

No. 731,012.

PATENTED JUNE 16, 1903.

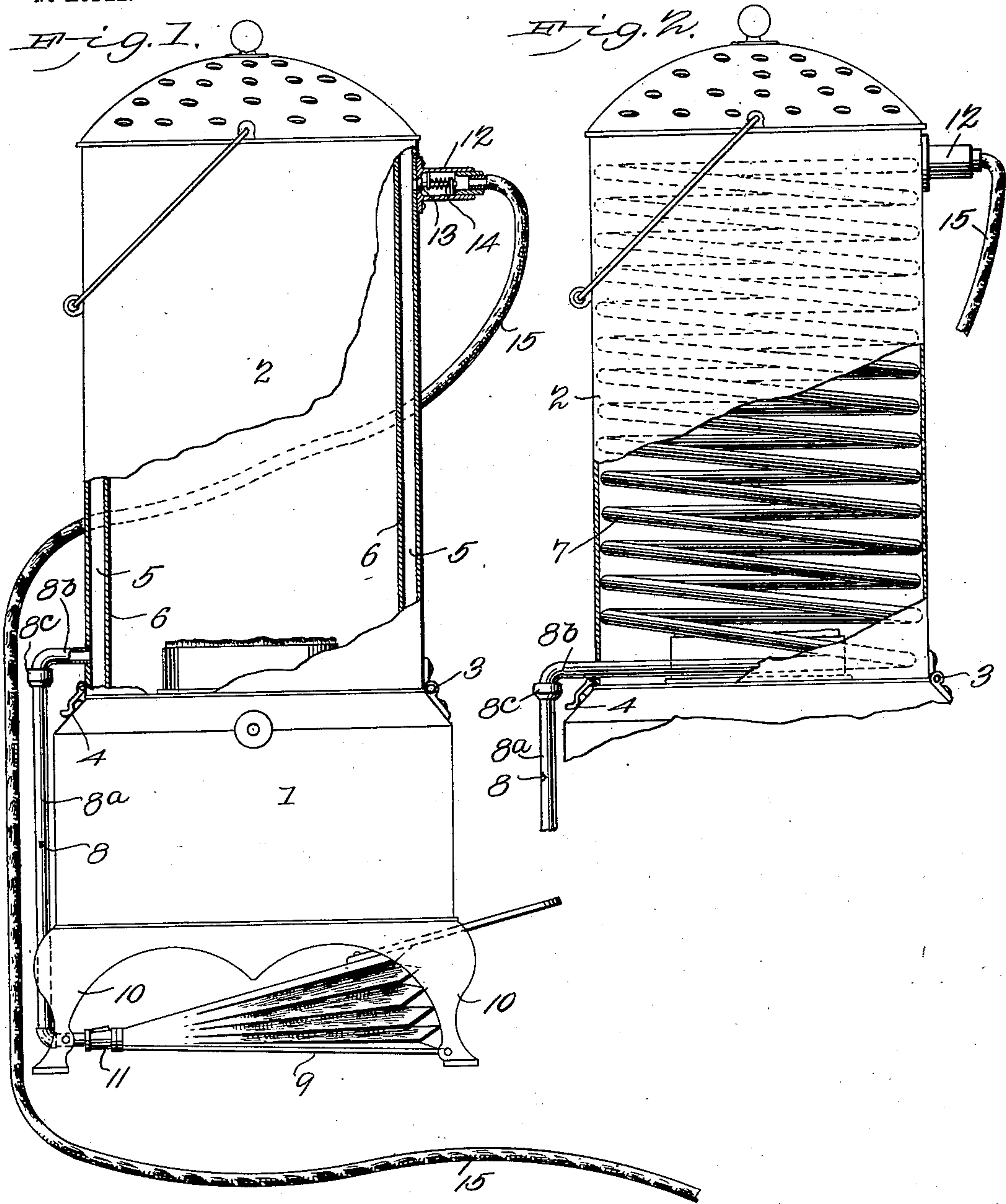
F. AVERY.  
BED WARMER.

