

No. 833,730.

PATENTED OCT. 23, 1906.

W. C. CASE.
BOW FACING OAR.
APPLICATION FILED MAY 10, 1906.

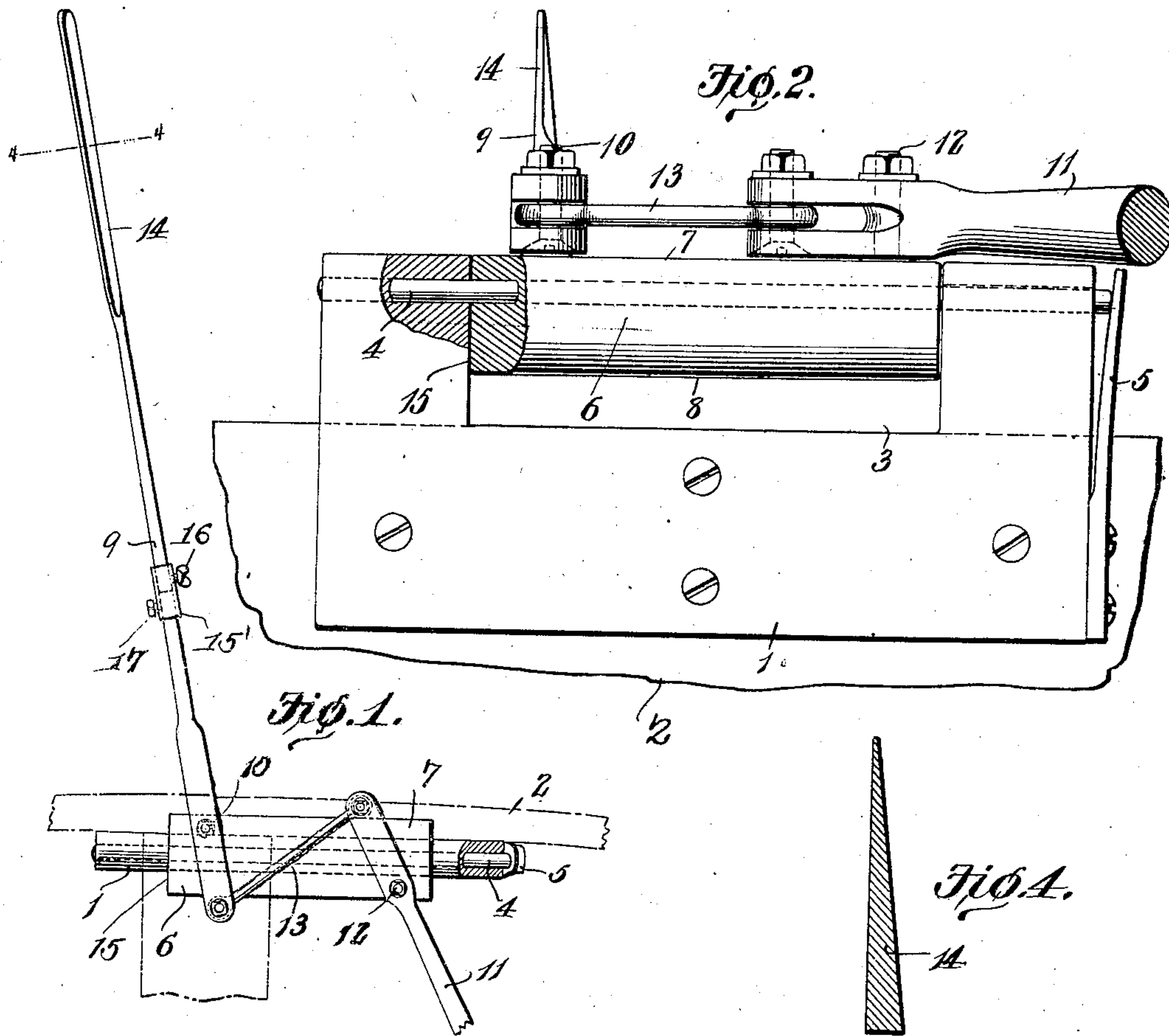


Fig. 3.

