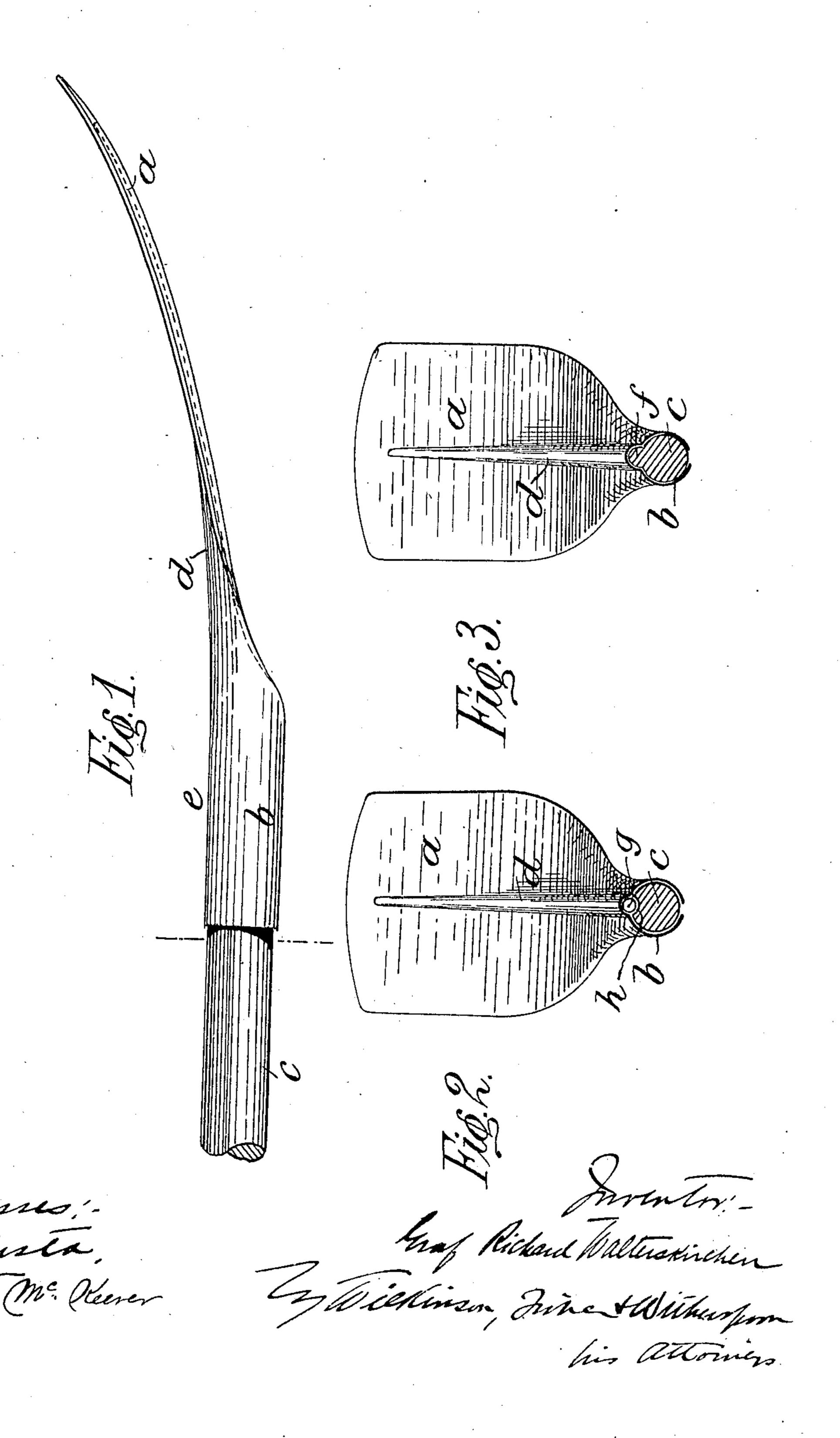
R. WALTERSKIRCHEN.

OAR FOR BOATS.

APPLICATION FILED AUG. 16, 1907.



## UNITED STATES PATENT OFFICE.

RICHARD WALTERSKIRCHEN, OF LAINSDORF, NEAR KRUMPENDORF-ON-THE-WÖRTHERSEE, AUSTRIA-HUNGARY.

## OAR FOR BOATS.

No. 872,158.

Specification of Letters Patent.

Patented Nov. 26, 1907.

Application filed August 16, 1907. Serial No. 388,920.

To all whom it may concern:

Be it known that I, Graf Richard Walterskirchen, a subject of the Emperor of Austria-Hungary, residing at Lainsdorf, near Krumpendorf-on-the-Wörthersee, Province of Carinthia, Empire of Austria-Hungary, have invented certain new and useful Improvements in Oars for Boats; and I do hereby declare the following to be a full, 10 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.

The object of the present invention is an oar with an interchangeable blade which will be described with reference to the accompa-

nying drawings, in which

Figure 1 shows a side view of one form of the oar, and Figs. 2 and 3 end views of the same.

of sheet-steel, of the desired shape, and is fixed rigidly to a metal shell b which is in its turn removably fixed to the oar shaft c. This can be done by giving the shell b a longitudinal slit. The oar shaft c is then forced into the free end of the shell and is then removably secured in it by screws or similar means. The fact that the shell is expansible allows one and the same blade to be put on shafts of different diameters within certain limits.

The oar blade may be provided with one or more longitudinally running stiffening ribs. Preferably, as shown in the drawings, a holowrib is arranged along the center line of the blade which is continued in a hollow rib e on the side of the shell b opposite the slit. The oar shaft c may then be provided with a longitudinal rib f which fits into the hollow rib e and so prevents the blade from turning on the shaft. A further stiffening may be obtained by placing in the hollow ribs d and e of the blade and shell an elastic bar such as a slit pipe g or a rod of U-shaped cross section and fixing the same in a suitable manner.

The bar may fit in a groove h of the oar shaft, as shown in Fig. 3, to prevent rotation of the blade.

Since the blade is made of metal, its rigidity and durability are much higher than 50 those of the usual wooden blades. The blade being easily removable either part can quickly be changed if damaged. The metal blades can be easily and cheaply made (by pressing), while wooden blades, if they are 55 to be curved properly, require considerable work.

Claims

1. In combination with an oar shaft a metal blade provided with longitudinal 60 strengthening ribs, an elastic shell rigidly secured to such blade and provided with a longitudinal slit and adapted to be pushed onto the shaft, substantially as and for the purpose described.

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2. In combination with an oar shaft a metal blade, an elastic shell rigidly secured to such blade provided with a longitudinal slit and adapted to be pushed onto the shaft, a hollow rib in the shell and means located in 70 such hollow rib for preventing the shell from turning round the oar shaft, substantially as

and for the purpose described.

3. In combination with an oar shaft a metal blade provided with longitudinal 75 strengthening ribs an elastic shell rigidly secured to such blade, provided with a longitudinal slit and adapted to be pushed onto the shaft, a hollow rib in the shell and an elastic bar located in such hollow rib of the shell 80 and one of the strengthening ribs of the blade and engaging into a longitudinal groove in the oar shaft, substantially as and for the purpose described.

In testimony whereof, I affix my signa- 85 ture, in presence of two witnesses.

RICHARD WALTERSKIRCHEN.

Witnesses:

ARTHUR BAUMANN, ROBT. W. HEINGARTNER.