

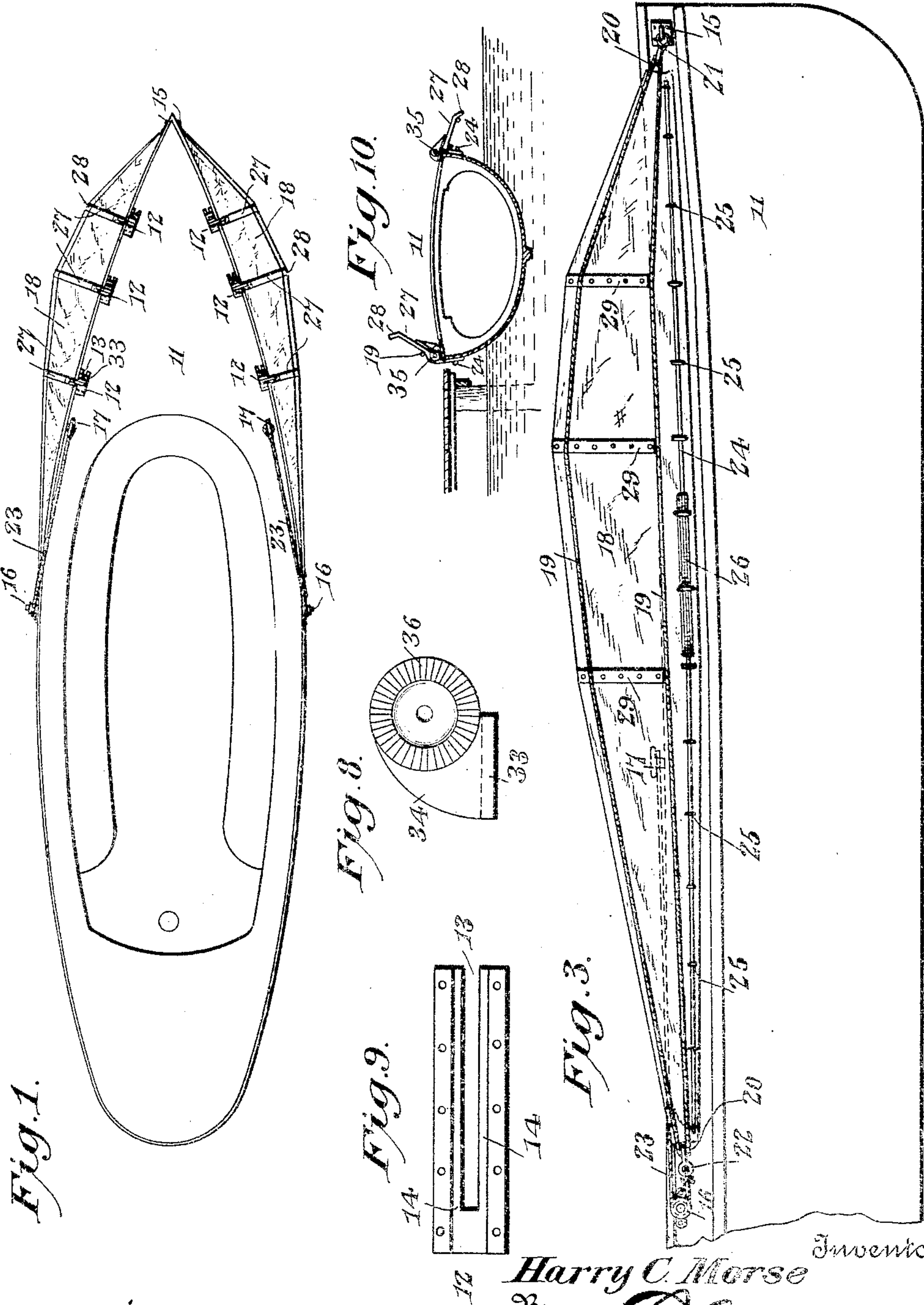
No. 804,154.

PATENTED NOV. 7, 1905.

H. C. MORSE.
SPRAY AND WATER GUARD FOR BOATS.

APPLICATION FILED MAR. 25, 1904.

