

I. F. Noë. Paddle Wheel.

N^o 34,767.

Patented Mar. 25, 1862.

Fig. 1.

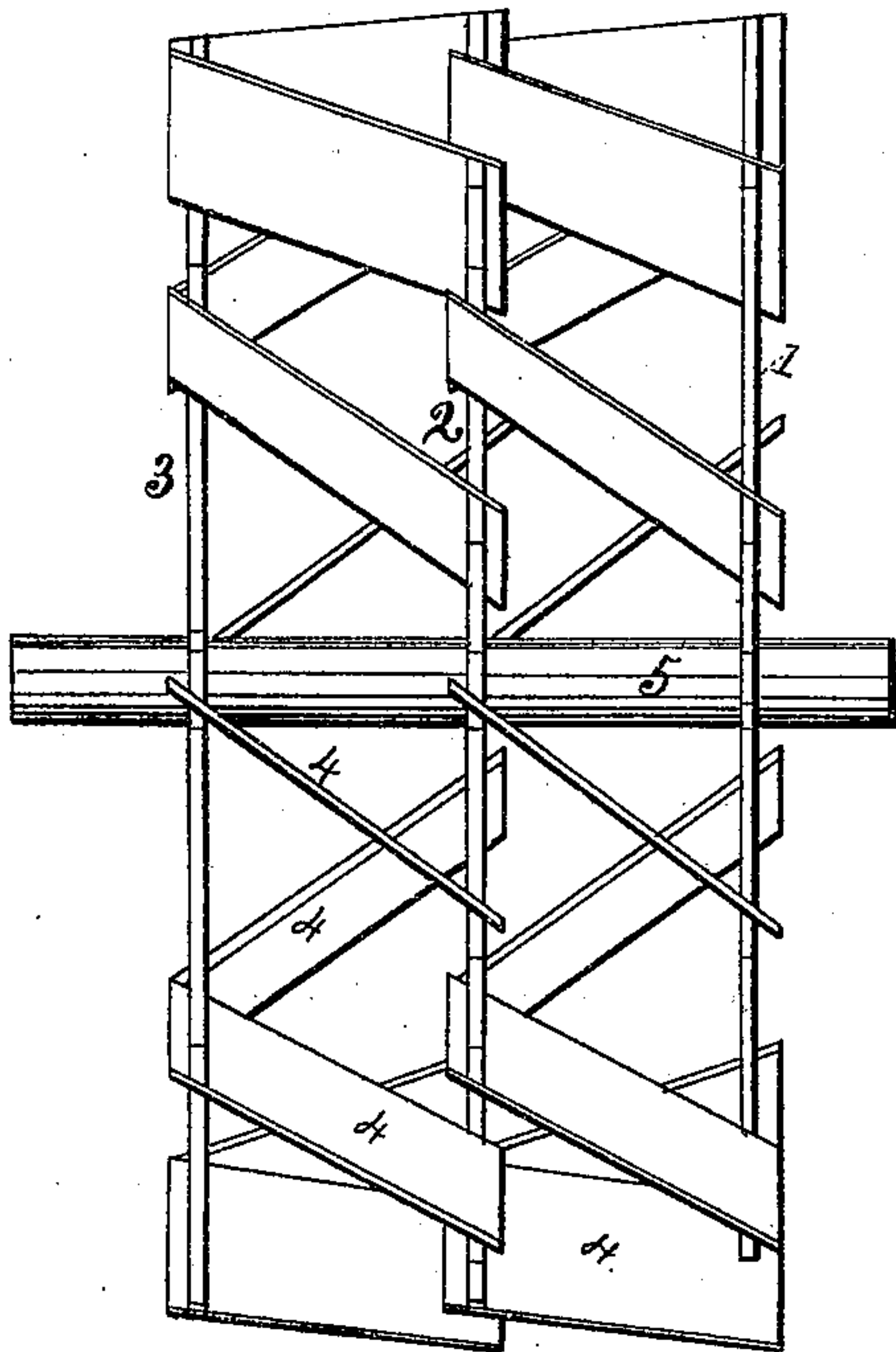


Fig. 2.

