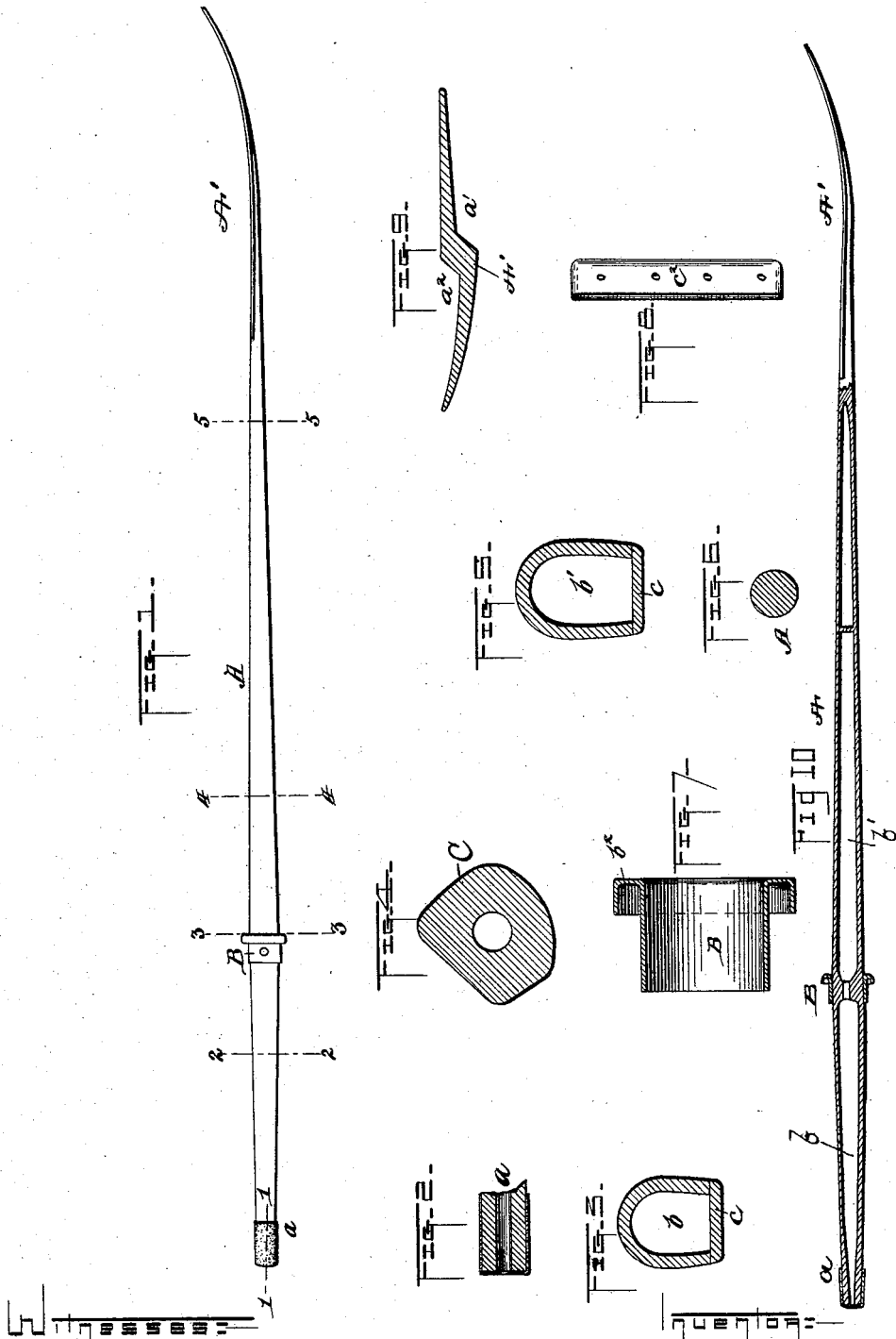


(No Model.)

M. F. DAVIS.
OAR.

No. 588,220.

