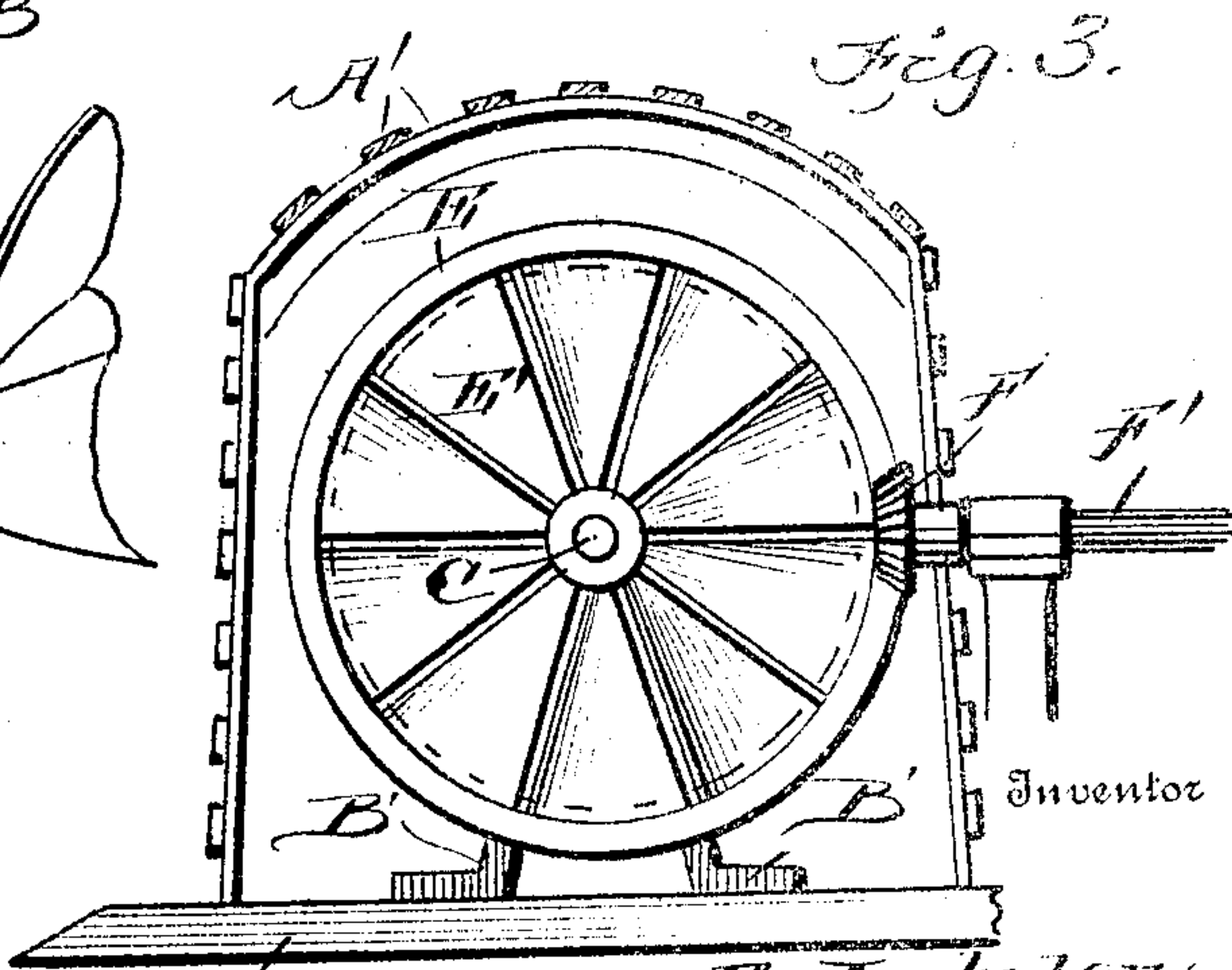
