

No. 830,828.

PATENTED SEPT. 11, 1906.

N. GAGNON.
BOW FACING OAR.
APPLICATION FILED APR. 2, 1906.

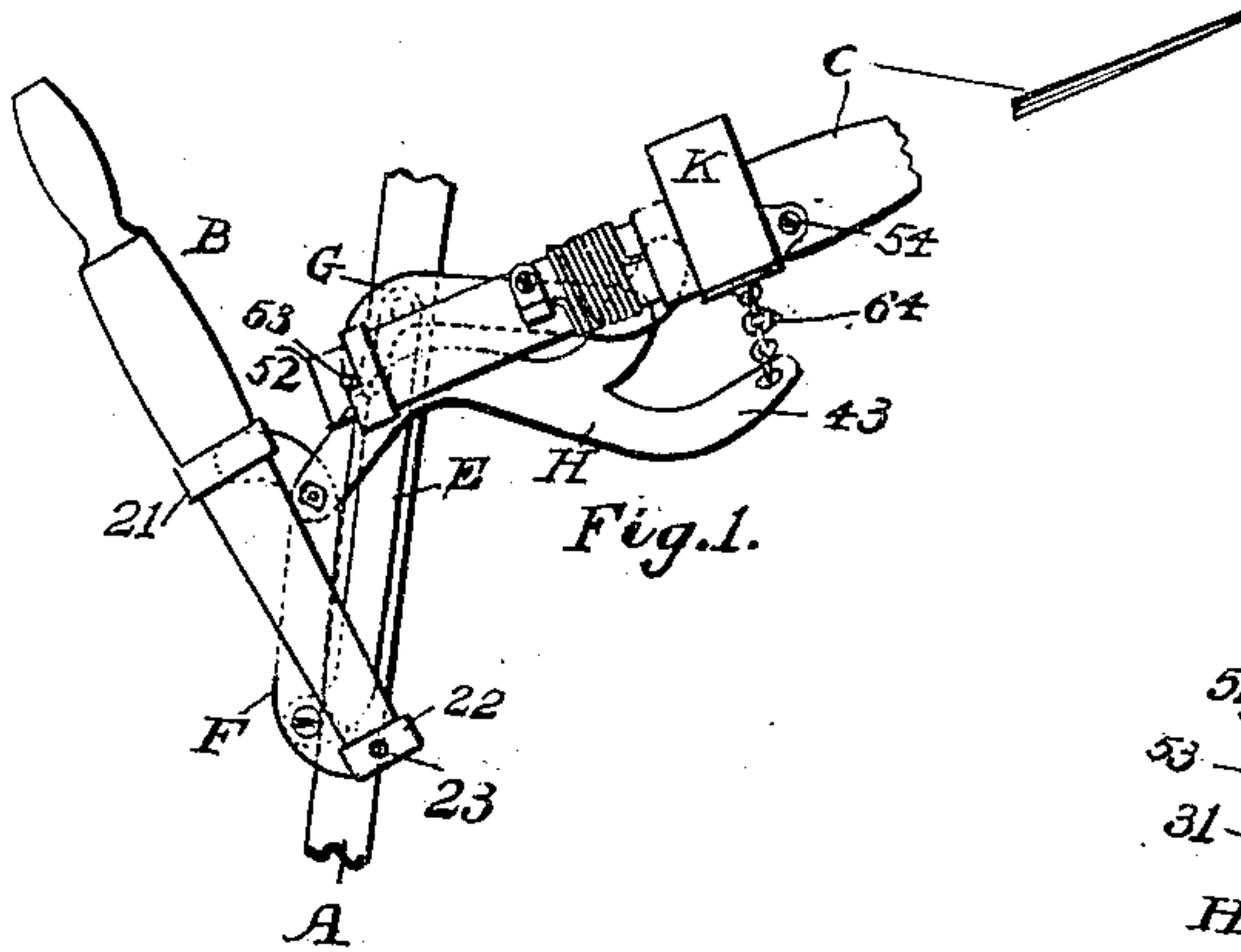


Fig. 1.

