

UNITED STATES PATENT OFFICE.

FRANK WOLF NEWBERGER, OF STEMPER, FLORIDA.

METHOD OF MAKING CHARCOAL AND OF CONSERVING THE VAPOROUS DISTILLATES THEREOF.

SPECIFICATION forming part of Letters Patent No. 724,601, dated April 7, 1903.

Application filed December 7, 1901. Serial No. 85,046. (No specimens.)

To all whom it may concern:

Be it known that I, FRANK WOLF NEWBERGER, a citizen of the United States, residing at Stemper, in the county of Hillsboro and State of Florida, have invented a new and useful Method of Making Charcoal and of Conserving the Vaporous Distillates Thereof, of which the following is a specification.

This invention relates to the manufacture of charcoal.

The object of the invention is in a simple, practical, and thoroughly feasible manner to secure the maximum amount of charcoal from a given quantity of wood and at the same time to conserve the pyroligneous acid, creosote, and other by-products resulting from combustion.

With these and other objects in view as will appear as the invention is better understood. The same consists in the method of making charcoal and of conserving the vaporous distillates produced by the burning of the wood, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts in the several views, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit of the invention; and in these drawings—

Figure 1 is a view in perspective of the temporary pile viewed from the exterior thereof. Fig. 2 is a view in transverse section. Fig. 3 is a view in longitudinal section.

In constructing a temporary pile in accordance with the present invention two base-logs 1 of green wood are taken and disposed in horizontal relation to each other at the proper distance apart, and at a point adjacent to each end of each of the said logs there is cut a notch or depression 2, in which is placed a short block of wood 3, constituting a chock. These chocks serve to hold the first row of logs 4 firmly against spreading or rolling, the succeeding superposed rows being piled in pyramid order upon the first row

and are thus held securely in the order arranged while being charred. The base-logs of green wood will not burn, but will merely smolder, so that the superposed rows of logs will be prevented from sinking to the ground during the charring operation. Further, the base-logs hold the pile of logs a sufficient distance above the ground to present a fire-chamber 5, in which is placed the material for igniting the pile. When the first row of logs has been positioned upon the base-logs and prior to the other rows of logs being superposed thereon, a condensing apparatus is positioned at each end of the said row, after which the succeeding rows are disposed in the manner described. As the condensing apparatus is the same at each end of the pile, a description of one will serve for both. The said apparatus is constructed as an ordinary manifold and comprises a header 6, which constitutes a condenser, and a plurality of branches 7, connected therewith and constituting collectors, these latter being disposed at their inner ends between the interstices of the logs 4, as clearly shown in Fig. 2, the collectors 7 being inclined downward in order to cause the distillates by gravity to be discharged into the condensers 6. The condenser is closed at one end by a cap 8, and its other end extends beyond the collectors and in this instance projects into a receptacle 9, which may be a barrel or the like, in which the distillates from the condenser are discharged. The condenser and collectors, in addition to performing the function described, also constitute a means to permit entrance of air to the pile to support combustion, and to regulate the supply of air the open end of the condenser may have the draft therethrough impeded by the employment of a closure 10, which will be of a character to permit passage at all times of a small quantity of air and may be some vegetable material, such as pine-wool or the like. It will be seen from the character of material employed that while subserving the function of a damper the said closure will not operate to check the discharge of the distillates to the receptacle 9. In addition to the above-described means for supplying atmospheric air to the pile draft-pipes 11 may be employed at each end thereof, these to be disposed beneath the base-

