No. 634,609. Patented Oct. 10, 1899.

J. A. O. BREDEMEYER.

STUMP BURNER.

(Application filed Nov. 19, 1898.)

(No Model.)

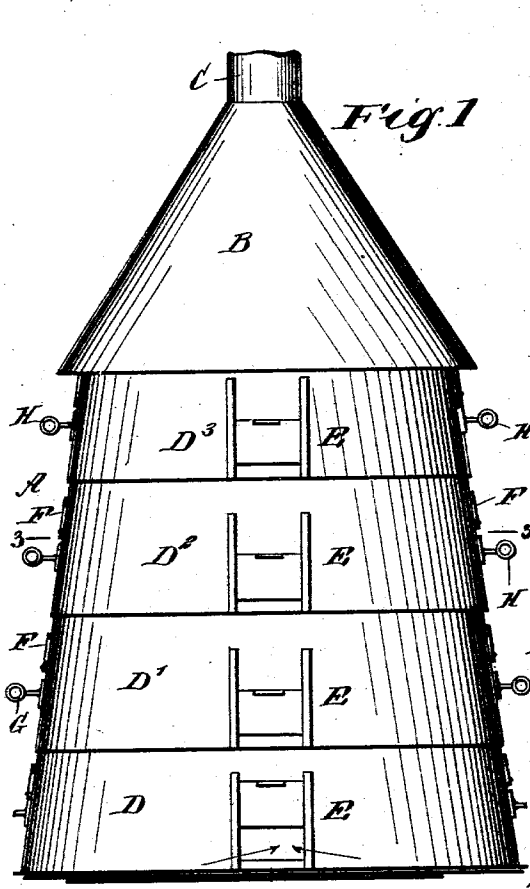

Fig. 1

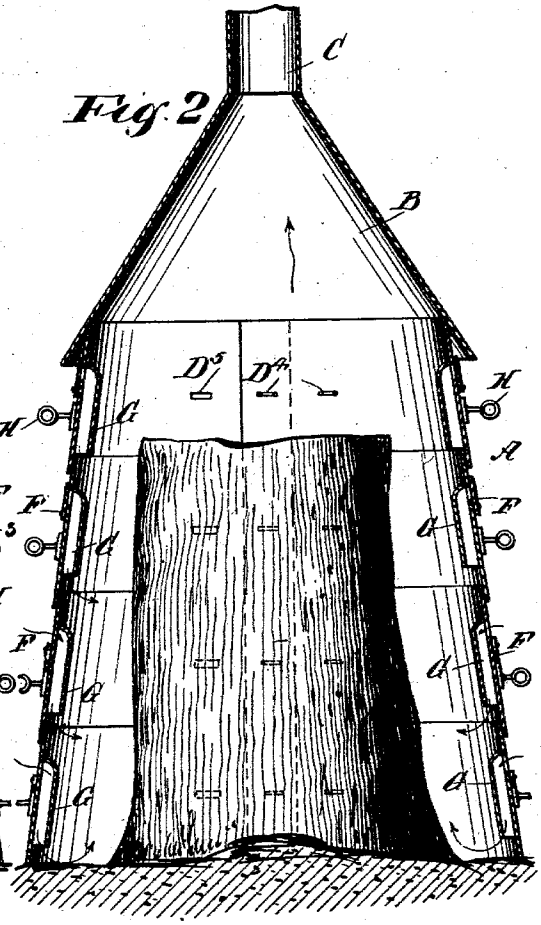

Fig. 2

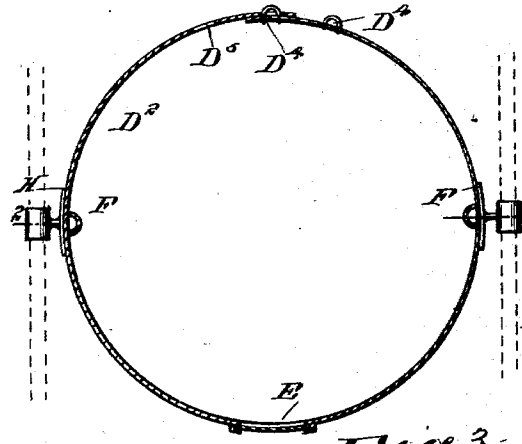

Fig. 3

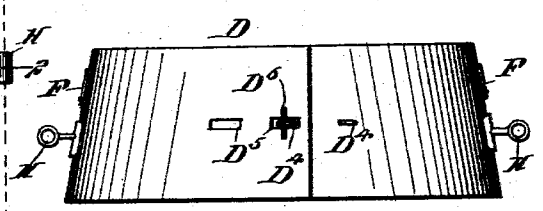

Fig. 4

WITNESSES:

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JOHANN A. O. BREDEMEYER, OF SEATTLE, WASHINGTON.

STUMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 634,609, dated October 10, 1899.

Application filed November 19, 1898. Serial No. 696,895. (No model.)

To all whom it may concern:

Be it known that I, JOHANN A. O. BREDEMEYER, of Seattle, in the county of King and State of Washington, have invented a new and Improved Stump-Burner, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved stump-burner which is simple and durable in construction, very effective when in use, and arranged to enable the user to keep a fire perfectly under control, to insure a perfect and rapid consumption of the entire stump, and to prevent accidental spreading of the fire to neighboring buildings, live trees, &c.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement. Fig. 2 is a sectional side elevation of the same on the line 2 2 in Fig. 3. Fig. 3 is a sectional plan view of the same on the line 3 3 in Fig. 1, and Fig. 4 is a rear side elevation of one of the sections of the casing.

The improved stump-burner is provided with a casing A, made in the form of a truncated cone, with a hood B set upon the head of the casing, and a smoke-outlet pipe C, leading from the apex of the hood for carrying off the smoke and gases. The casing A is preferably made in sections D D′ D^2 D^3, the base of one section being fitted upon the apex portion of the section below, so that the several sections sustain one another, and sections may be added or removed to make the casing of a height corresponding to the height of the stump to be burned, as will be readily understood by reference to Fig. 2.

Each of the sections is made of sheet metal bent into ring shape, with staples D^4 at one end to engage one of a series of slots D^5 in the opposite end of the ring to fasten the overlapping ends together by means of a pin D^6, inserted in the staple after it has passed into one of the openings D^5. (See Figs. 3 and 4.) By having two such staples and a number of slots D^5 the operator is enabled to increase or decrease the diameter of the sections, according to the diameter of the stump to be burned within the casing.

On each of the sections D D′ D^2 D^3 is arranged a sliding draft-door for admitting air directly to the casing or body of the burner, the draft passing by the doors in upward directions and each of the sections being provided on its sides with downdraft-doors F, commanding openings in the sections, such openings leading to tubular conductors G, located in the body of the burner. The conductors G are closed at their tops and open at their bottoms to cause the air after passing the doors F to travel in a downward direction and thence into the casing toward the base of the stump. By means of the conductors G, arranged, as described, with respect to the doors F, I am enabled to direct drafts against the very base of the stump, and thus cause that part of the stump to be consumed, which could not be effected were the draft allowed to pass directly from the draft-doors.

The sides of the casing below the doors F are provided with handles H to permit of conveniently carrying the casing-sections from one place to another and to allow of readily setting one section on the top of the other to build up the casing so as to contain the stump, as previously mentioned.

By the construction of the doors described the fire remains completely under the control of the operator and attacks the stump simultaneously on the sides as well as on the top and bottom, and thereby quickly and effectually reduces the stump to ashes. By shutting the updraft-doors E and using the downdraft-doors exclusively the roots of the stump in close proximity to the surface of the ground are readily attacked by the fire, and thus consumed. It is further evident that in surrounding the stump with the casing described the fire of the burning stump is confined so completely as to entirely avoid all danger from fire while burning stumps standing in close proximity to houses or barns, trees, &c. Accidental spreading of the fire is thus completely avoided.

Having thus fully described my invention,

I claim as new and desire to secure by Letters Patent—

1. A stump-burner, having a series of separable frusto-conical sections superimposed the one on the other, to form a tapering body serving to inclose the stump, a hood mounted on the uppermost section of the body and having a smoke-outlet pipe, sliding doors commanding draft-orifices in the several sections of the body, and draft-conductors in communication with said orifices and situated within the body, the draft-conductors passing downwardly from the openings to cause the draft to pass downwardly into the body of the burner and toward the base of the stump.

2. A stump-burner, having a body portion with a draft-orifice therein, a door commanding the draft-orifice, and a conductor within the body, the conductor passing downwardly from the draft-orifice so as to direct the draft in a direction downward toward the base of the stump.

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