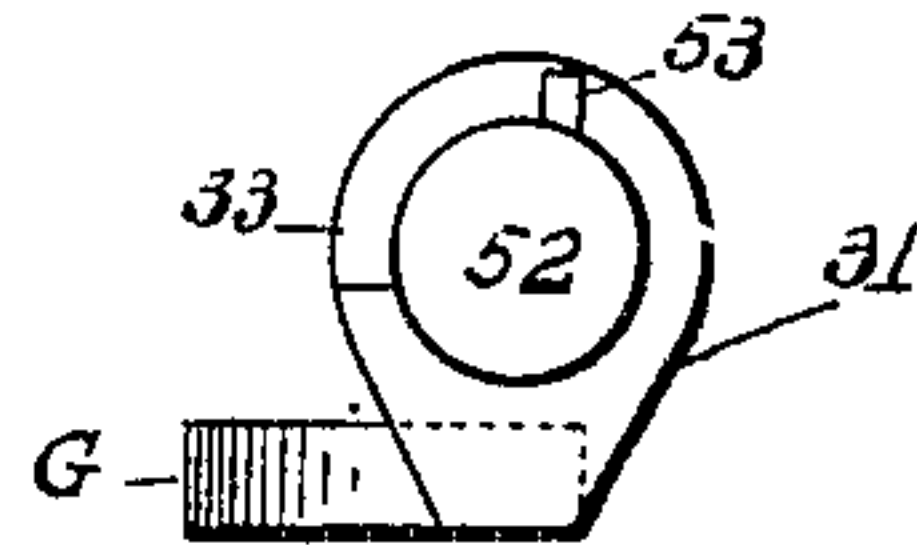


Fig. 2.

