June 30, 1925. 1,544,134

J. A. DAVID

BLADE CONSTRUCTION FOR PADDLE WHEELS

Filed July 25, 1924

Fig. 1.

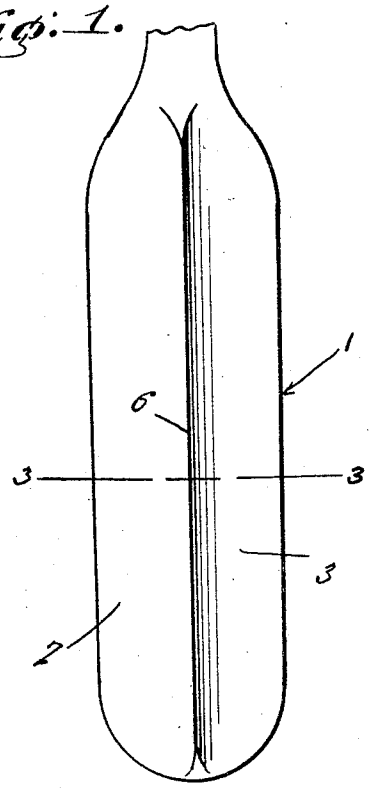


Fig. 2.

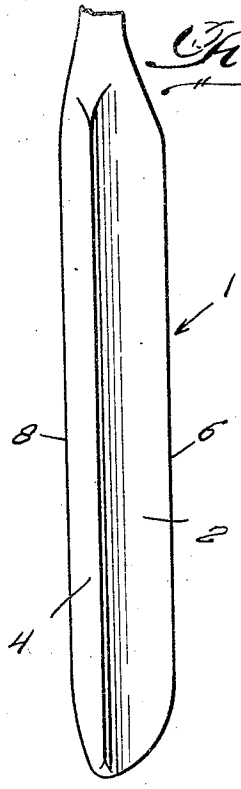
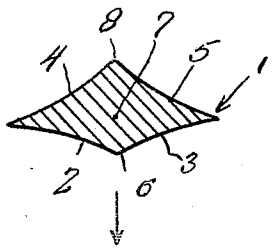


Fig. 3.



J. A. David,
Inventor

By Clarence A. O'Brien
Attorney

Patented June 30, 1925. 1,544,134

UNITED STATES PATENT OFFICE.

JOSEPH A. DAVID, OF ELIZABETH, NEW JERSEY.

BLADE CONSTRUCTION FOR PADDLE WHEELS.

Application filed July 25, 1924. Serial No. 728,182.

To all whom it may concern:

Be it known that I, JOSEPH A. DAVID, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in a Blade Construction for Paddle Wheels, of which the following is a specification.

This invention relates to new and useful improvements in blade construction in paddle wheels has for its principal object to provide a simple and efficient means for preventing eddy current as the blades of the paddle wheel strike the water.

A further object of the invention is to provide a blade construction for paddle wheels of the above mentioned character, which will permit the blades of the paddle wheel to pass through the water without causing any great amount of disturbance and for increasing the propulsion of the vessel on which the paddle wheel is mounted.

A further object of the invention is to provide a blade construction for paddle wheels of the above mentioned character, which is simple in construction, inexpensive, strong and durable and furthermore adapted for the purpose for which it is designated.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawing forming a part of this specification and in which like numerals designate like parts throughout the same:

Figure 1 is a front elevation of my improved blade construction.

Figure 2 is a side elevation thereof, and

Figure 3 is a transverse section taken approximately on line 3—3 of Figure 1.

In the drawing wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates generally my improved blade for use in connection with paddle wheels, the same being substantially diamond shaped in cross section as is clearly illustrated in Figure 3. The front faces 2 and 3 respectively of the blade 1 are slightly concaved as are also the rear faces 4 and 5 respectively.

The apex 6 of the front faces 2 and 3 respectively is nearer the longitudinal center designated at 7 in Figure 3 of the drawing than the apex 8 of the rear faces 4 and 5.

The paddle wheel blades now universally in use are flat on their opposite sides and in this use a blade construction of this character often results in disturbing the flow of water in the back of the blade whereby a considerable amount of energy is wasted. By providing a blade construction of the character shown and above described, the eddy currents will be reduced and permit the blades of the paddle wheels to pass through the water without causing any disturbance in the rear of each blade. Furthermore, by having the faces of the blades substantially concaved, the flow of water will be smoothened but it will be necessary to have the front faces of the blade of less inclination than the rear faces, in order that the blades will be efficient in carrying out the purposes for which the same is designated.

Not only can a blade construction of the character above described be used in connection with paddle wheels but may be also used as a swimming appliance for creating a greater amount of energy than is ordinarily obtained by the hands of the swimmer.

While I have shown the preferred embodiment of my invention, it is to be understood that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claim.

Having thus described the invention, what I claim is:—

In a blade for paddle wheels, the same being substantially diamond shaped in cross section, the faces thereof being concaved, the apex of the front faces being nearer the longitudinal center than the apex of the rear faces.

In testimony whereof I affix my signature.

JOSEPH A. DAVID.