2 SHEETS—SHEET 1.



Witnesses
Jas. E. McLaughlin
B. L. Latta

Harry C. Morse
By
E. G. Figg
Attorney

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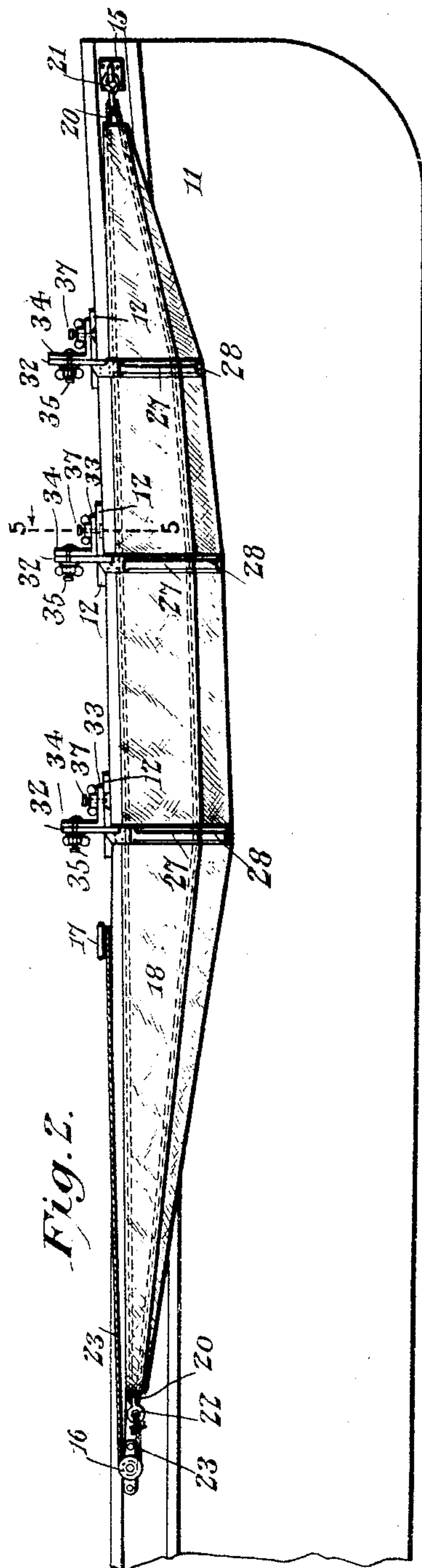


Fig. 2.

