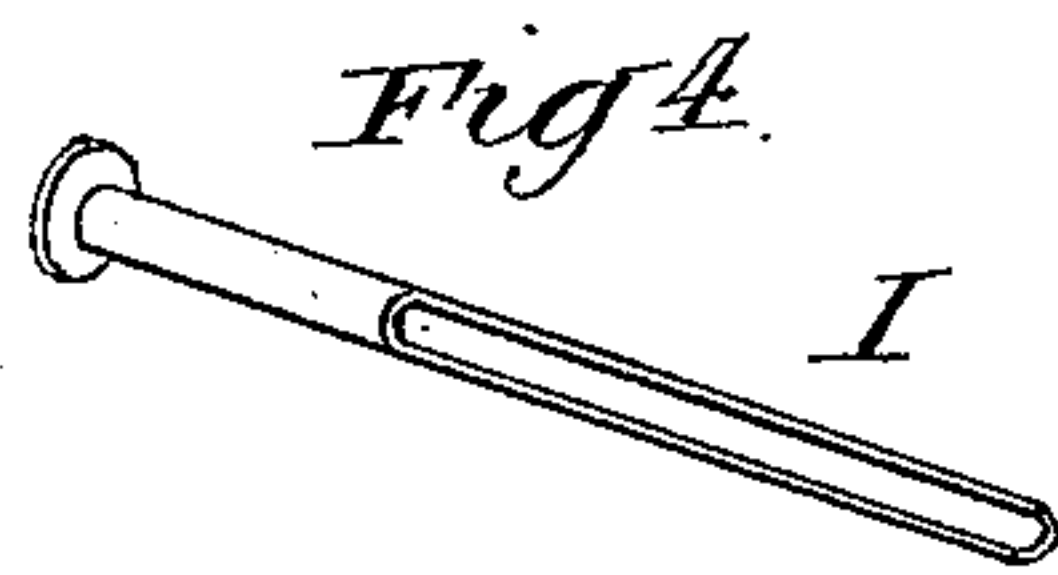
