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AERIAL PLUG CASTING TOY

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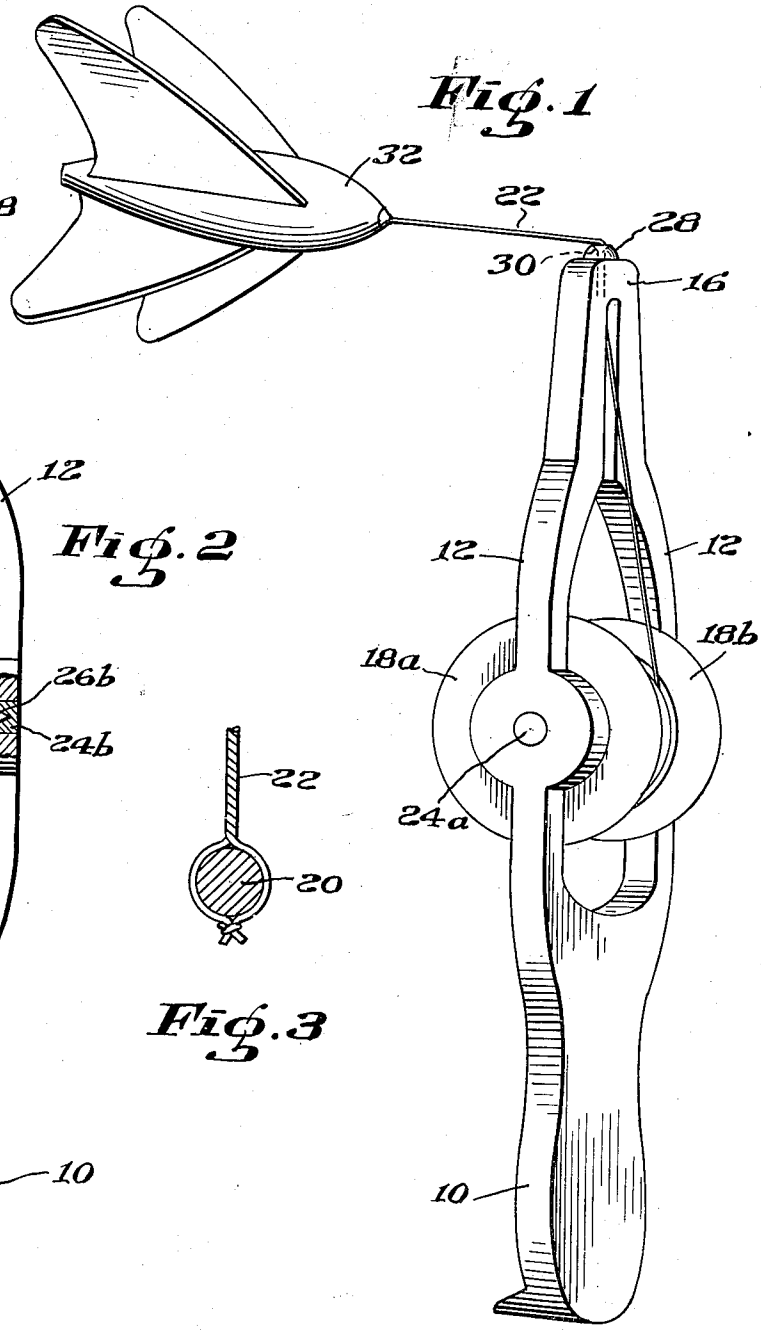


Fig. 1

Fig. 2

Fig. 3

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AERIAL PLUG CASTING TOY

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1 Claim. (Cl. 124—5)

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My invention relates to a toy casting novelty which is relatively inexpensive to construct and which is adaptable to provide both amusement for young children and a game of skill for their elders.

It is an object of the invention to provide an aerial plug casting toy having a free spinning reel in which the moment of inertia of the latter may be used to rewind the line and bring the plug back to starting position at the end of each cast.

It is another object of the invention to provide a casting toy of the type described in which the operator may, as desired, delay for an appreciable time interval the commencement of the rewinding operation while the line is fully extended to permit the plug to drop a desired distance.

It is a further object of the invention to provide a plug casting toy of the type described which may optionally be provided with noise-making or visual signaling devices to enhance its attraction to children.

