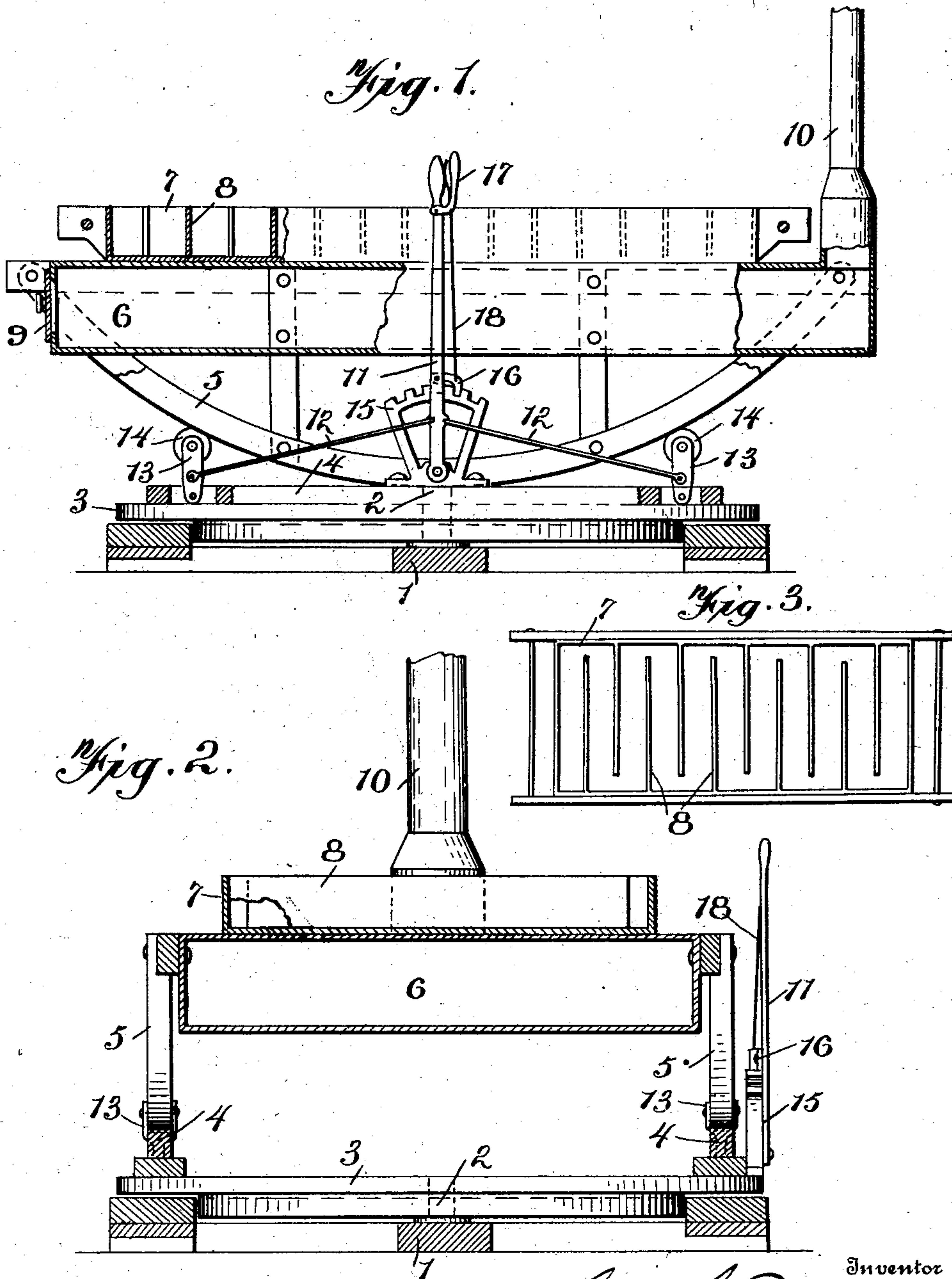


No. 721,275.

PATENTED FEB. 24, 1903.

S. S. BARGER.
REVOLVING FURNACE.
APPLICATION FILED JUNE 6, 1902.

NO MODEL.



Witnesses

Geo. C. Frick.
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By

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UNITED STATES PATENT OFFICE.