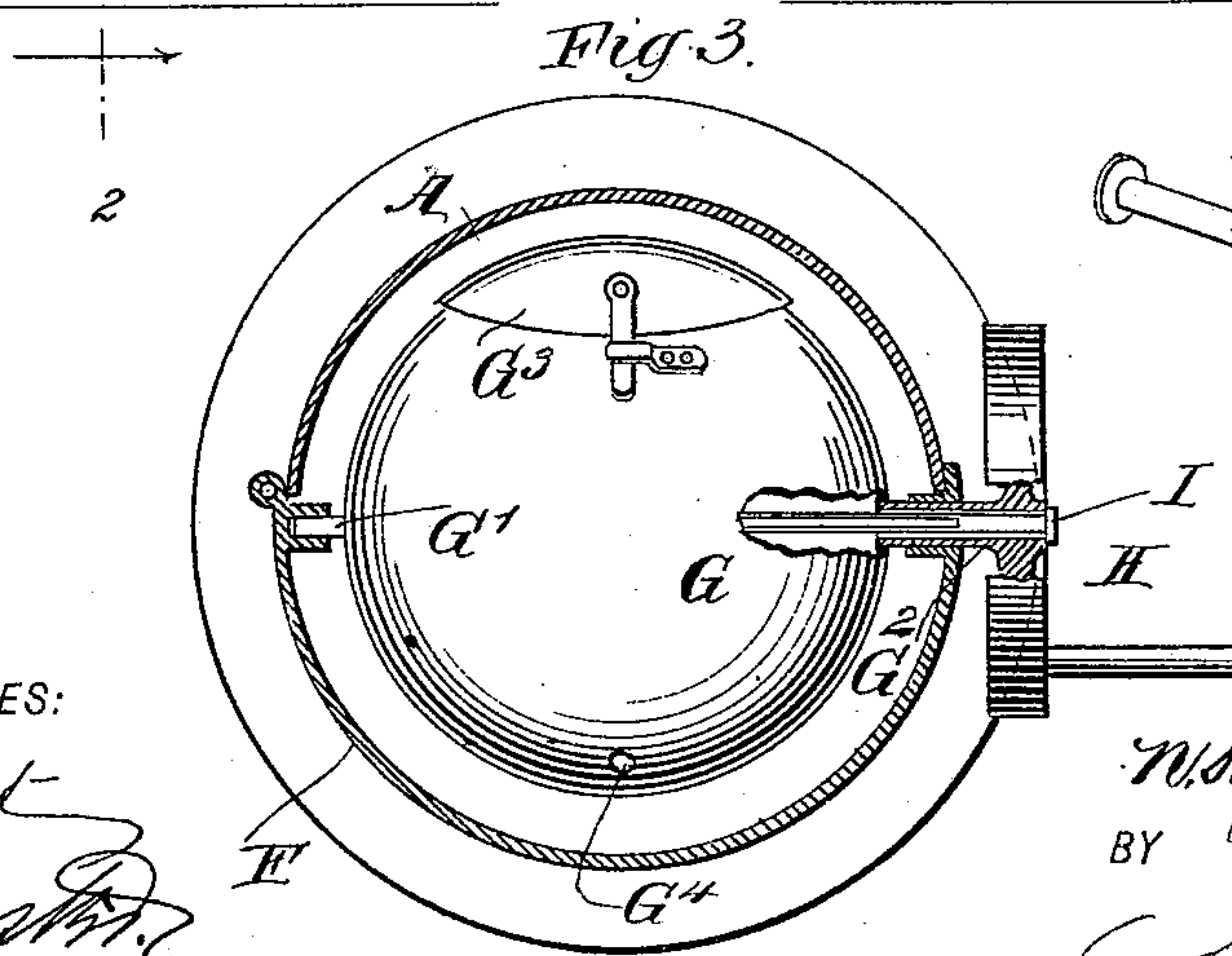
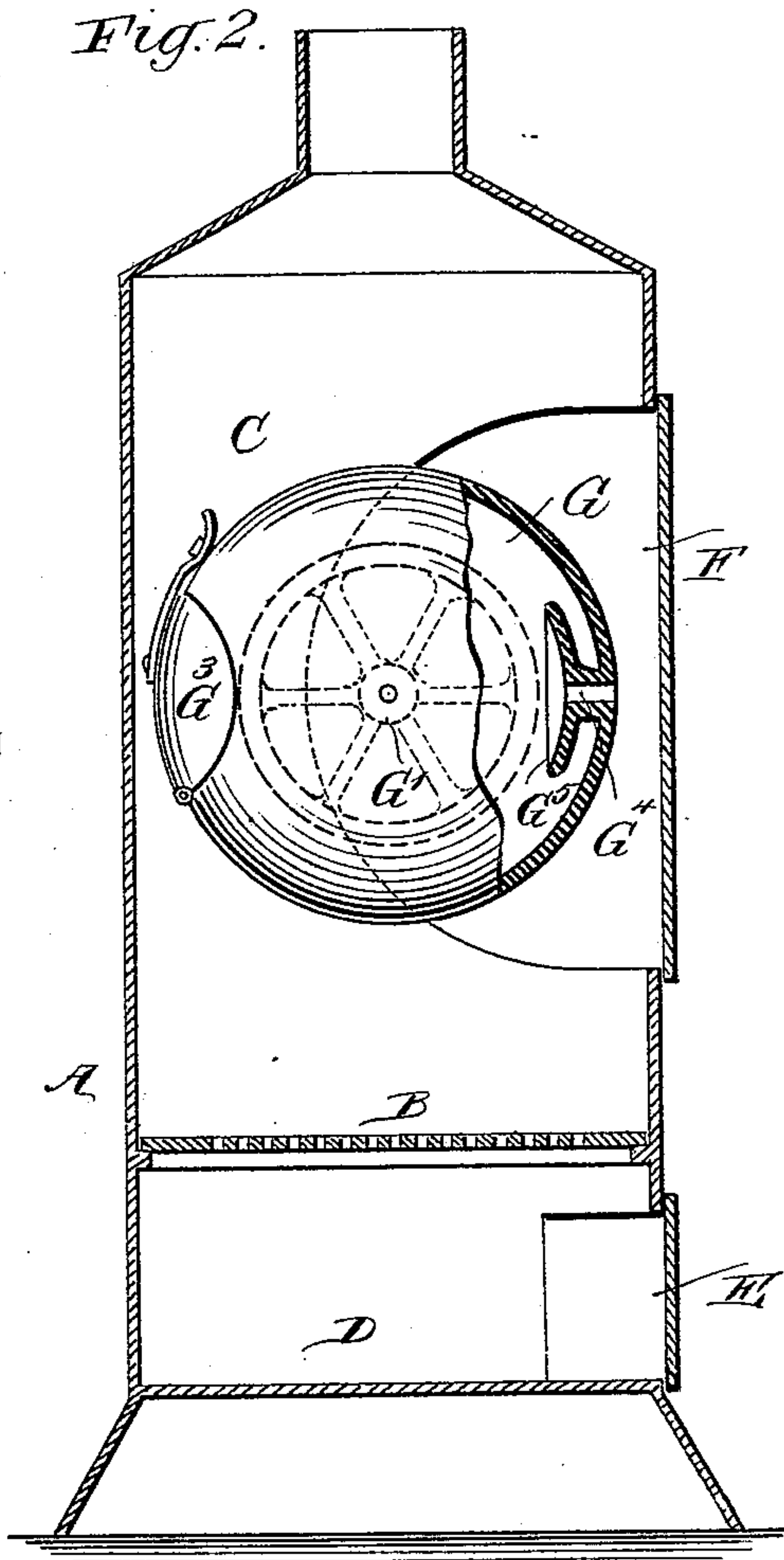
