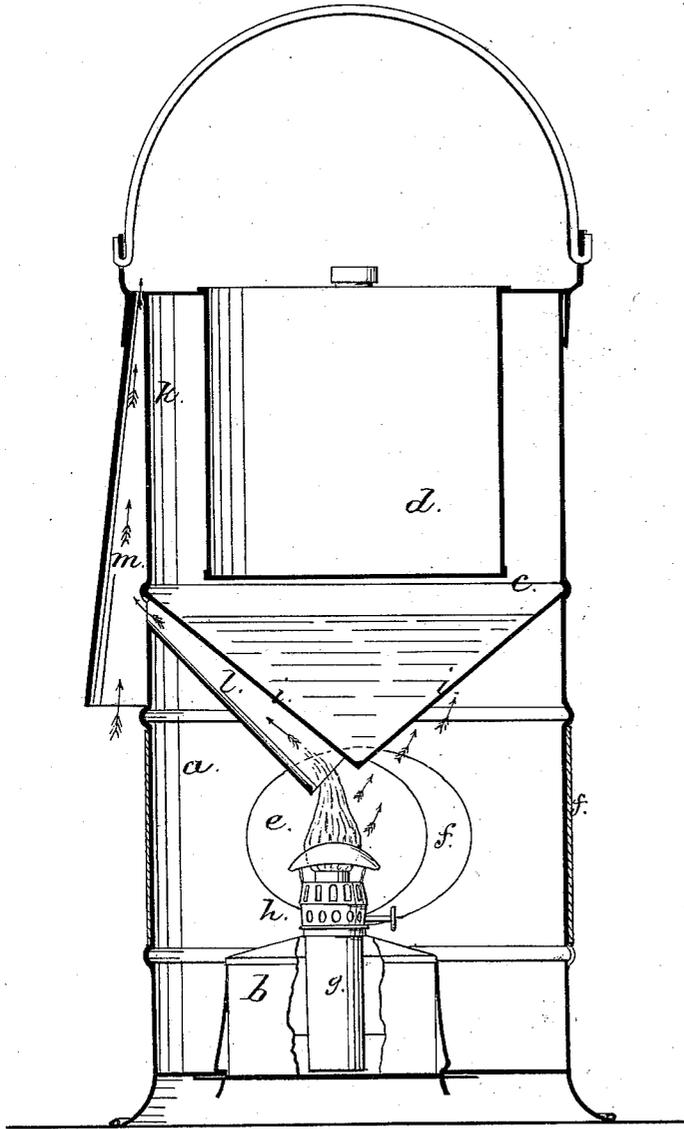


J. Bragdon,

Glue Pot.

No. 79945.

Patented July 14, 1868.



Witnesses:

*M. W. Frothingham,
L. B. Kidder.*

Inventor:

*Jas J Bragdon,
by his Atty,
Crosby Halsted & Co*

United States Patent Office.

JAMES BRAGDON, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 79,945, dated July 14, 1868.

IMPROVED GLUE-POT.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES BRAGDON, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an Improved Glue-Pot; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

My invention relates to the construction of a glue-pot, with reference to heating the water-containing vessel into which the glue-pan is set, with the flame of a kerosene-lamp.

Under the present construction of glue-pots, and lamps for the same, it is impracticable to use kerosene and similar oils for the heating-fuel, both on account of the smoke from the blaze: as there can be no chimney to the lamp, as in an ordinary kerosene-lamp,) and because the cap of the lamp becomes so heated from confinement of the blaze, and other volatile products of combustion, as to draw up the oil, and cause it to overflow and inflame upon the top and sides of the lamp.

My invention is intended to obviate these defects, and consists in combining with the stove a conical heat-impinging plate, forming the bottom of the water-containing chamber, with an inclined smoke-flue leading from the point of the cone to the side of the flue, where it opens into a vertical flue leading to the top of the stove, and in combining with the stove and such heat-impinging plate and flues a lamp, having a central tube or chamber leading from the cap to the bottom of the lamp, with space enough beneath the tube to allow the oil to be drawn from the oil-reservoir up into the tube by capillary attraction, the tube being packed tight with fibrous filling.

The drawing represents a section of my improved glue-pot. *a* denotes the stove or casing, *b* the lamp, *c* the water-containing vessel, *d* the glue-pan. The stove is made with one or more openings, *e*, which may be closed wholly or partially by a ring, *f*, which slides rotatively on the casing *a*, this ring having an opening or openings corresponding to the opening *e*. In the lower part of the stove is the oil-lamp *b*. In the centre of the oil-containing reservoir is a tube, *g*, which is fixed to and extends down from the cap-ring *h*, this tube being closed from the ring to its lower end, so as to have no communication whatever with such tube, excepting at said bottom, which is left open, but extends nearly down to the bottom of the reservoir, as seen in the drawing.

This tube is stuffed with fibrous material, packed tightly within it, and as there is no air-inlet into the oil-reservoir excepting through this packing and the wick-tube, the oil only rises into the filling and to the wick by capillary attraction, by which means the lamp is prevented from overflowing.

The water-containing vessel *c*, in the upper part of the stove, has a conical bottom, *i*, the point of the cone extending down towards the lamp, as seen in the drawing. The water in this vessel does not extend up to the glue-pan, but only to the top or part way to the top of the cone-shaped bottom thereof, leaving a steam-chamber all around the bottom and sides of the glue-pan, so that the steam generated by the boiling water heats the glue-pan and dissolves the glue, the water of condensation flowing down the sides of the steam-chamber back to the water-chamber. A safety-outlet, *k*, may be provided for escape of the excess of steam.

On one side of the inclined bottom a flue, *l*, is made, this flue opening at its lower end over or nearly over the centre of the lamp, and at its upper end into a vertical flue, *m*, open at top and bottom, as seen in the drawing. As the smoke and other volatile products of combustion ascend from the blaze, they are drawn into the flue *l*, the current of air ascending through flue *m* creating a draught, which accelerates draught through flue *l*. While the smoke is thus all drawn into the flue, and escapes at the top of the stove, the heat, striking the point of the cone, is disseminated from this point over all sides of the heat-impinging bottom, *i*.

It will thus be seen that a kerosene-lamp may be used for heating glue-pots without any of the dangers or troubles attending the use of lamps as commonly constructed in glue-pots as commonly constructed, the construction and arrangement of parts being simple, and making a very neat, reliable, and effective glue-pot.

I claim, in combination with the glue-pan or vessel *d*, the water-containing vessel *c*, made with the conical

bottom *i*, and the steam-chamber *j*, and having beneath it the inclined flue *l*, for escape of the smoke from the lamp, all substantially as shown and described.

I also claim, in combination with the conical bottom *i* and flue *l*, the vertical flue *m*, substantially as shown and described.

I also claim, in combination with the conical bottom *i* and flue *l*, the lamp *b*, having a packed tube, *g*, substantially as described.

JAMES BRAGDON.

Witnesses:

J. B. CROSBY,
FRANCIS GOULD.