With these and other objects and advantages in mind the invention is featured by the provision of an aerial plug casting toy device comprising a handle, a free spinning reel mounted on the handle, a resilient pole extending away from the handle and a reel, a line guide mounted at the end of the pole, a line running through the guide and adapted to be wound on the reel and an ornamental casting plug attached to the outer end of the line, the inner end of the line being held on the reel, the mass of the reel being so chosen that its moment of inertia will be sufficient to rewind the line after the latter has been fully extended in a casting operation.

Optionally the inner end of the line may be looped loosely around the axle of the reel so that when the line is fully extended the reel may rotate freely within the loop until, by snapping the handle, the operator increases the friction between the loop and the axle sufficiently to start rewinding.

Preferably the outer end of the guide is formed into a socket to receive and hold the plug in retracted position at the end of each cast.

Still other featuers and advantages of the invention will become apparent from the following detailed description of a preferred embodiment thereof taken together with the accompanying drawings in which like numerals refer to like parts in the several views and in which:

Fig. 1 is a perspective view of my novel casting toy;

Fig. 2 is a top view of the same showing the

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mounting of the reel in bushings in the handle; and

Fig. 3 is a fragmentary detail showing the loose looping of the line around the axle of the reel.

The operator may hold my novel casting toy by gripping its handle 10 and manipulating it as an ordinary casting rod. If desired the entire rod and handle may be a unitary molded piece of plastic, divided beyond the handle to provide a pair of spaced reel mounts 12 which face each other and between which is mounted a free spinning reel 14. The reel-mounting extensions converge beyond the reel and are integral with each other at the tip 16. The reel proper 14 comprises a pair of wooden or plastic disks 18–*a* and 18–*b* forced onto an axle 20 into closely spaced relation permitting the line 22 to wind up upon that portion of the axle exposed between them.

The mounting members 12 hold a pair of oppositely disposed bushings 24–*a* and 24–*b* to fit the needle bearings 26–*a* and 26–*b* formed at the ends of the shaft 20. At the end 16 of the pole is mounted a line guide 28, the outer side of which is preferably formed into a conical socket 30 to releasably retain the casting plug 32 which is held at the end of the line 22.

The lateral members 12 are sufficiently resilient to permit snapping the reel 14 into its bearings to provide a simple, rubbed and relatively anti-friction mounting.

As best seen in Fig. 3, the inner end of the line 22 is preferably formed into a loop which is loosely held on the axle 20 of the reel 14.

The mass of the reel 14 comprising primarily the combined masses of the disks 18–*a* and 18–*b* should be sufficient so that during casting operations its moment of inertia will, after the line is fully extended, completely rewind the line 22 against the resistance of the plug 32. If the line 22 is directly connected to the reel, the rewinding operation will commence immediately upon the plug's reaching the limit of maximum throw. If, on the other hand, a loop is formed on the inner end of the line, the reel 14 will spin freely as soon as the line is fully extended, but a snap of the wrist of the operator will increase the frictional engagement between the loop and the shaft 20, thus causing it to commence rewinding.

The plug 32 may take a variety of forms such as an imitation fishing lure, rocket plane, jet plane, or guided missile. It may be caused to smoke, whistle, spin or flash lights during flight.

Similarly, the reel 14 may be caused to whistle while it spins.

Furthermore, optionally the plug 32 may include a small magnet and the device used as a game of skill in fishing for small magnetic objects placed at a distance from the user.

While I have herein disclosed and described a preferred embodiment of the invention, it will nevertheless be understood that the same is susceptible of modifications and changes within the spirit and scope of the appended claim.

I claim:

An aerial plug casting toy comprising in combination a pole and handle formed of a unitary piece of molded resilient plastic divided between its two extremities into a pair of spaced generally parallel reel mounting portions, opposed bearings in said portions, a free spinning massive reel sprung into said bearings for spinning in either direction, said reel comprising an axle and a pair of parallel spaced massive discs mounted thereon, a line guide mounted at the outer end of said pole, a line running through said guide and loosely looped on said axle, permitting free spinning of said reel when said line is fully extended until sharply jerked by the operator thereof, and a weighted casting plug attached to the outer end of said line, said guide being formed into a socket to receive the inner end of said plug when said line is wound on said reel, the mass of said reel being so chosen that its moment of inertia will be sufficient to rewind the line after the latter has been fully extended in a casting operation.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
672,100	Jackson	Apr. 16, 1901
1,878,041	Voss	Sept. 20, 1932
2,031,501	Porter	Feb. 18, 1936
2,568,374	Thomas	Sept. 18, 1951

FOREIGN PATENTS

Number	Country	Date
301,655	Germany	Sept. 18, 1920
165,875	Switzerland	Dec. 15, 1933