

July 28, 1925.

1,547,765

E. G. LANG

WEED AND GRASS BURNER

Filed July 7, 1924

2 Sheets-Sheet 1

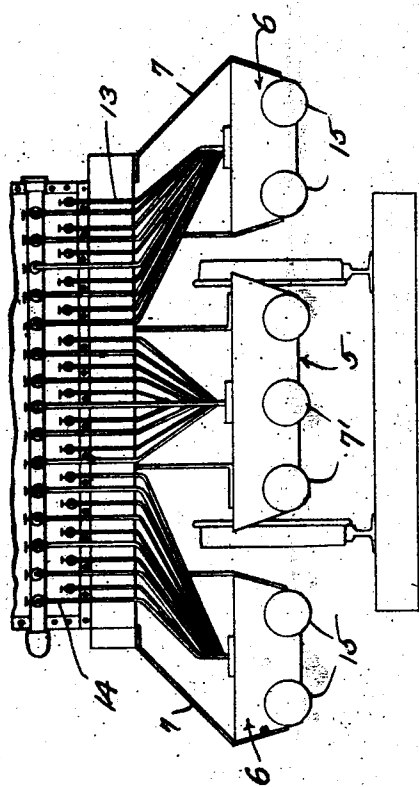


Fig. 1.

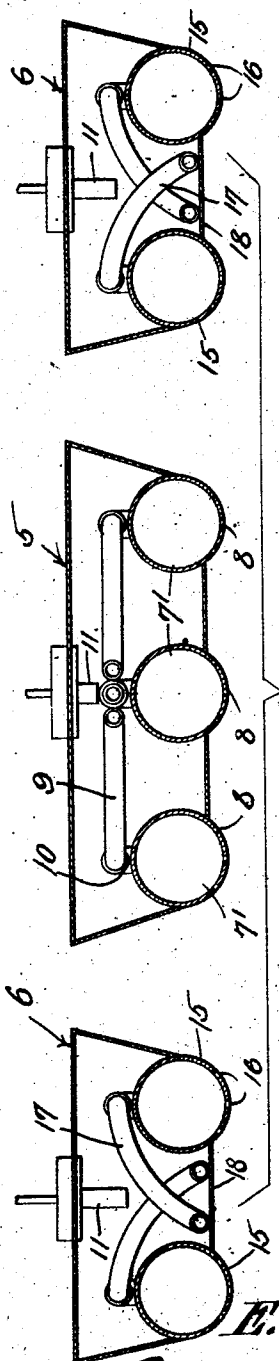


Fig. 2.

Inventor
E. G. Lang
By *Cashow & Co.*
Attorneys

July 28, 1925.

