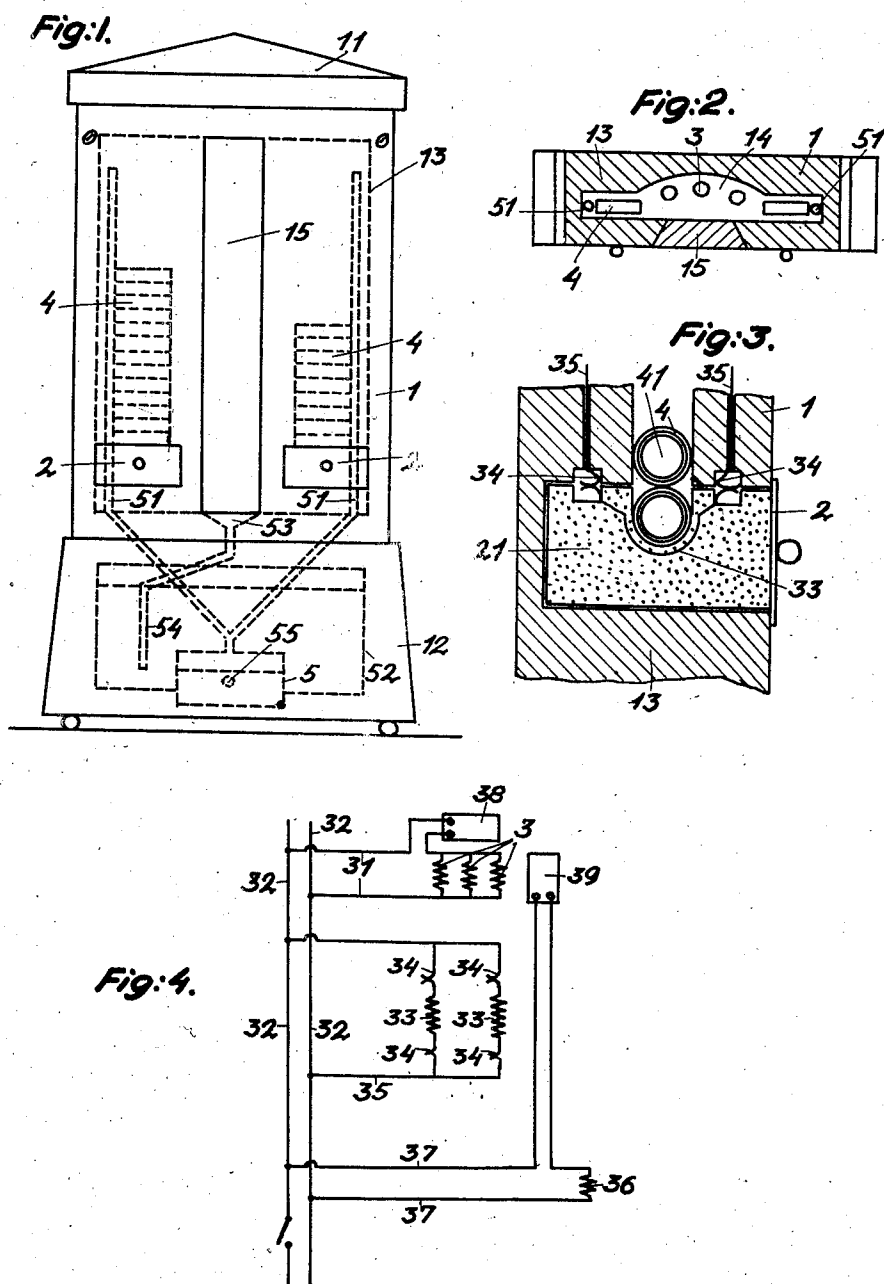


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S. H. GOLDSCHMIDT
AUTOMATIC VENDING MACHINE

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Inventor:

Lois Harold Goldschmidt

UNITED STATES PATENT OFFICE

SVEN HARALD GOLDSCHMIDT, OF COPENHAGEN, DENMARK

AUTOMATIC VENDING MACHINE

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My invention relates to improvements in automatic vending machines adapted to deliver goods in heated condition.

The object of my invention is to provide a simple vending machine of this kind, in which eatable goods, f. i. sausages, claiming a careful treatment can be sold in such a condition, that their pleasant flavor is preserved. More particularly the object of my invention is to provide a vending machine of the kind stated, in which goods claiming a treatment with hot water or steam can be sold, and wherein such goods can be heated, boiled or otherwise treated by heat, and can be maintained hot for some considerable time.