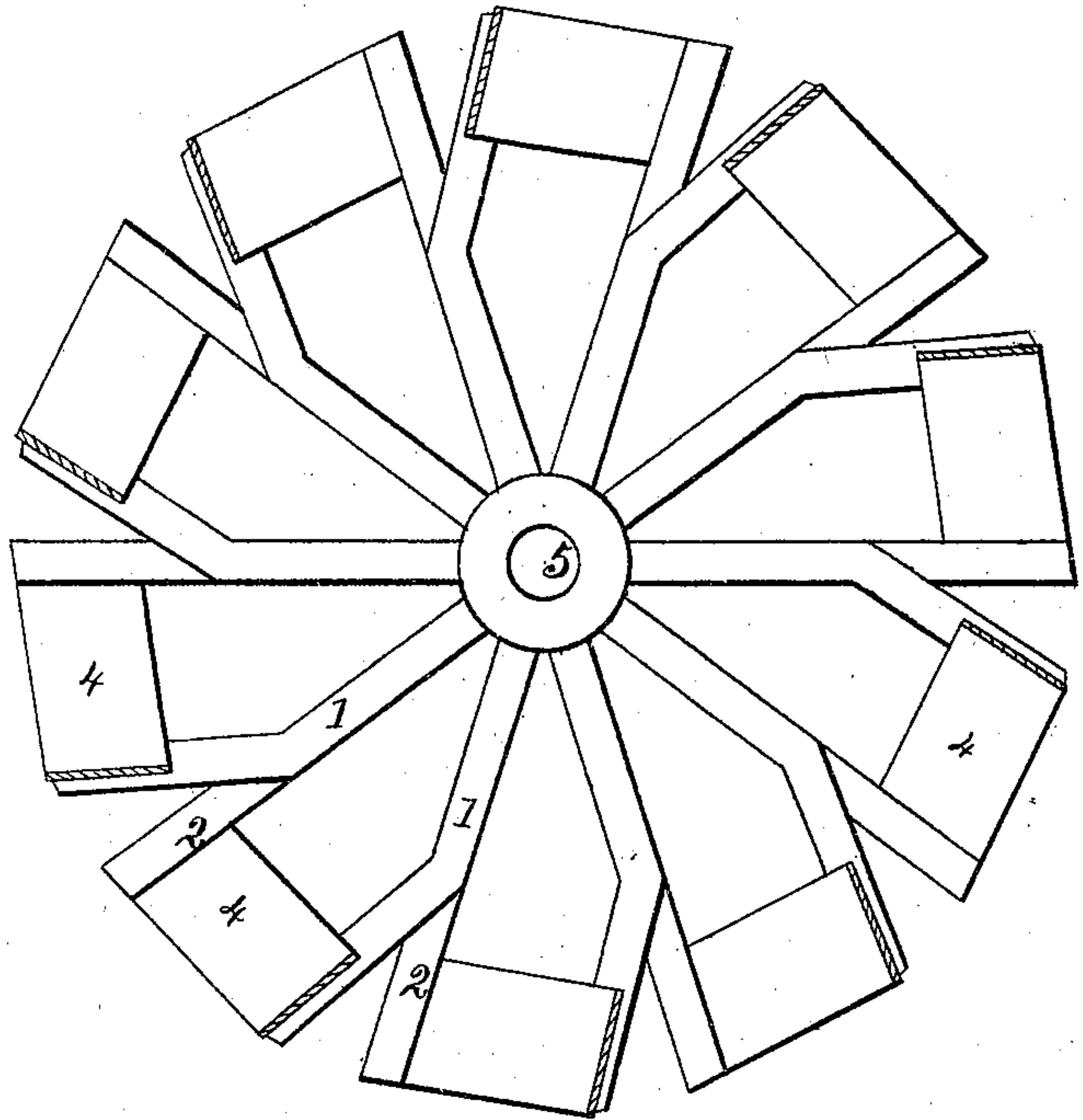
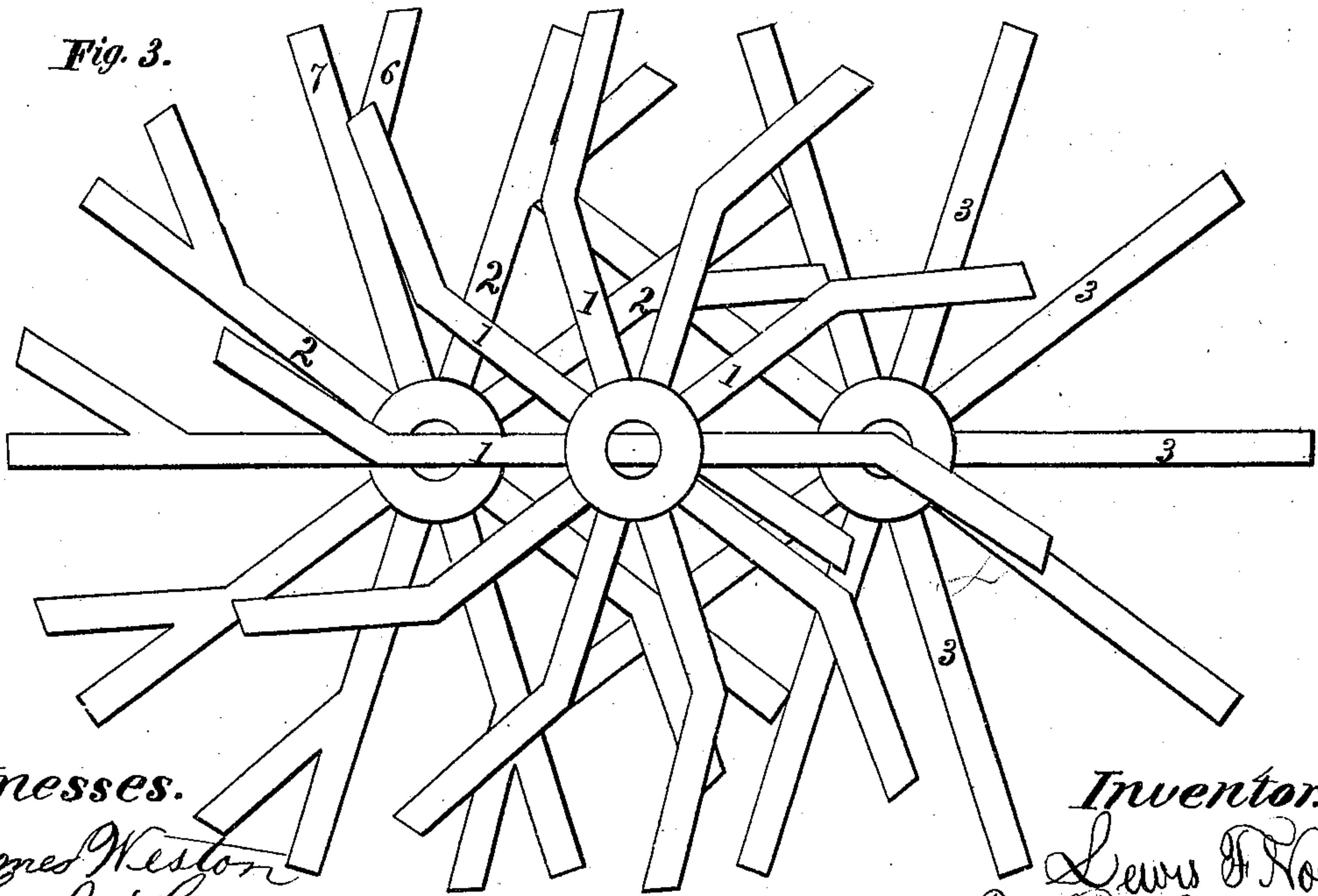