Patented Aug. 17, 1897.



Goverance.
H. W. Perry.

Michael F. Davis,
By L. Deane
his Attorney.

UNITED STATES PATENT OFFICE.

MICHAEL F. DAVIS, OF PORTLAND, MAINE.

OAR.

SPECIFICATION forming part of Letters Patent No. 588,220, dated August 17, 1897.

Application filed July 30, 1890. Serial No. 360,337. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL F. DAVIS, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Oars; and I do 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 it appertains to make and use the same.

Figure 1 is a side elevation of this oar. Figs. 2, 3, 4, 5, and 6 are sectional views at the point indicated by lines 1 1, 2 2, 3 3, 4 4, and 5 5 of Fig. 1. Fig. 7 is a central section through the button. Fig. 8 is a view of the metal cap for the tip of the blade. Fig. 9 is a cross-section of the blade near the middle. Fig. 10 is a central longitudinal section of this oar.

The object of this invention is to produce a very light and very strong oar, and the novelty consists in channeling or grooving the outboard loom and the inboard loom—namely, that part between the button and the beginning of the blade and between the button and handle-tip—and in lessening the stock or material in the blade as well as changing its shape and in making a very light button and in providing a seamless metallic cap for the end or tip of the blade, all as will now be more fully described.

In the accompanying drawings, A denotes a wooden oar of the type now generally used in racing boats or shells and except in those particulars which I shall now describe may be of any general or well-known size or shape and may or may not have a spoon-blade or a permanent or detachable blade. The handle end *a* may be left solid or is perforated, as shown in cross-section in Fig. 2, but from this point to the button B the body of the oar may be channeled or grooved at *b*. So, also, from the button to the beginning or shank of the blade, as shown, it is channeled or grooved, as at *b'* in Fig. 5; but in the finished oar this channel or groove is covered or closed by a piece of wood *c*, which is secured in place by nails, cement, or otherwise. If desired, the button portion of the oar may be perforated, as shown at Fig. 4. The button as now made is not only heavy, but expensive. By my present structure, as shown in Figs. 1 and 7, the button B is stamped up from sheet metal, preferably German silver, and by its annular flat face *b*² is perfectly well adapted to meet the rowlock. In order to make the blade

portion A' also very light, the stock or material of which it is made is cut away on the side *a'* as well as on the top left-hand side at *a*². This structure will not only leave all the superficial surface fully entire, but in feathering the side *a*² being lower is free from the shock of the encountering wave, while the blade of the ordinary structure is more fully exposed to it. It also presents a sharper angle to the water, thus cutting through a wave much easier.

The tip of the blade is entirely covered by a seamless metal cap *c*², which is clearly illustrated in Fig. 8, and which is in fact a pocket or case for the tip and is secured in place by pins or rivets.

If desired, the button or rowlock portion of the oar can be channeled or grooved in conformity with the rest of it, and in that case this part can be strengthened by a block or cross-piece C of proper shape and size.

By my invention I provide a hollow oar cut away on the under side to facilitate the operation of feathering and provided in the rowlock-section with a stiffening-block. The blade is also provided with a cap or pocket entirely covering the tip, so that no portion of the latter will be exposed.

What I claim is—

1. In an oar, substantially as described, a blade cut away on its under side at *a'*, and on its upper side at *a*², substantially as and for the purpose set forth.

2. An oar, having its inboard or outboard loom or both channeled, grooved or hollowed and provided in the rowlock-section with a stiffening-block, substantially as set forth.

3. An oar, having its inboard or outboard loom or both channeled, grooved or hollowed and provided in the rowlock-section with a stiffening-block integral therewith, substantially as specified.

4. As an improved article, an oar, having its inboard or outboard loom or both channeled, grooved or hollowed and provided in the rowlock-section with a stiffening-block integral therewith and the button of rigid material adapted to bear against a rowlock, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

MICHAEL F. DAVIS.

Witnesses:

JOSEPH ROY,
CASSELL SEVERANCE.