No. 624,281. Patented May 2, 1899.

C. WRIGHT.

MINING DEVICE.

(Application filed May 14, 1898.)

(No Model.)

FIG. 1.

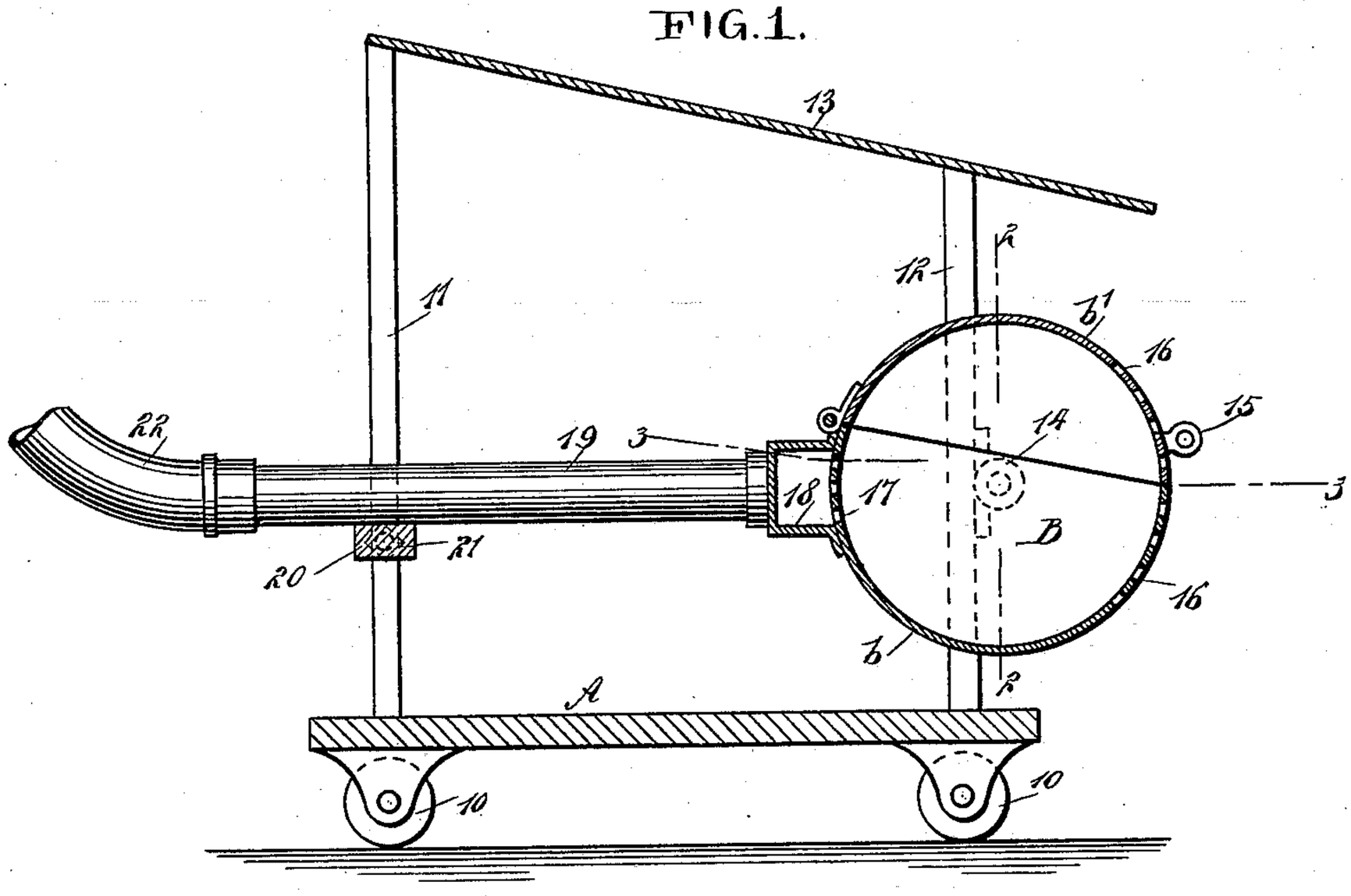


FIG. 2.

