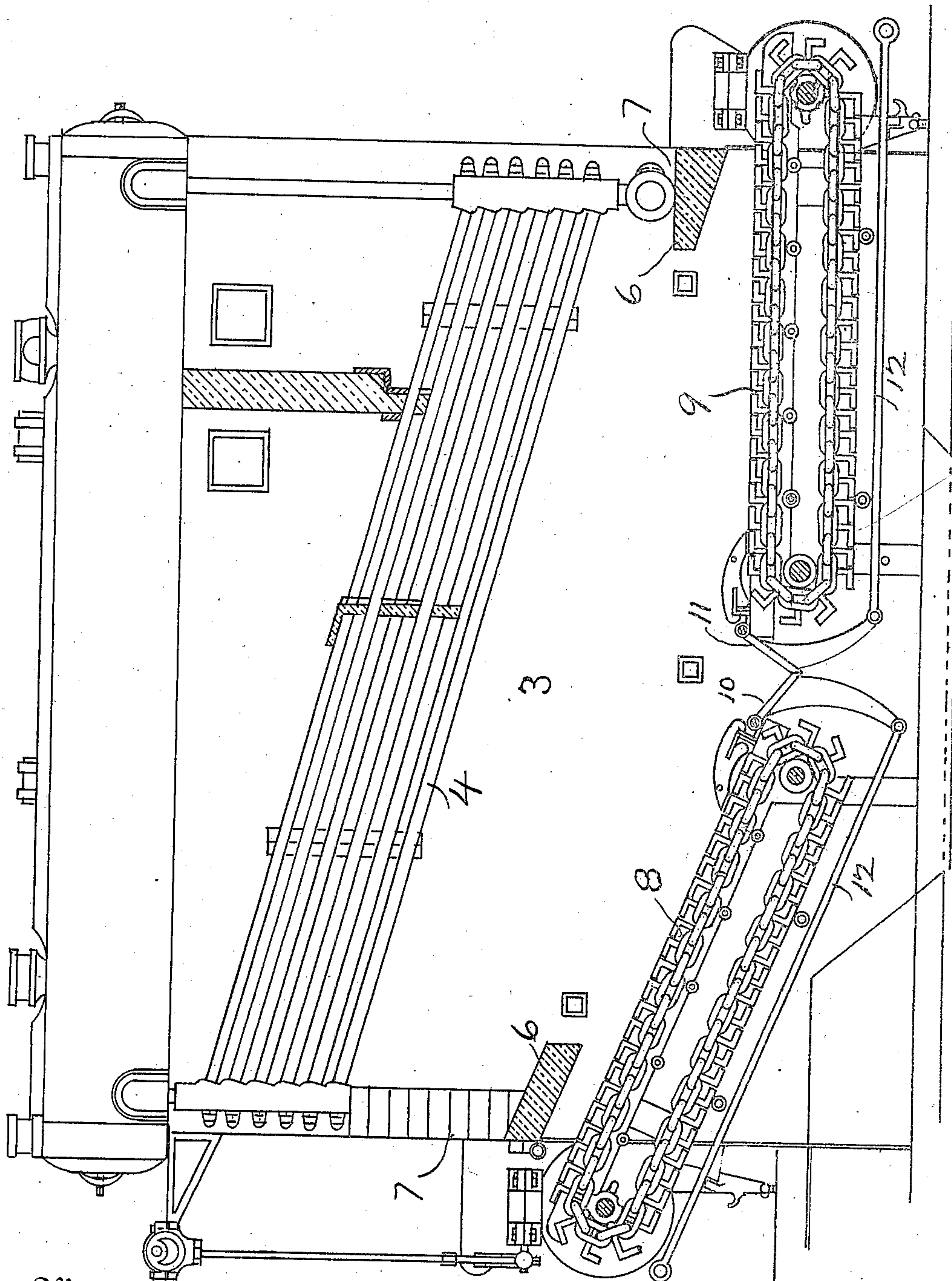


P. L. CROWE.
FURNACE.

APPLICATION FILED NOV. 8, 1909.

984,197.

Patented Feb. 14, 1911.



Witnesses:
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UNITED STATES PATENT OFFICE.

PAUL L. CROWE, OF JERSEY CITY, NEW JERSEY.

FURNACE.

984,197.

Specification of Letters Patent.

Patented Feb. 14, 1911.

Original application filed November 4, 1907, Serial No. 400,722. Divided and this application filed November 8, 1909. Serial No. 526,733.

To all whom it may concern:

Be it known that I, PAUL L. CROWE, a citizen of the United States, and resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Furnaces, of which the following is a specification.

My invention relates to furnaces and it has for its object the arrangement of two mechanical stokers within the same furnace, one horizontally positioned and the other downwardly inclined.

This invention is a divisional application of the application filed Nov. 4th, 1907, No. 400,722, and the construction of the stoker mechanism thereof are the same as that described in the above said application.

Referring to the drawings which represents a longitudinal sectional elevation of a furnace setting showing the manner of mounting or setting progressive feed grates within said furnace, 3, represents the furnace comprising the tubes 4, radiating arches 6, and end walls 7.

With furnaces of considerable length it is more practical to mount in them two mechanical stokers or progressive feed grates than one, because of the preferable shortness of the cable chain. When two progressive feed grates are used in a furnace of considerable length the bridge walls can be dispensed with in order that the entire space beneath the generator may be used in developing the heat and applying it to the heat absorbing elements.

In arranging my progressive feed grates 8—9 within the furnace so that one, 8, is on an incline and the other 9, is horizontal, I can obtain the best results as the heat therefrom reaches the radiating tubes 6, more readily and effectually because of their position in the furnace.

The hinged ash dump plates 10—11, pivoted at the inner end of the grates 8—9, are so positioned that their free ends abut each other when closed to form an ash pocket adapted to receive ashes discharged from the progressive feed grates. The dump plates are opened and closed by operating rods 12, within reach of the attendant.

What I claim is:

The combination of a furnace an inclined progressive feed grate mounted at one end of the furnace, a second progressive feed grate horizontally mounted at the opposite end of the furnace, a hinged ash dump plate for each grate pivoted at the inner end of said grate the free ends of said plates abutting when the plates are in closed position to form an ash pocket adapted to receive ashes discharged from the grates and means for operating said dump plates.

Signed at Jersey City, in the county of Hudson and State of New Jersey.

PAUL L. CROWE.

Witnesses:

OTTO L. SONNESEN,
PETER C. HANSEN.