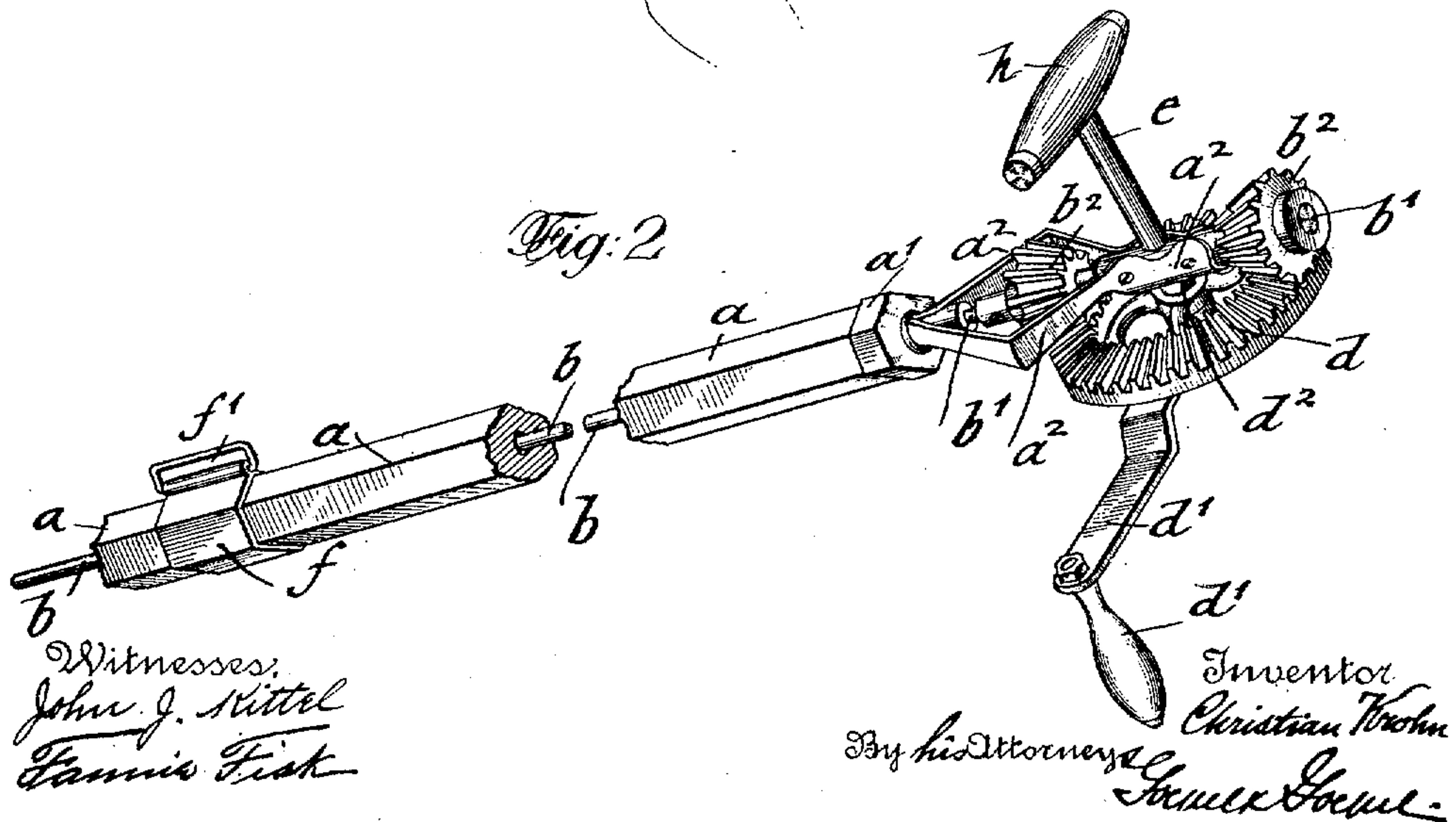
