J. V. DE LAMATER.

HOT BLAST STUMP BURNER.

APPLICATION FILED APR. 14, 1913.

1,153,610.

Patented Sept. 14, 1915.

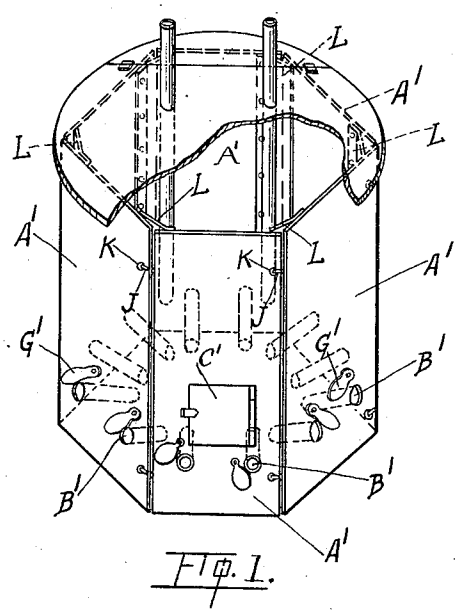

FIG. 1.

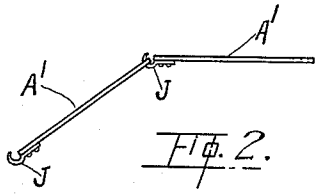

FIG. 2.

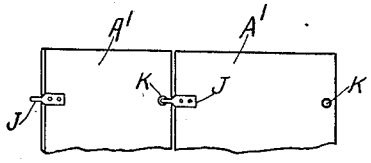

FIG. 3.

WITNESSES.

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UNITED STATES PATENT OFFICE.

JULES VERNE DE LAMATER, OF VANCOUVER, BRITISH COLUMBIA, CANADA.

HOT-BLAST STUMP-BURNER.

1,153,610. Specification of Letters Patent. Patented Sept. 14, 1915.

Application filed April 14, 1913. Serial No. 761,093.

To all whom it may concern:

Be it known that I, JULES VERNE DE LAMATER, of the city of Vancouver, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Hot-Blast Stump-Burners, of which the following is the specification.

My invention relates to improvements in hot blast stump burners, and the object of my invention is to devise a simple, inexpensive, and easily handled stump burner which shall be capable of burning stumps clear to the surface of the ground in a quick and economical manner, and which can be handled easily by one person.

A further object is to devise a burner capable of adjustment to any size of stump easily and at small expense.

I attain these objects by the means illustrated in the accompanying drawings in which:

Figure 1 is a perspective view of my burner assembled, the lid being shown partly broken away. Fig. 2 is an edge plan of two plates, showing method of hooking the plates together. Fig. 3 is a fragmentary front view of the plates shown in Fig. 2.

Similar letters refer to similar parts throughout the several views.

In Fig. 1 I have shown the construction of my burner. A′ indicates plates of sheet metal of standard size. B′ are holes cut in the plates A′ in proximity to their lower edges and provided with portable pipes, shown dotted, extending into the space inclosed by the burner when assembled. These pipes are adapted to be slid inwardly or outwardly in the holes B′. J are hooks attached to the plates A′, as shown more particularly in Fig. 2. K are holes in the plates A′ for engaging the hooks J. C′ indicates a door hinged to one of the plates giving access through a hole therein to the interior of the burner to allow of attention being given to the fire when in operation. L are covering strips of thin sheet metal, of which each plate has one such strip secured to it by one edge, the other edge of the strip being free, as shown in Fig. 1, the purpose being to cover the joints of the plates A′ where they come together when the burner is assembled and thus make the burner practically air-tight. A lid or cover similar to that shown in Fig. 1 is provided for the top of the burner, which lid is provided with portable pipes as shown, adapted to be slid upwardly or downwardly when required. G′ are cover plates attached to the plates A′ and capable of being moved sidewise to close the holes B′ or open same.

My stump burner operates on the hot blast principle, the hot blast being obtained by means of the air passing through the pipes mounted in the holes B′ and also in the lid to the fire, and it is used in the following manner:—The plates A′ are placed together, edge to edge, and hooked to one another as shown in Figs. 1, 2, and 3, the casing thus formed being placed on the ground and around the stump to be burned, and a fire built on the ground inside the casing, after which the lid is closed down. The portable pipes are placed in the holes B′ and pushed through till they are close to the tree stump. The covers G′ are kept open, as required, allowing the air to pass through the pipes to the fire inside, creating a hot blast and keeping the flames directed against the stump at the same place all the time, thus burning it away very quickly. By the use of the pipes in the holes B′ the stump can be burned away very close to the ground, but to insure that it will be burned off right close to the surface of the ground, the portable pipes for the lid are inserted, as shown in Fig. 1, and these pipes, by the air passing through them, direct the very hot flame thus created downward over the part of the stump remaining above ground until it is all burned away flush with the surface.

If necessary to increase the size of my burner, any number of plates may be added, or vice versa, to decrease its size any number may be taken away.

It will be seen, therefore, that I have devised a hot blast stump burner which is very simple, easy to handle, and inexpensive both to construct and to use, and which will burn a stump down clear to the surface of the ground in a very short time with the minimum of fuel and attention, since one person could attend a number of these burners in operation at the same time. It will also be seen that I have devised a stump burner which, from its knock-down form, is very

handy for transportation, and which can be adjusted to any size of stump very quickly and without any difficulty whatever.

What I claim as my invention is.

1. A hot blast stump burner comprising a casing designed to surround the stump and having draft orifices therein, said casing comprising a plurality of plates detachably secured together, each of said plates having a strip secured thereto and extending at an angle from and beyond one edge thereof, a cover for disposition upon said casing, and means for directing the draft from said orifices against any desired portion of the stump, as and for the purpose specified.

2. A hot blast stump burner comprising a collapsible casing designed to surround the stumps and having draft orifices therein, said casing comprising a plurality of rectangular plates detachably secured together, each of said plates having a strip attached thereto and extending at an angle from and beyond one edge thereof, a cover extending over the top of the casing, and adjustable means for adjustably directing the draft from the orifices against the base of the stump, as and for the purpose specified.

3. A hot blast stump burner comprising a collapsible casing designed to surround the stump, said casing comprising a plurality of rectangular plates detachably secured together and having each a pair of draft orifices formed therein adjacent the base thereof, each of said plates having a strip secured thereto and extending at an acute angle from and beyond one edge thereof, a cover for said casing, and laterally and longitudinally adjustable pipes for directing the draft from said orifices against the base of the stump, as and for the purpose specified.

Dated at Vancouver, B. C., this 29th day of March, 1913.

J. VERNE DE LAMATER.

Witnesses:

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