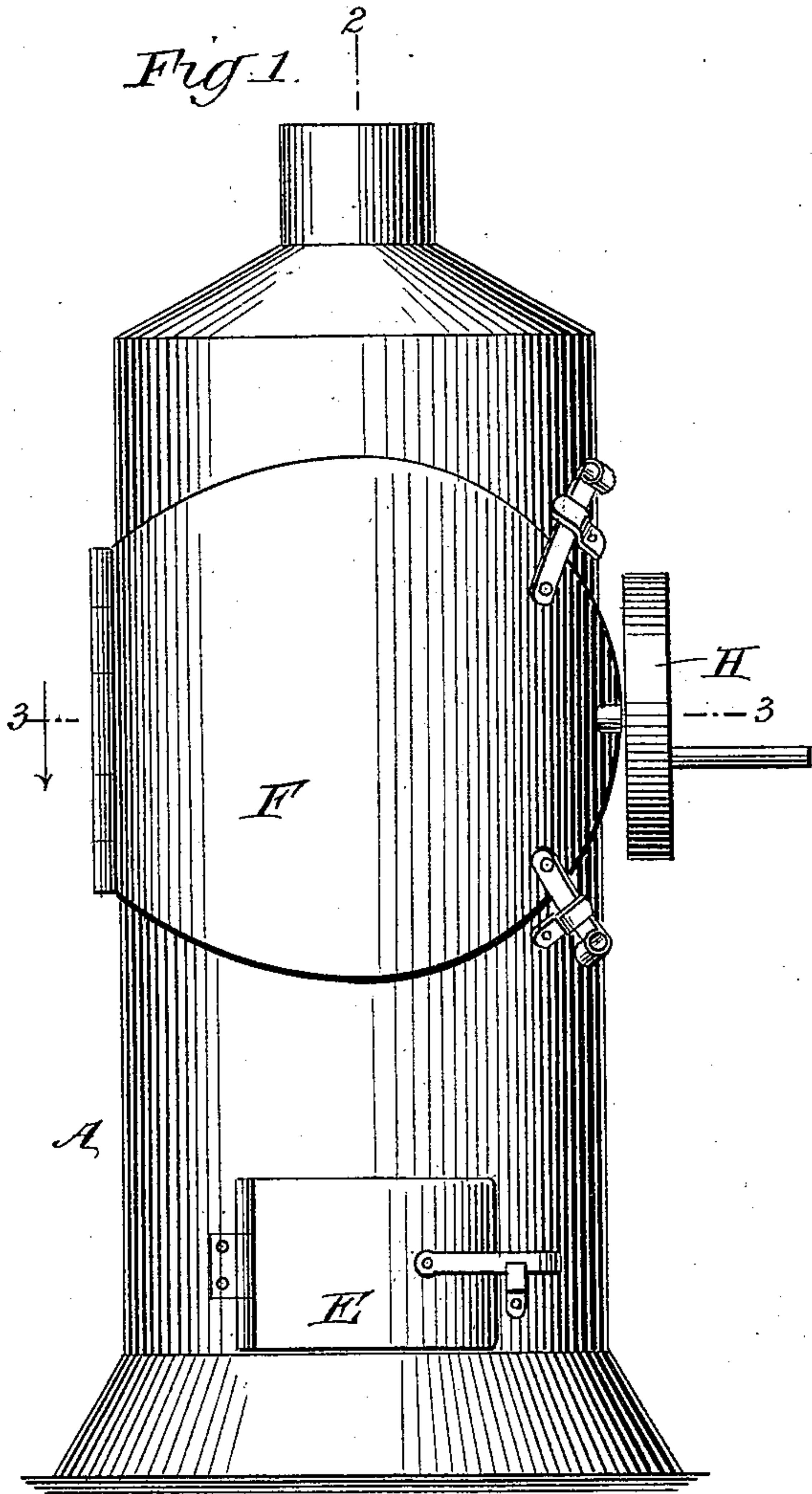


