

(No Model.)

J. LEWIS.
BASKET GRATE.

No. 463,061.

Patented Nov. 10, 1891.

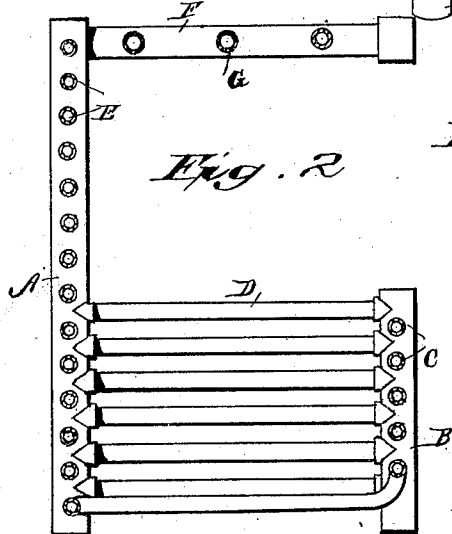
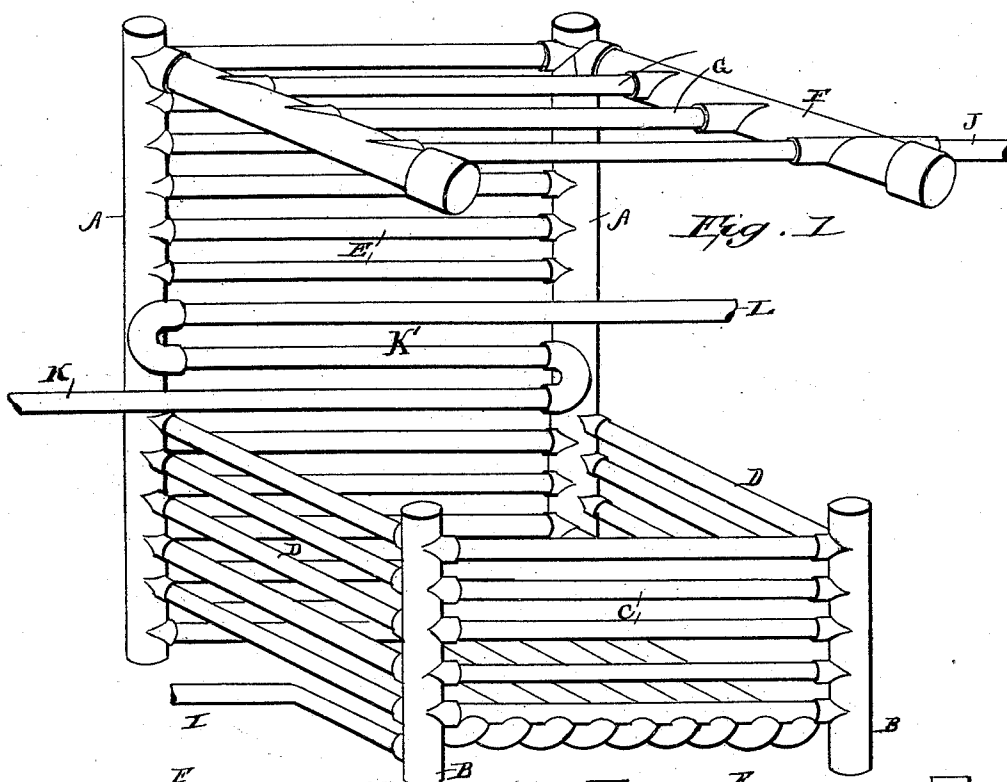
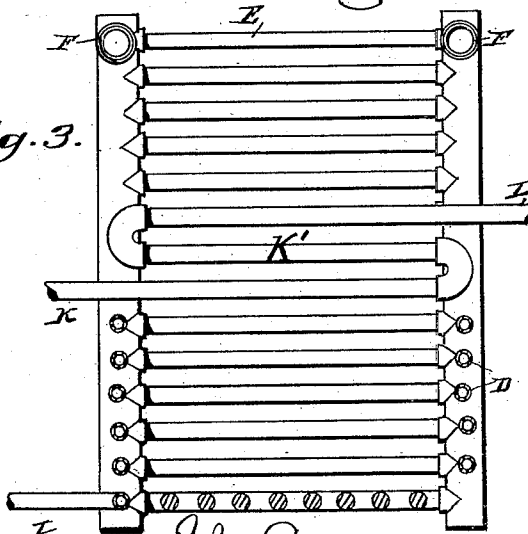


