Feb. 8, 1949. J. E. SUS ET AL 2,461,356

AUTOMATIC FISH POLE HOLDER

Filed Dec. 30, 1946

Fig. 1.

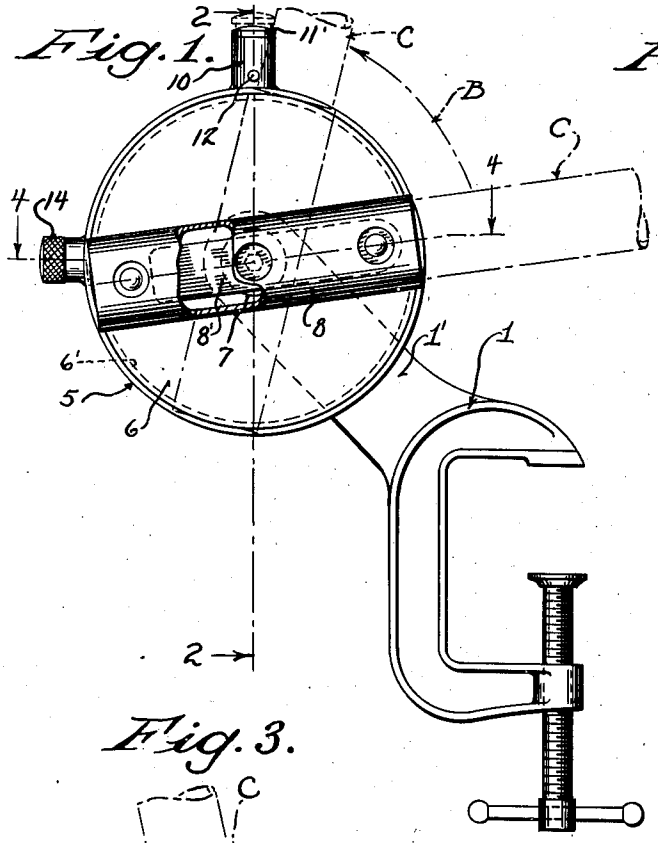


Fig. 2.

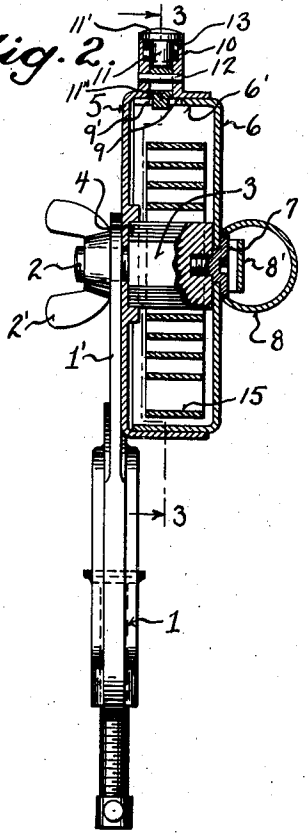


Fig. 3.

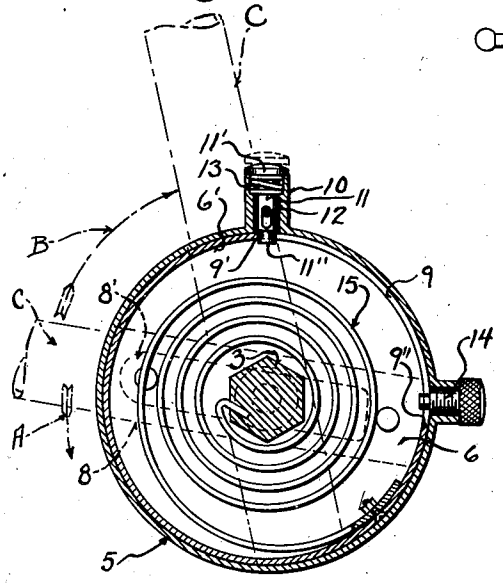
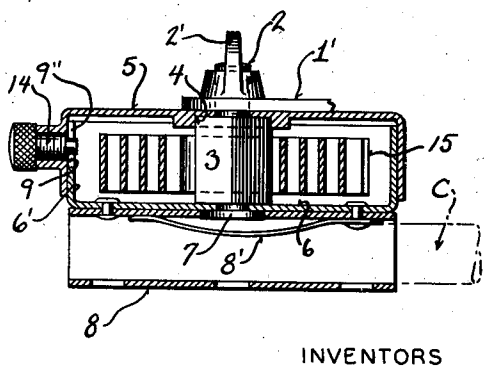


Fig. 4.



INVENTORS
JOSEPH E. SUS
ANTON SUS JR.

BY Cullen Wright

ATTORNEYS

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AUTOMATIC FISH POLE HOLDER

Joseph E. Sus and Anton Sus, Jr., Racine, Wis.

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1 Claim. (Cl. 248—42)

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Our invention refers to fish rod holders and it has for its primary object to provide a fixed circular shell having nested therein a similar rod carrying shell under spring control, the same being locked in one position under spring tension by a trigger which is released upon an initial load strain upon the rod, whereby said rod is rocked from its normal low soaking or trolling position to approximately a vertical position whereby a fish is automatically gaffed and lifted through the water.

A further object of our invention is to provide a spring controlled friction locking trigger for the rod carrying shell.

A still further object of our invention is to provide a key connected hub secured to fixed shell carrying the inner end of a coil spring whereby tension of the spring may be varied.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the novel construction, combination and arrangement of parts, substantially as hereinafter described, and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawings is illustrated one complete example of the physical embodiment of the present invention constructed according to the best mode so far devised for the practical application of the principles thereof.

In the drawings:

Figure 1 represents a front elevation of a rod holder embodying the features of our invention.