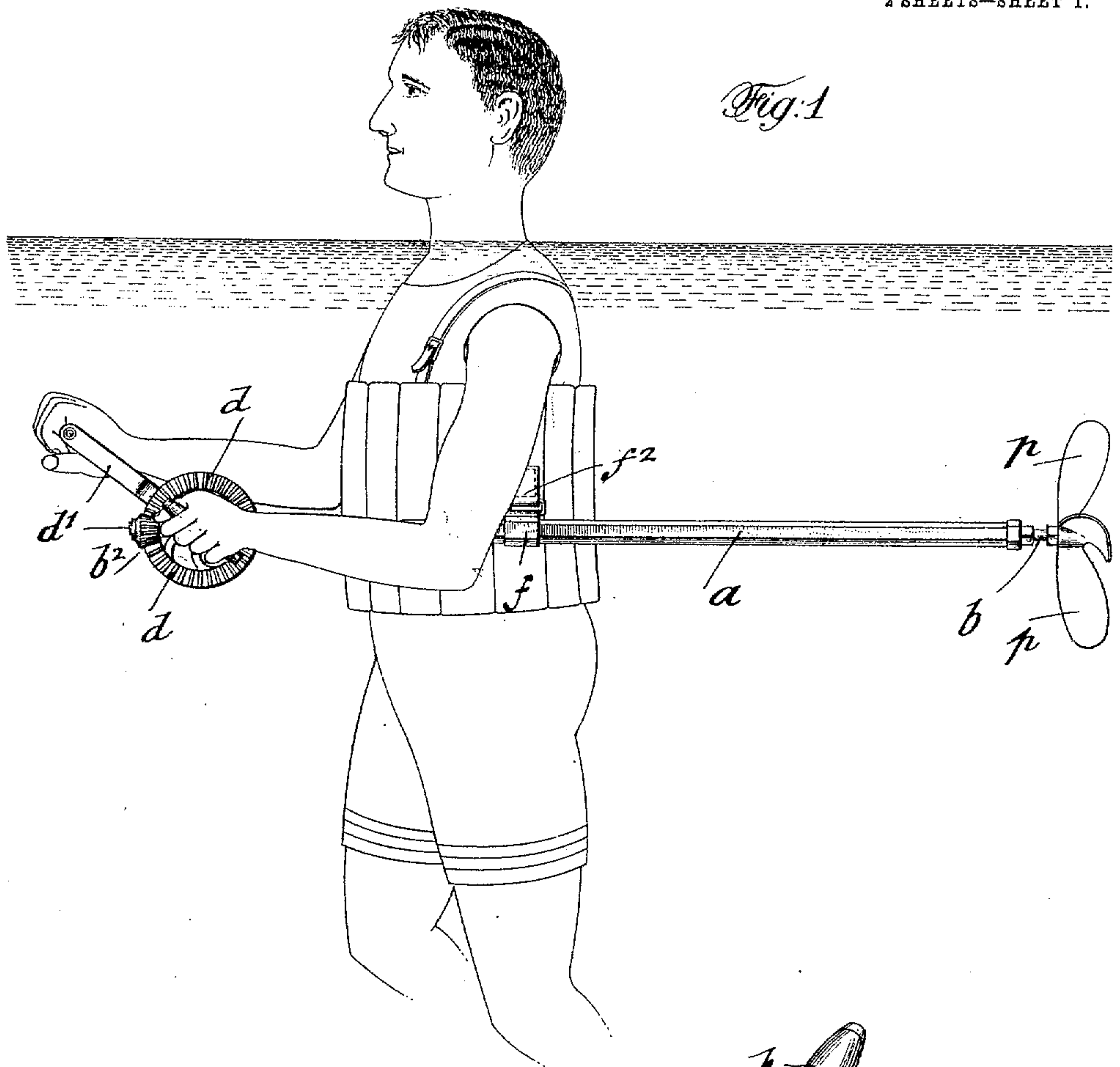