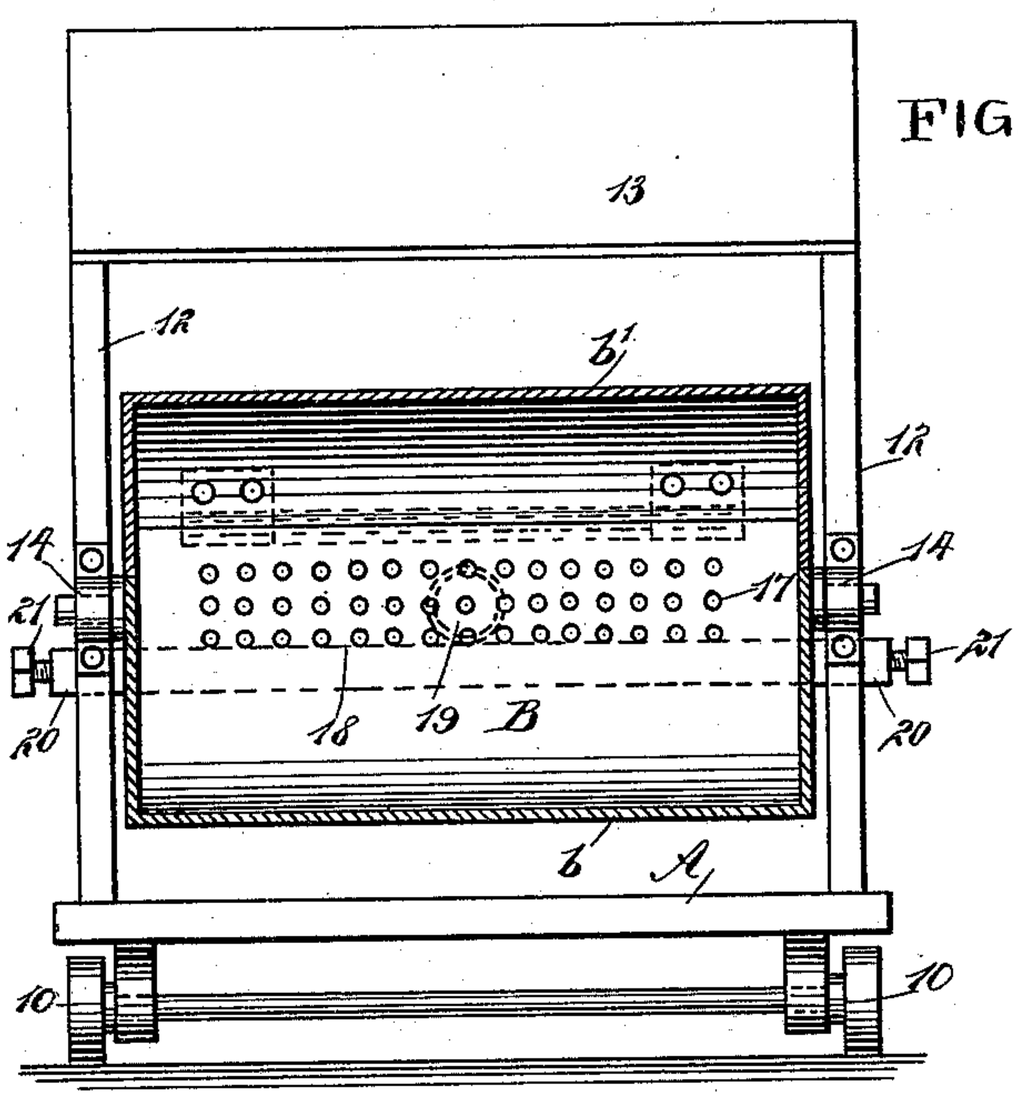
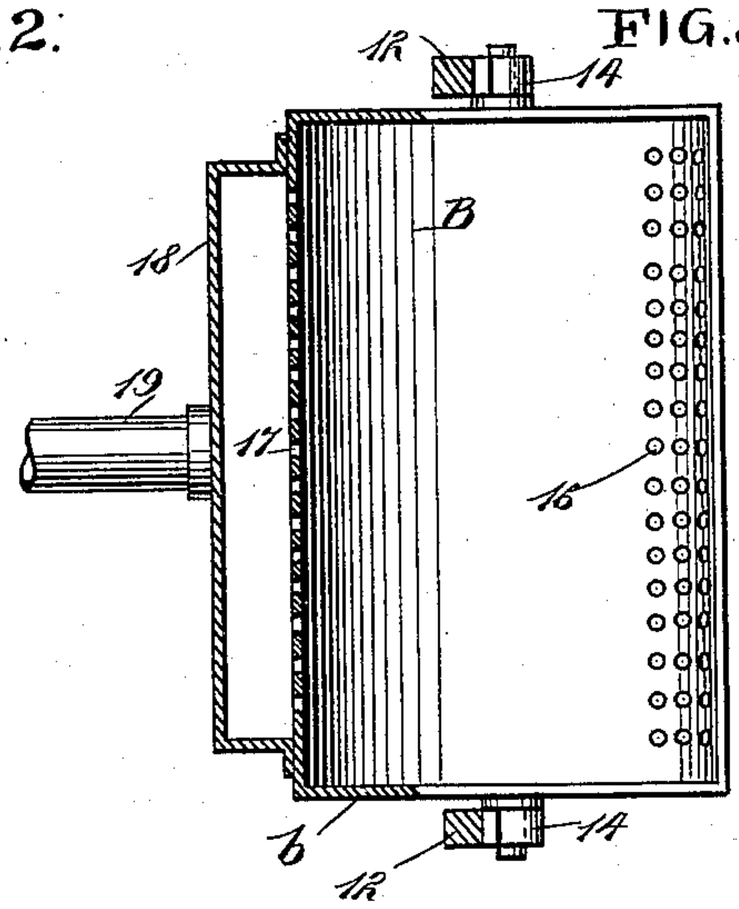


