

C. Daniels,  
Water Wheel,

No 70,419.

Patented Nov. 5, 1867.

Fig. 1

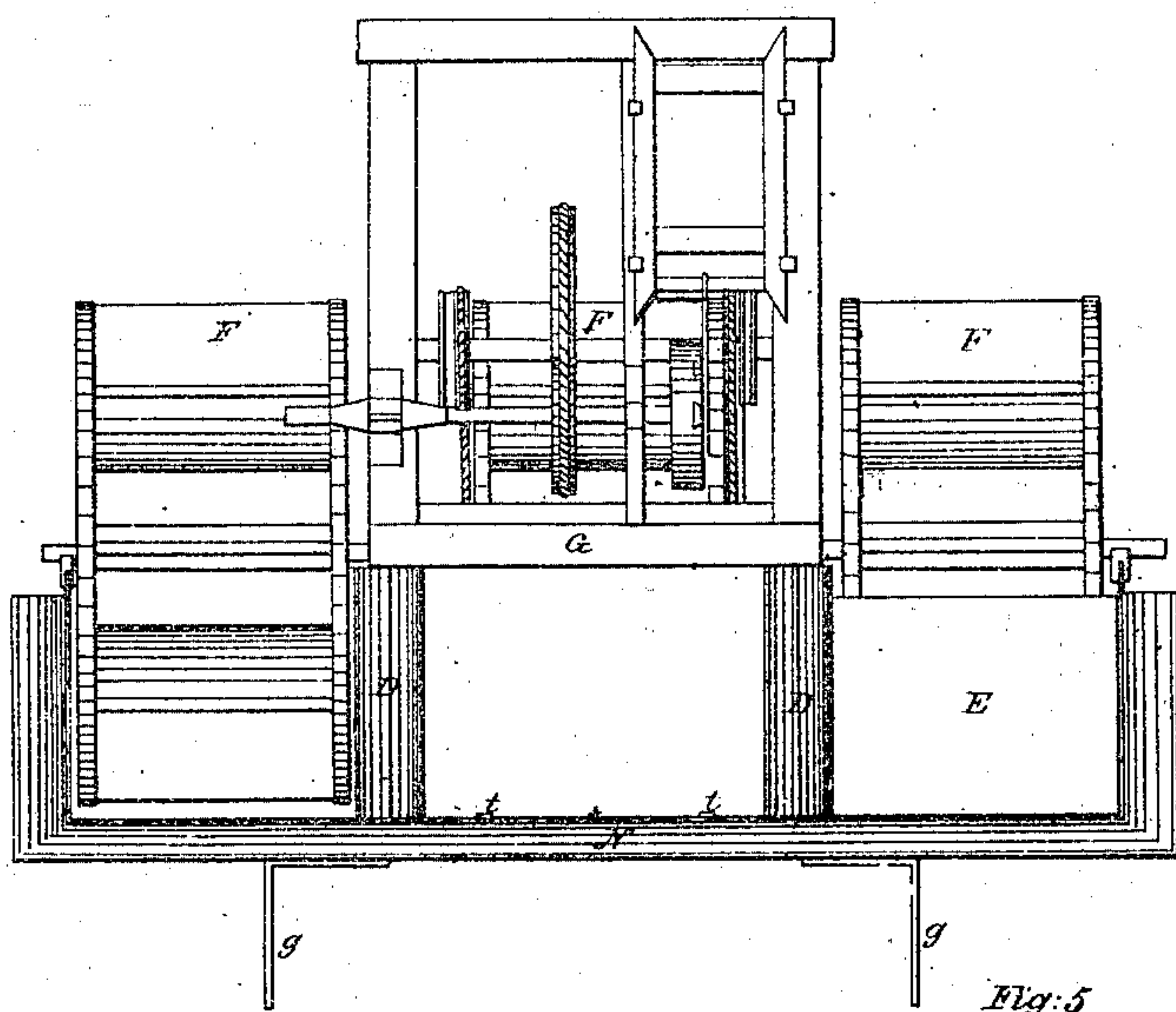
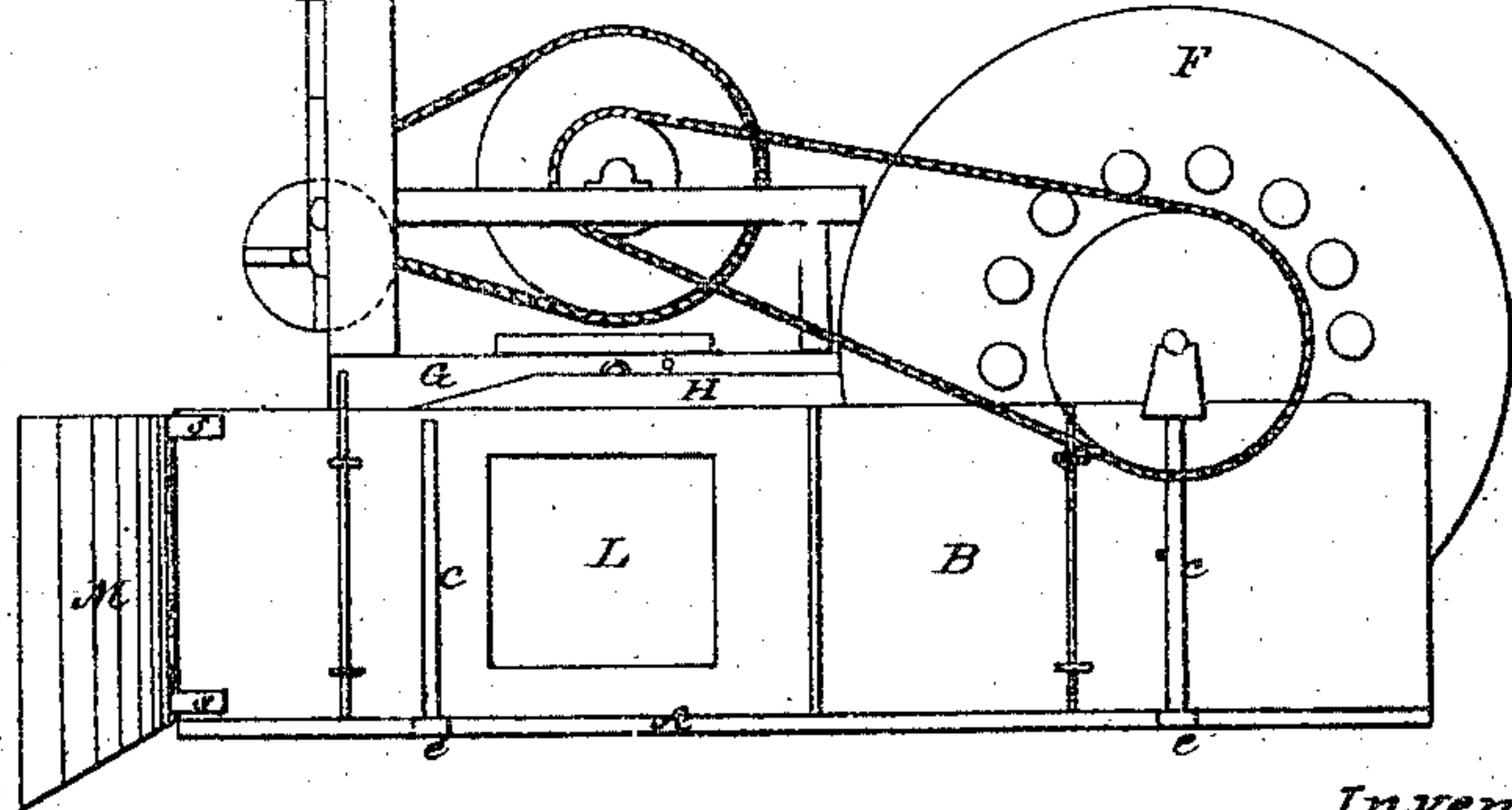