Witnesses
Jas. E. McLaughlin
Ch. Foster

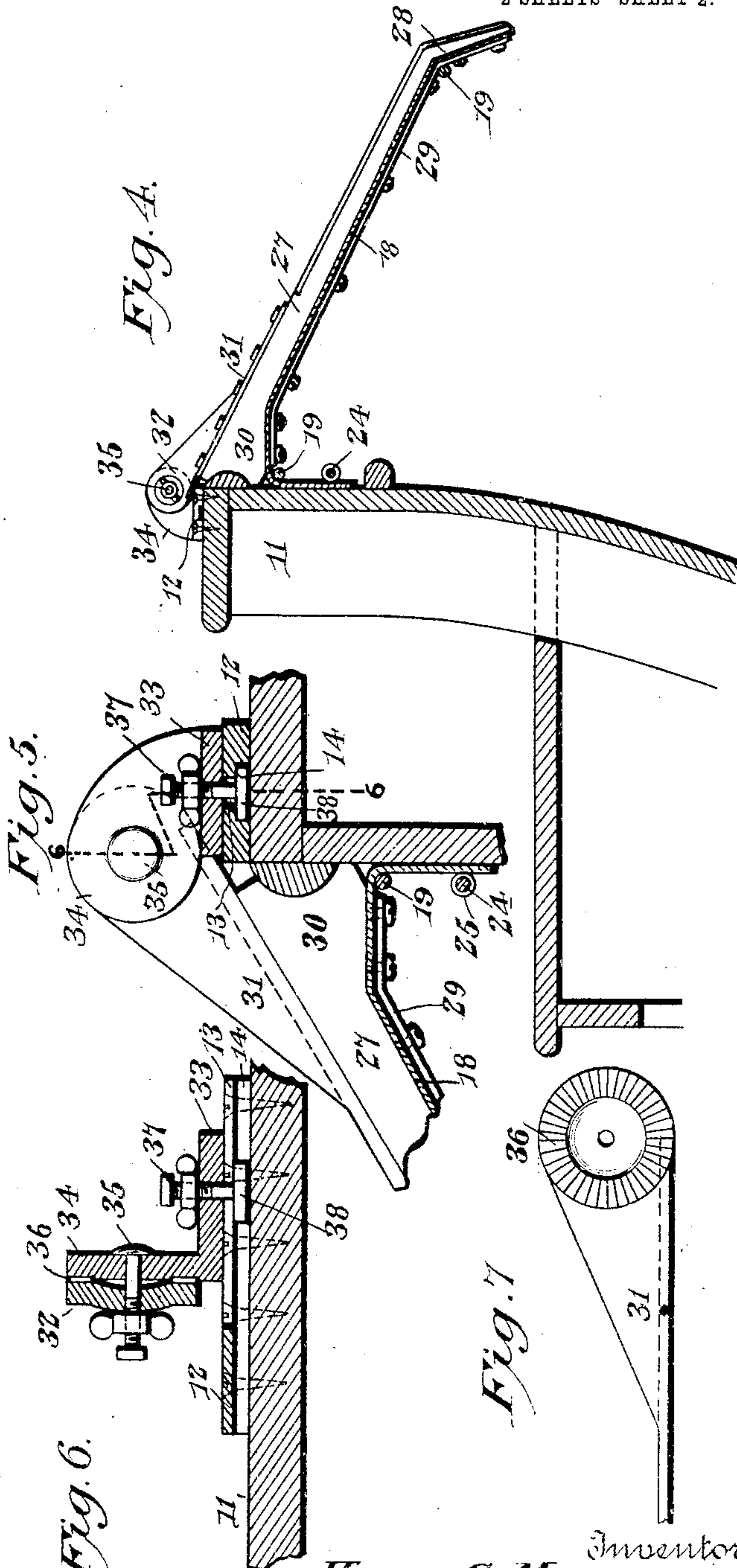


Fig. 3.