FIG. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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MINING DEVICE.

SPECIFICATION forming part of Letters Patent No. 624,281, dated May 2, 1899.

Application filed May 14, 1898. Serial No. 680,728. (No model.)

To all whom it may concern:

Be it known that I, CARY WRIGHT, of Salmon City, in the county of Lemhi and State of Idaho, have invented a new and Improved Mining Device, of which the following is a full, clear, and exact description.

The object of my invention is to provide a device especially adapted to facilitate mining in a cold climate and to provide a portable device of simple, durable, and economic construction that may be operated in a shaft or in a tunnel and will serve to thaw the earth to be worked and which will utilize the heat to the best advantage.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and 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 figures.

Figure 1 is a vertical central section through the machine. Fig. 2 is a vertical section on the line 2 2 of Fig. 1, and Fig. 3 is a horizontal section on the line 3 3 of Fig. 1.

A truck A is employed mounted upon suitable wheels 10, and on the said truck, at the rear, standards 11 are secured in any suitable or approved manner, and at the forward end of the truck shorter standards 12 are provided. Said standards 11 and 12 support a roof 13, which roof extends beyond the forward faces of the forward standards 12, as shown in Fig. 1.

Bearings 14 are secured to the forward standards 12, and in said bearings the trunnions of a heater B are mounted to turn. This heater is preferably of cylindrical shape and comprises a body-section *b* and a cover-section *b'*, the cover-section being hinged to the body, and any approved means may be employed for locking the cover-section to the body.

One or more handles 15, of any desired shape, are attached ordinarily to the cover-section to facilitate the manipulation of the same and to facilitate the rotation of the cylinder. The body of the cylinder and likewise its covers are provided at the front with perforations 16, and at the rear of the cylinder other perforations 17 are made, and over and around the rear perforations 17 a box 18 is constructed. A tube 19 is made to enter the box 18 at or near its center; and the said tube is made to rest upon or may be attached to a cross-bar 20, which cross-bar is adjusted by means of set-screws 21 or any equivalent devices upon the rear standards or uprights 11. The tube 19 is connected with a flexible tube 22, which is adapted to be carried up through the shaft and out at the top or out of a tunnel and connected with a blower or other means for forcing air into the heater B. The fuel that is preferably used in the heater is wood, and the air which is forced into the heater will materially assist in the combustion of the material.

The perforated surface of the heater is adapted in practice to face the bank or wall of frozen earth or gravel that is to be removed, and the wall or bank is subjected to heat for a sufficient length of time to extract the frost therefrom, enabling the earth to be readily worked. It will be observed that the heater is pivoted and that the supply-tube 19 can be adjusted upward or downward, so that the rays of heat may be directed to any desired point. The forward-projecting portion of the roof 13 prevents the heat from escaping upward and insures all of the heat being concentrated where it will do the most service.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A thawing device, comprising a movable frame, a cylindrical fuel-chamber mounted upon said frame by axial journals, said chamber having a fuel-charging door and also a series of gas-discharge openings on one side, an air-supply chamber extending along one side of the fuel-chamber and connected with its interior by holes through the wall between, an air-supply pipe connected to the air-chamber and serving also as a handle to control the position of the chamber, and a shield or cover supported from the frame and extending over the fuel-chamber.

2. A thawing device, comprising a frame, an approximately cylindrical fuel-chamber pivoted axially to the said frame and provided with gas-discharge openings, an air-

supply pipe rigidly connected with the fuel-chamber and serving as a handle therefor, and a cross-bar adjustably mounted upon the frame and arranged to support said pipe.

3. A thawing device, comprising a movable frame, a fuel-chamber mounted thereon upon journals, said chamber having a series of gas-discharge openings on one side, an air-supply pipe connected to the fuel-chamber, and serving as a handle to control the position of the chamber, a bar supporting said pipe and vertically adjustable upon the frame and a shield or cover supported from the truck and extending over the fuel-chamber.

CARY WRIGHT.

Witnesses:
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