Fig. 5



Fig. 2



Witnesses:

F. Lehmann  
Pro A. Ellis

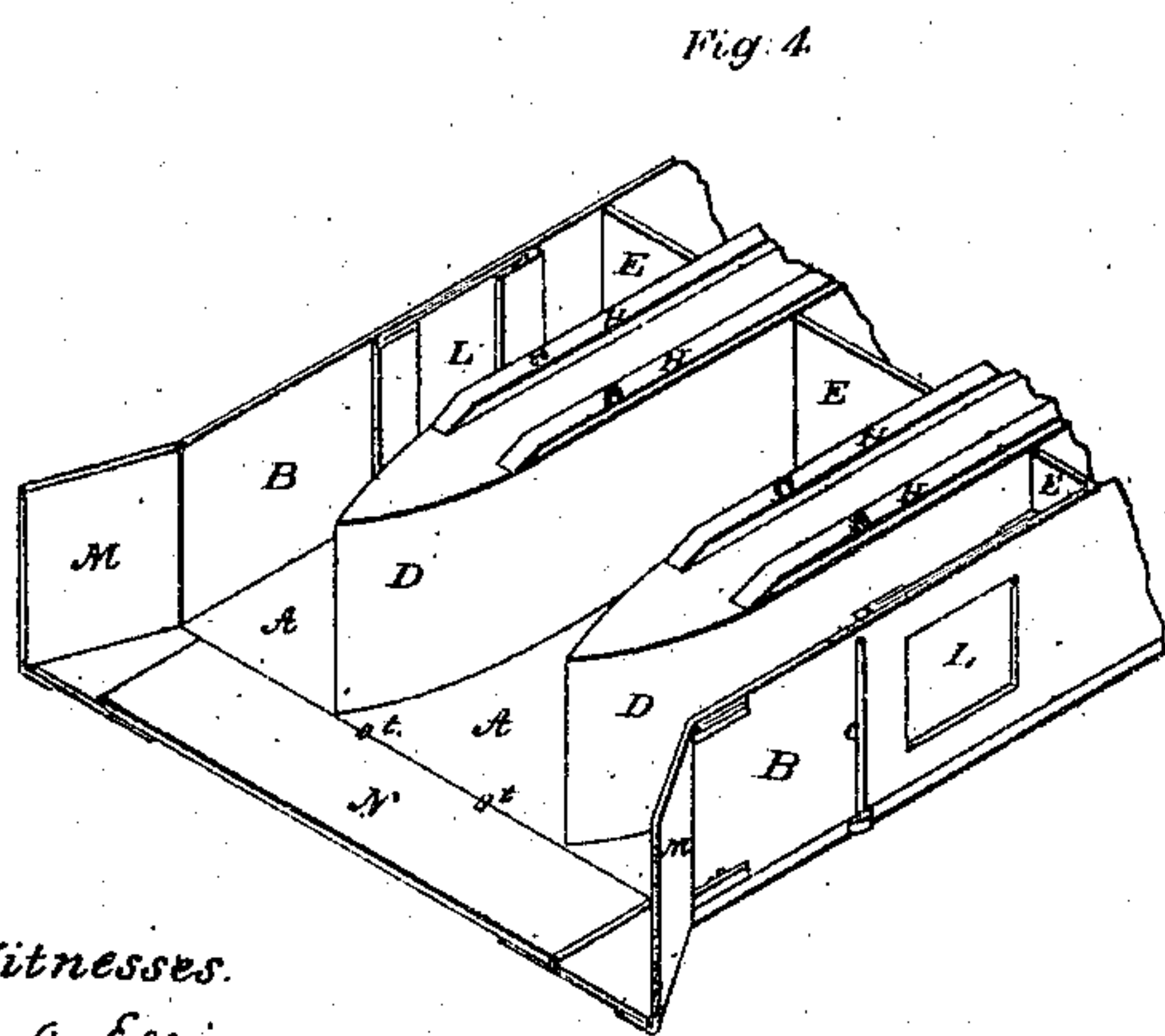
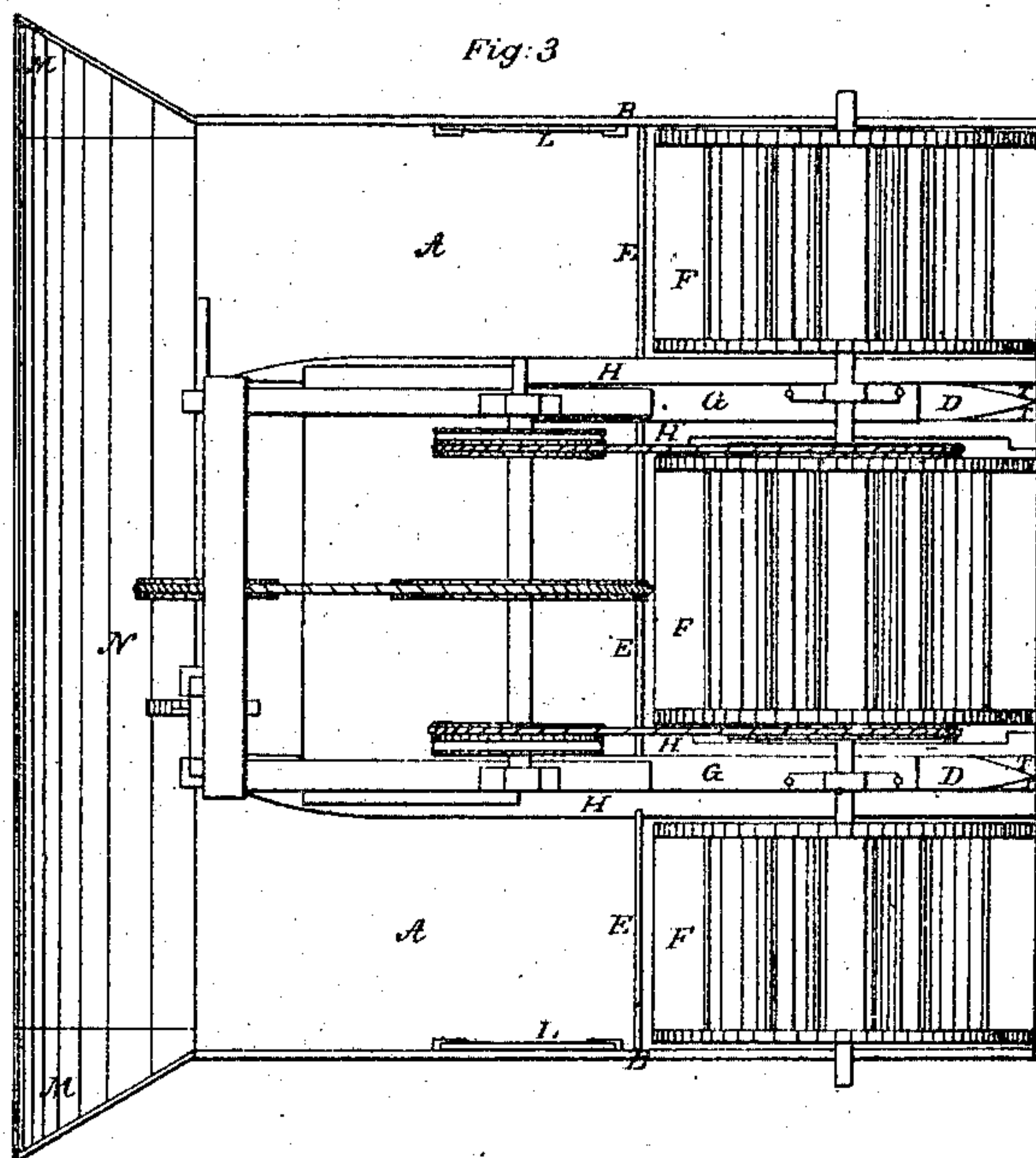
Inventor:

C. Daniels  
Per J. H. Alexander  
Atty

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Witnesses:  
Jno. A. Ellis,  
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Inventor:  
Comodore Daniels  
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# United States Patent Office.

