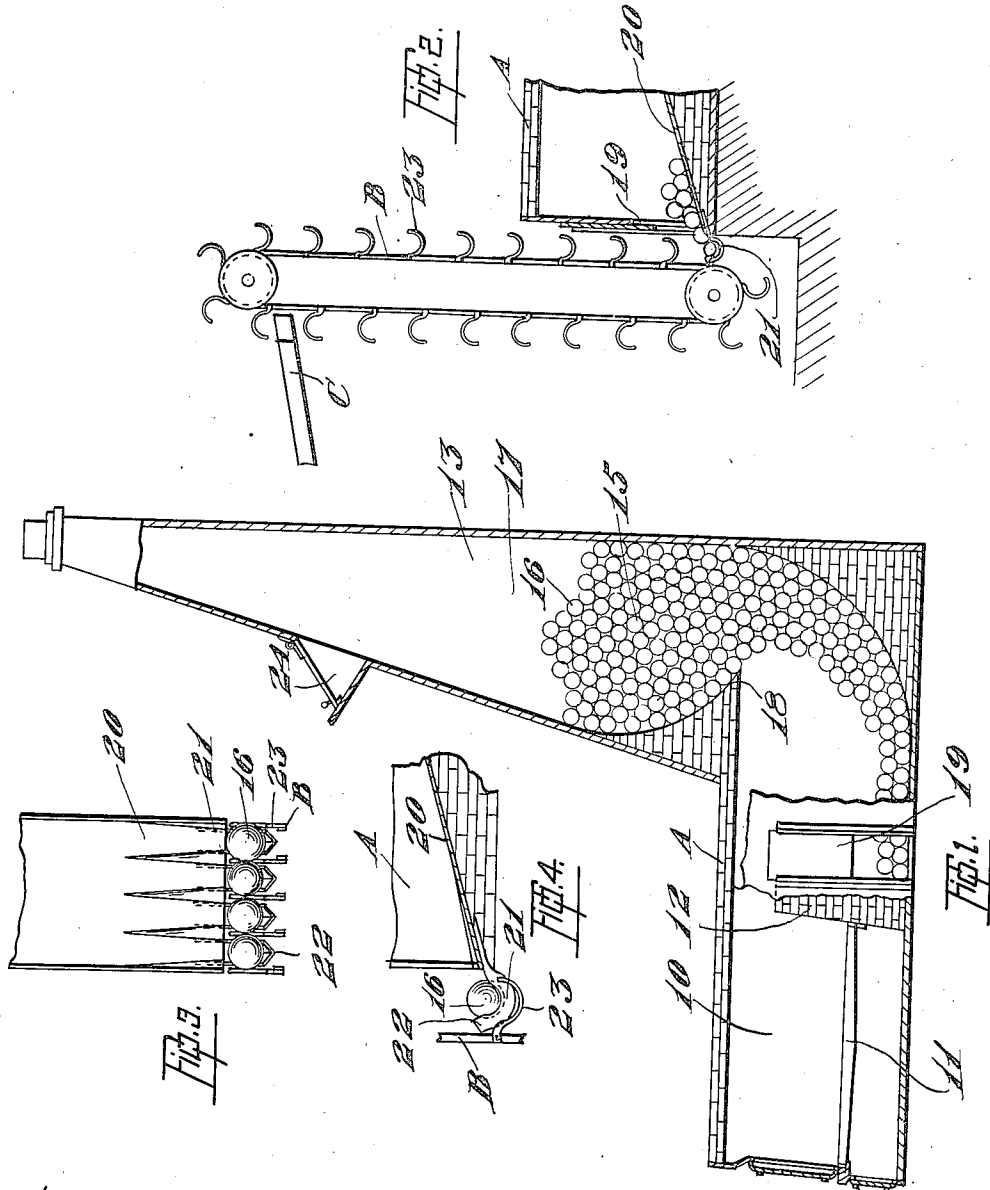


A. B. McADAM.
HEATING SYSTEM.
APPLICATION FILED OCT. 3, 1918.

1,320,640.

Patented Nov. 4, 1919.



WITNESSES

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BY

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ALFRED BUCHANAN McADAM, OF MOOSE JAW, SASKATCHEWAN, CANADA.

HEATING SYSTEM.

1,320,640.

Specification of Letters Patent.

Patented Nov. 4, 1919.

Application filed October 3, 1918. Serial No. 256,781.

To all whom it may concern:

Be it known that I, ALFRED BUCHANAN McADAM, a subject of the King of Great Britain, and resident of Moose Jaw, in the Province of Saskatchewan, Dominion of Canada, have invented certain new and useful Improvements in Heating Systems, of which the following is a specification.

This invention relates to improvements in heating systems, and the objects of the invention are to provide a simple and effective means by which any building, place or apartment or the like may be heated economically.

It consists essentially of means for heating a plurality of balls and conveying them to the compartments to be heated all as hereinafter more fully set forth and described in the accompanying specification and drawings.

In the drawings;

Figure 1 is a sectional elevation of an embodiment of the invention.

Fig. 2 is a cross sectional elevation showing the elevating mechanism.

Fig. 3 is a plan view of the delivery tray.

Fig. 4 is a sectional detail through the delivery tray.

In the drawings, like characters of reference indicate corresponding parts in the figures.

Referring to the drawings, A represents a furnace having a fire chamber 10 with grate 11 and bridge wall 12 and chimney 13.

The rear part of the bridge wall and a portion of the chimney is formed into a heating or combustion chamber 15 adapted to contain a plurality of heat carrying balls 16 conveniently formed of iron, or other material which will stand heat.

The greater number of these balls are adapted to be contained in the enlarged portion 17 of the stack which is formed with a constricted neck 18 at the bottom, the two sides of the enlarged portion 17 tapering together toward the top.

The balls are adapted to be withdrawn through a sliding door 19 at one side of an inclined floor portion 20 in the combustion chamber. The balls passing through the door onto a delivery tray 21 formed with spaced fingers 22 designed to hold the balls

and from which they are lifted by corresponding projecting fingers 23 on an elevator B.

This elevator is of any suitable or convenient type and is designed to lift the balls and discharge them onto a guideway or track C which will extend through the compartment to be heated and permit the balls to travel through the compartments by the force of gravity and ultimately return to the heating chamber passing through a door 24 in the upper part thereof.

Any desired temperature may be given to the balls depending upon the degree of heat desired.

It will be seen that this heat will be directly radiated into the room through which the balls are passed.

As many changes could be made in the above construction and many apparently widely different embodiments of my invention within the scope of the claim, constructed without departing from the spirit or scope thereof, it is intended that all matter contained in the accompanying specification and drawings shall be interpreted as illustrative and not in a limiting sense.

What I claim as my invention is:

A heating system comprising a fire chamber, a combustion chamber behind the fire chamber provided with a sliding door and an inclined bottom sloping toward the door, a chimney at one end of the combustion chamber adapted to receive balls to be heated, the said chimney being formed with a constricted lower end, the body of the chimney widening above the said constricted lower end and then decreasing toward the top, a conveyer designed to receive the heated balls delivered from the chimney to the combustion chamber and discharged through the sliding door, and a runway to receive the heated balls from the conveyer and transport them through a compartment to be heated.

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

ALFRED BUCHANAN McADAM.

Witnesses:

ALFRED J. WICKENS,
MARION G. TRUAX.