

J. H. ATKINS.  
 WEEDING MACHINE.  
 APPLICATION FILED SEPT. 23, 1910.

979,407.

Patented Dec. 27, 1910.

Fig. 1

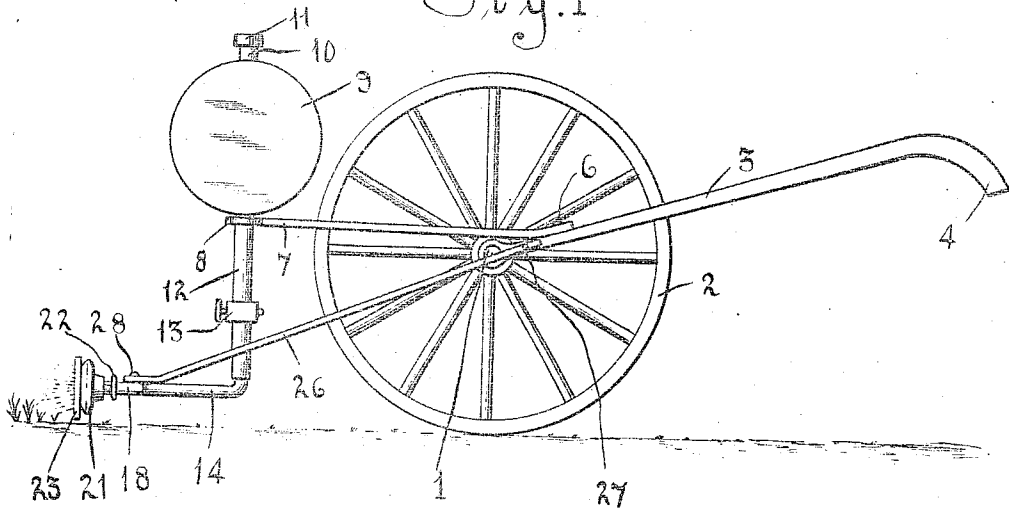


Fig. 2

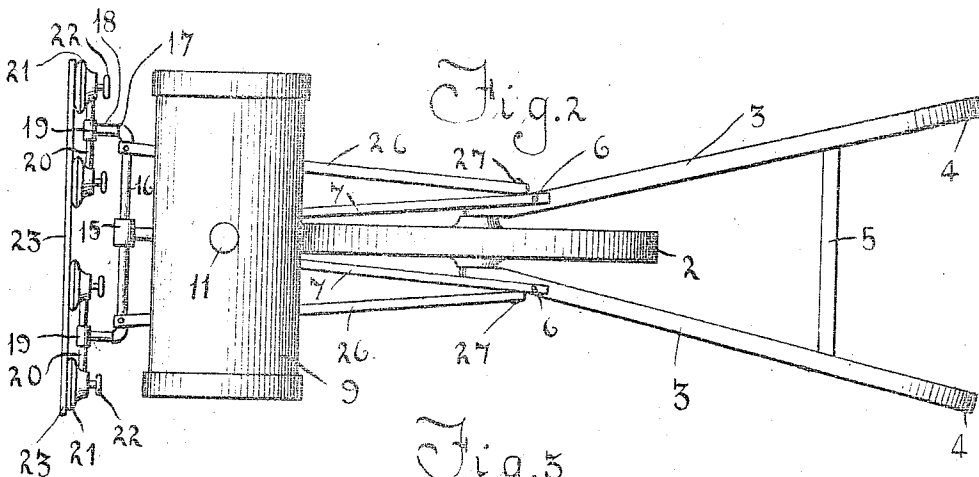
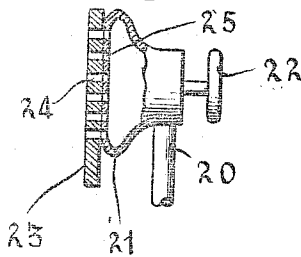


Fig. 3



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JAMES H. ATKINS, OF CAMBRIDGE, OHIO.

WEEDING-MACHINE.

979,407.

Specification of Letters Patent. Patented Dec. 27, 1910.

Application filed September 23, 1910. Serial No. 583,365.