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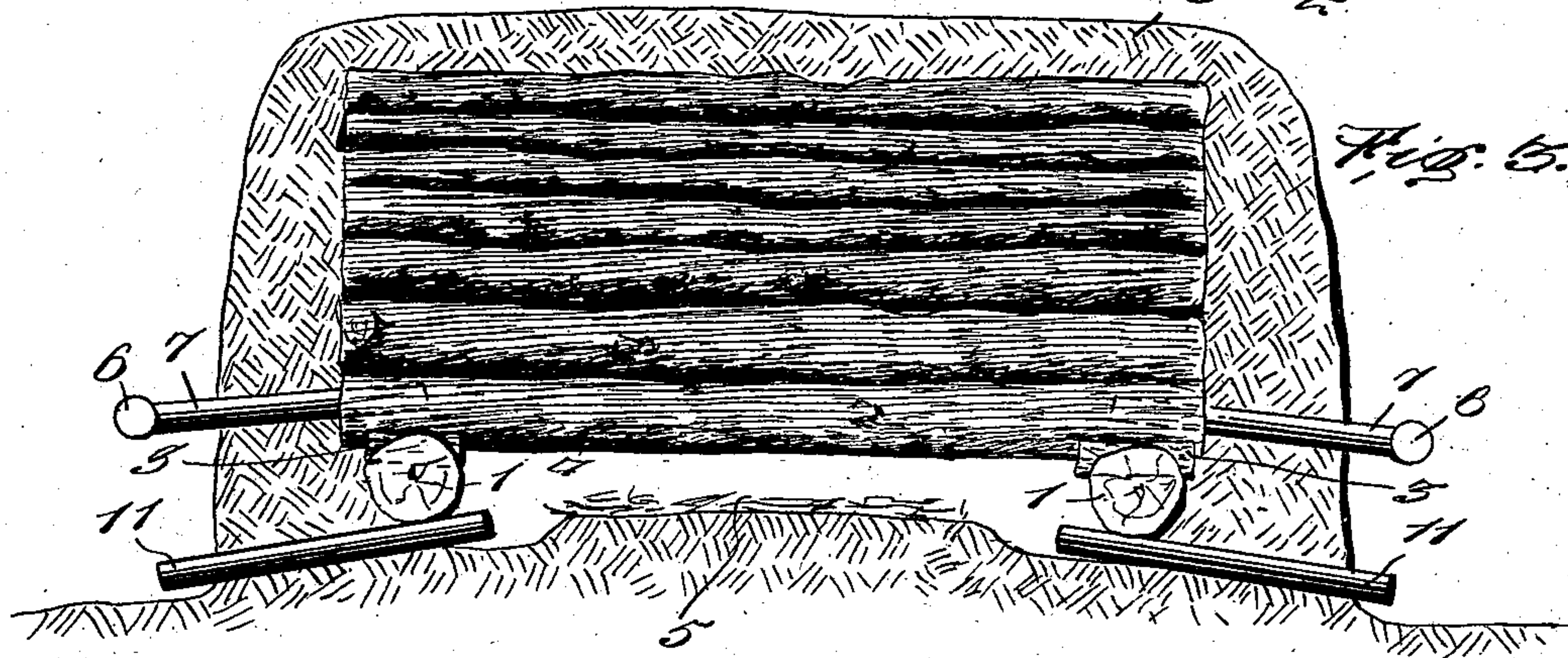
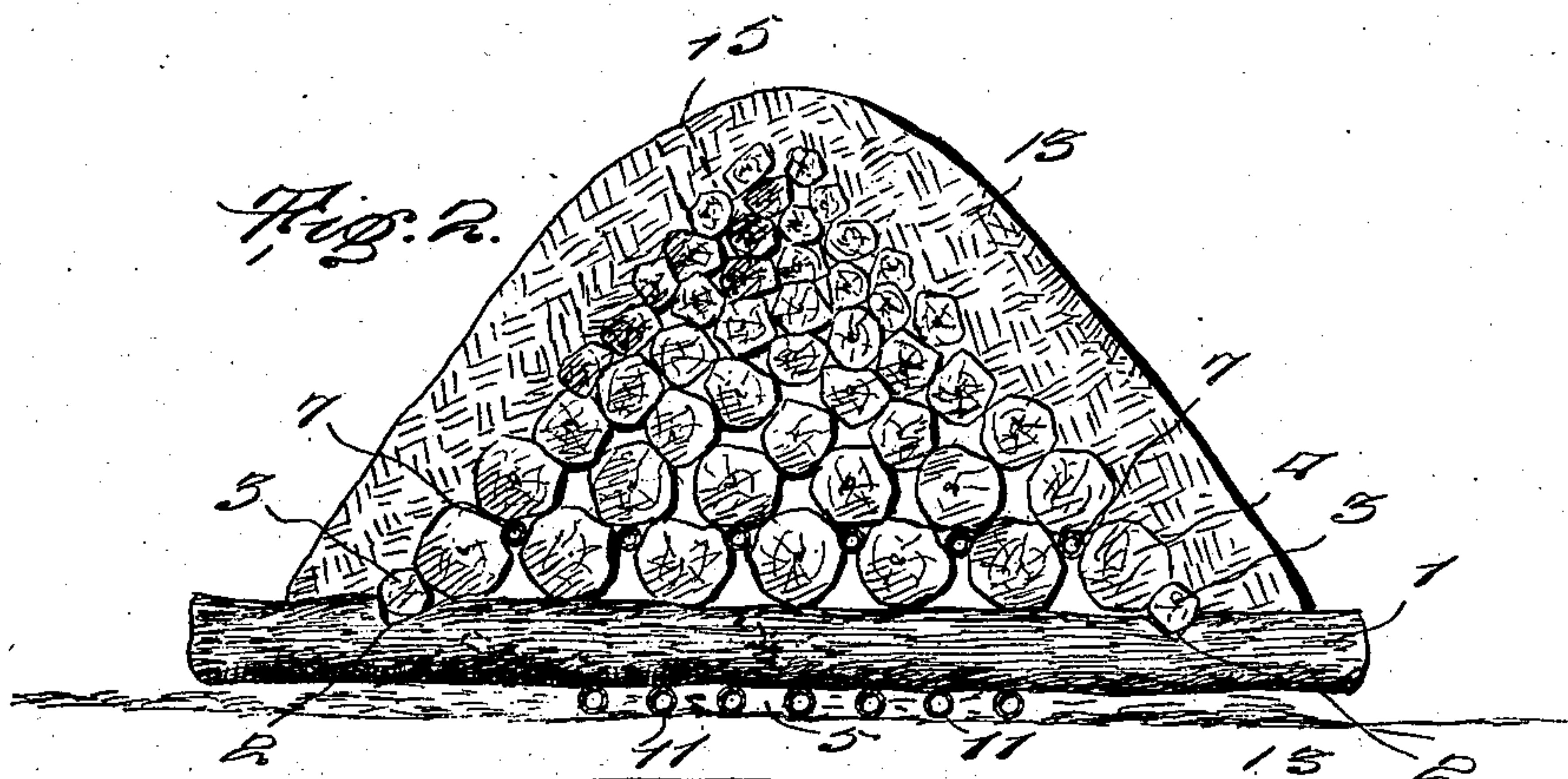
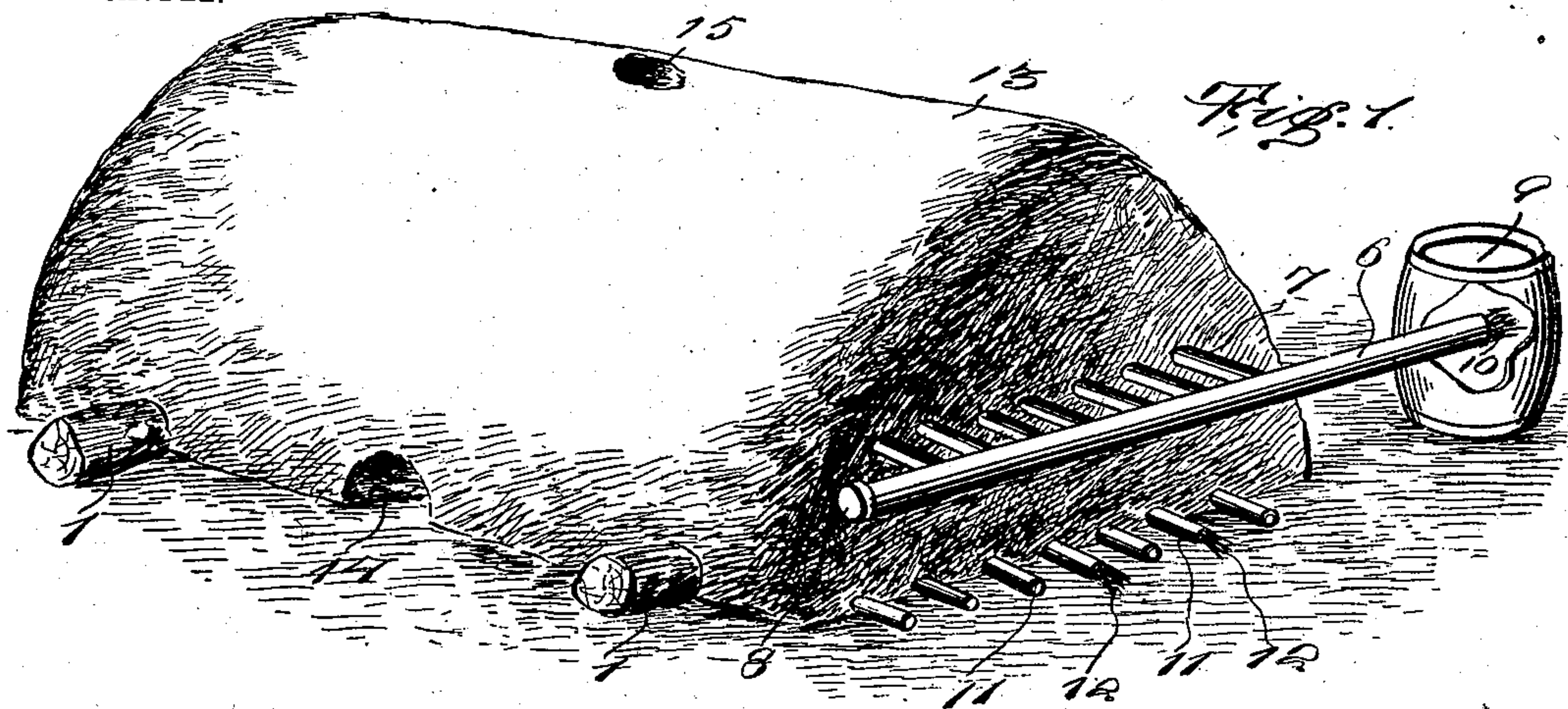
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F. W. NEWBERGER.

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NO MODEL.



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