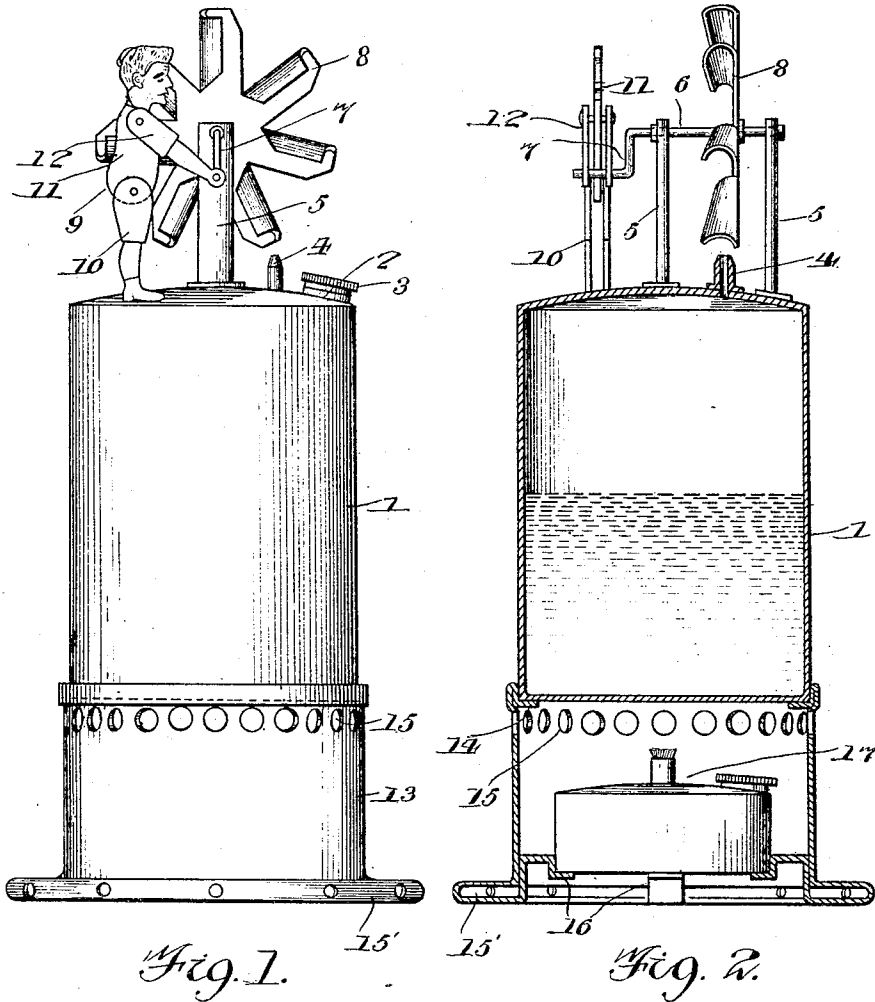


F. FULTON.
TOY STEAM TURBINE ENGINE.
APPLICATION FILED OCT. 12, 1917.

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Patented Oct. 22, 1918.



WITNESSES

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TOY STEAM-TURBINE ENGINE.

1,282,212.

Specification of Letters Patent.

Patented Oct. 22, 1918.

Application filed October 12, 1917. Serial No. 196,264.

To all whom it may concern:

Be it known that I, FRANK FULTON, a citizen of the United States, residing at Collinsville, in the county of Madison and State of Illinois, have invented new and useful Improvements in Toy Steam-Turbine Engines, of which the following is a specification.

This invention is an improved toy steam turbine engine in which the boiler is detachable from the supporting base, the clamp is detachable from the base and the turbine wheel is mounted in bearings on the upper end of the boiler and has a crank shaft, the crank of which is connected to members of a rocking toy figure, as of a man, and in which the rotation of the turbine wheel causes the figure to describe motions simulating those of a person in turning the crank so that the toy makes it appear that the figure is turning the turbine wheel instead of being operated thereby, the object of the invention being to provide an improved toy of this character which is cheap, is simple in construction and in which the boiler may be removed from the base and placed on a stove or the like, to be heated thereby and thus enable the toy to be operated by the heat of the stove.

The invention consists in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings:—

Figure 1 is an elevation of a toy turbine steam engine constructed and arranged in accordance with my invention.

Fig. 2 is a sectional view of the same at right-angles to Fig. 1.

The boiler 1 is cylindrical and upright and is provided at the top with a water filling nipple 2 and with a closure 3 for said nipple. The top of the boiler is also provided with a steam discharge nozzle 4 which is directed upwardly. A pair of standards 5 are secured on the top of the boiler and form the bearings for a horizontally arranged shaft 6 which has a crank 7 at one end and is also provided with a turbine

wheel 8. The turbine wheel is here shown as provided with seven blades and is arranged in such relation to the nozzle that the latter discharges steam upwardly against one side of the turbine wheel so as to cause the turbine wheel to rotate by the force of the steam and thereby correspondingly operate the crank shaft. A figure 9 is mounted on the top of the boiler and is here shown as the figure of a man and comprises the legs 10, the body 11 pivotally mounted on the legs, and the arms 12 pivotally connected to the body and also pivotally connected to the crank of the crank shaft. When the engine is in operation the revolutions of the crank cause the body to rock or sway back and forth so that the figure has such motions imparted thereto as to simulate the movements of a person in turning a crank, and hence the turbine wheel appears to be turned and operated by the figure.

The lower end of the boiler is detachably fitted in the upper end of a base 13 which is provided with an annular flange 14 on its inner side near its upper end to support the boiler and the wall of the base is also provided with air openings 15. The base is made of sheet metal and its wall is formed at the lower end with a doubled out-turned annular portion 15' which constitutes a base flange and is provided at spaced points with radially arranged inwardly extending arms 16.

A lamp 17, in which alcohol may be preferably used, is detachably arranged in the base and bears on and is supported by the said inwardly extending arms. The arms being in spaced relation permit of the detachment of the lamp when desired.

The water in the boiler may be heated to the boiling point by the employment of the lamp if desired or the boiler may be detached from the base and placed on a stove, to generate the steam, as may be preferred.

While I have herein shown and described a preferred form of my invention I would have it understood that changes may be made in the form, proportion and construc-

tion of the several parts, without departing from the spirit of my invention and within the scope of the appended claim.

Having thus described my invention, I claim:—

In a toy of the class described, a boiler, an engine on and carried by the boiler, a movable figure operated by the engine, a base

in which the lower end of the boiler is detachably fitted, said base having supporting members at its lower side extending inwardly and a lamp in the base, detachable therefrom, and arranged on said supporting members. 10

In testimony whereof I affix my signature.
FRANK FULTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."