COMMODORE DANIELS, OF FREMONT, OHIO.

*Letters Patent No. 70,419, dated November 5, 1867.*

## IMPROVED FLOATING WATER-POWER.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, COMMODORE DANIELS, of Fremont, Sandusky county, Ohio, have invented certain new and useful Improvements in Floating Mills; and I hereby declare that the following is a true, full, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon. In the annexed drawings, which make a part of this specification—

Figure 1 represents a front elevation of the water-wheels, and of the platform and boats which support said wheels.

Figure 2 is a side elevation of the same.

Figure 3 is a plan view of my machine.

Figure 4 is a perspective view of the front half of a cross-section of the same.

Figure 5 is a plan view of the stern of the boats.

The nature of my invention consists in constructing a wheel or wheels to be propelled either by the current of running streams or by tide-water, in the manner hereinafter described.

The letter A represents a platform, of suitable length, and adapted in width to the number of wheels to be placed on it. The said platform will be strengthened by longitudinal sleepers at its bottom, and also by cross-ties, *c*. B designates one of the sides of platform A, (see fig. 1,) and will be about four feet in depth, but can be increased in measure if the size of the water-wheels should require it. The sides B will be strengthened and prevented from bulging out by the stays or uprights *c* which rest on cross-ties *c*. D D (see fig. 4) represent two boats resting on and extending lengthwise of platform A. The said boats are so arranged as to admit of the play of three water-wheels, F, one wheel being between the two boats, and each of the others being placed between a boat and the side B. My three wheels may be constructed on a single shaft, in which case the journals will rest on bearings placed upon the sliding frame G. In case each wheel should have a separate shaft, so that any one may be removed for repairs without interfering with the action of the other two, the shafts can be coupled together in the ordinary way. The frame G, it will be observed, is made to slide between timbers H which are placed on the top of the boats lengthwise. By this arrangement the water-wheels F can be removed from near the end of platform A to its centre when advisable. To regulate the quantity of water required to drive the wheels F, the gates E are provided, the said gates being made to work in grooves cut in the side of boats D and sides B. In order still further to control the water acting on the two outer wheels, the sliding gates L and hinged gates M are provided. The gate L is placed in the sides B, and the gates M hinged, by means of the strap-hinges S, to the front ends of sides B, (see figs. 2 and 4.) N represents an apron, made of any suitable material, and hinged to the front edge of platform A, as seen in figs. 1 and 4, letter *t*. To the outside of said apron the two anchor-pieces *g* are hinged. The lower ends of pieces *g* are made angular, so as to present a point that will penetrate the sand at the bottom of the river and hold the platform A at a point where the current is strongest.

It will be seen that the sterns of the boats have attachments consisting of pieces of timber, T, (see fig. 3,) secured to them by screws, and that when it becomes necessary, these timbers can be removed and the boats rendered as sharp at the stern as at the bow. By this arrangement the boats, when on tide-water, will be adapted to the ebb and flow of the tide; and, as the paddles of the wheels are made radial, the action of the current will be the same in either direction.

The frame and fender parts of a saw-mill are represented in the drawings to illustrate one mode of communicating power; but as leather bands would soon become useless when kept constantly wet, it will be necessary, to drive machinery attached to any water-power, to use iron gearing.

When the platform A is once anchored in a stream, the apron N let down to a horizontal position, and the gate M opened, the current flowing through the several flumes formed by the boats D and sides B will give a motion to the water-wheels proportioned to the rapidity of its flow.

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

1. The sliding frame G, in combination with boats D and wheels F, the whole constructed and operating as herein described.

2. The sliding frame G, in combination with boats D, wheels F, apron N, anchor-piece *g*, the whole constructed and operating as and for the purpose substantially as herein set forth.

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

COMMODORE DANIELS.

Witnesses:

E. F. DICKINSON,  
DANIEL NAGEL.