APPLICATION FILED AUG. 11, 1902.

NO MODEL.

*Fig. 1.*

*Fig. 2.*



Witnesses  
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## UNITED STATES PATENT OFFICE.

FRANK AVERY, OF ORIN, WYOMING.

## BED-WARMER.

SPECIFICATION forming part of Letters Patent No. 731,012, dated June 16, 1903.

Application filed August 11, 1902. Serial No. 119,325. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK AVERY, a citizen of the United States, residing at Orin, in the county of Converse and State of Wyoming, have invented a new and useful Bed-Warmer, of which the following is a specification.

My invention is an improved bed-warmer adapted for use for heating beds and for other purposes; and it consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of a bed-warmer embodying my improvements. Fig. 2 is a similar view showing a modified construction thereof.

In the embodiment of my invention here shown the same is applied to an oil heating-stove, of which 1 designates the font or lamp forming the base, and 2 the radiating-drum, which is disposed on the upper side thereof and is hinged thereto, as at 3. On the side opposite the said hinge there is a catch 4 to secure the radiating-drum in a closed position on the font or base. In the radiating-drum is an air-heating element, which in the form of the invention shown in Fig. 1 is an annular chamber 5, formed on the inner side of the radiating-drum 2 by a drum 6, which is spaced therefrom. In the form of my invention shown in Fig. 2 the air-heating element is formed by a coil of pipe 7, disposed on the inner side of the radiating-drum. Within the scope of my invention the air-heating element may be of any suitable construction, and I do not desire to limit myself in this particular. An air-feed pipe 8 leads to the air-heating element and from any suitable means for forcing cold air into the air-heating element through the said feed-pipe 8. A bellows 9 is here shown for this purpose; but a suitable air-pump may be employed instead of the bellows, if preferred, and I do not limit myself in this particular. The bellows is here shown as disposed under the font or lamp 1 between the supporting-legs 10. In the connection between the bellows and the air-feed pipe 8 is a check-valve 11. The air-feed pipe includes a lower section 8<sup>a</sup>, which is fixed with relation to the base of the stove or heater, and an upper section 8<sup>b</sup>, which is

fixed with relation to the hinged drum 2 and detachably jointed to the lower section 8<sup>a</sup>, as at 8<sup>c</sup>. This air-feed pipe connects with the lower portion of the air-heating chamber 5 or with the lower end of the coil 7.

At the upper side of the air-heating chamber 5 or at the upper end of the coil 7, as the case may be, is a nipple 12, which leads therefrom and in which is a valve 13 to control the escape of heated air from the air-heating element. A spring 14 is here shown which normally closes the said valve 13 and the tension of which is such as to cause the air to be compressed in the air-heating element before it can escape therefrom, thus retaining the air in the air-heating element a sufficient length of time to cause it to become thoroughly heated. A flexible conducting-pipe 15 leads from the nipple 12 and is of sufficient length.

In the operation of my invention the air-heating chamber or pipe coil is filled with air, compressed therein by operating the bellows 9, and becomes heated, as will be understood. By means of the flexible conducting-pipe 15 the heated air may be applied to the bed and between the covers to comfortably warm the bed before it is used.

Where my improved bed-warming apparatus is applied to an oil-stove, as here shown, the same is not inconsistent with the use of the oil-stove for ordinary heating purposes.

Having thus described my invention, I claim—

A stove having a radiating-drum, hinged thereto, an air-heating element in said drum, a feed-pipe comprising a section, fixed to a fixed portion of the stove, and a section carried by the hinged drum and communicating with the air-heating element, said sections being adapted to connect and disconnect, means to force air into the air-heating element through the said feed-pipe, and a hot-air conductor leading from the air-heating element, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANK AVERY.

Witnesses:

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