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN LEWIS, OF NASHVILLE, TENNESSEE.

BASKET-GRATE.

SPECIFICATION forming part of Letters Patent No. 463,061, dated November 10, 1891.

Application filed May 6, 1891. Serial No. 391,790. (No model.)

To all whom it may concern:

Be it known that I, JOHN LEWIS, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Basket-Grates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists in a new and improved hollow basket-grate, which is formed of hollow pipes communicating with each other and so arranged that the basket-grate, while presenting the usual appearance and containing the fuel which heats the room in which it is located, is utilized for heating the water which circulates through every part of it, the water when heated in the grate passing into a radiator in another room to warm the said room, then passing back to the hollow basket-grate, where it is again heated, and finally passes to a bath-room or laundry.

My invention will be hereinafter fully described, and claimed.

Referring to the accompanying drawings, Figure 1 is a perspective view of my hollow basket-grate. Fig. 2 is a vertical sectional view through the same. Fig. 3 is a similar view taken at right angles to Fig. 1.

Referring to the several parts by their letters of reference, A A indicate the rear upright legs, and B B the shorter front legs, of my basket-grate, the said legs being formed of hollow pipes of suitable diameter.

C indicates the front bars, consisting of hollow tubes, the ends of which communicate with the front legs B. D D are the side bars, formed, also, of hollow pipes, the ends of which communicate respectively with the hollow front and rear legs B A, and E indicates the rear bars of the grate, formed of hollow tubes or pipes, the ends of which communicate with the rear legs A of the basket-grate.

F G indicate the side and cross bars of an extension running out from the top of the grate, these bars F G being formed of hollow pipes communicating with each other, as shown, and with the upper ends of the rear legs A.

It will now be seen that my new and improved basket-grate is of the general form and presents the external appearance of the

ordinary basket-grate, in which a fire is built for heating a room. The water enters this hollow basket-grate through the inlet-pipe I and circulates through the communicating pipes forming the grate, and as the pipes of which the grate is composed are kept continuously and thoroughly heated by the fire burning in the grate the water circulating through the hollow grate will be heated to a high degree. The hot water flows out from the basket-grate through the pipe J, which leads from the upper end of the same, as shown, and then passes into a radiator or the like in another room in the building, thus heating the same, and the water after passing through the radiator becomes partially cool and returns through the pipe K to the lapped pipes K' at the back of the basket, where it is again heated, and from which it passes through the pipe L to the place where it is finally discharged and used.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that by the use of my invention I effect a great saving both in fuel and in apparatus, the fuel, which would be used anyhow to heat the room in which the basket-grate is located being likewise utilized to heat all of the hot water required for heating the room in which the radiator is located and for use in a bath-room or laundry.

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

1. The combination, with a basket-grate formed of hollow communicating tubes having a feed-pipe and an outlet-pipe, of the lapped pipes and the feed and discharge pipes communicating therewith, substantially as and for the purpose set forth.

2. The combination of the hollow rear and front legs A B, the hollow bars C D E, communicating with the front and rear legs, the extensions F G, formed of the tubes communicating with the rear legs, the feed-pipe I, and the outlet-pipe J, substantially as specified.

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

JOHN LEWIS.

Witnesses:

JOS. H. THOMPSON,
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