Another object of my invention is to provide a vending machine of the nature specified, in which the temperature is easily regulated in accordance with the conditions required by the goods treated.

A third object is to provide a vending machine as stated above, which is cheap in use, easy to manipulate and simple and cheap to construct.

These advantages are attained by the automatic vending machine, one construction of which is shown by way of example on the drawing. In the construction shown the machine is especially adapted for selling hot sausages, but the construction may easily be modified, without transgressing the frames of the invention, so as to fit other goods.

On the drawing Fig. 1 shows the machine in front elevation, Fig. 2 a horizontal section of the same, Fig. 3 a vertical section of a drawer, and Fig. 4 a wiring diagram for the electric installation.

The machine consists of an outer casing 1, covered at top by a roof 11 and supported at bottom by a base 12. The casing 1 is made from sheet metal and is fitted on the inside with a heavy layer of insulating material 13, an internal space 14 being left for the goods. The front of the casing is fitted with a door 15 giving access to the space 14. In the construction shown the front of the machine is fitted with drawers 2, which are similarly insulated against loss of heat by means of insulating material 21, the said drawers enabling in known manner the bottommost

parcel of merchandise 4 to be withdrawn from the pile of parcels, which in the example shown consist of pasteboard tubes with sausages 41 inserted therein.

The machine is maintained heated by electric heating bodies, which operate partly directly by radiation and by heating the air in the chamber 14, and partly by direct contact with the articles to be heated, and partly by generation of steam which by way of suitable pipes is directed into the main chamber 14 of the machine. In the construction shown the main chamber 14 is fitted with lamps 3, which by wires 31 are connected to the main wires 32 of the machine, which in suitable manner are connected up to the municipal lines of supply. The drawers 2 are fitted with heating bodies 33, which by means of sliding contacts 34 are connected to wires 35 branching off from the main wires 32. The base 12 of the machine contains a small steam boiler 5, which communicates with the chamber 14 by way of steam pipes 51. In the steam boiler 5 an electric heating body 35 is inserted, which by wires 37 is connected to the main lines 32. By means of a pipe the steam boiler 5 is connected to a large water tank 52 containing pure cold water. The bottom of the chamber 14 is fitted with a funnel 53 with a return pipe 54. The funnel 53 and the return pipe 54 are made from some heat-conducting material, for instance metal, and serve to return any condensed vapor from the chamber 14 to the tank 52. Furthermore the funnel 53 will have about the same temperature as the cold water in the tank 52, and the vapor in the chamber 14 will therefore mostly be condensed there.

In the wires 31 leading to the heating bodies 3 a thermoregulator 38 is inserted, which cuts off the current when the temperature in the chamber 14 becomes too high. The wires 37 for the heating body 36 in the boiler 5 are similarly fitted with a thermoregulator 39, which does not close the steam-generating current until the temperature in the chamber 14 has become so high that the steam produced does not condense on the goods.

The machine operates in such a manner that the parcels of merchandise 4 inserted

into the chamber 14 by way of the door 15 in manner known per se can be withdrawn, singly, when a coin is inserted into one of the coin slots 16, whereby a corresponding one of the drawers 2 is released. When the circuit of the machine is closed the current passes, at the start, only through the heating bodies 3, whereby the temperature in the chamber 14 increases. When the temperature has reached a certain point, the temperature regulator 39 closes the circuit of the heating body 36 in the steam boiler 5, whereby the water in this small boiler quickly reaches the boiling point, whereafter steam commences to pass out through the pipes 51. These pipes are fitted with holes on the sides, so that steam flows into the chamber 14 throughout the entire height of the same. As the chamber 14 is previously heated no condensation of steam will take place on the goods nor on the walls, but mainly in the funnel 53 from where the condensed water will be directed back to the tank 52.

It is obviously not necessary to use all the here shown heating devices for all purposes. For some kinds of goods it will be sufficient to use solely the heating bodies 3 or the heating bodies 33, and for other goods it will be suitable to use only the steam heating.

I claim:

Automatic vending machine comprising in combination a heat-insulated chamber adapted to contain parcels of goods to be sold, means to withdraw from the chamber a single parcel at a time after insertion of a coin in the vending machine, and electric heating bodies, a steam generator with electric heating bodies being provided outside of the said chamber, and steam pipes leading from the steam-generator to the said chamber in the vending machine.

In testimony whereof I affix my signature.
SVEN HARALD GOLDSCHMIDT.

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