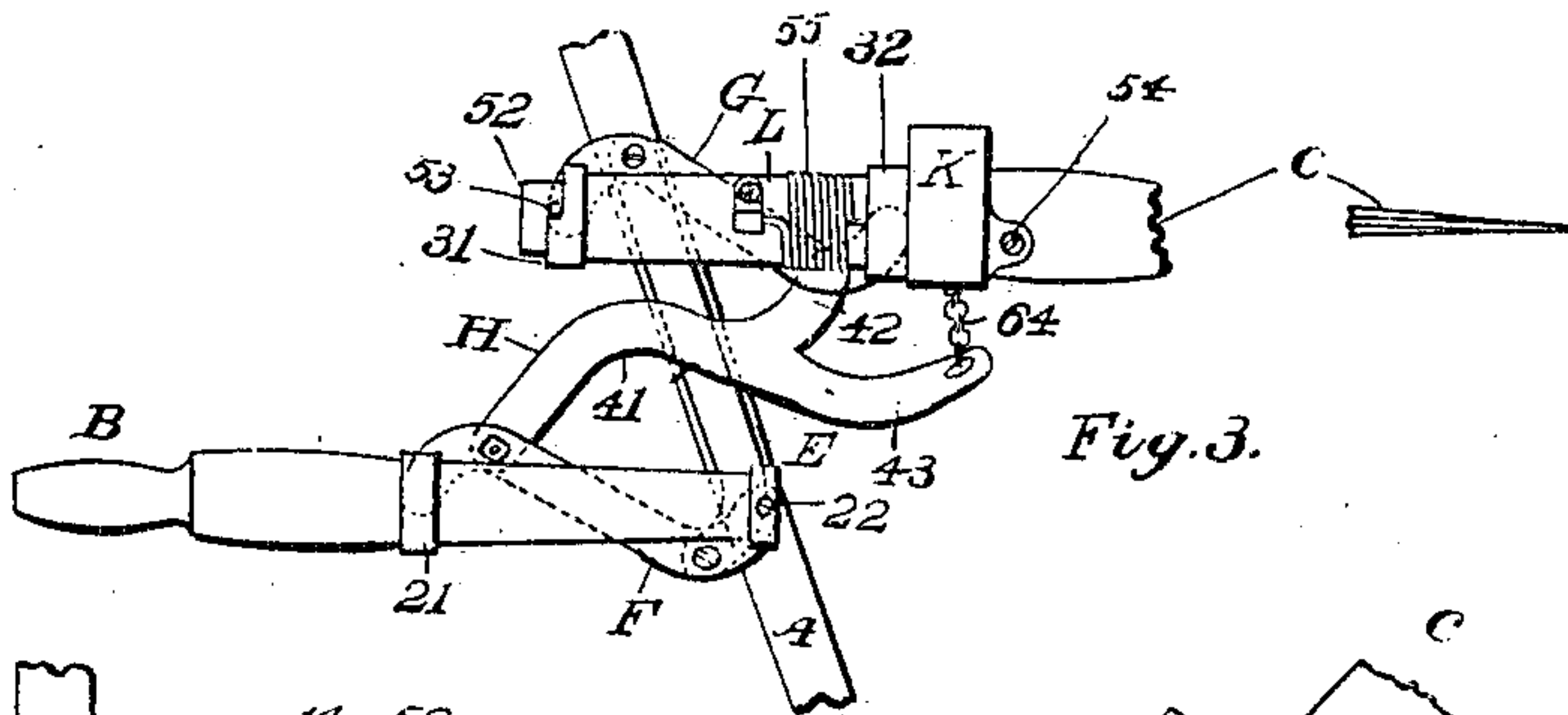


Fig. 3.

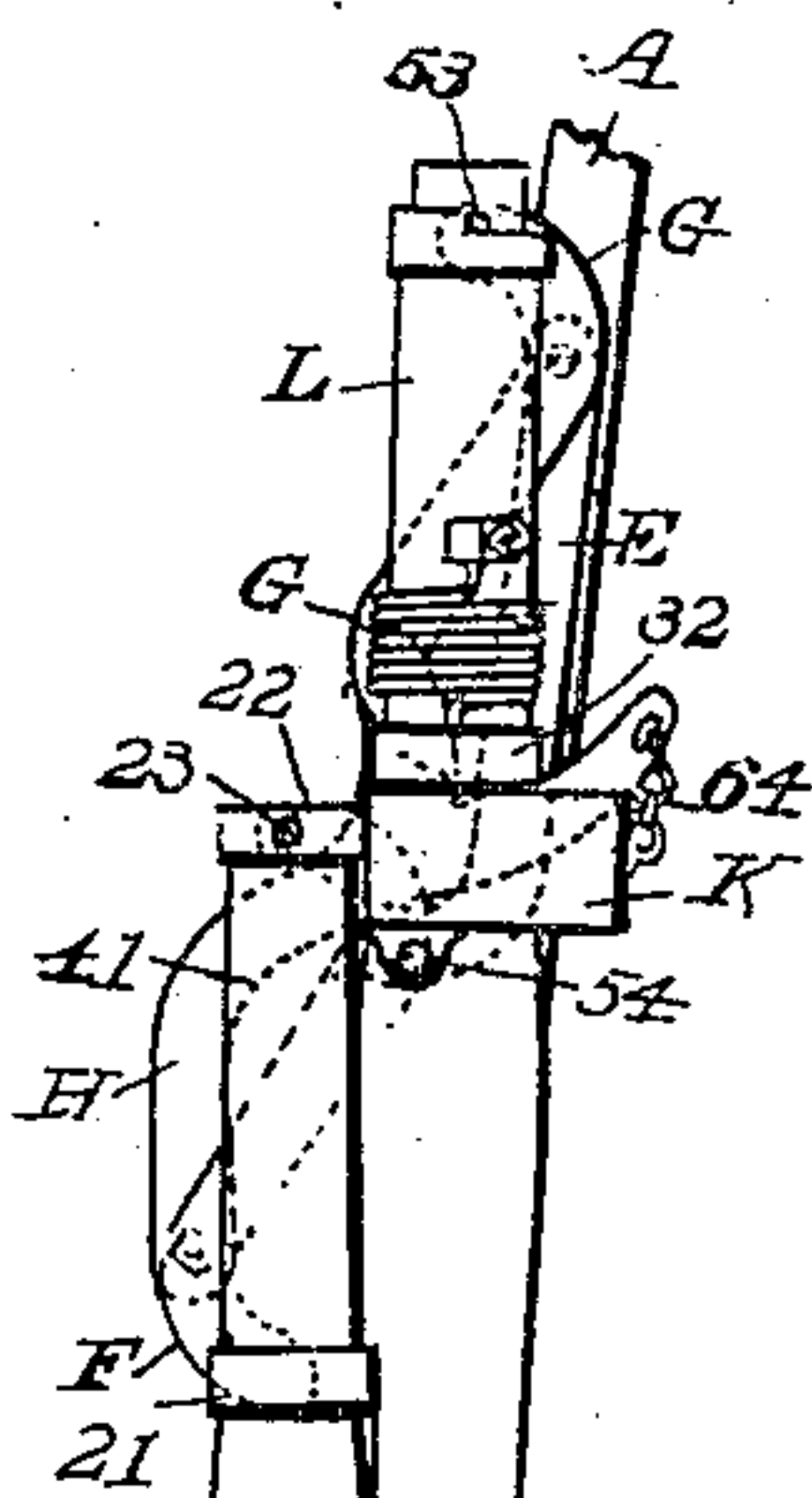


Fig. 4.

