

No. 735,931.

PATENTED AUG. 11, 1903.

J. ALLOATTI.
ALIMENTARY PASTE DRYING APPARATUS.

APPLICATION FILED NOV. 7, 1900.

NO MODEL.

Fig. 1.

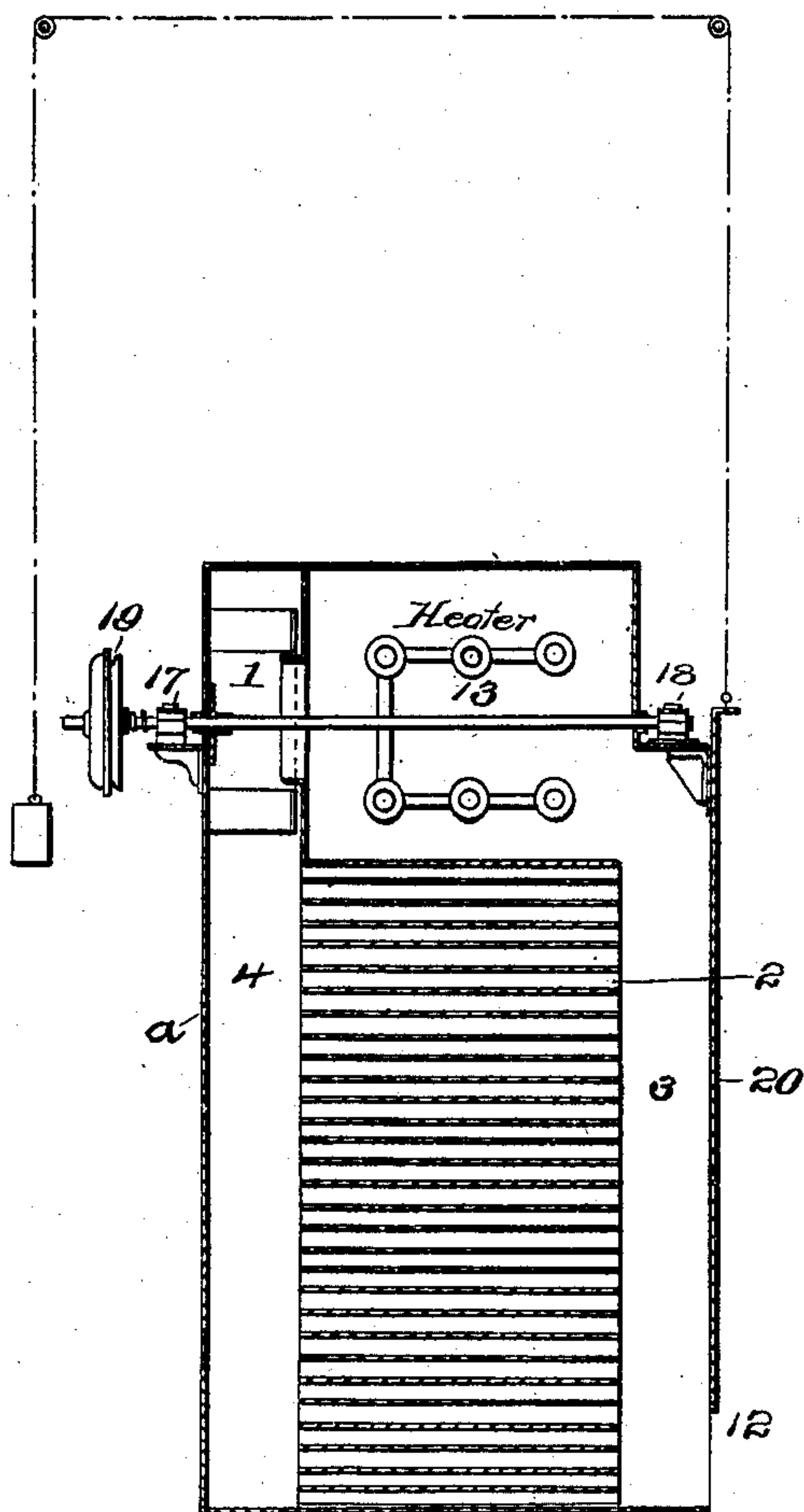
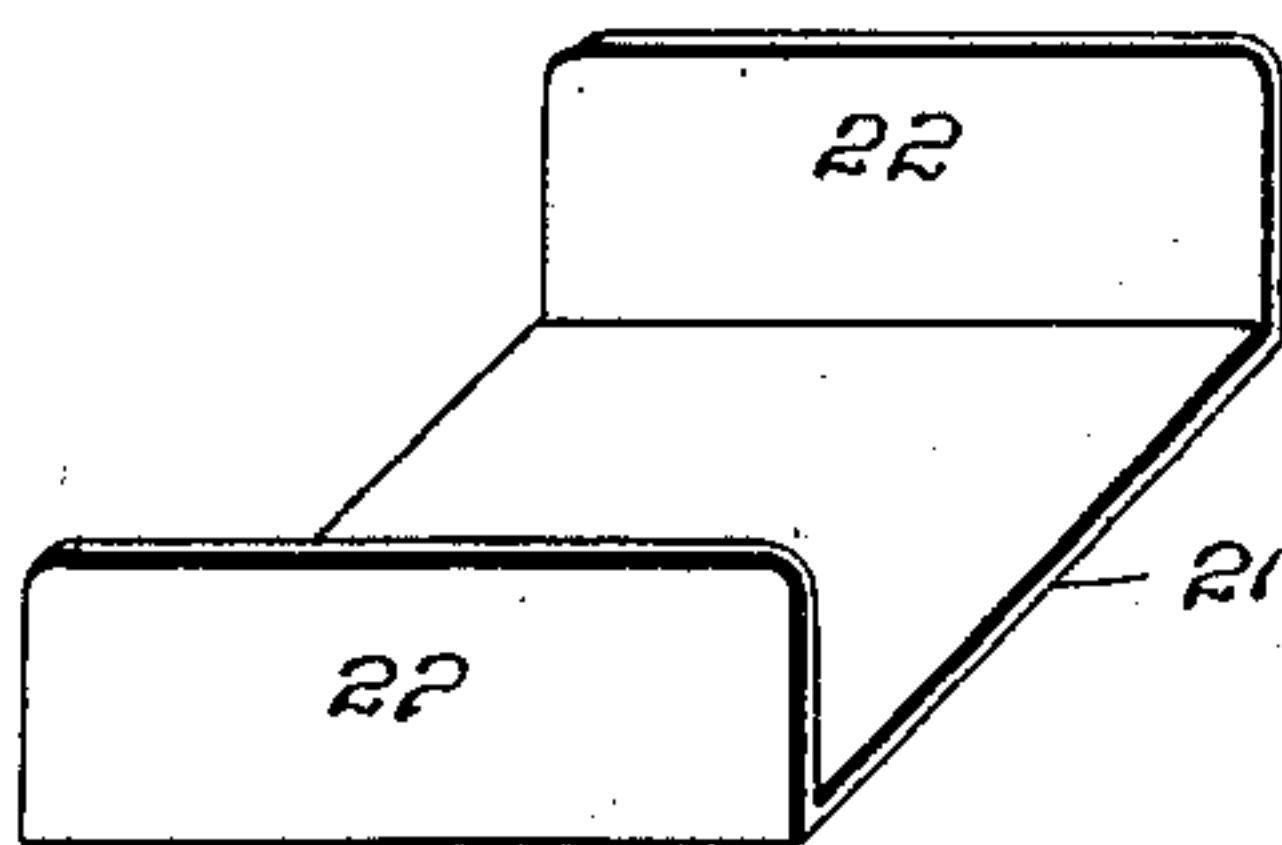