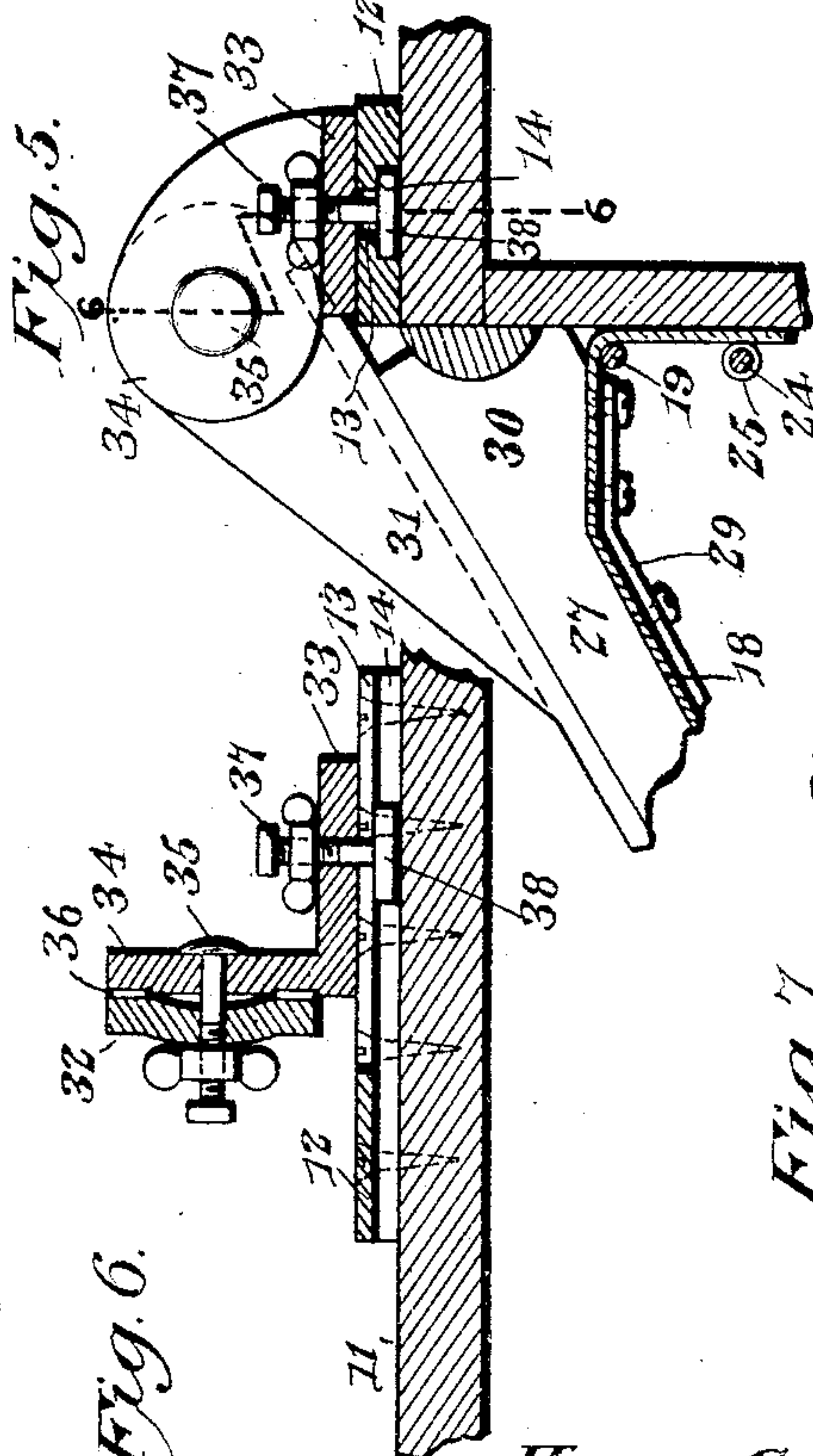


Fig. 4.

