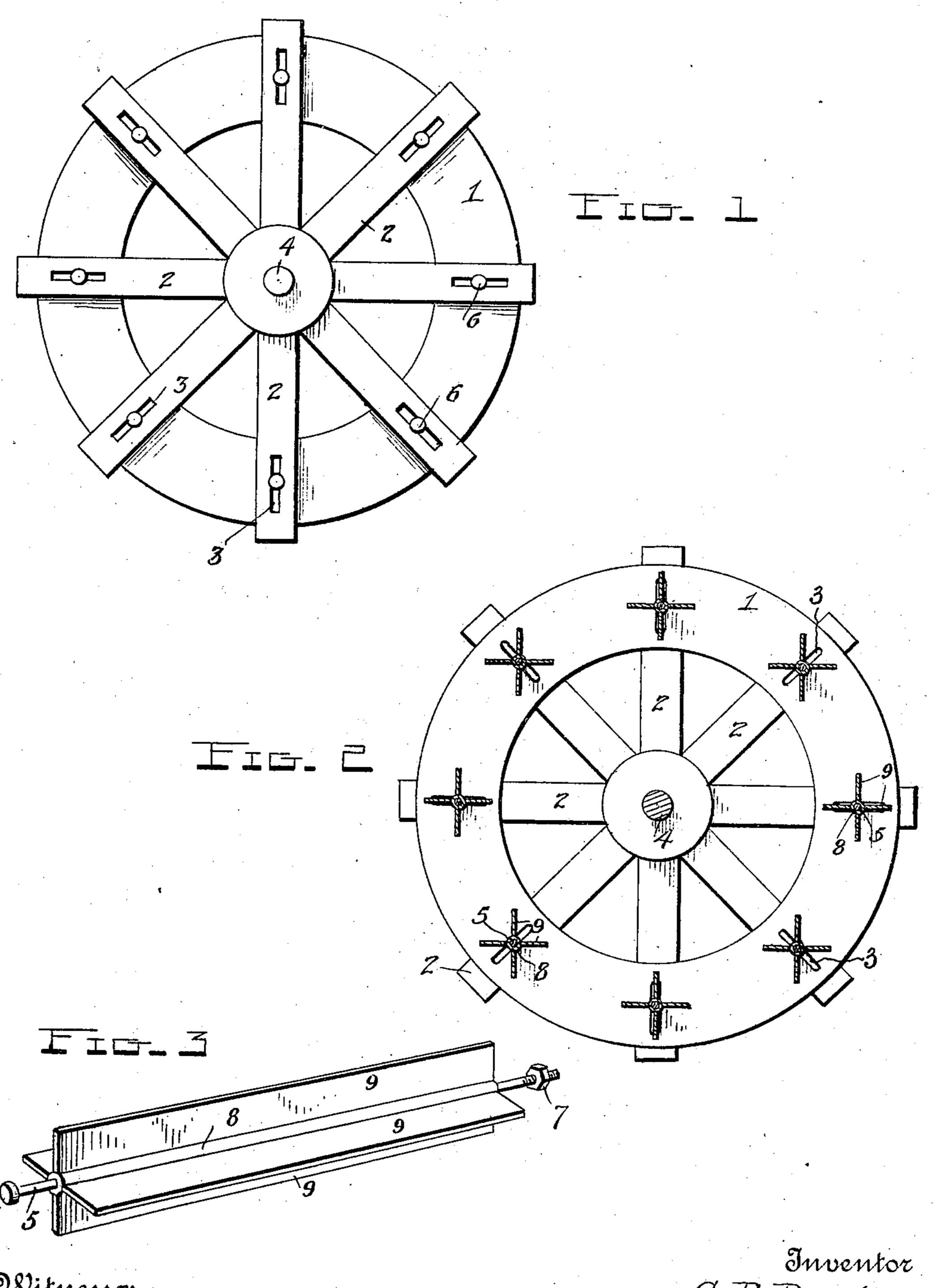
G. B. DAVIS. PROPELLER WHEEL.

APPLICATION FILED AUG. 5, 1907.



Inventor G.B.Davis

UNITED STATES PATENT OFFICE.

GEORGE B. DAVIS, OF DAWSON, YUKON TERRITORY, CANADA.

PROPELLER-WHEEL.

No. 896,087.

Specification of Letters Patent.

Patented Aug. 18, 1908.

Application filed August 5, 1907. Serial No. 387,207.

To all whom it may concern:

Be it known that I, George B. Davis, a citizen of the United States, residing at Dawson, Territory of Yukon, Canada, have in-5 vented certain new and useful Improvements in Propeller-Wheels, and hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which 10 it appertains to make and use the same.

This invention has relation to new and useful improvements in propeller wheels, especially designed for marine propulsion and has for its object the production of a simple 15 and economical construction of wheel of this character having means whereby the paddles may be adjusted to work at the proper depth in the water, the invention relating more particularly to a form or construction of paddle 20 whereby back pressure is eliminated and the maximum amount of power obtained.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and ar-25 rangement of parts, as will be more fully described and particularly pointed out in the

appended claims.

In the accompanying drawings,—Figure 1 is a side elevation of a propeller wheel con-30 structed in accordance with the invention; Fig. 2 is a central cross sectional view of the same; and Fig. 3 is a detail perspective view of one of the paddles.

As shown in the drawings, and in accord-35 ance with the invention, the side members or wheels 1 of the propeller are each provided with a plurality of radially projecting arms or spokes 2, slotted longitudinally, near their outer or free ends, as at 3, the side members 40 or wheels being connected by a shaft or axle 4.

Journal rods 5 are arranged between and adjustably secured in the slotted ends of the arms or spokes 2 of the side members or tively to the propeller wheel. 45 wheels 1. These rods are provided with suitable heads 6 at one end adapted to engage the outer faces of the arms or spokes of one of the side members and are threaded at their opposite ends to receive nuts 7 adapted to 50 engage the outer faces of the arms or spokes of the other side member. The paddle!

wheels, which comprise each a sleeve or hollow axle 8 having a plurality of radially projecting blades 9, are rotatably mounted on the journal rods between the side members 55 or wheels 1. These blades may be caused to work at the desired depth in the water by a proper adjustment of the journal rods in the arms or spokes 2.

By providing a paddle of the construction 60 shown and described and having it free for rotation relatively to the propeller wheel, back pressure incident to the forms of propeller wheels now employed, is obviated, and the full or maximum power of the wheel 65 obtained.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without 70 requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of 75 this invention.

Having described my invention, what I claim as new and desire to secure by Letters-Patent, is:—

In a propeller wheel, the combination with 80 side members having radially projecting longitudinally slotted arms or spokes, of journal rods arranged transversely of said side members and adjustable in the slots of the arms or spokes thereof, said rods having heads at 85 one end for engaging the arms or spokes of one of the side members and threaded at their opposite ends to receive nuts for engaging the arms or spokes of the other side member, whereby said rods may be retained in 90 an adjusted position, and paddles, each comprising a plurality of radially projecting blades rotatably mounted on the journal rods so as to be adapted for rotation rela-

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE B. DAVIS.

Witnesses:

ROBERT B. BORG, Joseph J. Manier.