(No Model.)

N. H. JENSEN.  
ROASTER.

No. 525,905.

Patented Sept. 11, 1894.



WITNESSES:  
Paul Johat  
Geo. G. Hoosier

INVENTOR  
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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

NEILS H. JENSEN, OF PHILADELPHIA, PENNSYLVANIA.

## ROASTER.

SPECIFICATION forming part of Letters Patent No. 525,905, dated September 11, 1894.

Application filed April 26, 1894. Serial No. 509,093. (No model.)

*To all whom it may concern:*

Be it known that I, NEILS H. JENSEN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Roaster, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved roaster, which is simple and durable in construction, very effective in operation, and more especially designed for properly roasting coffee beans, cocoa, &c., without requiring a large amount of fuel for heating it.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the improvement. Fig. 2 is a transverse section of the same on the line 2—2 of Fig. 1. Fig. 3 is a sectional plan view of the same on the line 3—3 of Fig. 1; and Fig. 4 is a perspective view of the sample taking device.

The improved roaster is provided with a suitably constructed furnace A, having a grate B, above which is the fire box C, and below it is the ash pan D provided with a door E, through which the ashes can be conveniently removed from time to time. The fire box C is provided with a hinged door F, supporting a revoluble roaster G of spherical form and having trunnions G' and G<sup>2</sup>, journaled in suitable bearings in the said door F, the trunnion G<sup>2</sup> extending to the outside thereof, and carrying at its outer end a hand wheel H, provided with a suitable handle adapted to be taken hold of by the operator for conveniently turning the wheel and consequently the roaster G, in the fire box C at the time the door F is closed.

The roaster G is provided with a suitable door G<sup>3</sup> for introducing or removing the articles, substances, &c., to be roasted, and directly opposite this door is arranged an opening G<sup>4</sup> for the escape of steam, gases, shells, impurities, &c. The inner end of the outlet opening G<sup>4</sup> is surrounded by a suitable shield

G<sup>5</sup>, made in dish form and extending within a suitable distance of the inner surface of the roaster G, as is plainly indicated in Fig. 2. The shield G<sup>5</sup> when at the top of the roaster acts as a funnel to gather the steam and cause it to escape and when at the bottom acts to collect the dust and shells and conduct them to the opening G<sup>4</sup> through which they fall into the fire. The shield also acts as an agitator and spreader to cause the separation and stirring of the coffee beans as the roaster is revolved. The door G<sup>3</sup> and the opening G<sup>4</sup> are arranged at right angles to the axis of the roaster G, so that when the door G<sup>3</sup> is at the top the outlet opening G<sup>4</sup> is at the bottom of the roaster, it being understood that in turning the roaster, the said door and outlet opening move in the greatest diameter of the spherical roaster.

The trunnion G<sup>2</sup> is made hollow to permit the insertion of a sample taking device I, preferably made in the shape of a tube cut open at the top for the greater part of its length and to one end and provided at its extreme outer end with a knob or handle, as is plainly shown in Fig. 4. This device is inserted in the hollow trunnion G<sup>2</sup> to get a sample of the contents of the roaster, and then is withdrawn to permit inspection of the sample taken.

It will be seen that by the arrangement described, the door F when opened brings the roaster G to the outside of the furnace A for conveniently filling or emptying the roaster, it being understood that for filling the roaster the wheel H is turned so as to bring the door G<sup>3</sup> to the top, and in emptying it, the wheel H is turned to bring the door G<sup>3</sup> into a lowermost position.

In using the roaster, a fire is started on the grate B, so that the heat generated heats the roaster G, which is turned by the operator in the usual manner, by turning the hand wheel H, to uniformly agitate and roast the contents.

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

1. The herein described revoluble spherical roaster provided with a covered opening for inserting and removing its contents and also having an outlet opening at right angles to its

axis for shells and impurities, and a flaring or dished shield on the interior of the roaster around said outlet opening.

2. A roasting apparatus consisting in the  
5 furnace, and the spherical roaster having trunnions journaled in the furnace door to swing therewith, the said spherical roaster

having an outlet opening at right angles to its axis and surrounded by a dished shield substantially as described.

NEILS H. JENSEN.

Witnesses:

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WILLIAM H. JARDEN.