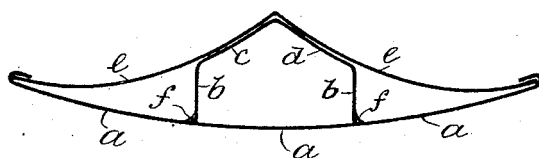
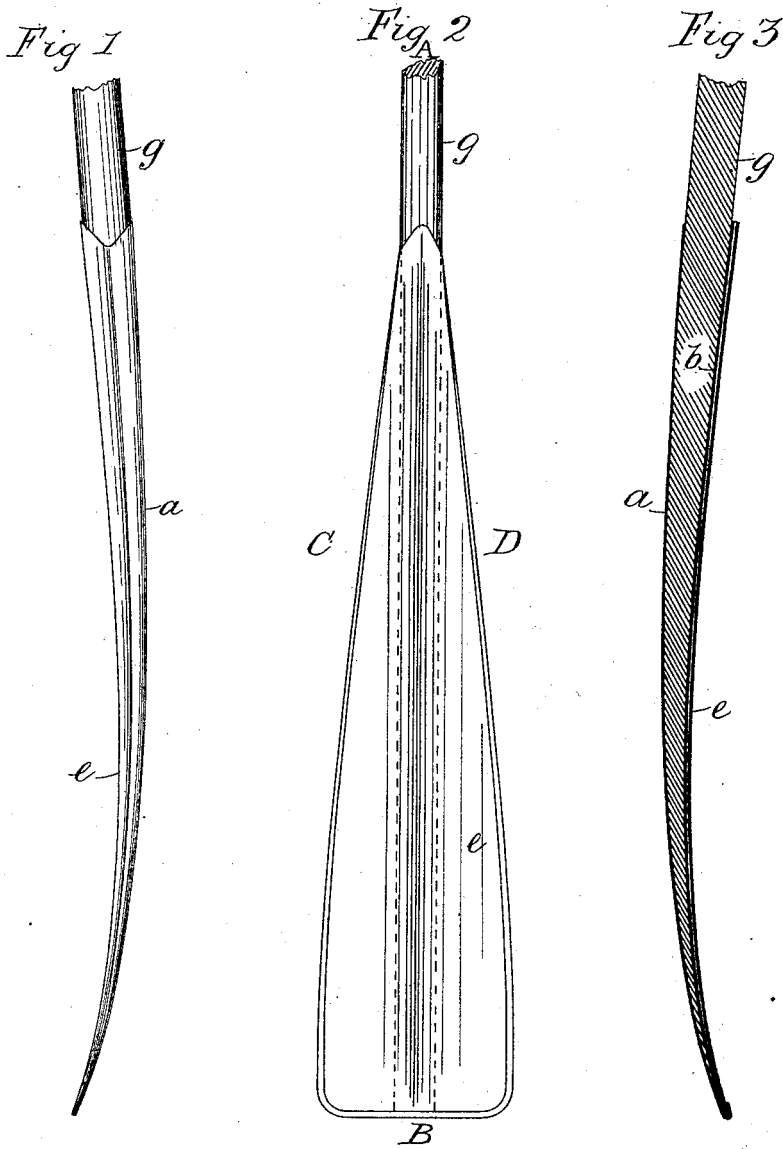


(No Model.)

G. W. GREEN.
OAR OR SCULL BLADE.

No. 358,034.

Patented Feb. 22, 1887.



Witnesses
Charles J. Powell
Ernest W. Jones.

Fig 4.

Inventor.
George William Green

UNITED STATES PATENT OFFICE.

GEORGE WILLIAM GREEN, OF LONDON, ENGLAND.

OAR OR SCULL BLADE.

SPECIFICATION forming part of Letters Patent No. 358,034, dated February 22, 1887.

Application filed August 30, 1886. Serial No. 212,272. (No model.) Patented in New Zealand March 22, 1886, No. 1,767, and in England May 24, 1886, No. 6,955.

To all whom it may concern:

Be it known that I, GEORGE WILLIAM GREEN, a subject of the Queen of Great Britain, and now a resident of Nos. 17 and 18 Basinghall street, London, England, have invented new and useful Improvements in Oar and Scull Blades, (for which I have obtained a patent in New Zealand, No. 1,767, bearing date March 22, 1886, and also in Great Britain a patent No. 6,955, bearing date May 24, 1886,) of which the following is a specification.

This invention relates to the construction of oars or sculls for boating and other similar purposes.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

Figure 1 is a sectional elevation of the blade of an oar or scull constructed of sheet metal after the manner of this my invention. Fig. 2 is a front elevation of Fig. 1. Fig. 3 is a sectional view of Fig. 2 upon line A B. Fig. 4 is an enlarged sectional view of Fig. 2 upon line C D.

The plate *a* is formed of one piece from end to end. Upon the inner or concave side of this plate I attach a hollow rib or channel, *b*, extending the whole length of the plate, or as far as is practicable, and of such a sectional form that the upper sides at *c* and *d* coincide with the sectional shape of the inner plate, *e*. This inner plate, *e*, is also shaped to suit the plate *a*, and having a curved rib down its center, forming a concave part upon both sides of it and the edges, the said rib diminishing as it approaches the end of the blade. The hollow rib or channel *b* is parallel in plan in its length, as shown by dotted lines in Fig. 2, and is soldered or otherwise suitably fastened to the plate *a* along its entire length at *f*, thus making a permanent strengthening-rib to the plate *a*, and also affording a hole or socket to receive the handle.

Around and along the edges of the plate *a* the metal is turned up, so that the inner plate, *e*, may lie therein, when the said edges are then turned down onto the plate *e* and soldered

thereto, thus uniting the plates *a* and *e* together. This joint may, however, be made without the metal of the plate *a* being turned over, as the two plates *a* and *e* may be cut level with each other at their edges and there soldered together.

The handle *g*, which is made of wood, would be made to pass as far into the hollow rib as practicable—the farther the better—and for ordinary use this would be sufficient to hold the handle in the blade; but I may also, if desired, further secure the handle in the said blade by screws, cement, or other devices. These metallic blades may be constructed of any suitable kind of sheet metal, but generally they would be made of sheet-steel.

Although I have shown the drawings, I do not limit myself to the precise shapes and curves shown, inasmuch as these may be somewhat varied to suit taste and science without departing from my invention.

I am aware that oars and sculls have been already made of metallic blades in various forms with wooden handles; but such blades have been made of solid iron or steel, except in some cases a socket has been provided upon the blade for the handle; but in this my invention the blade itself is hollow, being built up into a shape resembling those made of wood, and very much stronger than those made of solid material, weight for weight, and which are more or less buoyant in water.

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

The hollow blade constructed on its opposite faces with a convex surface and concave surfaces, and having a longitudinal hollow rib, *b*, throughout its length to receive the wooden handle *g*, together with a wooden handle, constructed and combined as and for the purpose herein specified.

GEORGE WILLIAM GREEN.

Witnesses:

CHARLES T. POWELL,
ERNEST W. JONES.