Figure 2 is a cross section of the same, the section being indicated by line 2—2 of Figure 1.

Figure 3 is a sectional elevation of the rod holder, the section being indicated by line 3—3 of Figure 2.

Figure 4 is a plan sectional view through the rod holder, the section being indicated by line 4—4 of Figure 1.

Referring by characters to the drawings, 1 indicates a clamping bracket for the fish rod holder having an apertured arm 1' extending upwardly therefrom.

Fitted into the arm aperture 1' is the threaded shank 2 of a polygonally faced key-hub 3. The polygonal end faces of said hub being seated in a correspondingly shaped recess 4 of a centrally apertured outer flange shell 5, as best illustrated in Figures 2 and 4 of the drawings.

The central aperture of the shell 5 is mounted upon the hub shank 2 with its face in frictional

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engagement with the arm 1' of the bracket. The outer shell 5 is thus held in a fixed position with reference to the bracket arm by a thumb nut 2', which engages the end of the shank 2 whereby all parts are drawn tightly together.

Rotatably mounted in the fixed outer shell is a correspondingly shaped flanged inner shell 6, which shell is journaled upon a screw threaded head 7 engaging a central aperture of the face of the inner shell and rotatable upon the walls of the head and outer end face of the hub.

The head 7, for convenience in assemblage, is provided with a wrench socket whereby the parts may readily be mounted.

The outer wall of the rotatable inner shell has riveted thereto a pole carrying sleeve 8 which extends across the axis of the shell. The said sleeve carries a leaf spring 8' secured by one of the sleeve rivets, whereby friction is exerted upon a fishing rod C, as indicated in dotted lines, Figure 1, said rod being shown in its low or soaking position with reference to the holder.

As best indicated in Figures 2–4 inclusive, the flange 6' of the inner shell is cut away approximately one-quarter of its diameter to form a slot 9 having notched ends 9'—9'', as best shown in Figure 3 of the drawings.

The peripheral flange of the outer shell has extending upwardly therefrom a sleeved housing 10.

Mounted in the housing is a plug 11, which plug is reciprocatively secured by a slot and pin 12 that is seated in the housing in engagement with said slot.

The upper end of the sleeved housing is shouldered for the reception of a coil spring 13 interposed between said shoulder and the head 11' of the plunger whereby the lower reduced end 11'' of said plunger is normally held clear of the inner flange 6', said plunger being in effect a spring controlled trigger.

The slot 9, formed in a flange 6', also has normally extending therein a threaded stop-pin 14, as best indicated in Figures 3 and 4 of the drawings, the same being approximately at an angle of 90° from the friction trigger and spaced slightly from the end of the slot 9''.

Secured to the hexagonal hub 3 is the inner end of a coil spring 15, the outer end of which spring is secured to the inner face of the rotary shell flange 6', the spring, as shown in Figure 3, exerting a rotating action from left to right upon the inner shell.

Should it be desired at any time to increase the tension of the coil spring, it may be effected

by loosening the shank and nut connections 2—2' whereby the hub and associated inner shell parts may be shifted longitudinally of the axis to a position where the interlocked key engagement between said hub and shell 5 is freed. Thereafter the polygonal face of the hub 3 may be rotated from right to left approximately the distance of one face of said hub and thereafter the coupling connection between the hub and polygonal recess of the outer shell are re-nested and locked together.

In this rewind movement it is understood that the stop pin may be lifted from the periphery of the flange 6' to permit a partial rewinding movement irrespective of the position of the slot.

As shown in Figure 3 of the drawings, when the holder is set for fishing, the inner shell is rotated from left to right to load the coil spring 15 and incidentally shift the offset end 9' of the slot 9 to a position approximately alining the end portion 11' of the spring controlled plunger. Now as the operator holds the inner shell in this position, the plunger will be manually depressed whereby the end 11' thereof will enter the slot 9. Hence, when pressure is relieved by the operator from the inner shell, the action of the coil spring will cause the offset end of the slot 9 to frictionally engage the plunger end 11' whereby these parts are held in their locked position. Thus the rod is held and inclined at a low angle for trolling or soaking, it being noted that the end 9'' of the slot is slightly spaced away from the stop-pin 14.

Under this set pole position, in the event a fish should strike, the pole will be caused to move slightly downward in the direction of the arrow A, Figure 3. This slight downward movement will cause the inner shell to rotate against its spring tension slightly from left to right whereby the end of the plunger 11' is relieved of its friction lock and said plunger will immediately move upward

to clear the flange 6' whereby the inner shell will rotate from right to left as indicated by the arrow B of Figure 1, and the pole C will assume practically a vertical position being held in said position due to the fact that the end 9'' of the slot will have engaged the stop-pin 14. Thus the fish will automatically be hooked and the pole swung upward through approximately a radius of 90° whereby the said fish is drawn through the water and can then readily be landed.

It should be understood that our automatic pole holder may be used effectively in ice fishing.

We claim:

A fish rod holder comprising a stationary flanged circular shell, an inner flanged shell rotatably mounted upon the flange of the stationary shell, a slot formed in the flange of the inner shell having offset ends, a fixed hub extending from the stationary shell, a coil spring having ends secured to the fixed hub and flange of the inner shell, a radially disposed sleeve extending from the outer shell flange, a spring controlled reciprocative plunger mounted in the sleeve for frictionally engaging one of the offset ends of the spring controlled shell slot, whereby upon a slight back movement of the spring controlled outer shell, the spring controlled plunger is released from its frictional engagement with the offset slot end, and a stop-pin carried by the outer shell extending into the inner shell slot.

JOSEPH E. SUS.
ANTON SUS, JR.

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