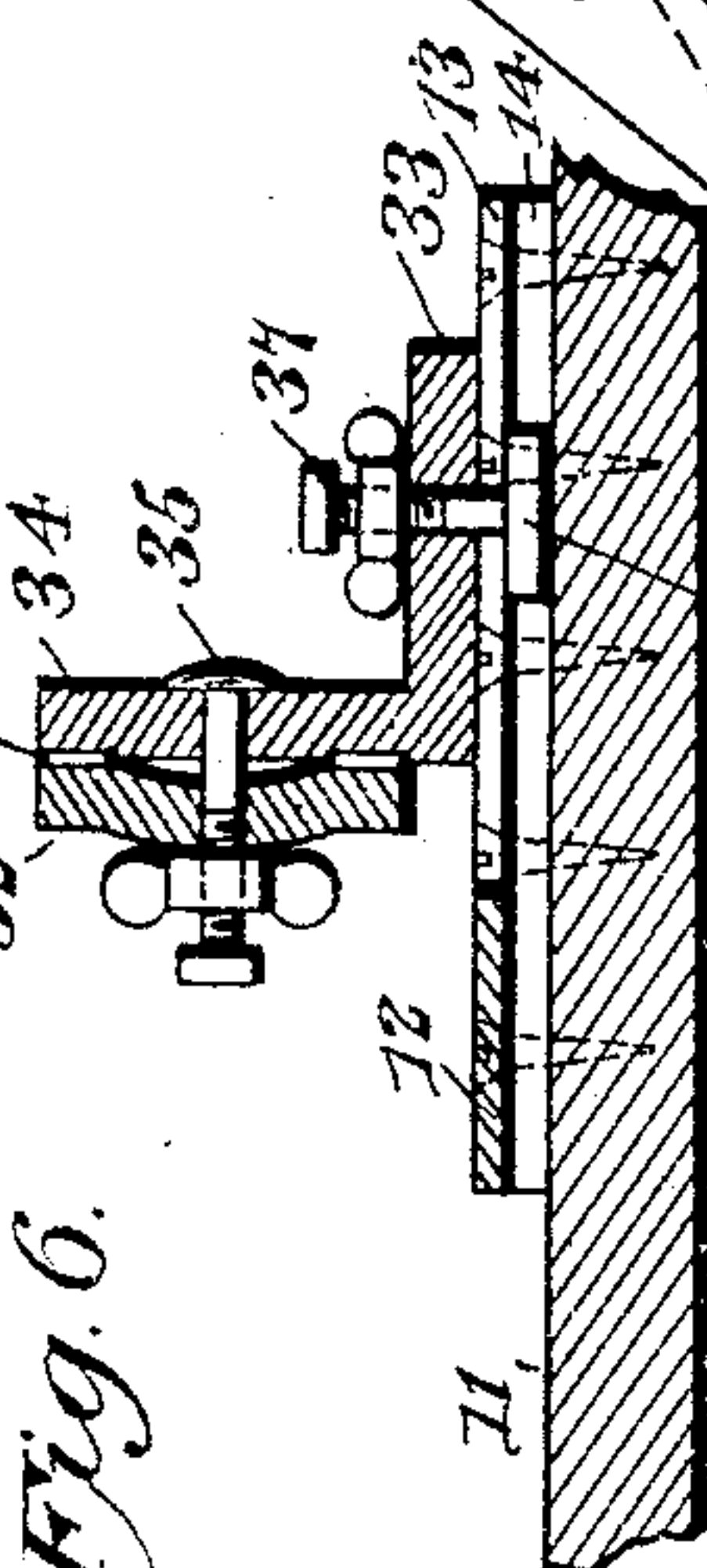


Fig. 5.

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Inventor
Harry C. Morse,

E. J. Siggers

Attorney

UNITED STATES PATENT OFFICE.

HARRY COREY MORSE, OF PENN YAN, NEW YORK.

SPRAY AND WATER GUARD FOR BOATS.

No. 804,154.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed March 25, 1904. Serial No. 199,997.

To all whom it may concern:

Be it known that I, HARRY COREY MORSE, a citizen of the United States, residing at Penn Yan, in the county of Yates and State of New York, have invented a new and useful Spray and Water Guard for Boats, of which the following is a specification.

This invention relates to means for preventing water and spray from dashing into boats. It is a well-known fact that vessels, especially of the smaller open types, as gasolene and other small power boats, when running into head or quartering-head winds, particularly when the water is rough, almost universally ship water, while their occupants are usually drenched with spray caused by the waves dashing against the bows. Furthermore, sailing vessels when beating to windward take in much water over their weather-bows in the same manner.

The object of the present invention is to provide a device in the form of an attachment that can be quickly applied to a boat when the necessity arises for preventing the above-noted objections, said device being as easily detached, and when not in use it can be compactly folded, so that it will occupy a comparatively small space, and thus be stowed entirely out of the way.

The preferred embodiment of the invention is illustrated in the accompanying drawings; but the invention is not limited to the structural details therein set forth, as will be apparent by an inspection of the claims hereto appended.

In the drawings, Figure 1 is a top plan view of a boat, showing a pair of guards applied thereto and in operative position. Fig. 2 is a side elevation, on an enlarged scale, of the bow portion of the same, showing one of said guards. Fig. 3 is a similar view with the guard elevated. Fig. 4 is a cross-sectional view through the guard and boat. Fig. 5 is a detail cross-sectional view taken substantially on the line 5 5 of Fig. 2. Fig. 6 is a detail sectional view taken on the line 6 6 of Fig. 5. Fig. 7 is a view in elevation of one of the hinge-leaves carried by the ribs. Fig. 8 is a similar view of the other hinge-leaf. Fig. 9 is a bottom plan view of one of the attaching-cleats. Fig. 10 is a cross-sectional view through the boat, showing one of the guards elevated with the boat at a landing.