Fig. 3.



Witnesses.
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LEWIS F. NOÉ, OF NEW YORK, N. Y.

IMPROVED PADDLE-WHEEL.

Specification forming part of Letters Patent No. 34,767, dated March 25, 1862.

To all whom it may concern:

Be it known that I, LEWIS F. NOÉ, of New York, in the county of New York and State of New York, have invented a new and Improved Paddle-Wheel for Steamers, the construction and operation of which I have described in the following specification and illustrated in its accompanying drawings with sufficient clearness to enable competent and skillful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

The said invention consists in the construction, combination, and arrangement in the manner hereinafter described of the arms and floats, by which flat floats set obliquely to the axle of the wheel are made more available and a smoother action and better result secured.

In the accompanying drawings, Figure 1 is an edge view of the wheel. Fig. 2 is a side elevation of the wheel. Fig. 3 is a side elevation of the three sets of arms separated, so as to show their construction and differences.

1 1 are the arms of the first set, which are bent, as shown, Figs. 2 and 3.

2 2 are the arms of the middle set, which are crotched, so that one part corresponds to the first set and the other part corresponds in a like manner to the radial arms of the third set.

3 3 are the third set of arms made straight.

4 4 are the paddles or buckets.

5 is the shaft.

6 and 7 are the branches of the arms 2.

The first set of blades are fastened, one end to the oblique portions of the arms 1 1 and the other end to the straight or radial portions of the middle or center set of arms. By this arrangement the ends of the first set of blades, which are fastened to the arms 1 1,

are oblique to the radii of the wheel, so that it operates to gather the water and thus act more powerfully upon it. In the same manner the ends of the second set or series of buckets, which are fastened to the parts 6 of the arms 2, are oblique to the radii of the wheel and act the same as the other set. These two sets of buckets are set in such a manner that the forward ends are opposite each other in pairs, so that the inner ends of each of the two sets come respectively between two of the inner ends of the other set and nearly in the middle between them. By this means the water is prevented from obtaining a rapid motion toward the front of the wheel, and thus preventing the full effect of the wheel being experienced. The wheel should be used with the arms 1 1 outside for river, lake, or ocean steamers, as in that position it throws the water out from the boat, and for canal-steamers the wheel is reversed, so as to throw the water toward the boat and prevent the washing of the banks.

I am aware that oblique paddles have heretofore been used. These I do not claim.

I am also aware that paddle-wheels have been used which had the paddles in two parts, the one part directly opposite the opening between the other parts, respectively. These I do not claim.

I claim—

The combination of the middle arms 2 2, forked or raised, as described, to receive the buckets from each side, with the straight arms 3 3, the bent arms 1 1, and the straight or flat buckets 4 4, substantially as described, and accomplishing the purpose set forth.

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Witnesses:

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