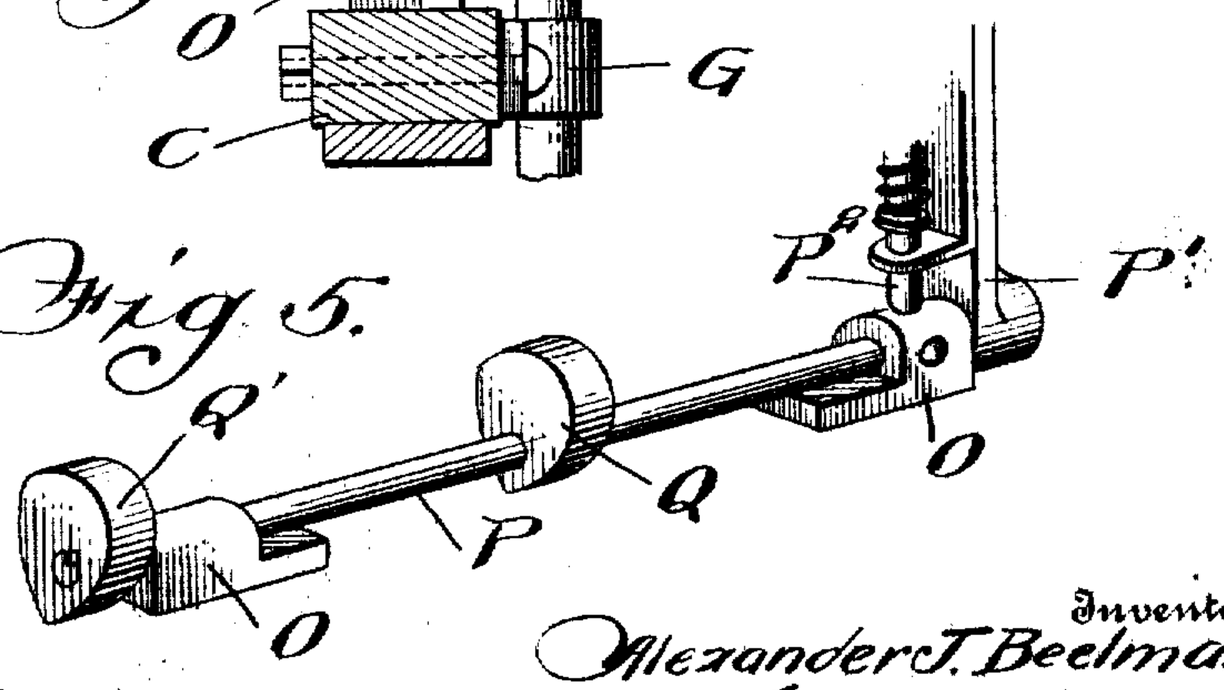

Fig. 5.

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UNITED STATES PATENT OFFICE.

ALEXANDER JOSEPH BEELMAN, JR., OF WESTWEGO, LOUISIANA.

ENDLESS WATER-POWER PADDLE-MOTOR.

953,455. Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed May 3, 1909. Serial No. 493,728.

To all whom it may concern:

Be it known that I, ALEXANDER JOSEPH BEELMAN, Jr., a citizen of the United States, residing at Westwego, in the parish of Jefferson and State of Louisiana, have invented certain new and useful Improvements in Endless Water-Power Paddle-Motors, of which the following is a specification.

This invention relates to new and useful improvements in endless current motors and comprises various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is a side elevation of a motor apparatus embodying the features of my invention. Fig. 2 is a cross sectional view, parts being shown in elevation. Fig. 3 is an enlarged detail perspective view showing the manner of reversing the blades. Fig. 4 is a detail sectional view showing the locking means for holding the blades in an adjusted position, and Fig. 5 is a detail view in perspective of the cam and mechanism for operating the same.

Reference now being had to the details of the drawings by letter, A designates a frame adapted to be anchored in any suitable manner in a rapidly flowing current of water and supports the tracks B on which an endless motor made up of shafts C and having flanged wheels C′ journaled upon their ends is adapted to travel. Journaled in suitable bearings at the ends of said frame are the sprocket wheels D having transverse grooves D′ in the circumference thereof and adapted to receive the shafts of the endless motor. Each of said shafts has clamping members E fastened thereto which are adapted to engage the endless cable or chain F, and G is a strap which is fastened to each shaft and forms a journal bearing for the blade carrying shaft H to each end of which is fastened a blade K said blades being held to the shaft by means of plates I. A strap K′ is fastened to each pair of blades upon the shaft H and serves as a stop when coming in contact with the shaft C to limit the rotary movement of the blade carrying shaft H in one direction. Journaled in the bearing members O upon said shaft and intermediate the two blades is a rock shaft P, one end of which has a lever P′ fastened thereto.

Q and Q′ designate cams which are fixed to the shaft P, one of said cams Q′ being adapted, when turned in the position shown in Fig. 3 of the drawings to coöperate with the angled bar K^3 to grip the extension K^2 of the blade and hold the latter in position at right angles to the length of the shaft and in which position the blades are adapted to feather in the stream. A spring-actuated pawl, designated by letter P^2, is mounted upon the lever P, said pawl being adapted to engage an indenture formed in one of the bearing plates O for the purpose of holding the rock shaft in an adjusted position. Both of the cams are adapted to engage a thin projecting portion K^2 of the blades and cooperate with the strap K′ to hold the blades in the position parallel with the shafts C or in operative relation in a current of water.

It will thus be seen that, by the provision of an apparatus embodying the features of my invention, an endless motor apparatus is afforded so constructed that, by the manipulation of the rock shaft connected to the levers, the blades which are arranged in pairs may be thrown at right angles to the shaft when it is desired to feather, the same or parallel with the shaft when in operative positions at right angles to the current, means being provided for securely locking the blades in either of the adjusted positions. Power may be transmitted from one or the other of the shafts upon which the sprocket wheels are mounted to any suitable location, not shown.

What I claim to be new is:—

1. An endless water current motor apparatus comprising a frame, sprocket wheels journaled in suitable bearings thereon, an endless cable passing about said wheels, tracks mounted upon the frame, shafts fixed to said cable, blades arranged in pairs upon each shaft, means for turning said blades into feathering positions, and mechanisms for locking the blades in adjusted positions.

2. An endless water current motor apparatus comprising a frame, sprocket wheels journaled in suitable bearings thereon, an endless cable passing about said wheels, tracks mounted upon the frame, shafts fixed to said cable, a rock shaft journaled upon each of the shafts which are fixed to said

cable, blades arranged in pairs and fastened to each of said rock shafts, a bar connecting said blades, rotatable cams coöperating with said bar and shaft fixed to the cable for holding the blade in operative position.

3. An endless water current motor apparatus comprising a frame, sprocket wheels journaled in suitable bearings thereon, an endless cable passing about said wheels, tracks mounted upon the frame, shafts fixed to said cable, a rock shaft journaled upon each of the shafts which are fixed to said cable, blades arranged in pairs and fastened to each of said rock shafts, a bar connecting said blades, a lever-carrying shaft journaled upon the endless motor apparatus, cams fixed to said lever-operated shaft, a projection upon the shaft fixed to said cable and adapted to coöperate with a portion of the blade to hold the same in a feathered position.

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

ALEXANDER JOSEPH BEELMAN, JR.

Witnesses:
J. B. BLANER,
L. M. JONES.