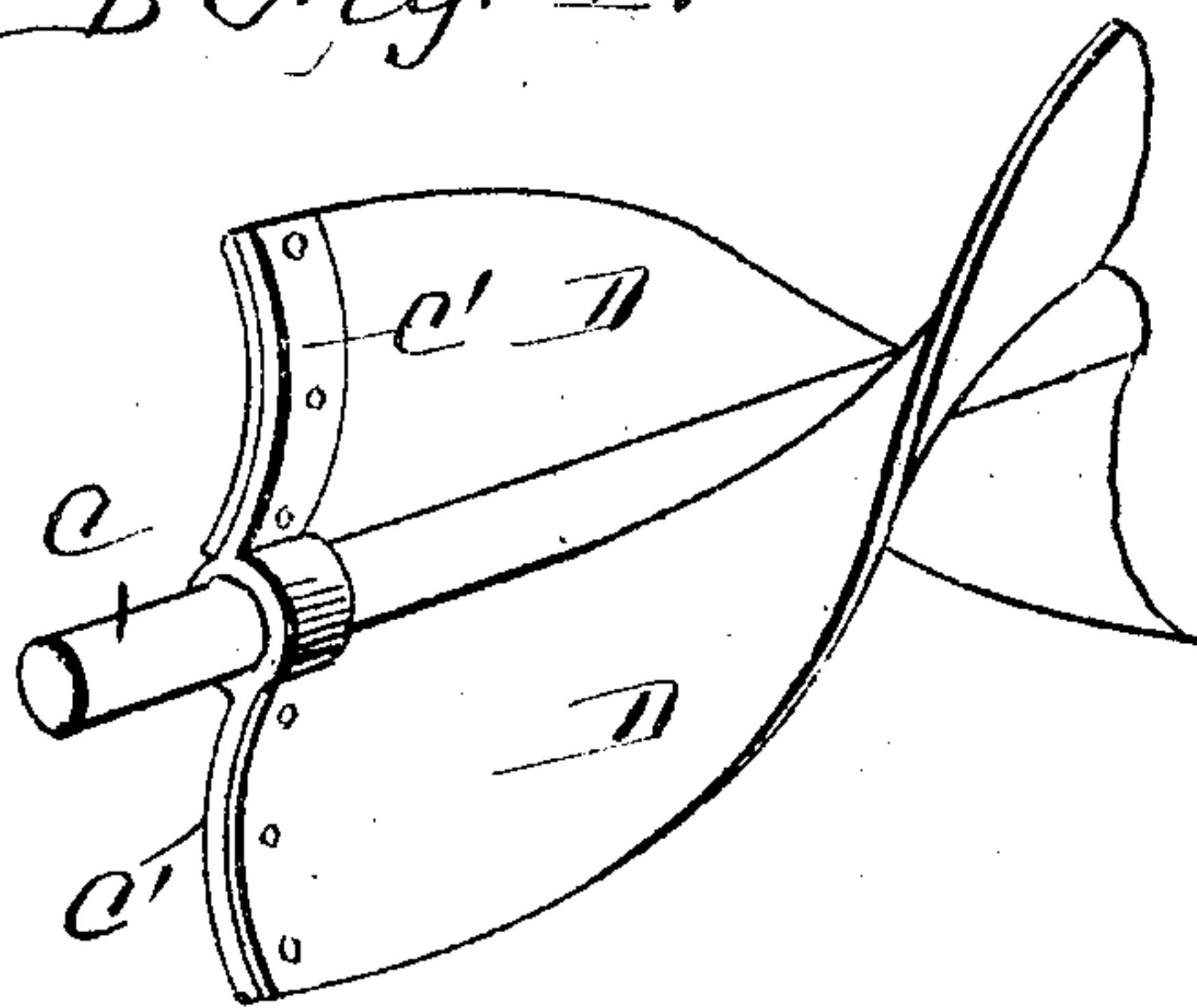
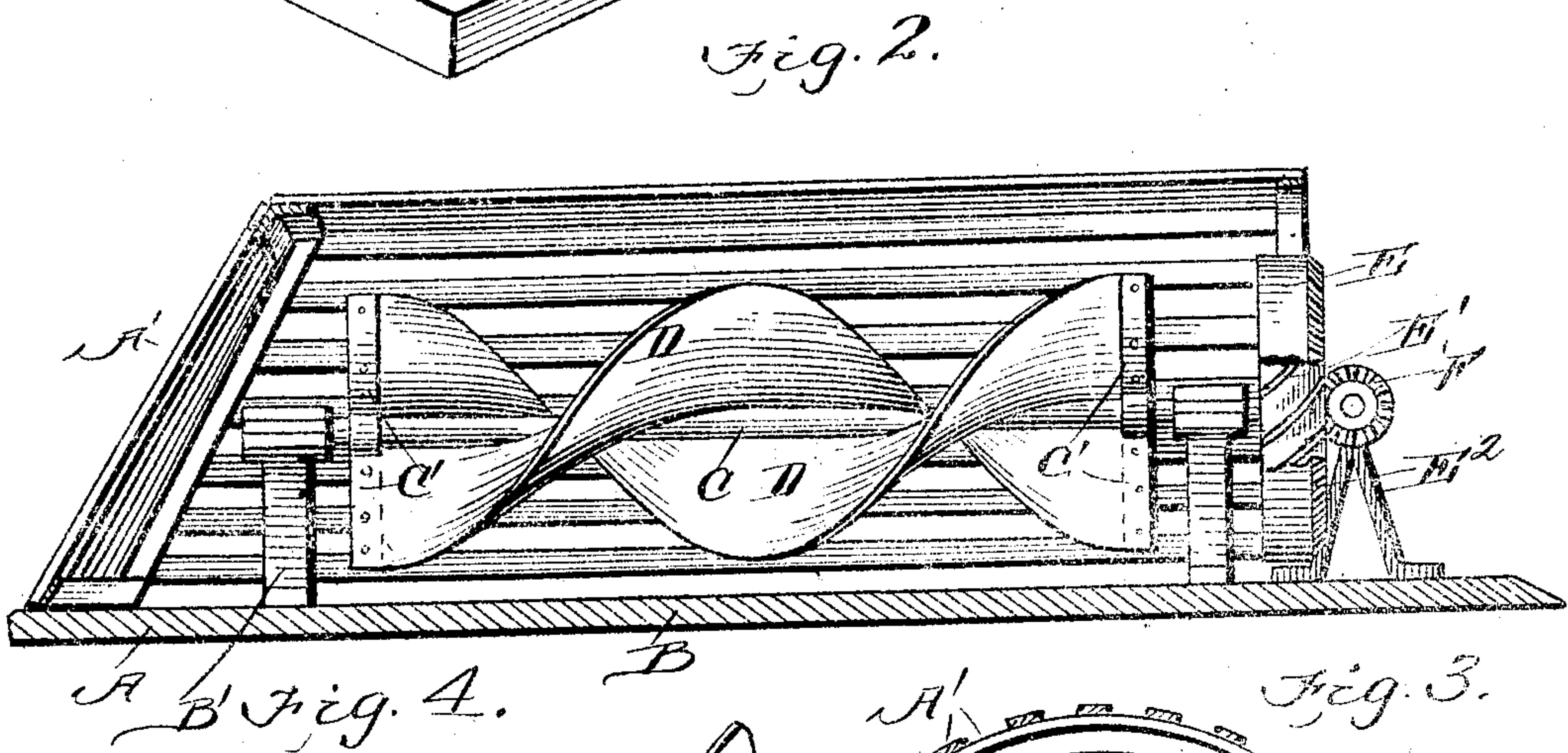
