

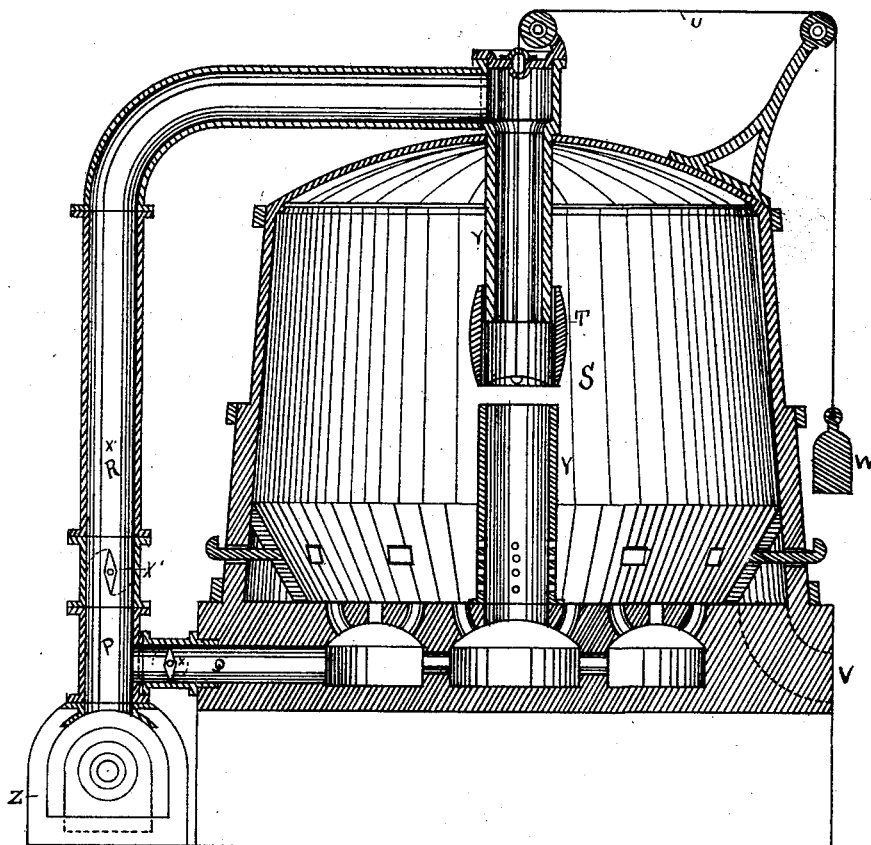
(No Model.)

L. S. GOODRICH.

CHARCOAL KILN.

No. 342,202.

Patented May 18, 1886.



WITNESSES

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UNITED STATES PATENT OFFICE.

LEVEN S. GOODRICH, OF WARNER, TENNESSEE.

CHARCOAL-KILN.

SPECIFICATION forming part of Letters Patent No. 342,202, dated May 18, 1886.

Application filed September 29, 1885. Serial No. 173,591. (No model.)

To all whom it may concern:

Be it known that I, LEVEN S. GOODRICH, of Warner, in the county of Hickman and State of Tennessee, have invented certain new and useful Improvements in Kilns for the Manufacture of Charcoal, of which the following is a specification.

This invention relates to kilns for the manufacture of charcoal.

The object of my invention is to provide means for directing and controlling the flow of heated gases into and through the kiln.

My drawing represents a vertical section of a charcoal-kiln constructed according to my plan, and also the furnace wherein the gases are heated by combustion, and also the pipes or passages which connect the said furnace and kiln, as hereinafter more fully described.

It will be seen that pipe D has two branches, Q and R, provided with valves X and X'. The first branch leads to the bottom of kiln S, while the other pipe or branch leads to the top of the kiln, as shown, connecting with a vertical pipe, V, down through the center to the bottom of the kiln when closed or united by sleeve T. When this sleeve, however, is raised, as shown, it breaks this connection, and permits the gas to escape from the said pipe into the kiln at this point. This opening and closing operation is controlled by the wire or cable U, which supports the said sleeve in balanced condition through the attachment of counter-weight W, a stuffing-box being provided at the top of the pipe where the wire or cable passes through to prevent leakage at this point, (as in Case B.) The outlet-passage from the kiln S is represented by the dotted lines V, which passage will lead to a main, as shown in Case B, or to any other suitable apparatus. The central pipe in both these cases connects at the bottom of the kiln with the annular flues, and are perforated at different points, as practice may dictate. In this present case, by the proper arrangement of the dampers or valves X and X' and sleeve T, the flow of gas can be directed in either direction,

from top or bottom, and may also be supplied from both branches Q and R at the same time.

What I here claim and desire to secure by Letters Patent of the United States, is--

1. A charcoal-kiln provided with top and bottom inlets, in combination with branch supply-pipes connected with said top and bottom inlets and leading to the source of supply of hot gas, and provided with suitable dampers, whereby said gas may be admitted to the kiln either at the top or bottom, or both, substantially as and for the purpose set forth.

2. A charcoal-kiln provided with suitable gas-inlets at top and bottom, with approaching pipes extending from said inlets, in combination with branch pipes connecting with said top and bottom inlets and leading to a source of supply of gas, and provided with suitable dampers, as and for the purpose described.

3. A charcoal-kiln provided with top and bottom gas-inlets, pipes extending inward from said inlets and approaching each other, and a telescopic section by which connection may be made between said pipes, in combination with valved branch pipes connecting with said top and bottom inlets and leading to a source of supply of gas, substantially as and for the purpose described.

4. In the manufacture of charcoal, a kiln provided with a central pipe connected with inlet-pipes at the top and bottom, as shown, and supplied with a sliding sleeve, which, when raised, as shown, divides the pipe and forms an opening into the kiln, and is further provided with perforations at proper intervals to permit the heated gases to escape into the kiln, substantially as and for the purpose set forth.

In testimony whereof I hereunto set my hand in presence of two witnesses.

LEVEN S. GOODRICH.

Witnesses:

W. H. CRAWFORD,
H. B. COOPER.