*To all whom it may concern:*

Be it known that I, JAMES H. ATKINS, a citizen of the United States of America, residing at Cambridge, in the county of Guernsey and State of Ohio, have invented certain new and useful Improvements in Weeding-Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a weeding machine, and the primary object of the invention is to provide simple and effective means for destroying and exterminating weeds and other plants that are injurious to the soil, displeasing to the eye, and harmful to the proper cultivation and growth of surrounding plants.

Another object of the invention is to utilize a flame for burning, singeing, or otherwise destroying weeds, the flame being produced by burners arranged in proximity to the ground and supported by a truck that can be easily moved and guided.

A further object of the invention is to provide a machine of the above type that is simple in construction, durable, inexpensive to manufacture, safe to use, and efficient for the purposes for which it is intended.

With these and such other objects in view as may hereinafter appear the invention consists of the novel construction, combination, and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing forming a part of this specification, wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the structural elements thereof are susceptible to such changes as fall within the scope of the appended claims.

In the drawings: Figure 1 is a side elevation of the machine. Fig. 2 is a plan of the same, and Fig. 3 is an enlarged plan of one of the burners partly broken away and partly in section.

In the drawing 1 denotes an axle and revolubly mounted upon said axle is a large wheel 2, said wheel being arranged intermediate the ends of the axle whereby rearwardly extending handle bars 3 can be mounted upon the ends of the axle, said handle bars adjacent to the outer curved ends 4 thereof being connected by a transverse brace 5.

Secured to the handle bars 3 contiguous to the axle 1, as at 6, are forwardly extend-

ing supports 7 having the forward ends thereof connected by a ring 8, and mounted upon this ring is a transverse cylindrical tank or reservoir 9 adapted to contain a hydro-carbon, as gasolene. The tank 9 has the top thereof intermediate the ends provided with a filling spout 10 normally closed by a cap 11.

Depending from the bottom of the tank 9 and extending through the ring 8 is a pipe 12 having a valve 13 of a conventional form, and connected to the lower end of the pipe 12 is a forwardly extending pipe 14 having the forward end thereof provided with a tee 15 connected to transverse branch pipes 16, these pipes having the outer ends provided with elbows 17 and forwardly extending pipes 18. The forward ends of the pipes 18 are provided with tees 19 supporting burner pipes 20 having perforating burner heads 21, the admission of gasolene to said burner heads from the pipes 20 being controlled by valves 22. Perforated burner heads 21 are connected by a longitudinal bar 23 and this bar is perforated, as at 24, with the perforations thereof registering with the perforations 25 of the heads 21. The branch pipes 16 and their appurtenant parts are supported by braces 26 having the upper ends thereof connected to the sides of the handle bars 3, as at 27, and the lower ends thereof connected to the branch pipes 16 adjacent to the elbows 17, as at 28.

It is through the medium of the valves 22 that one or more of the burner heads 21 can be used, and by regulating the valve 13 a prescribed quantity of gasolene will be fed to the burners and when ignited a flame will be projected from the burners. It is then only necessary to move the machine over the weeds to be exterminated.

The bar 23 serves functionally as a deflector and is adapted to retain the weeds in an upright position or before the burners while the machine is being moved to exterminate the weeds.

The wheel 2, axle 1, and handle bars 3 constitute a truck to which the burners can be suitably connected and the supply of gasolene arranged whereby it will feed by gravity to the burners.

The machine in its entirety can be constructed of light and durable metal and made of various sizes.

What I claim, is:

1. A machine of the type described com-

prising an axle, a wheel revolubly mounted upon said axle, handle bars carried by said axle, supports carried by said handle bars, a gasolene supply tank carried by said supports, burner heads arranged in advance of said wheel, pipes connecting said burner heads with said tank, valves for controlling the supply of gasolene to said burner heads, and a deflector bar connecting said burner heads and provided with openings communicating with the interior of the burner heads, substantially as described.

2. A machine of the type described comprising a hydrocarbon supply tank, a portable support therefor, two pairs of valve

burner heads, a pipe communicating with and connecting each pair of burner heads together, means for supplying hydrocarbon from said tank to said pipes, and a deflector bar connected to the pairs of burner heads and provided with a series of groups of openings, each group communicating with the interior of a burner head.

In testimony whereof I affix my signature in the presence of two witnesses.

JAMES H. ATKINS.

Witnesses:

E. W. LINDSEY,  
G. D. DUGAN.