

1,063,571.

2 SHEETS—SHEET 1.



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INVENTOR
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BY

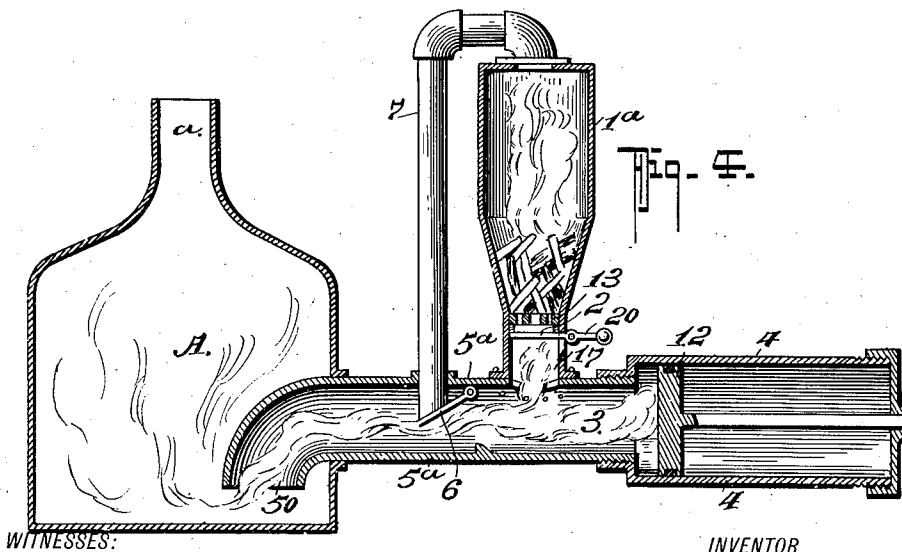
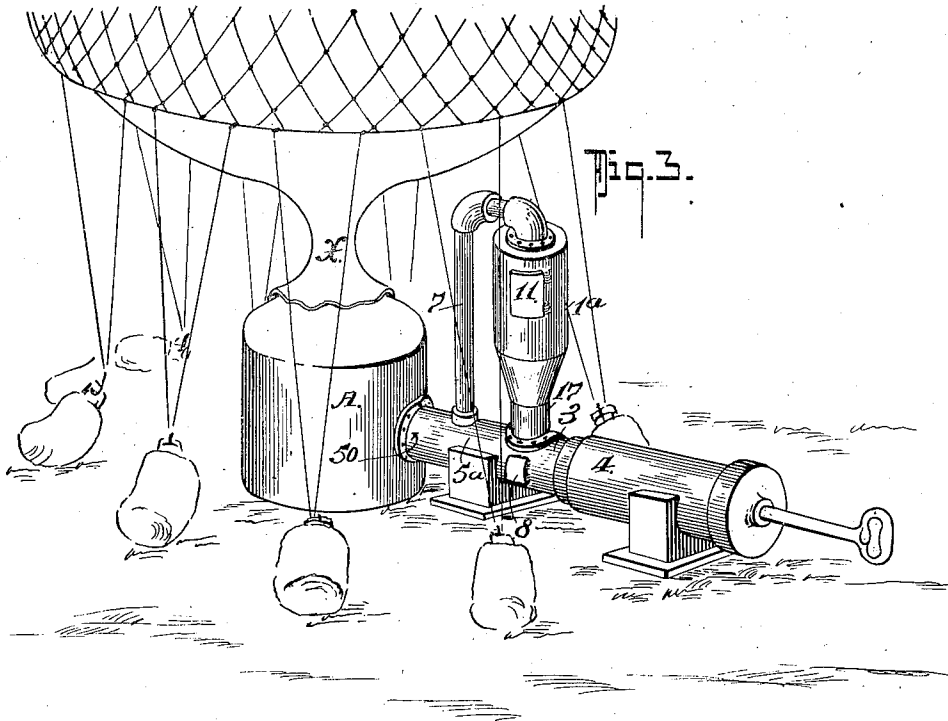
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A. M. MILLER.
MEAT SMOKING APPARATUS.
APPLICATION FILED OCT. 17, 1912.

1,063,571.

Patented June 3, 1913.

2 SHEETS—SHEET 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

AUGUST M. MILLER, OF LAKE PRESTON, SOUTH DAKOTA.

MEAT-SMOKING APPARATUS.

1,063,571.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed October 17, 1912. Serial No. 726,373.

To all whom it may concern:

Be it known that I, AUGUST M. MILLER, residing at Lake Preston, in the county of Kingsbury and State of South Dakota, have
5 invented certain new and useful Improvements in Meat-Smoking Apparatus, of which the following is a specification.

This invention, which in its general nature relates to apparatus for curing and
10 smoking meats, more particularly has reference to certain new and useful improvements in that type of apparatus shown and described in my Patent #800,863, dated October 3, 1905, and my said present invention
15 seeks to simplify the construction shown in my patent referred to and to render the said apparatus the more effective for its intended uses.

Another object of my present invention is
20 to so construct the smoke generating devices shown in my patent aforesaid whereby to provide for adjusting the said devices so as to let air into the smoke house at times when it is desired to exhaust the smoke from the
25 smoke house, and further for adapting the said generator devices for being readily utilized, for inflating balloons.

