No. 677,101. Patented June 25, 1901.

H. V. B. PARKER.

PROPELLER FOR VESSELS.

(Application filed Mar. 29, 1901.)

(No Model.)

Fig. 1.

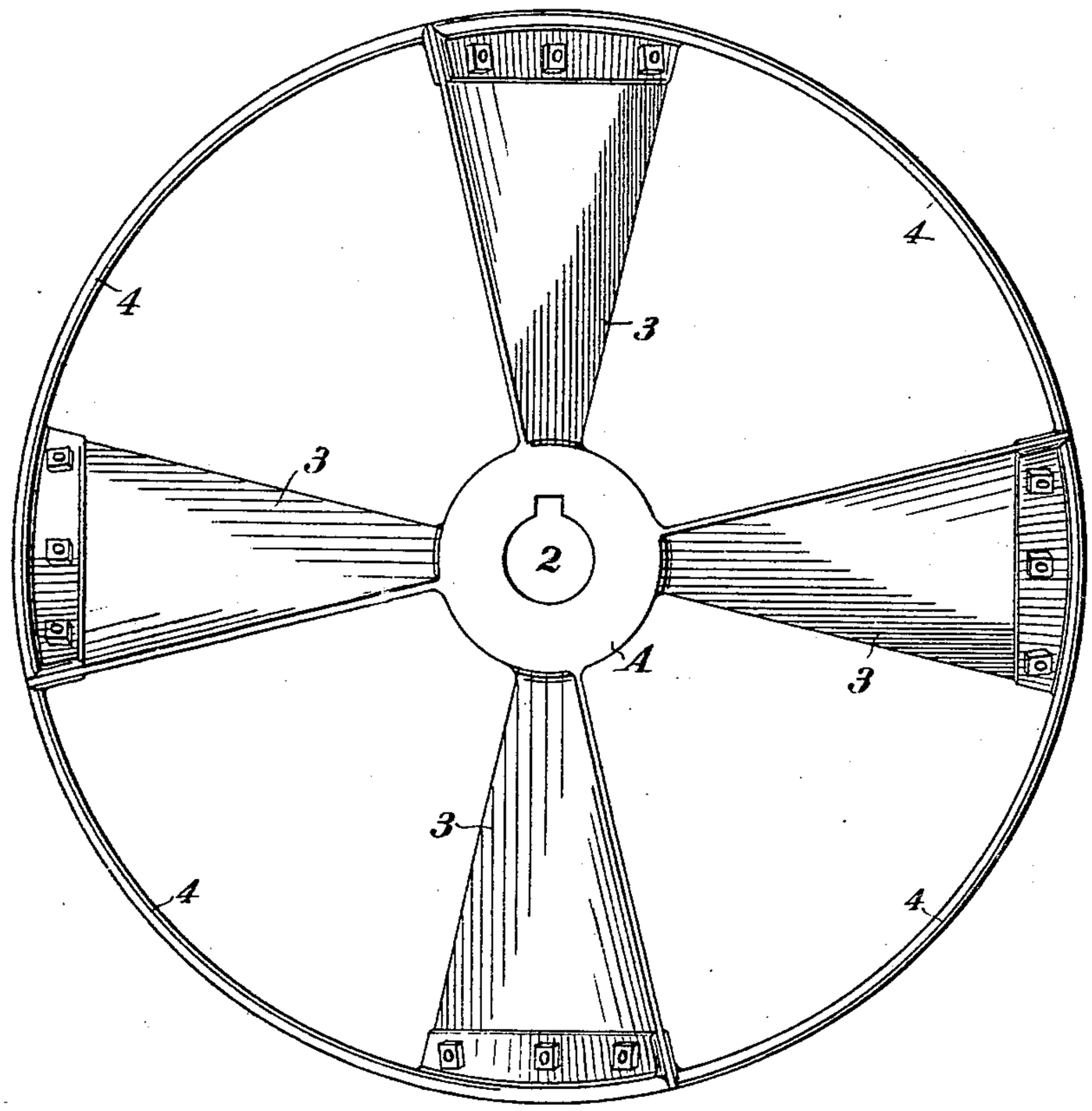
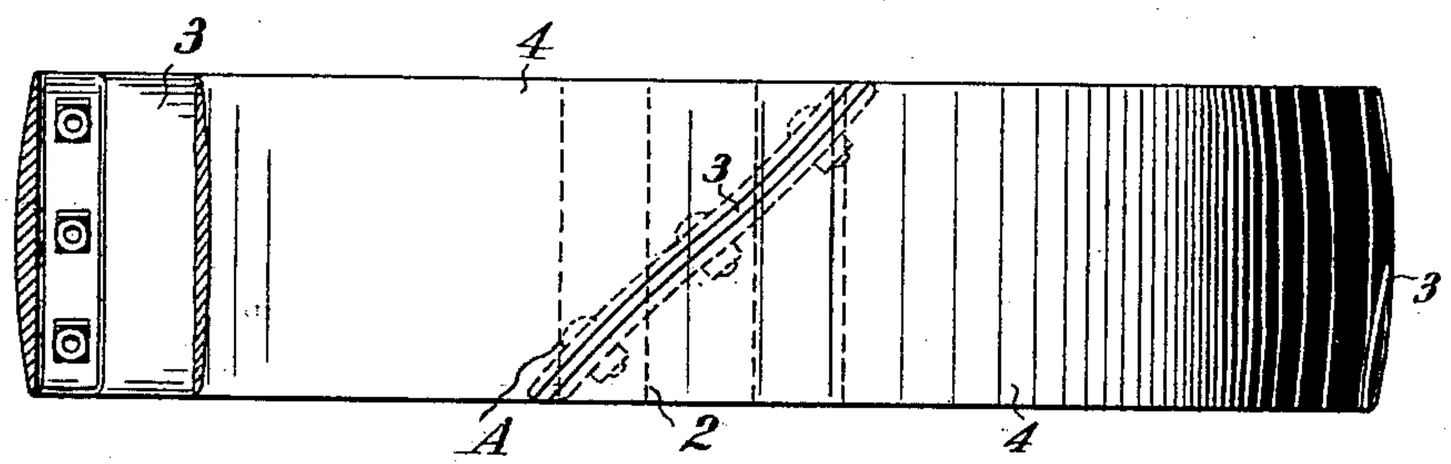


