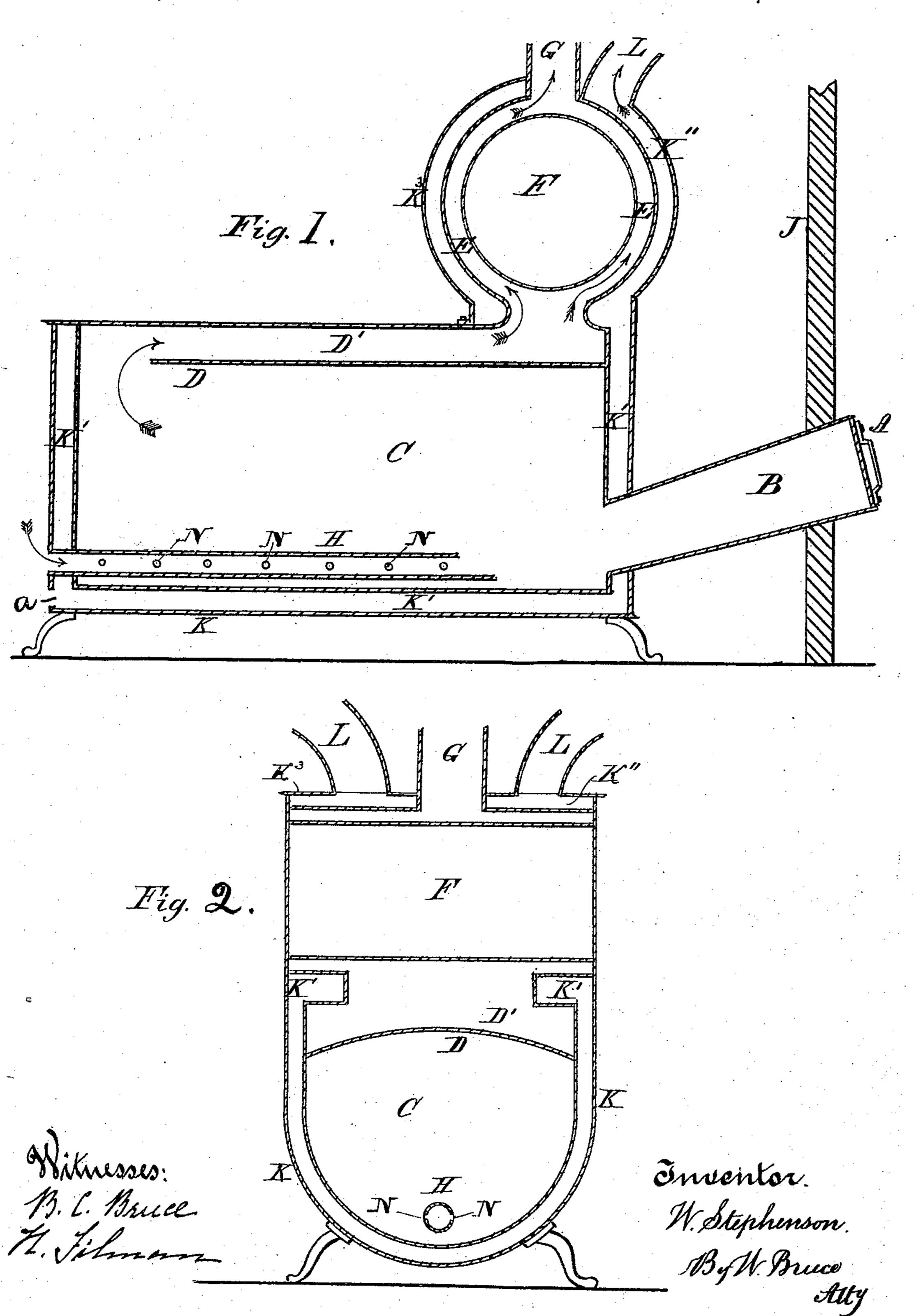
# W. STEPHENSON. STOVE.