With other objects in view that will hereinafter appear, my present invention consists in the peculiar construction and novel
30 arrangement of parts, all of which will be hereinafter fully explained, specifically pointed out in the appended claims, and illustrated in the accompanying drawings,
35 in which:

Figure 1 is a vertical longitudinal section of a meat house in which is embodied my present invention, the generating devices being in side elevation. Fig. 2 is a detail
40 longitudinal section of the generating devices, the parts being adjusted for drawing the air from the smoke house and the smoke from the generator preparatory to its being forced out into the smoke house. Fig. 3 is
45 a perspective view of my improved smoke generating devices showing the same as utilized for inflating balloons. Fig. 4 is a section of the said devices taken practically on the line 4-4 on Fig. 3, the parts being
50 shown as closing off the suction pipe to the generator and for forcing the smoke into a receiver shaped for receiving the neck of the balloon.

In carrying out my present invention
55 when applied for smoking meats and the like I provide a smoke house which, in the

present showing has a number of smoking compartments, that are in communication with each other, the lower one of which has an entrance door 14 in which is a supplemental or vent door 5, the purpose of which
60 will presently appear. The smoke house 1 also includes a central offtake or chimney, the entrant end of which is normally closed by a rock valve 9 held shut by a spring 10
65 and having an arm 90 to which connects a pull cord 91 that extends to a suitable point outside the smoke house.

The generating devices include a generating chamber or stove, suitable for burning
70 wood, corn cobs, coal or any other smoke producing substance and it has a fuel feed door 11 at the upper end. The bottom or base of the stove tapers to a straight way passage 17, in which is located the grate 13
75 and which communicates with and discharges into a smoke collecting device 3 that forms a part of a smoke conveying pipe 5, the discharge end 50 of which leads into the
80 smoke chamber, when my present invention is adapted for smoking or curing meats, as shown in Fig. 1, or into a receiver A when arranged for filling balloons, as shown in
Figs. 3 and 4, by reference to which it will
85 be seen the receiver has its neck portion *a* shaped for receiving the mouth of the balloon indicated by X. Chamber 3 also communicates with a pumping cylinder 4 in which operates the piston 12, the rod of which extends and terminates in a handle as
90 shown.

2 designates a damper or gate that normally closes over the bottom of the grate and shuts off communication between the chamber 3 and the stove or generator 1^a and
95 for holding it closed the said valve has a weighted projecting stem 20 on the outside of the chamber 3, it being clear that to open up the chamber 3 to the stove 1 it is only necessary to lift the weighted stem 20, see
100 Fig. 2.

7 designates a smoke pipe that connects the discharge end of pipe 5^a with the top of the stove 1^a and 6 is a drop valve, so hinged in the entrance end of pipe 5^a that
105 under one adjustment, see Fig. 2, it closes the chamber 3 from the pipes 5^a and 7 and under another adjustment (see Fig. 4) it closes the pipe 7 and opens up chamber and pipe 5^a.

8 designates a cleaning out door in the chamber 3.

110

From the foregoing description taken in connection with the drawings, the complete arrangement, the manner of operating the same and the advantages thereof will be readily apparent.

By reason of the construction shown and described, when operating the pump when the piston is pulled outward, the valve 6 is drawn down to uncover the pipe 7 and establish communication between the smoke house and the stove, the said valve being now held down to close the chamber 3 from the outlet 5^a. Valve 2 at the same time is pulled down to uncover the grate and permit drawing a charge of smoke into the chamber 3, circulation between the said chamber 3 and the smoke house being now established through the stove 1. On the reverse movement of the piston (see Fig. 4) the valve 2 closes up under the grate and the valve 6 is swung up to close pipe 7, the smoke charge within the chamber 3 now going into the smoke house or balloon. To exhaust some from the smoke house it is only necessary to pull open the valve 9, the outflow through past the valve being increased by opening the door 14 or by opening the small covered opening or door 5 in the main door 14.

What I claim is:

1. In an apparatus of the class described, a smoke generator comprising a smoke producing stove having a grate, a pipe for conveying the products of combustion into the chamber to be charged, said stove having an intake and having a connection in communication with said pipe below the grate, a valve that normally closes over the bottom of the grate and opens under suction action, a back check valve in said pipe and a pump in communication with said pipe and with the stove below the grate.

2. In an apparatus of the character stated, a smoke generator comprising a smoke producing stove including a grate and a dis-

charge portion below the grate, an offtake pipe in communication with said discharge portion for leading the smoke into the chamber to be charged, a by-pass pipe communicating with said offtake pipe and with the top of the stove, a pump in communication with said offtake pipe and with the discharge portion of said stove, a back check valve in said offtake pipe between the point of connection of said by-pass pipe with said offtake pipe and the discharge of said stove, said back check valve serving to close said offtake pipe when in one position and to close said by-pass pipe when in the opposite position, and a check valve in said stove beneath said grate for closing the passage through the grate when said valve is in one position.

3. In an apparatus of the character described the combination of a smoke house, of a smoke generator comprising a stove, a smoke collecting chamber in communication with the bottom of the stove, a pump in connection with a part of said chamber, an offtake for the said chamber that connects with the smoke house, a pipe connection between said offtake and the top of the stove, a valve between the stove outlet and the said pipe connection, which under one adjustment closes the said pipe connection to the top of the stove and under another adjustment closes the outlet to the smoke house, a valve that normally closes off the stove from said chamber, the aforesaid parts being arranged so that on the suction stroke of the piston smoke will be drawn through the stove into said chamber and pump, and on the other stroke of the pump piston smoke will be passed through said chamber and offtake into the smoke house.

AUGUST M. MILLER.

Witnesses:

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