Similar reference-numerals indicate corresponding parts in all the figures of the drawings.

The type of boat to which the invention may be applied is not essential, as the said invention may be employed in connection with any of those well known. One of such boats is illustrated in the accompanying drawings and designated generally by the reference-numeral 11. To the opposite sides of the bow portion of this boat and preferably on the extreme outer margins of the deck are secured attaching-cleats comprising plates 12, having longitudinally-disposed slots 13 extending in from one end of each and terminating short of the other end, said slots being provided with undercut portions 14, which extend the entire length of the plates, as shown in Fig. 9, to permit the free passage of water. On each side of the bow of the boat is secured an eye 15, while on the side amidship pulleys 16 are fastened. Cleats 17 are preferably located on the deck in rear of the rearmost attaching-cleats 12. These are the only parts that are secured permanently to the boat and constitute the means for attaching the guard thereto. As these guards are exact duplicates, but one need be described.

A spray-arresting wing or sheath 18, preferably formed of canvas or other flexible fabric or material, is provided and is tapered toward its opposite ends, being reinforced by a looped cable 19, the opposite lengths of which are spaced apart and fastened longitudinally to one face of the wing or sheath, preferably by sewing. The ends of the looped cable 19 project beyond the ends of the wing or sheath, as shown at 20, and to one of these projecting ends is loosely attached a snap-hook 21, adapted to engage the eye 15. The other projecting end of the loop carries an eye 22, to which is fastened a stretcher-cable 23, said cable being adapted to pass about the pulley 16 and be secured at its ends to the cleat 17. A binder comprising a cable 24 is secured at its ends to the ends of the wing or sheath and is extended along the inner margin of the same, being held in position and slidably passing through rings 25, secured to the under face of the sheath. An intermediate portion of this binder is in the form of an elastic board 26, that serves at all times to secure tension upon said binder. Stretcher-ribs 27 are located across the intermediate portions of the wing or sheath and have outer downturned ends 28, which are arranged at an obtuse angle. The said wing or sheath passes across the under faces of the ribs and is secured thereto by strips 29. The inner

ends of the ribs are preferably enlarged, as shown at 30, and carry hinge-leaves 31, that are provided with upstanding ears 32. Other hinge-leaves 33 have ears 34 coacting with the ears 32 and secured thereto by combined clamp and pivot bolts 35, passing through said ears. The adjacent coacting faces of the ears are preferably corrugated, as shown at 36, so that when the bolts 35 are tightened the hinge-leaves will thus be held against relative pivotal movement. The main portions of the ears 33 are adapted to rest upon the attaching-cleats 12 already described and carry depending headed bolts 37, the heads 38 of which are adapted to adjustably and detachably interlock in the slots 13 and 14 of the attaching-cleats.