No. 376,454.

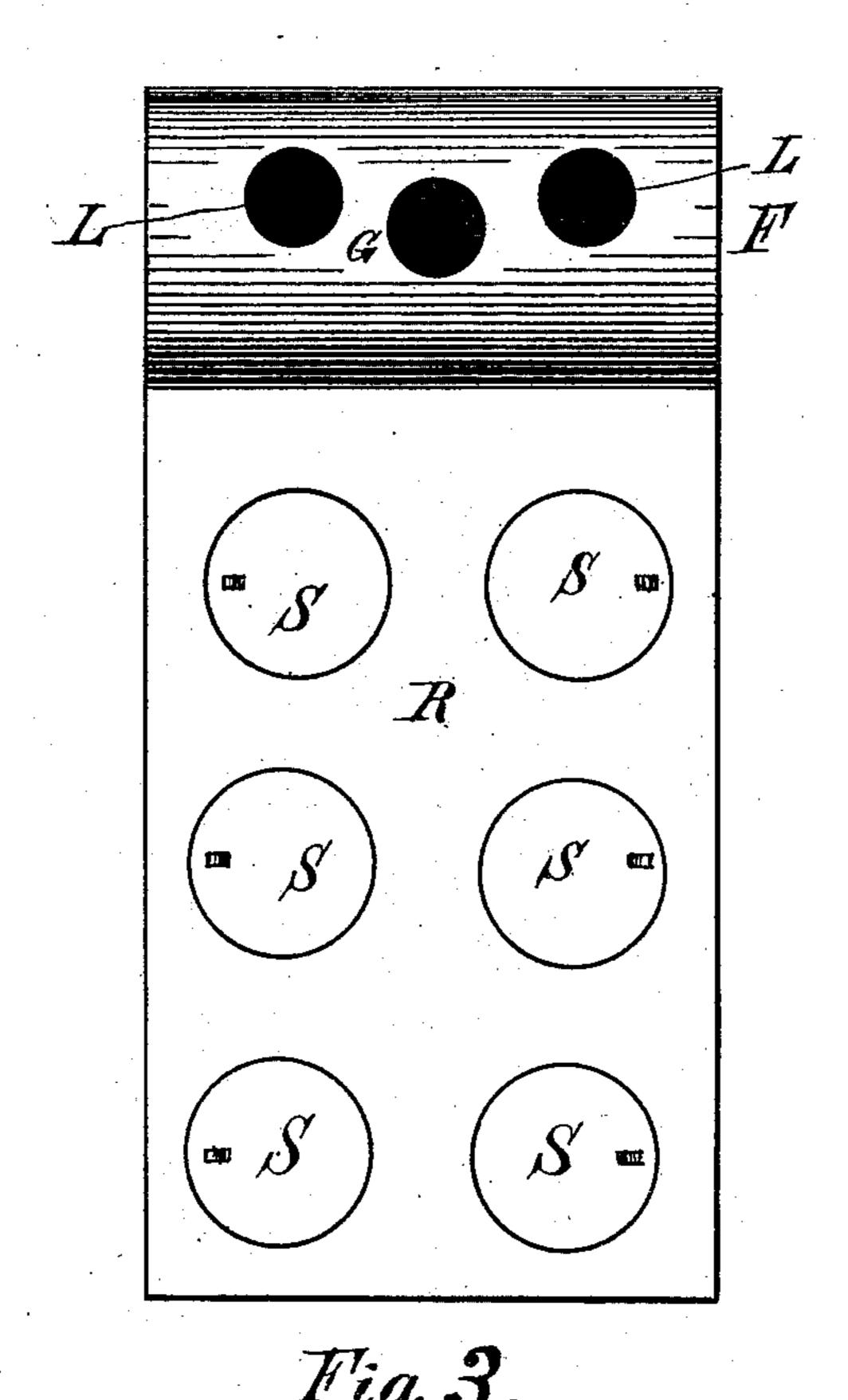
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Miknesses: B. C. Bruce Z. L. Lanzanza Enventor N. Stephenson By W. Bruce Atty

### UNITED STATES PATENT OFFICE.

WILLIAM STEPHENSON, OF MORRIS, MANITOBA, CANADA.