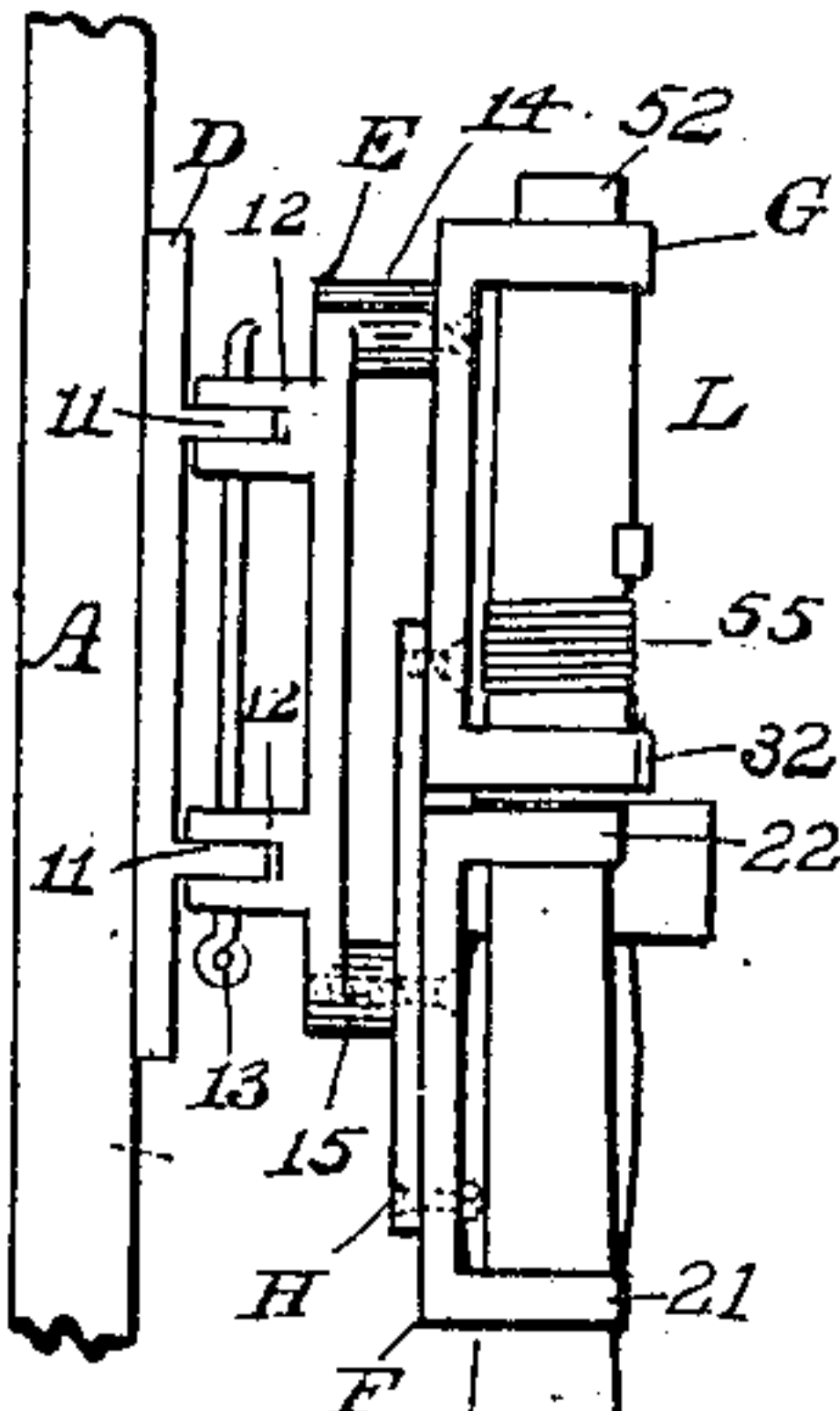


Fig. 5.