SILAS S. BARGER, OF EDDYVILLE, ILLINOIS.

REVOLVING FURNACE.

SPECIFICATION forming part of Letters Patent No. 721,275, dated February 24, 1903.

Application filed June 6, 1902. Serial No. 110,506. (No model.)

To all whom it may concern:

Be it known that I, SILAS S. BARGER, a citizen of the United States, residing at Eddyville, in the county of Pope and State of Illinois, have invented certain new and useful Improvements in Revolving Furnaces, of which the following is a specification, reference being had to the accompanying drawings.

This invention has relation to rocking and revolving furnaces especially adapted to heat syrups or other liquids and at the same time maintain them in agitation; and it consists in the novel construction and arrangement of its parts, as hereinafter described.

The object of the invention is to provide a furnace adapted to be revolved, so that the door of the fire-box may be brought toward the wind, and a means is provided for rocking the furnace, so that the liquid contained in the pan resting upon the furnace may be kept in agitation, and a means is provided for maintaining the furnace in a stationary position, which may be either horizontal or at an angle.

In the accompanying drawings, Figure 1 is a side elevation of the furnace with parts in section. Fig. 2 is a transverse sectional view of the furnace. Fig. 3 is a top plan view of the pan, showing the arrangement of the partitions therein.

The furnace and its attachments are mounted upon a foundation 1, the spindle 2 being suitably journaled at its lower end in the said foundation. An annular platform 3 is attached to said spindle 2, and upon said platform are arranged the parallel tracks 4, the rockers 5 resting upon the said tracks 4, said rockers supporting the fire-box 6. The said fire-box 6 is elongated horizontally and is provided with a flat top adapted to hold a pan 7, the said pan 7 being provided in its interior with a series of intermeshing partitions 8, which are attached at one end to the side of the pan and extend across nearly to the opposite side in the manner as shown in Fig. 3. One end of the fire-box 6 is provided with a door 9, and the opposite end is provided with a flue or stack 10. A lever 11 is fulcrumed at its lower end to the platform 3, said lever being connected by the rods 12 to the arms

13, said arms 13 being pivoted at their lower ends to the platform 3, the upper ends of said arms being provided with the rollers 14, which engage the under surface of the rocker 5. Adjacent the lever 11 is located the toothed segment 15, and the pawl 16, pivoted on the lever 11, is adapted to engage the teeth of the said segment in the manner as shown in Fig. 1.

An ordinary grip 17 is pivoted to the handle of the lever 11 and is connected by the rod 18 with the pawl 16. The furnace is operated as follows: A fire is built in the fire-box 6, and the syrup or other liquid is placed in the pan 7. The furnace and its attachments may be revolved on the spindle 2, so as to bring the door 9 toward the wind. By opening the said door a draft is created through the fire-box 6, which causes the fire to burn briskly, which will heat the said fire-box, the pan 7, and its contents. As the liquid is heated the lever 11 may be manipulated, so as to cause the upper ends of the arms 13 to move simultaneously toward and away from the rocker 5, which will cause the fire-box 6 and its attachments to tilt back and forth upon the platform 3, and thus the liquid in the pan 7 is kept in a state of agitation. When occasion may require, the fire-box 6 and its attachments may be secured in a horizontal or slanting position by permitting the pawl 16 to enter the spaces between the teeth of the segment 15.

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

1. A furnace consisting of a fire-box permanently attached thereto, a platform, said platform being revolubly supported, the top of said fire-box forming a heating-surface.

2. A furnace consisting of a fire-box mounted on a platform, a means for rocking said fire-box upon the platform, said platform being revolubly supported, the top of said fire-box forming a heating-surface.

3. A furnace consisting of a fire-box having rockers, a platform adapted to support said rockers, said platform being revolubly mounted and a means engaging said rockers to cause the fire-box to tilt, the top of said fire-box forming a heating-surface.

4. A furnace consisting of a fire-box having
rockers, a platform supporting said rockers,
a fire-box mounted on said rockers, a lever
fulcrumed to said platform, arms pivoted at
5 their lower ends to said platform, the upper
ends of said arms engaging said rockers and
rods connecting said arms with said lever.

In testimony whereof I affix my signature
in presence of two witnesses.

SILAS S. BARGER.

Witnesses:

M. T. CHANCY,
JENNIE STONE.