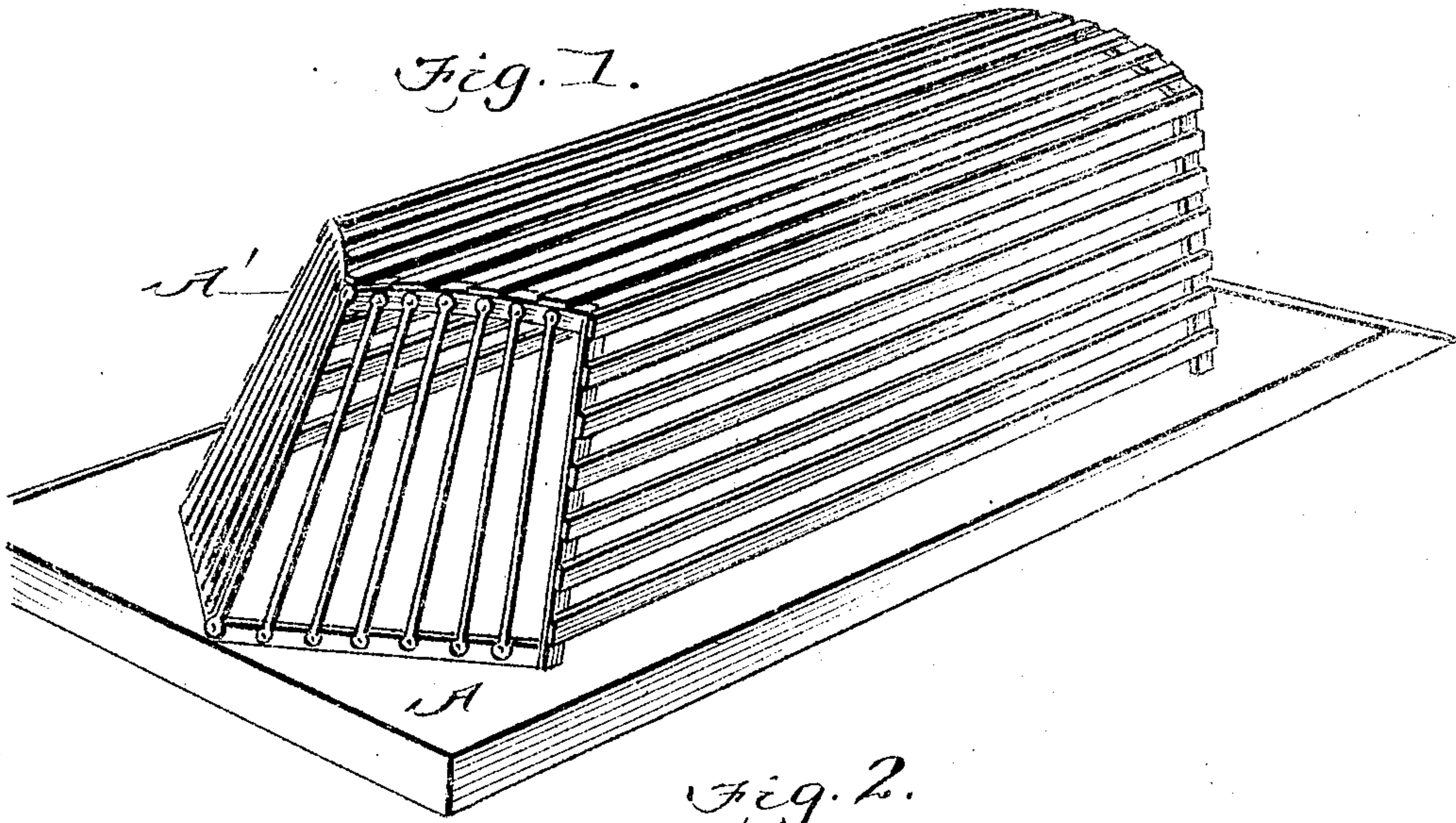


