Nov. 9, 1926. 1,606,208

E. P. CONLIN

FIRE HOSE DEVICE

Filed Dec. 28, 1925

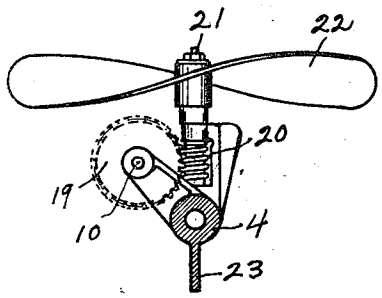


FIG. 2.

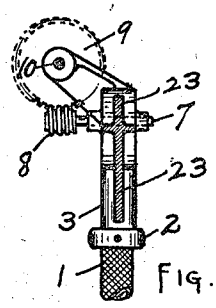


FIG. 3.

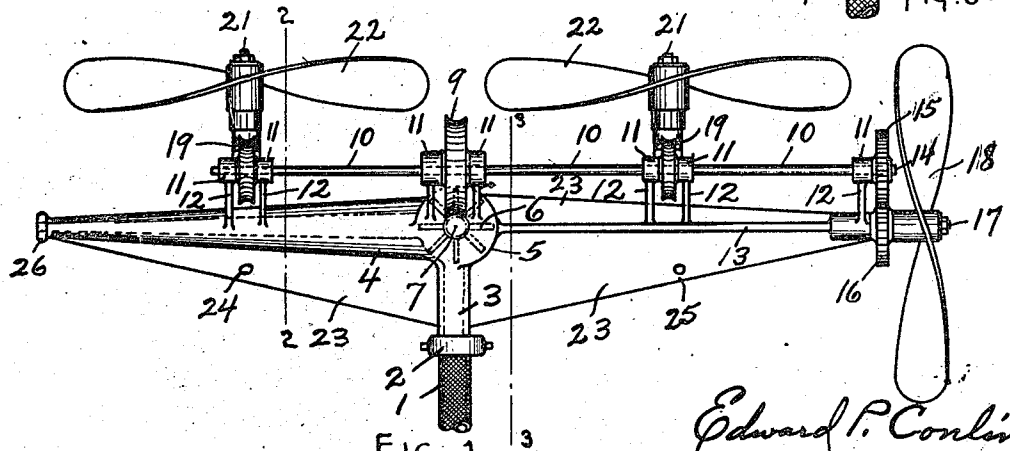


FIG. 1.

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FIRE-HOSE DEVICE.

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This invention relates to a fire hose. The principal object of this invention is to provide a fire hose nozzle equipped with a water-driven wheel, which in turn actuates a plurality of lifting propellers, and a single propeller for the purpose of tending to force the fire nozzle in a horizontal direction.

A still further object is to provide efficient means for utilizing the power derived from the stream of water passing through a hose nozzle.

In the fighting of fires, modern water departments and fire fighting devices have means of producing a terrific pressure on the water forced through the hose and nozzle. When it is desired to carry the water nozzle upwardly along the outer wall of a building, this pressure of water may be utilized by being harnessed so as to energize lifting propellers, and a propeller positioned so as to force the nozzle in the same direction the water takes in leaving the nozzle.

While the invention has for its principal object, the production of a device to be attached to a fire hose, it is understood that this device may be used in many other ways, where it is desired to carry a water hose to a higher elevation.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawing, wherein:—

Figure 1 is a side elevation of the device.

Figure 2 is a sectional view, taken on line 2—2 of Fig. 1.

Figure 3 is a sectional view taken on line 3—3 of Fig. 1.

By referring to Fig. 1, it will be seen that I have provided an ordinary hose 1, provided with a coupler 2, in order to attach the hose to a downwardly extending intake end 3 of a nozzle 4. This nozzle 4 is shaped so as to provide an enlarged right angle turn 5, in which there is positioned a water wheel 6. This water wheel 6, being secured to a shaft 7, to which is secured a worm gear 8, functioning with a worm wheel 9. This worm wheel 9 being secured to a shaft 10. This shaft 10 is supported by boxings 11, supported by means of arms 12, which in turn are supported by the nozzle 4, and a rear extension arm 13.

In operating the device, the water is turned into the ordinary hose 1, which causes the water wheel 6 to revolve in a clock-wise direction, causing the shaft 7 to rotate, thereby actuating the worm gear 8 to function with the worm wheel 9, thereby causing the shaft 10 to rotate. The rear end 14 of the shaft 10 is provided with a gear wheel 15, which in turn functions with a gear wheel 16, secured to a shaft 17. Upon this shaft 17, there is positioned a propeller 18. It will also be seen that there is positioned upon the shaft 10, worm wheels 19, these worm wheels 19 being positioned at an equal distance from each side of the worm wheel 9, which is positioned directly above the water wheel 6. It will be seen by referring to Fig. 2, that the worm wheel 19 functions with a worm gear 20, secured to a lower end of a shaft 21, which is attached to a lifting blade 22. It will be seen by referring to Fig. 1, that the lifting blades 22 are both mounted alike, and energized by means of the shaft 10. It will also be seen that I have provided web strengthening members 23 for the purpose of making the device more rigid.

At points 24 and 25, I have provided openings in the web members 23 for the purpose of securing guiding and assisting lines to be used in governing the position and direction of the nozzle end 26.

What I claim is:—

In a device of the class described, a hose nozzle, downwardly extending intake end, means for securing a hose to said end, a water wheel within said nozzle, means for energizing a shaft directly above said water wheel, means for energizing a plurality of lifting blades equally spaced apart above said water wheel, means for energizing a propeller blade secured to attaching means directly back of and in line with the end or outlet of nozzle, substantially as described for the purpose set forth.

In testimony whereof I affix my signature.

EDWARD P. CONLIN.