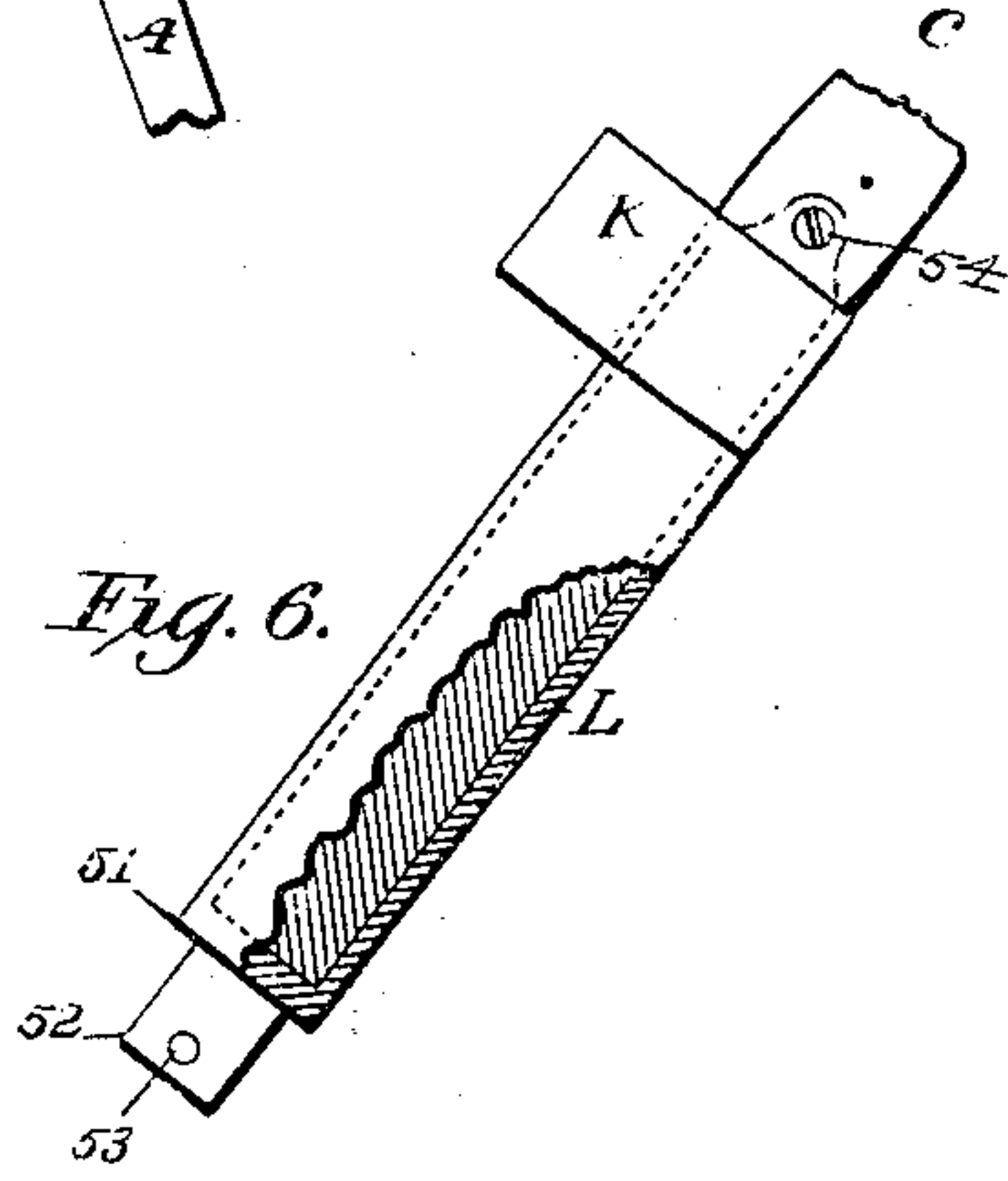


Fig. 6.