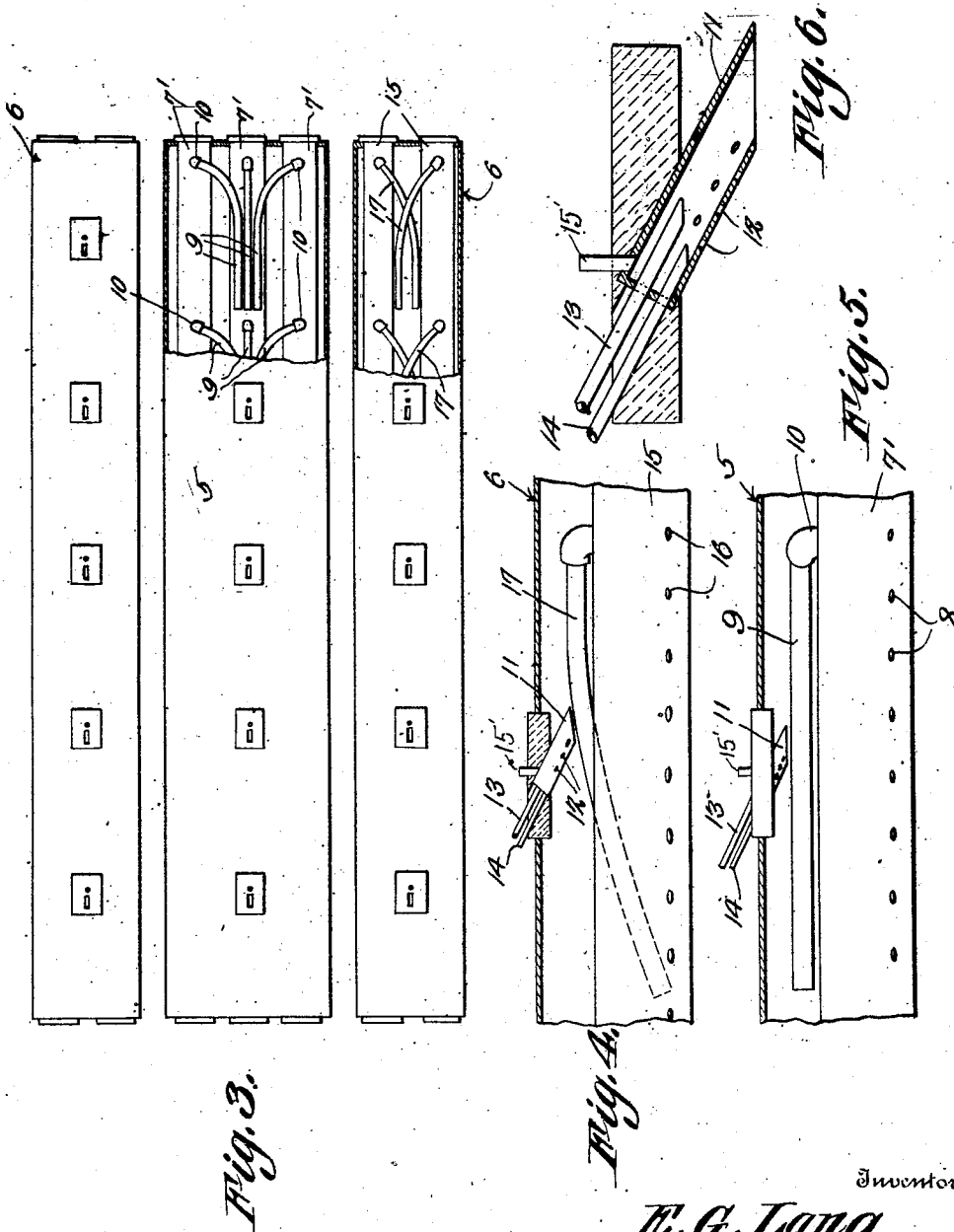
1,547,765

E. G. LANG

WEED AND GRASS-BURNER

Filed July 7 1924

2 Sheets-Sheet 2



Inventor
E. G. Lang
By *Chas. H. Co.*
Attorneys

UNITED STATES PATENT OFFICE.

EDWARD GUS. LANG, OF FORT WORTH, TEXAS.

WEED AND GRASS BURNER.

Application filed July 7, 1924. Serial No. 724,672.

To all whom it may concern:

Be it known that I, EDWARD G. LANG, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented a new and useful Weed and Grass Burner, of which the following is a specification.

This invention relates to a device for destroying vegetation along a railroad track, and aims to provide a device especially designed for attachment to railway rolling stock.

Another object of the invention is to provide a device of this character wherein the flames from the burners will not come in direct contact with the vegetation, but the heat from the burners will be so directed to the vegetation that it will be scorched and burned to prevent its growth.

Another important object of the invention is to provide a device of this character which will operate efficiently as a snow and ice remover, thereby eliminating the use of plows or the like for removing snow and ice from a track.

A still further object of the invention is to provide a device of this character which may be readily and easily installed on a car, eliminating the necessity of making extensive alterations in the car structure to mount the same.

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, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 is an elevational view disclosing a grass and weed burning device constructed in accordance with the invention as mounted on a car.

Figure 2 is a diagrammatical view showing the burners in section.

Figure 3 is a plan view of the device.

Figure 4 is an elevational view partly in section illustrating the burners and manner of supplying heat to the heating tubes thereof.

Figure 5 is a side elevational view por-

tions of the burner housings being shown in section.

Figure 6 is an enlarged sectional view illustrating the construction of the burner.

Referring to the drawings in detail, the device embodies a plurality of hollow casings, there being provided a central casing 5 and lateral casings 6, which casings are provided with suitable arms 7 constructed to permit the casings to be secured to the frame of a car.

As clearly illustrated by Figure 2 of the drawings, the central casing 5 includes a plurality of tubes 7' which extend throughout the length of the casing 5 and are arranged in transverse spaced relation with each other. Openings 8 are formed in the tubes and are arranged in spaced relation with each other throughout the lengths thereof, and establish communication between the interior of the tubes and the atmosphere.

Associated with the tubes are pipes 9 which are relatively short and provided with end portions 10 extending into the tubes, the free ends of the pipes being open to allow heat to enter the pipes 9 and be directed into the tubes 7'.

As shown by Figure 3 of the drawings, the pipes are arranged throughout the length of the tubes 7' so that heated air will be supplied throughout the length of the tubes to accomplish the purpose of the invention.

Arranged within the casings 5 and 6 are burners 11, which extend through the upper walls of the casings and are provided with a plurality of burner openings 12 to burn the oil passing through the openings.

The reference character 13 indicates the oil pipe which is in communication with a tank or other suitable source of oil supply, and has its discharge end arranged within the burner tube 11 directly above the steam pipe 14, which is also in communication with a suitable source of supply such as the steam line of a train. Thus it will be seen that as the steam is forced through pipe 14 the oil passing through pipe 13 will be broken up and forced through the end of the burner tube 11 where it will be burned, and since these burner tubes are arranged directly above the pipes 9, the pipes will become heated and the air which collects in the casing will pass through the pipes and

into the tubes 7' where it will be directed through the openings 8 thereof and onto the grass, weeds or other vegetation which may be present on the road bed.

5 The lateral casings 6 are provided with tubes 15, which are also provided with openings 16 to allow heated air to exhaust therefrom, the tubes being fed with heated air through pipes 17 that have their upper ends
10 extending into the tubes 15, the lower ends thereof being curved downwardly and resting on the lower wall 18 of the casings. Air pipes 15' extend into the burner tubes 11, which pipes 15' supply air to the burner
15 tubes 11.

The burners used in the lateral casings 6 are identical with those previously described, and it is thought that a further detailed description of these burners is unnecessary.

20 I claim:—

1. In a device of the character described, a hollow casing, supporting arms having connection with the casing for supporting the casing under the truck of a car, parallel
25 tubes arranged within the casing and dis-

posed in spaced relation with each other, said tubes having portions thereof extended below the lower wall of the casing and having discharge openings, pipes for directing air to the tubes, and means for heating the
30 pipes to heat the air entering the tubes.

2. In a device of the character described, a hollow casing including a lower wall, tubular members disposed within the hollow casing, said lower wall having openings,
35 said tubes resting in the openings, said tubes having discharge openings, air supply pipes connected with the tubes and adapted to admit air to the tubes, burners arranged above the tubes for heating the air passing
40 to the tubes, and said discharge openings of the tubes adapted to direct heated air downwardly under the casing.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDWARD GUS. LANG.

Witnesses:

V. D. SMITH,

B. F. GAFFORD.