Fig. 2.



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JOSEPH ALLOATTI, OF CLERMONT-FERRAND, FRANCE.

ALIMENTARY-PASTE-DRYING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 735,931, dated August 11, 1903.

Application filed November 7, 1900. Serial No. 35,765. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ALLOATTI, a citizen of the Kingdom of Italy, and a resident of Clermont-Ferrand, France, have invented certain new and useful Improvements in Alimentary-Paste-Drying Apparatus, of which the following is a specification.

The present invention relates to alimentary-paste-drying apparatus, the object being to provide an apparatus of this kind in which paste, such as macaroni ribbon and other forms of vermicelli or other similar materials, may be perfectly and readily dried. Hitherto the drying of such alimentary paste could be efficiently effected only by the atmosphere or in large drying apparatus in which the temperature is slightly raised. These methods require much time and space, while other quick-drying processes are objectionable in that the paste is frequently cracked by reason of the quick drying of the surface thereof.

The object of the invention is therefore to avoid the objections of the air-drying and of the artificial-drying processes.

The invention consists in the construction, novel combination, and arrangement of parts fully described and claimed hereinafter.

In the accompanying drawings, Figure 1 is a vertical sectional view of a drying apparatus constructed in accordance with my invention. Fig. 2 is a detail view of a paste-receiving shelf or drawer.

Referring to the drawings, *a* represents a casing made of suitable form, dimensions, and material.

1 designates a suitable ventilator, such as a turbine-ventilator, arranged within the upper part of the casing *a*, and the shaft of which is journaled in bearings 17 18, secured to the casing *a*, said ventilator being actuated by means of friction-pulleys 19 or otherwise and a suitable motor. Arranged within the compartment or casing at the upper part of the casing *a* is a heater 13, preferably formed of winged tubes, adapted to receive hot steam, &c., a diagrammatical view of which is shown in Fig. 1. Under said compartment or casing are arranged the removable shelves 2 for the reception of paste to be dried, a vertical passage 3 4 being provided on each side of said removable shelves. The front wall 20 of the

casing *a* is movable vertically, being supported in suitable guides (not shown) provided for the purpose, and may be raised to a greater or less extent, so as to provide an adjustable opening 12, through which fresh air enters the apparatus when the latter is in operation and through which the shelves are introduced and removed. The ventilator 1 being actuated, air is sucked through the passage 3 and into the upper compartment or casing, where said air is heated by the tubular heater 13 and then forced down through the passage 4 into the spaces between the paste and through the hollow spaces in said paste, (macaroni,) whereby the latter is readily and perfectly dried.

The apparatus thus constructed may be employed for drying paste in bulk instead of arranging said paste in separate layers, whereby considerable saving of time is obtained, as the pastes—for instance, macaroni—may be taken from the compressing-machine and directly introduced into the drying apparatus, wherein the current of air is produced parallel with the tubes of paste and forced partially through the tubes of paste and partially through the intermediate spaces between said tubes. For this purpose I have constructed special shelves or drawers 2, formed of a flat plate 21, Fig. 2, having two upwardly-projecting flanges 22 22, between which the tubes of paste are received as they come from the compressing-machine.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an alimentary-paste-drying apparatus, the combination of a lower casing having one side movable and adjustable, a paste-material-receiving space located centrally of said casing; an upper casing having a bottom and provided with a central opening in one side and an air-inlet opening in the opposite side, said inlet and opening communicating with the interior of the lower casing on opposite sides thereof; a heater in said upper casing; and a rotating ventilator adjacent to said central opening on a plane above said paste-material-receiving space, said ventilator producing continuous air-currents on opposite sides of said shelves within the lower casing through said paste-material-receiving

space in one direction and through the upper casing.

2. In an alimentary-paste-drying apparatus, the combination of a lower casing; a vertically-sliding plate closing one side thereof; an upper casing provided with a central opening in one side and an air-inlet opening in the opposite side, said inlet and central openings communicating with opposite sides of the interior of the lower casing; a heater in said upper casing; removable shelves for the paste material located centrally of the lower casing, and a rotating ventilator adjacent to said central opening, said ventilator producing continuous air-currents on opposite sides of the removable shelves within the lower casing, through the shelves in one direction and through the upper casing.

3. An alimentary-paste-drying apparatus comprising a lower casing; a vertically-movable plate closing one side of the lower casing; an upper casing provided with an air-

inlet opening in one side and an air-discharge opening in the opposite side; a heater within the upper casing; a plurality of superposed paste-shelves located centrally of the casing, the air-inlet and air-discharge openings of the upper casing being located at points outside of the vertical plane of said shelves and having open communication with the lower casing, each shelf having vertical side flanges to permit of supporting one upon the other; and a rotating ventilator adjacent to the discharge-opening and for producing continuous air-currents on opposite sides of the shelves through the shelves in one direction, and through the upper casing.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

JOSEPH ALLOATTI.

Witnesses:

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MAURICE GERBEAULT.