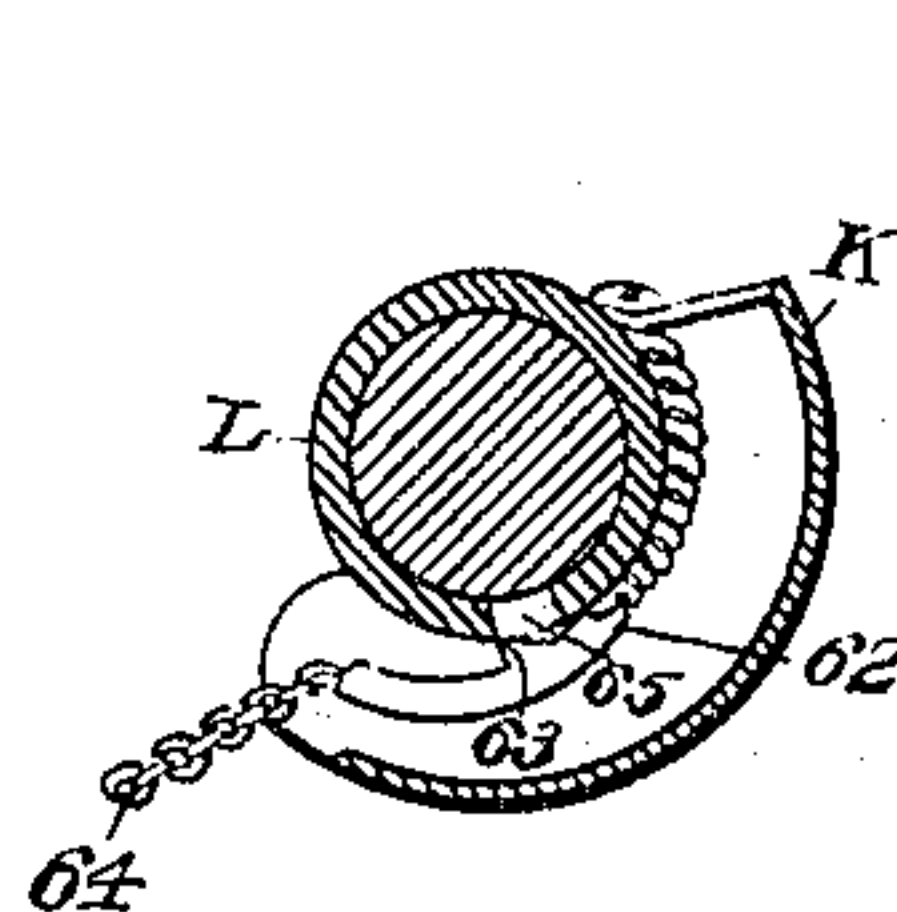


Fig. 7.

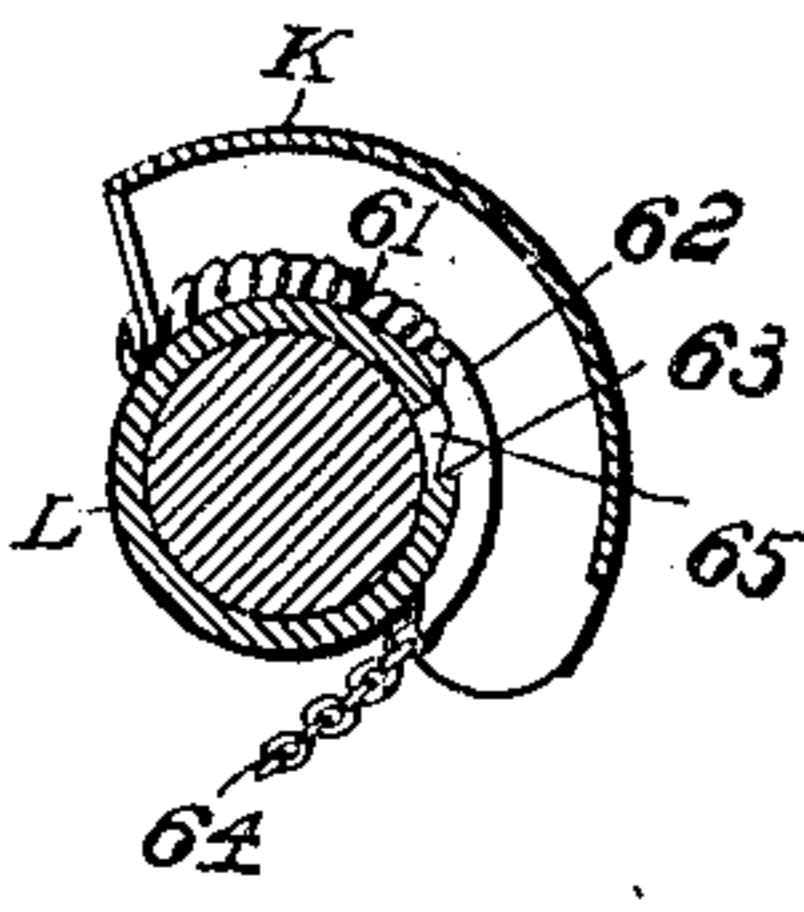


Fig. 8.