965,912.

Patented Aug. 2, 1910.

2 SHEETS—SHEET 1.

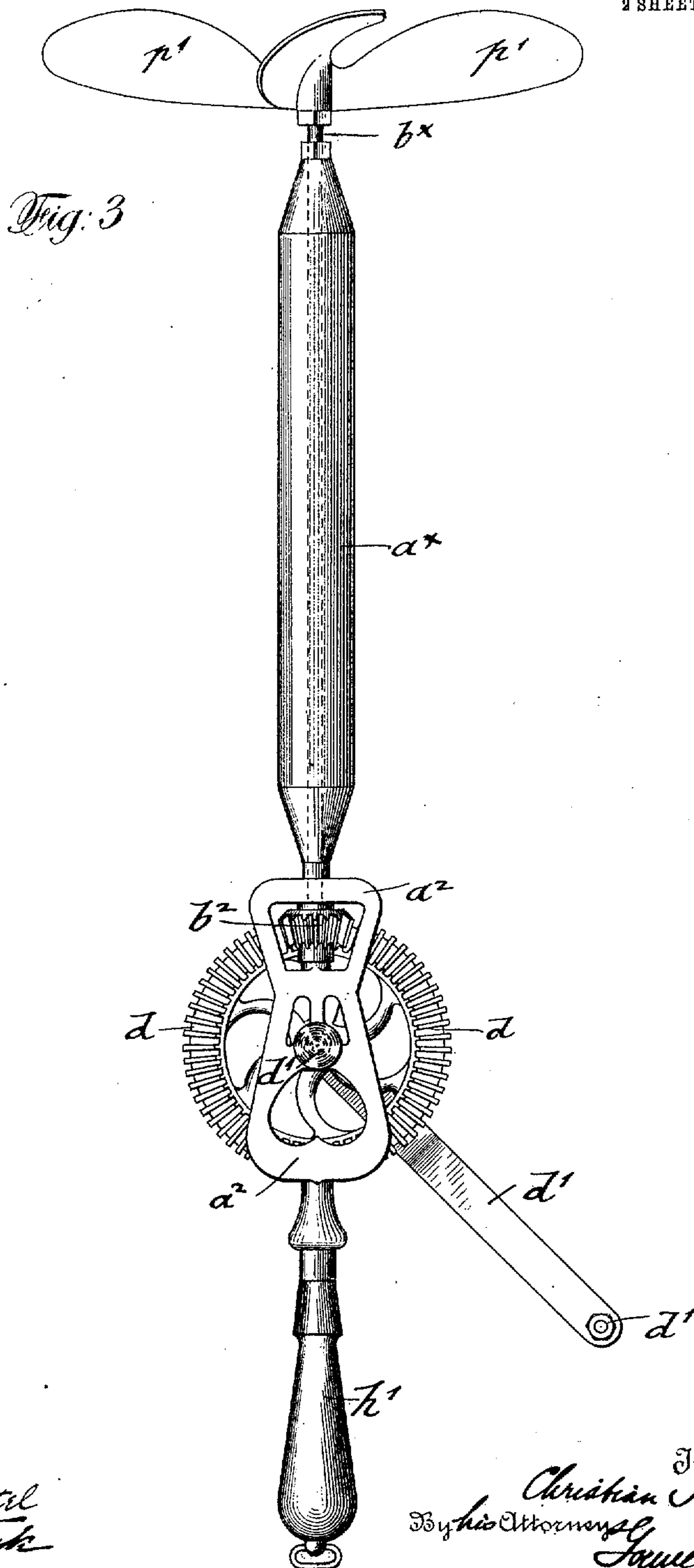


C. KROHN.
PROPELLING DEVICE.
APPLICATION FILED MAR. 20, 1909.

965,912.

Patented Aug. 2, 1910.

2 SHEETS—SHEET 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHRISTIAN KROHN, OF NEW YORK, N. Y.

PROPELLING DEVICE.

965,912.

Specification of Letters Patent.

Patented Aug. 2, 1910.

Application filed March 20, 1909. Serial No. 484,656.

To all whom it may concern:

Be it known that I, CHRISTIAN KROHN, a citizen of the United States of America, residing in New York, in the borough of Manhattan, county and State of New York, have invented certain new and useful Improvements in Propelling Devices, of which the following is a specification.

This invention relates to an improved propelling device which is to be used for sporting purposes, when bathing, for moving the body through the water, or which can be attached to boats for producing the forward motion of the same while looking in the direction of motion of the boat; and for this purpose the invention consists of a propelling device which is held under water by one hand and operated by the other hand and which comprises a tubular supporting rod, a shaft turning in bearings of said rod, means for rotating said shaft located at the upper end of the rod, means for holding the device, and a propeller attached to the opposite end of the shaft.

