S. R., J. C. & J. H. TEMPLETON.

HOP-DRIER.

No. 190,794. Patented May 15, 1877.

Fig. 1

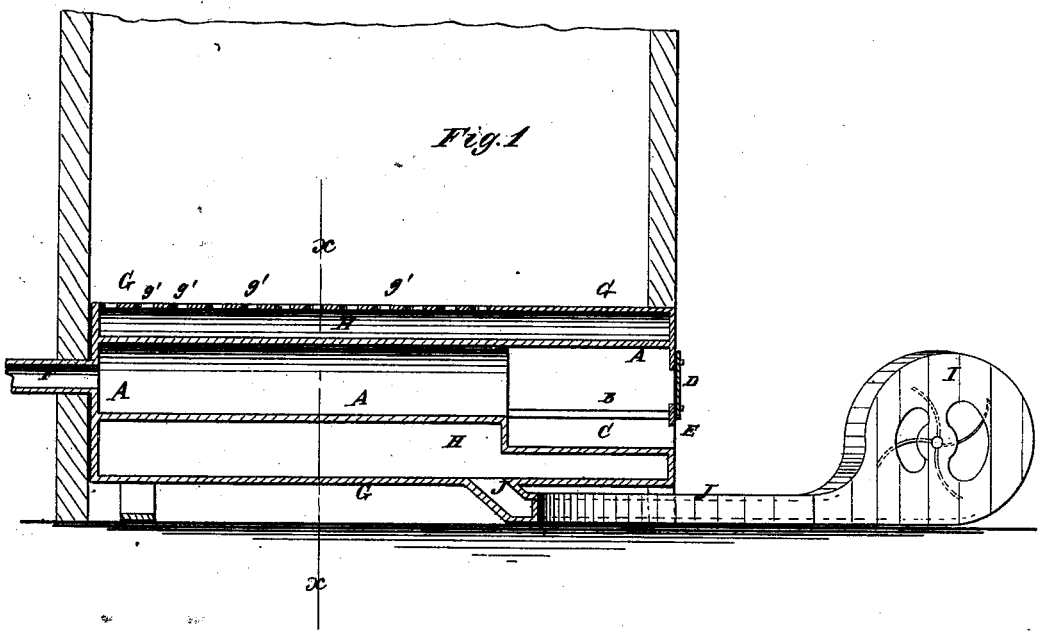
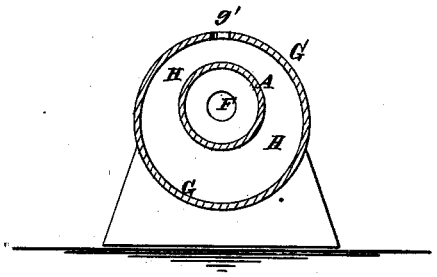


Fig. 2



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UNITED STATES PATENT OFFICE.

SAMUEL R. TEMPLETON, JOHN C. TEMPLETON, AND JOSEPH H. TEMPLETON, OF BROWNSVILLE, OREGON.

IMPROVEMENT IN HOP-DRIERS.

Specification forming part of Letters Patent No. **190,794**, dated May 15, 1877; application filed March 12, 1877.

To all whom it may concern:

Be it known that we, SAMUEL R. TEMPLETON, JOHN C. TEMPLETON, and JOSEPH H. TEMPLETON, of Brownsville, in the county of Linn and State of Oregon, have invented a new and useful Improvement in Apparatus for Drying Hops, of which the following is a specification:

Figure 1 is a vertical longitudinal section of our improved device. Fig. 2 is a vertical cross-section of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention is an improvement in the class of drying apparatus in which a furnace and fan-blower are combined, the one to impart heat and the other to impel heated air through or in contact with the substance to be dried.

The invention relates particularly to the construction and arrangement of parts, as hereinafter described and claimed.

A is a cylindrical iron furnace, in the forward part of which is formed a grate, B, and an ash-pit, C. In the forward end of the furnace A is the door D for putting in the fuel, and an opening, E, to admit air to support combustion. In the rear end of the furnace A is secured a pipe, F, to conduct the smoke and other gaseous products of combustion to the chimney-flue. The furnace A is surrounded with a sheet-iron shell, G, of a greater diameter than said furnace, so as to form an air-chamber, H, all around the furnace. I is a fan-blower, which may be driven by a horse or other convenient power, and the discharge-pipe J of which enters the bottom of the shell G, near its forward end, in an inclined direction.

As the air is forced into the space H it fills said space, becomes thoroughly heated, and escapes through holes *g'*, in the upper rear part of the shell G, into the drying-room.

The hops to be dried are placed upon a cloth, laid upon racks in layers of any desired thickness, so that the hot air may be forced up through them, expelling the moisture and drying the hops very quickly, very thoroughly, and very evenly.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The improved hop-drying apparatus, consisting of the hollow cylinder G, having the apertures *g'* in its upper side, the smaller concentric furnace A, having grate B, ash-pit C, and door D at one end, and flue F at the other end, a fan-blower, I, and air-conducting tube J, all combined and arranged with the receiver for the hops, as shown and described.

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