Witnesses

Ludger A. Nicol.
Florence A. Parr.

Inventor

Narcisse Gagnon
by Gardner W. Pearson

Attorney

UNITED STATES PATENT OFFICE.

NARCISSE GAGNON, OF LAWRENCE, MASSACHUSETTS.

BOW-FACING OAR.

No. 830,828.

Specification of Letters Patent.

Patented Sept. 11, 1906.

Application filed April 2, 1906. Serial No. 309,483.

To all whom it may concern:

Be it known that I, NARCISSE GAGNON, a citizen of the Dominion of Canada, residing at Lawrence, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Bow-Facing Oars, of which the following is a specification.

My invention relates to means for propelling boats; and it consists mainly of a combination of rowlock and oar.

The object of my invention is to permit the person who is propelling the boat to face in the direction in which the boat is to travel instead of the opposite direction, as is the case when ordinary oars are used.

Another object of my invention is to bring the oar-blade on the propelling-stroke backward at right angles to the surface of the water and on the return forward stroke to turn it so that it lies parallel or almost parallel with the surface of the water, or, in other words, to feather it.

Another object is to so arrange the parts that the oar-blade may run well forward to a point at an angle of about forty-five degrees with the boat and also that in being brought back to a similar angle to the rear the rower will have the greatest leverage on the oar, as this part of the stroke is the most effective in propelling the boat. I also provide that the oar-blade may be brought back so that the blade rests above the gunwale, and as the whole device is pivoted thereto the oar may be brought in out of the way of wharves, posts, &c., when desired.

In the drawings, Figure 1 shows the device at the forward point or beginning of the stroke. Fig. 2 shows the butt-end of the oar-blade holder. Fig. 3 shows about the middle point of the stroke. Fig. 4 shows the extreme backward point. Fig. 5 is an elevation from the left of the device in the position shown in Fig. 4. Fig. 6 is a view of the oar-blade socket. Figs. 7 and 8 are sectional views of the feathering device.

A is the gunwale of the boat to which my device is attached.

B is the handle portion of the oar.

C is the blade portion of the oar.

D is a plate securely attached to the top of gunwale A and provided with projections 11 11, suitably apertured to serve as bearings for the rocking member E, which is also provided with projections 12 12, in which are suitable orifices to receive pin 13, by which

D and E are held together. This rocking member E is allowed considerable pivotal motion, and the two parts may be disconnected by removing pin 13. Rocking member E is curved at its rear end and carries at each end vertical bearings 14 and 15.

Oar-handle B is firmly held by means of an S-shaped plate, which forms a holder F, which carries at each end rings 21 22 of a size to fit handle B. Handle B passes through ring 21 and into ring 22, where it is held in place by a screw 23. Holder F is pivoted at its curved part on bearing 15 of rocking member E. Oar-blade C is supported by another S-shaped plate forming a holder G, which is also made with a ring at each end 31 32. Holder G is pivoted at the curved part near one end on bearing 14. The connecting member H is made in the form shown with an elbow at 41 in order to clear bearing 15 when the device is in the position shown in Fig. 4. It is pivoted to support G by branch arm 42, and it also has another arm 43, which is longer than 42.

Examination of Figs. 1, 3, and 4 show that through the medium of connecting member H and holders G and F with their respective pivotal connections when handle B is brought back it carries blade C back in the same direction, and when handle B is pushed forward blade C is pushed forward.

Oar-blade C, which is usually of wood, preferably fits into socket L, which may be of brass, steel, or other suitable metal. This socket L has a shoulder 51, which rests against ring 31 of holder G and also has a projection 52, which passes through ring 31. Ring 31 is formed with a recess 33 on about ninety degrees of its circumference, and pin 53 is adapted to limit the rotation of socket L to the length of recess 33. A screw 54 holds oar-blade C in place in socket L and prevents it from turning independently. A spiral spring 55, attached at one end to ring 32 and at the other to socket L, cooperating with pin 53, normally keeps socket L and oar-blade C in the position shown in Figs. 1, 3, and 4.

In order to obtain the feathering spoken of, I use the trigger arrangement shown in detail in Figs. 7 and 8. Referring to Figs. 7 and 8, 61 is a spiral spring, attached at one end to socket L. At its other end is a curved latch 62, provided with a nose 63 and attached at its other end to arm 43 by means of a chain 64. Socket L has a notch 65, adapt-

ed to engage nose 63. K is a metal case adapted to protect the parts.