Fig. 2.



Witnesses,
E. A. Brandau
J. H. Turner

Inventor
Henry V. B. Parker
By Dewey Strong & Co.
Atty.

UNITED STATES PATENT OFFICE.

HENRY V. B. PARKER, OF SAN FRANCISCO, CALIFORNIA.

PROPELLER FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 677,101, dated June 25, 1901.

Application filed March 29, 1901. Serial No. 53,381. (No model.)

To all whom it may concern:

Be it known that I, HENRY V. B. PARKER, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Propellers for Vessels; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a novel construction of propeller for vessels.

It consists of a hub, blades having approximately straight parallel edges and projecting radially from the hubs, and a cylindrical rim inclosing the ends of said blades and flush with the front and rear edges, said rim being made thin or sharp upon both edges.

My invention also comprises a means for fixing rims in sections to the peripheries of blades to form wheels of any desired diameter.

Referring to the accompanying drawings, Figure 1 is a front elevation of my invention. Fig. 2 is a plan, a portion of the rim being in section.

A is the hub of my propeller, which is preferably made cylindrical in shape and of the smallest diameter necessary to provide sufficient strength and support for the inner ends of the propeller-blades, and a bearing by which the hub is fitted upon the propeller-shaft. The hub has a central bore, as at 2, a means by which it is secured upon the shaft, and the blades 3, standing at any desired or approved angle with the hub, extend radially outward therefrom, and their outer ends connect with a circular ring 4, by which the circular ends of the blades are inclosed. The hub is preferably made cylindrical, having the same diameter from end to end, and the rim has its front and rear edges made thin or sharp and flush with the edges of the blades. The opposite edges of the blades are in two planes coinciding with the front and rear of the wheel-rim and hub and at right angles with the propeller-shaft. These edges, the hubs, and the rims being thus in the same plane it will be seen that there is little or no opportunity for the screw to become foul with ropes or lines, which may be overboard, or with seaweed or with any floating object, the edges of the blades and of the rims being sufficiently sharp to sever any ordinary soft obstruction, and by reason of their lying in the same transverse planes the rims will act to throw off any floating object which may come in contact with the propeller, and thus prevent the latter from being broken.

For small propellers the hub, blades, and rim may be cast in a single structure; but for larger propellers the hub and blades may be formed together or the blades may be bolted to the hub and the outer rim formed in several circular segments, which are afterward fitted and bolted to the outer ends of the propeller-blades, so that when all are united the combined strength of the rim, blades, and hub will be a sufficient support to prevent any portion from being readily broken.

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

1. The combination in a propeller of a hub and a cylindrical rim said rim having a width corresponding with the length of the hub and tapering in cross-section to form sharpened edges, and propeller-blades connecting the interior of the rim with the hub.

2. The combination in a propeller of a cylindrical hub, propeller-blades radiating from the hub having their front and rear edges in transverse planes coincident with the length of the hub, a circular rim tapering in cross-section from the center toward each edge, to form cutting edges on opposite sides, said rim formed of segments, and means by which said segments are bolted to the outer ends of the propeller-blades, the ends of said rim being flush with the edges of the propeller-blades.

In witness whereof I have hereunto set my hand.

HENRY V. B. PARKER.

Witnesses:
S. H. NOURSE,
JESSIE C. BRODIE.