When the water is smooth and the guards are not wanted, they are detached from the boat and can be rolled into a small compass, so that they may be stowed away. When it is desired to use them, however, it is only necessary to hook the front ends in the eyes 15, pass the cable 23 about the pulleys 16, and draw the guard taut by means of said cable, securing the same to the cleats 17. The wings or sheaths are thus tightly stretched. In the meantime the headed clamping-bolts 37 have been engaged in the cleats, but not tightened, so that the stretching of the sheaths is not interfered with. After the desired tension has been secured, however, the bolts 37 are tightened, thus securing the ribs to the boat. The wings can be held at any angle of elevation desired by means of the clamping pivot-bolts 35, which secure the ears of the hinge-leaves together. Under normal conditions the guards are preferably depressed slightly, as illustrated in Fig. 4, being arranged at an acute angle; but in making a landing or whenever desired they can be elevated over the side of the boat, as shown in Fig. 10. The binders 24, to which reference has been made, are placed under tension by the stretching of the wings, and this will tightly clamp the depending inner margins of the fabric against the sides of the boat. It will therefore be apparent that water and spray thrown upwardly by the bows of the boat when running against a head wind in rough water will be caught by the sheath or wing, and consequently will not find ingress into the boat or passage over the same. The binders serve to prevent any passage of water between the sides of the boat and the inner sides of the guards, and consequently the deck and body of the boat may be kept dry. It will be apparent that the device can be detached with great ease by a reversal of the operations above described, and thus a simple attachment is provided which secures all the objects mentioned in the preliminary portion of the specification.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a boat having a bow, of a spray-arresting wing of flexible material secured along its inner margin to the side of the bow and projecting outwardly beyond the side walls thereof to prevent the passage of water into the boat, the front end of the wing being tapered and extending to the bow end of said boat.
2. The combination with a boat having a bow, of a spray-arresting wing hinged on a substantially horizontal axis along its inner margin to the boat and arranged to swing outwardly beyond said hinge-axis and laterally beyond the side of the bow, said wing being capable of swinging on its hinge-axis into and outside of the boat, and means for securing the wing in its outward position.
3. The combination with a boat having a bow, of a spray-arresting wing hinged along its inner margin to the boat and arranged to swing outwardly beyond its hinge-axis and laterally beyond the side of the bow, and means for securing it at different elevations in its outward position.
4. The combination with a boat having a bow and deck, of a spray-arresting wing having tapered ends, means for attaching the wing to a boat with its front tapered end in juxtaposition to the bow end of said boat, said wing projecting laterally outward from the deck and beyond the bow, and means engaging the tapered ends of the wing for placing said wing under longitudinal tension.
5. In a guard of the class described, the combination with a spray-arresting wing, of means for attaching the same to a boat in projecting relation to and beyond the side of the same, and means for longitudinally stretching the wing along the boat, said means being separate from the attaching means.
6. In a guard of the class described, the combination with a boat, of a flexible spray-arresting wing having a plurality of spaced transverse ribs secured thereto and having their ends spaced apart, independent hinges connected to the ribs, and means located at spaced points along the side of the boat for detachably connecting a leaf of each hinge to said boat.
7. In a guard of the class described, the combination with a boat, of a spray-arresting wing, spaced independent hinges carried by the wing, and spaced means for detachably securing the hinges at different points along the bow of a boat to thereby hold the wing in projecting relation to said bow to prevent the passage of water over the bow.
8. In a guard of the class described, the combination with frame members, of hinges for pivotally attaching the frame members to a boat and permitting their upright swinging movements, said hinges comprising leaves,

and a clamping-bolt passing through the leaves for holding the same against movement and constituting a pivot therefor.

9. In a guard of the class described, the combination with attaching-cleats, of a spray-arresting wing having hinges arranged to interlock with said cleats, and means for securing the devices to the cleats.

10. In a guard of the class described, the combination with attaching-cleats, of a wing having devices arranged to adjustably interlock with said cleats, means for securing the devices to the cleats, and stretching means for the wings.

11. In a guard of the class described, the combination with a cleat arranged to be secured to a boat and having a guideway, of a spray-arresting wing having a device that detachably engages the guideway, and means for securing the device upon the guideway.

12. In a guard of the class described, the combination with a cleat arranged to be secured to a boat and having a longitudinally-disposed guideway, of a spray-arresting guard-wing, a headed clamp-bolt carried by the guard-wing, the head of said bolt being adapted to detachably engage in the guideway, and a clamping-nut mounted on the bolt for clamping the head in said guideway.

13. In a guard of the class described, the combination with a flexible wing, of a plurality of spaced transverse stretcher-ribs secured to the wing, each stretcher-rib having a hinge-leaf provided with an ear, other hinge-leaves having ears associated with the ears of the ribs, clamping-bolts passing through the ears, headed bolts carried by said other ears, and attaching-cleats adapted to be secured to a boat and having longitudinally-disposed slotted guideways arranged to receive the heads of said bolts.

14. In a guard of the class described, the combination with a plurality of ribs having outstanding main portions and outer downturned ends, of means for securing the inner ends to a boat, and a spray-arresting sheath secured to and extending across the spaces between the outstanding and downturned portions of the ribs.

15. In a guard of the class described, the combination with a plurality of ribs, of means for hingedly and detachably securing the ribs to a boat, a spray-arresting sheath arranged across the corresponding faces of the ribs and extending between the same, and fastening-strips secured to the ribs and extending over one face of the sheath.