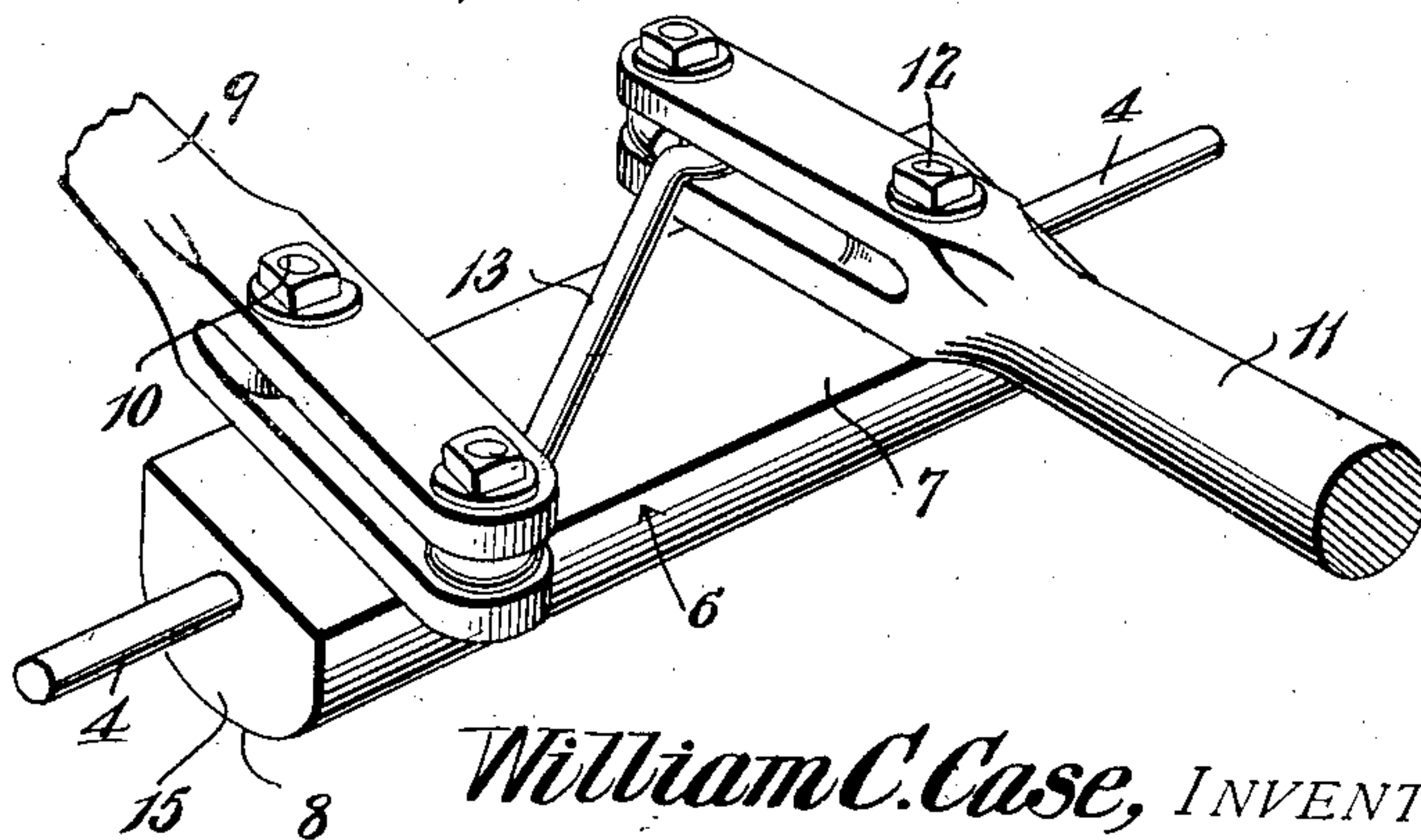


Fig. 4.



WITNESSES:
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WILLIAM C. CASE, NEAR NEW BOSTON, TEXAS.

BOW-FACING OAR.

No. 833,730.

Specification of Letters Patent.

Patented Oct. 23, 1906.

Application filed May 10, 1906. Serial No. 316,210.

To all whom it may concern:

Be it known that I, WILLIAM C. CASE, a citizen of the United States, residing near New Boston, in the county of Bowie and State of Texas, have invented a new and useful Bow-Facing Oar, of which the following is a specification.

This invention has relation to bow-facing oars; and it consists of the novel construction and arrangements of its parts, as hereinafter shown and described.

The object of the invention is to provide a novel rowing apparatus adapted to be applied to the sides of a boat, which shall be simple in its construction, capable of speedy application into place and manipulation and operation and be efficient in service, and in which there shall be such an arrangement of parts that an oarsman will be able to sit facing the direction of movement of the boat and be able to bring into operation the greatest possible power with a given exertion of energy; furthermore, to produce a rowing apparatus capable of easy and speedy attachment upon the gunwale of a boat.

With the above object in view the invention consists, primarily, of a gunwale-plate adapted to be screwed or bolted to the boat, a block horizontally pivoted to said gunwale-plate, the shaft upon which said block is mounted extending at one end beyond the end of the gunwale-plate, a spring attached to the gunwale-plate and bearing at its free end against the end of said shaft, the oar pivoted to the said block, and a lever fulcrumed to said block and having its working end connected by a link with the said oar. The blade of the oar is constructed especially for advantageous use in connection with a bow-facing apparatus.