E. IMBODEN.
CURRENT MOTOR.

APPLICATION FILED DEC. 10, 1907.

Patented Mar. 9, 1909.

914,574.



Witnesses

M. S. Blauvelt
E. B. McBath

Inventor

E. Imboden

By

O'Meara Brock

Attorneys

UNITED STATES PATENT OFFICE.

EDWIN IMBODEN, OF CAPE GIRARDEAU, MISSOURI.

CURRENT-MOTOR.

No. 914,574.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed December 10, 1907. Serial No. 405,953.

To all whom it may concern:

Be it known that I, EDWIN IMBODEN, a citizen of the United States, residing at Cape Girardeau, in the county of Cape Girardeau and State of Missouri, have invented a new and useful Improvement in Current-Motors, of which the following is a specification.

This invention relates to a current motor adapted for use upon the bottom of streams and the object of the invention is a motor of this kind which will be protected against any material floating in the stream and which can be operated during the winter when the surface of the stream is frozen equally as well as during other seasons of the year.

The invention consists of the novel features of construction hereinafter set forth, pointed out in the claim and shown in the drawings, in which—

Figure 1 is a perspective view of the base and protecting grille work; Fig. 2 is a longitudinal section through the base and grille, the motor being shown in elevation, a small portion being broken away; Fig. 3 is an end view looking up stream; Fig. 4 is a detail perspective view of a portion of the blades and a shaft.

In these drawings A represents a suitable base of sufficient size and weight to anchor it securely in place upon the bed of a stream. Upon this base is mounted a frame of grille work A', the up stream end of which tapers to a point. Upon the base A are placed standards B adjacent each end and upon these standards is journaled a rotatable shaft C. At each end portion of the shaft are arranged two oppositely extending and oppositely curved arms C'. These arms are secured to blades D which are twisted so as to encircle spirally the shaft C, the two

blades combined forming a screw against which the force of the current passing through the grille A' is expended. Upon the down stream end of the shaft D is mounted a wheel E having curved and angled blades E' and also provided upon its rim with beveled cog teeth E² which mesh with a beveled pinion F carried at an end of a shaft F'.

The operation of the device will be obvious and it will also be readily understood that at the shore end of the shaft F' any coupling means may be employed which may be found necessary to connect said shaft to the shaft or machinery to be driven. It will also be obvious that a number of these motors may be connected together so as to increase the power gained. It will also be obvious that the grille A' will protect the motor proper from injury by reason of any floating objects, such as logs which might otherwise damage the motor.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent is—

A current motor comprising a base, a grille work mounted above said base, said grille having a pointed end portion, a shaft longitudinally arranged in said grille and supported from the base, a wheel fixed upon said shaft, said wheel having beveled gear teeth thereon, fan blades arranged within the wheel, spirally arranged blades carried by the shaft, a second shaft at right angles to the first mentioned shaft, and a beveled pinion meshing with the beveled teeth of the wheel.

EDWIN IMBODEN.

Witnesses:

RALPH D. GRAHAM,
JOHN D. WILSON.