16. In a guard of the class described, the combination with a flexible spray-arresting wing, of means for securing the same at one end to the side of a boat in projecting relation to the side of the same, and means attached to the other end for stretching the wing.

17. In a guard of the class described, the combination with a flexible spray-arresting

wing, of means for securing the same at one end to the side of a boat in projecting relation to the same, means for adjustably connecting the intermediate portions to the boat, and means attached to the other end for stretching the wing.

18. In a guard of the class described, the combination with a flexible spray-arresting wing, a cable attached longitudinally thereto, of means for securing the cable at one end to the boat, and stretching means for the wing attached to the opposite end of the cable.

19. In a guard of the class described, the combination with a flexible spray-arresting wing, including a looped cable having spaced portions secured thereto and extending longitudinally thereof, of means attached to one end of the loop for securing the same to the side of a boat in projecting relation thereto, and stretching means fastened to the opposite end of the loop.

20. In a guard of the class described, the combination with a spray-arresting wing formed from fabric, and having a looped cable secured longitudinally thereof, of a hook fastened to one end of the cable, an eye adapted to be secured to a boat and arranged to receive the hook, a stretching-cable secured to the opposite end of the loop, and means for fastening the cable to a boat.

21. In a guard of the class described, the combination with a flexible wing or sheath, of means for securing the same under tension to the side of a boat, and a yielding extensible binder secured to the opposite end portions of the sheath and adapted to conform to the longitudinal contour of the side of the boat.

22. In a device of the class described, the combination with a flexible wing or sheath, of transverse ribs secured to the same, means for detachably and pivotally fastening the ribs to the side of a boat, means for securing the inner end of the wing or sheath to the boat, stretching means secured to the opposite end of the wing or sheath, and a yielding flexible binder secured longitudinally to the wing or sheath contiguous to its inner margin.

23. In a guard of the class described, the combination with a wing having outer downturned ends, of means for pivotally attaching the same to a boat to permit its upright swinging movement, and means for securing the wing against such swinging movement.

24. In a guard of the class described, the combination with a wing having outer downturned ends disposed at an obtuse angle, of means for pivotally attaching the same to a boat to permit its upright swinging movement, and means for securing the wing against such swinging movement, said wing being movably fixed at an acute angle to the side of the boat.

25. In a guard of the class described, the combination with a spray-arresting wing, of

means for pivotally attaching the same to a boat in projecting relation to the bow portion thereof and permitting its upright swinging movement between a position outside the boat and one inside or above the same, and means for securing the wing against such swinging movement in its outward projecting relation, said wing being held by said means at an acute angle to the side of the boat.

26. In combination with a boat, a spray-arresting wing secured to the side thereof and arranged at an acute angle thereto having its outer end downturned and set at an obtuse angle.

27. A boat provided at its bow portion on each side with a spray-arresting wing composed of a flexible sheath and transverse stretcher-ribs spaced apart on the sheath throughout their lengths, and devices located at different points along the boat for securing the ribs thereto and holding the wing in projecting relation and at an acute angle to said boat.

28. In a guard of the class described, the combination with a spray-arresting wing having intermediate transverse stretching means and tapering ends, of means for attaching the wing along its inner margin to a boat and in

projecting relation to the bow of said boat, and means for securing the tapered ends under tension to the boat.

29. In a guard of the class described, the combination with a spray-arresting wing, of means for attaching the same to a boat in projecting relation thereto, said wing having an offset longitudinally-disposed curved margin.

30. In a guard of the class described, the combination with a spray-arresting wing, of means for hingedly attaching the same at its inner margin to a boat in projecting relation to the side of the same, said means permitting an up-and-down movement of the wing.

31. In a guard of the class described, the combination with a wing, of means for pivotally mounting the same on a boat to permit its upward and downward movement, and common means for holding the wing in its upward and downward positions.

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

HARRY COREY MORSE.

Witnesses:

LILIAN BUTLER,
CLINTON D. STRUBLE.