The action of the feathering device is as follows: As arm 43 is longer than arm 42, the tendency when the blade C moves forward is to tighten chain 64 and draw out latch 62 until nose 63 engages notch 65. When this happens, as the notch continues, blade C is revolved as it moves forward, until, as shown in Fig. 7, nose 63 drops out of notch 65, when spring 55 immediately brings back oar-blade C to its normal position. On the back stroke nose 63 is so formed that it passes by notch 65 as it is drawn back by spring 61, and so does not rotate the oar-blade. Spring 55 may be attached either to ring 32 or to ring 31 or it may be placed inside socket L, one side only being outside and attached to ring 31. By making the holder G in the form of an S curve the oar-blade C can be brought farther forward than if it were attached to a straight holder. By using the socket L whenever blade C is broken it may be replaced by unscrewing screw 54 and substituting a new blade. The feathering device for revolving the blade on the back stroke is a well-understood advantage, as it prevents the blade striking the wind and water broadside and makes the return stroke much easier. By making holders F and G both S-shaped, the oar-handle B and blade C can be brought close together, as shown in Fig. 4, when it is desired to ship the oars to avoid wharves, posts, &c., and both may then be brought entirely inside the boat by turning in on pin 13.

What I claim as my invention, and desire to cover by Letters Patent, is—

1. In a bow-facing oar, a rocking member, an S-shaped handle-holder pivoted at one end thereof, and an S-shaped blade-holder pivoted at the other end thereof, combined with a connecting member provided with oppositely-extending ends pivoted respectively to the handle-holder and to the blade-holder.

2. In a bow-facing oar, a rocking member, an S-shaped handle-holder pivoted at one end thereof, an S-shaped oar-holder pivoted at the other end of the rocking member, and a connecting member with oppositely-projecting arms pivoted to the handle-holder and to the blade-holder, combined with means for partially rotating the oar-blade on the back stroke, as described.

3. In a bow-facing oar, a rocking member, a handle-holder pivoted at one end thereof, a blade-holder pivoted at the other end thereof and comprising a ring at each end, and a member pivotally connecting said handle-holder and blade-holder comprising a branch arm, combined with an oar-blade adapted to

revolve in said blade-holder rings, a spiral spring connected at opposite ends to the oar-blade and oar-blade holder, and a trigger attached to the branch arm of the connecting member adapted to partially rotate said oar-blade against the pressure of said spiral spring.

4. In a bow-facing oar, a rocking member, a handle-holder pivoted at one end thereof, a blade-holder pivoted at the other end thereof and comprising a ring at each end, and a member pivotally connecting said handle-holder and blade-holder and comprising a branch arm, combined with a socket in which is a notch and adapted to revolve in said blade-holder rings and to carry the oar-blade, a spiral spring connected at opposite ends to said socket and oar-blade holder, and a trigger comprising a latch with a nose adapted to engage the socket-notch and a spring connection with the socket and a chain connection with the branch arm of the connecting member.

5. In a feathering device for bow-facing oars, an oar-blade holder comprising a ring at each end and in one ring a channel, a socket to receive the oar-blade adapted to rotate in said rings and comprising a shoulder and a pin to limit its movement together with a trigger-notch, and a spiral spring connected at opposite ends with said socket and oar-blade holder, combined with a latch comprising a nose adapted to engage the trigger-notch, a spring connecting the latch and socket, and a chain connecting the latch with other parts of the device, as described.

6. In a bow-facing oar, a rocking member, an S-shaped oar-handle holder pivoted at one end thereof, an S-shaped blade-holder pivoted at the other end thereof and comprising a ring at each end, a member pivotally connecting said handle-holder and blade-holder and comprising a branch arm, a socket to receive the oar-blade adapted to rotate in said rings and comprising a shoulder and a pin to limit its movement and a trigger-notch, and a spiral spring connected at opposite ends with said socket and oar-blade holder, combined with a latch comprising a nose adapted to engage the trigger-notch, a spring connecting the latch and socket, and a chain connecting the latch and the branch arm of the connecting member as described.

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

NARCISSE ^{his} X GAGNON.
mark

Witnesses:

PETER LEAVALLÉ,
L. H. SCHWARTZ.