#### STOVE.

SPECIFICATION forming part of Letters Patent No. 376,454, dated January 17, 1888.

Application filed January 8, 1886. Serial No. 188,009. (No model.) Patented in Canada April 22, 1886, No. 23,872.

To all whom it may concern:

Be it known that I, WILLIAM STEPHENSON, of Morris, in the county of Morris, in the Province of Manitoba, Canada, have invented certain new and useful Improvements in Stoves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

My invention is a certain improvement in stoves whereby hay or straw, &c., in a pressed or loose state can be used as fuel for cooking or heating purposes, and is particularly adapted to a prairie country, where wood is scarce and dear and hay or straw plentiful and cheap, as in the Province of Manitoba and the Northwest Territory.

The invention consists in the construction

and combination of parts, which will be hereinafter fully described, and then set forth in

20 the claims.

By reference to the annexed drawings, forming part of this specification, it will be seen that Figure 1 is a longitudinal section of a stove constructed according to my invention.

Fig. 2 is a transverse section of the same. Fig. 3 is a top view.

C is the fire box, formed half cylindrical, of sheet-iron, steel, boiler-plate, cast-iron, or like material. It is provided at the right end with a feed-pipe, B, which extends through a partition, J, into a straw-shed built adjacent to the room the stove is placed in, for convenience in feeding the stove with straw fuel. A perforated draft-pipe, H, affixed near the bottom of the stove and open at the outer end, supplies draft underneath the ashes or charred straw, and causes every part of the fuel to be consumed to hard cinders, and enables the stove to retain its heat for a consider-to able time.

D is a diaphragm-plate extending partly over the fire-box C, and forms a return-flue, D', which branches into flues E E around the oven F to the exit-pipe G.

R, Fig. 3, represents the top of the stove, showing six pot-holes, S.

As the stove is intended to serve as a furnace-heater, it is provided with an outer drum or casing, K, which forms a space, K', between the fire-chamber and the drum K. This space 50 K' communicates with the external air at the point a, and it leads into a similar space, K'', formed by a jacket, K<sup>3</sup>, around the oven, as is clearly seen in Fig. 1. Hot-air-discharge pipes L L connect with the hot air space K", 55 over the top of the oven-drum, to conduct hot air to a room or rooms above or adjoining the one the stove is placed in. It will be seen that the draft pipe H extends almost the entire length of the fire-chamber, and that it has 60 air-discharge openings N. By such means a perfect draft and combustion is insured.

It may be observed that the oven could, if desired, be dispensed with for simply a heating stove, and in that case the smoke pipe 65 would be placed on the top of the stove, in

the part occupied by the oven.

Having thus described my device and its advantages, what I claim as my invention is—

1. The herein-described stove, comprising 70 the fire-box C, having a horizontal diaphragm, D, and flue D', the jacket K, nearly surrounding said fire-box and forming flues K', the feedpipe B, and the draft-pipe H, located in the lower part of the fire-box and having open-75 ings N, substantially as shown and described.

2. The herein-described stove, comprising the fire-box C, having a horizontal diaphragm, D, and flue D', the oven F, the flues E E, surrounding the oven and communicating with 80 the flue D', the draft-pipe H, located in the lower part of the fire-box, the feed-pipe B, the jacket K K<sup>3</sup>, forming flues K' K", the hotair exits L L, and the smoke-exit G, substantially as shown and described.

Dated at Winnipeg this 31st day of October, 1885.

### WILLIAM STEPHENSON.

In presence of— J. H. McLean, D. S. Campbell.