In the accompanying drawings, Figure 1 is a top plan view of the bow-facing oar. Fig. 2 is a side elevation, partly sectioned, showing a bow-facing oar attached to the side of a boat. Fig. 3 is a perspective view of the block upon which the oar is pivoted and the lever fulcrumed. Fig. 4 is a vertical sectional view through the blade of the oar cut on the line 4-4 of Fig. 1.

The apparatus consists of the gunwale-plate 1, which is adapted to be screwed or bolted to the inner or outer side of the boat 2.

A plate 1 is provided in its upper edge with a recess 3, said recess being located at a point intermediate of the ends of said plate. The shaft 4 extends horizontally through the up-

per portions of said plate 1 and also horizontally across the recess 3. The forward end of said shaft 4 projects slightly beyond the forward end of the plate 1. The flat spring 5 is screwed at its lower end to the lower forward edge of the plate 1. The upper end of said spring bears against the forward projecting end of the shaft 4. The block 6 is fixed to the shaft 4 and is located in the recess 3. Said block is provided with the upper flat surface 7, and its under side 8 is semicylindrical, as shown in Fig. 3 of the drawings. The shaft 4 is journaled in the plate 1. The oar 9 is pivoted at the point 10 on the flat side 7 of the block 6. The lever 11 is fulcrumed at the point 12 to the flat side 7 of the block 6. The link 13 connects the working end of the lever 11 with the inner end of the oar 9. The blade 14 of the oar 9 is made thickest at its lower edge and gradually diminishes in thickness at its upper edge. This construction in the blade of the oar is found to be advantageous in bow-facing apparatus, as will be hereinafter explained.

The operation of the apparatus is as follows: The oarsman sits substantially in alignment with the longitudinal axis of the oar when the same is substantially at right angles to the side of the boat. By grasping the power end of the lever 11 and pulling the same toward him the outer end of the oar 9 is moved from bow toward stern. At the same time the block 6 is turned sufficiently on the shaft 4 to enable the blade 14 of the oar 9 to enter the water. At the end of the stroke the block 6 is turned on the shaft 4 so as to elevate the blade 14 of the oar 9 above the surface of the water, and by reversing the movement of the lever 11 the blade of the oar is carried from stern to bow. By reason of the fact that the lower edge of the blade 14 of the oar 9 is thicker than the upper edge and that the thickness of the said blade gradually diminishes from its lower edge toward its upper edge the angles of the plane surface of the sides of the blade are such as to retain the blade in the water—that is to say, that inasmuch as the surface of the blade is cantered at a slight angle to a perpendicular the water bearing down upon the surface of the blade thus cantered by gravity has a tendency to retain the blade in the water and relieves the oarsman from the extra exertion of endeavoring and preventing the block 6 from rotating during the operation of the oaring to such an extent as to bring the blade

of the oar out of the water. During the row-
ing the block 6 is constantly oscillating from
side to side, and consequently the rear end 15
thereof will wear away, or that portion of
the plate 1 which comes in contact with the
end 15 of the said block is worn. The func-
tion of the spring 5, bearing against the
shaft 4, is to hold the end 15 of the block 6 in
contact with the plate 1. The shaft 4 may
slide in its bearings in the said plate 1.
Thus the said spring 5 keeps the block 6
from rattling or making unnecessary noise
as it becomes worn.

By reference to Fig. 1 of the drawings it
will be seen that the oar 9 is provided with a
detachable blade end or section. The end
of said section enters a sleeve 15' and is held
therein by the set-screw 16, while the said
sleeve in turn is held upon the other section
of the oar by the set-screw 17. Thus should
the blade end or section of the oar break a
new section may be attached without re-
moving the entire oar and its attachments
from the side of the boat.

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

1. A bow-facing apparatus consisting of a
gunwale-plate, a sliding shaft journaled in
said plate, a block fixed to said shaft, a spring
attached to said plate, and bearing against

the end of said shaft and an operatively-con-
nected lever and oar pivotally attached to
said block.

2. A bow-facing apparatus consisting of a
gunwale-plate having in its upper edge a
recess and shaft journaled in the upper por-
tion of said plate and extending across said
recess, said shaft being adapted to slide
longitudinally in its bearings, a block fixed
to said shaft and being located in the recess
of said plate, a spring attached to said plate,
a bearing against the edge of said shaft, a
lever and oar operatively connected and
pivotally connecting to said block.

3. A bow-facing apparatus consisting of a
gunwale-plate, a shaft journaled to said
plate and adapted to slide longitudinally in
its bearings, the end of said shaft projecting
beyond the end of the plate, a spring attached
to said plate and bearing against the pro-
jecting end of said shaft, and block attached
to said shaft, a lever and oar operatively con-
nected and pivotally attached to said block.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature
in the presence of two witnesses.

WILLIAM C. CASE.

Witnesses:

FRANK A. KING,
O. B. PIRKEY.