The invention consists further of certain details of construction which will be fully described hereinafter and finally pointed out in the claim.

In the accompanying drawings, Figure 1 represents a perspective view of my improved propelling device shown as attached to the swimming vest of a person in the water, Fig. 2 is a perspective view of the propelling device, with a portion broken off, and Fig. 3 is a side-elevation of a modified construction of the propelling device.

Similar letters of reference indicate corresponding parts throughout the figures.

The improved propelling device consists of a tubular rod a , through which is passed a shaft b , which turns in bearings of the tubular rod. To the upper end of the tubular rod a is applied a cap a^1 on which is supported a frame a^2 provided with bearings for an extension b^1 of the shaft b . To the extension b^1 of the shaft, are rigidly attached either one or the other, as desired, of two bevel-pinions b^2 which mesh with a bevel gear-wheel d that is turned by a hand-crank d^1 attached to the bevel gear-wheel d , the second of said bevel-pinions being loose on the shaft and serving as an idler. The bevel gear-wheel d rotates on a short stud or shaft d^2 applied to the frame a^2 . To the supporting frame a^2

of the bevel-pinions b^2 and bevel gear-wheel d is attached a laterally-extending arm e to which a handle h is applied. To the opposite end of the shaft b is applied a propeller p . The tubular rod a is provided at a point between the driving mechanism and the propeller with a ferrule f and loop f^1 , which latter is suspended from a supporting device f^2 that is attached to a swimming vest or life-preserver g , preferably to the left side of the same, so that the tubular rod with its attachments is supported alongside of the vest, the entire propelling device being held under water by the left hand grasping the handle of the supporting frame and operated with the right hand turning the hand-crank of the driving mechanism.

The propeller is rotated by the driving-gear and the body moved in forward or backward direction in the water according as the crank-arm is turned in one or the opposite directions. As the body is supported by the swimming vest or life-preserver, the quick and convenient propulsion of the body forward or backward, according to the direction of motion of the crank-arm, is obtained.

In Fig. 1 the propelling device is shown in position for propelling a person in the water, the device being supported alongside of the body. The propelling device can also be used in such a manner that instead of pushing the body forward the body is pulled or drawn through the water. This arrangement is shown in Fig. 3. It consists of the handle h^1 , which is arranged in line with the tubular rod a^x and held by the left hand, in front of the body, while the right hand operates the hand-crank c^1 and the motion-transmitting gear so as to impart rotary motion to the propeller p^1 , which is arranged at the forward end of the propeller-shaft b^x , so that when the same is rotated a forward motion through the water takes place.

The propelling device shown in Figs. 1 and 2 can also be used in connection with a boat, by applying it to a fastening device attached to the stern of the boat, or two such devices can be applied to the gunwale of the boat, one at each side, the propeller or propellers being rotated by the hand-operated driving gears. This permits the forward propulsion of the boat, either by one or two propellers, while the persons are sitting and

looking forward in the direction of motion of the boat.

The propelling device forms an easily operated mechanism for sporting purposes, both in propelling a person in the water or for propelling a boat, by which a great deal of amusement can be obtained while bathing or boating.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

A propelling device comprising a tubular supporting rod, a pair of members secured to the forward end of the tubular rod and forming a supporting frame having spaced free ends, a tubular bearing piece secured between said free ends, a shaft passing entirely through said bearing piece and the tubular

supporting-rod, a pinion on said shaft within said supporting frame, a stub-shaft frame extending laterally from said bearing piece, a gear wheel on said stub-shaft and engaging said pinion, a handle on said gear wheel, an arm extending laterally from said bearing piece on the side away from said stub-shaft, a handle disposed transversely of said arm at the end thereof, a metal sleeve non-rotatably secured to the tubular rod, and a metallic loop secured to said sleeve.

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

CHRISTIAN KROHN.

Witnesses:

PAUL GOEPEL,
H. J. SUHRBIER.

Bussell - 857,868 - (115-17)
Richardson - 222,951 - (9-18)
Br. Pat. Remfry - (Fig. 5) 1,636 of 1857 (9-18)