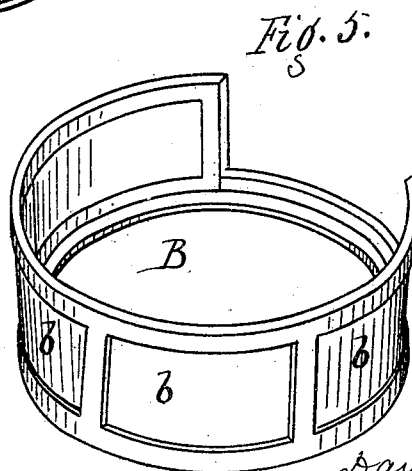
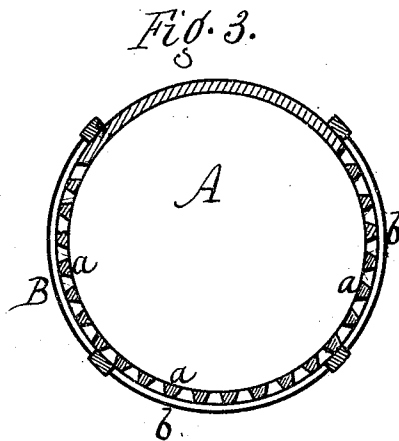
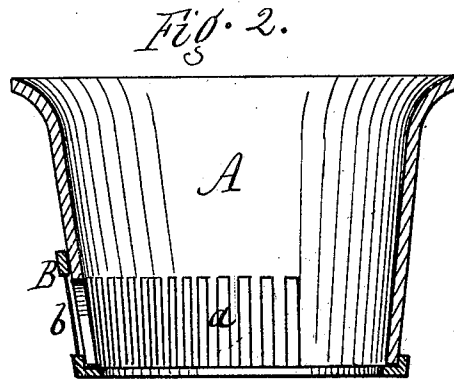
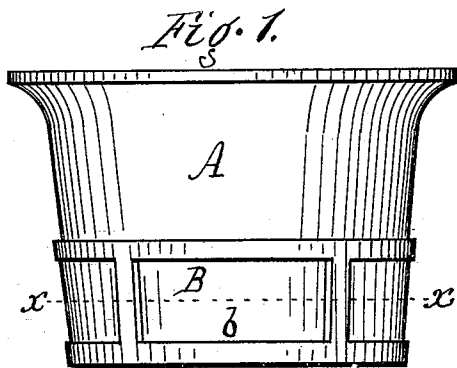


D. L. STILES.
FIRE-POTS FOR STOVES.

No. 178,483.

Patented June 6, 1876.



Witnesses.
Edwin Scott.
Jacob Spink

Inventor.
David L. Stiles
By R. F. Osgood,
Atty.

UNITED STATES PATENT OFFICE.

DAVID L. STILES, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN FIRE-POTS FOR STOVES.

Specification forming part of Letters Patent No. **178,483**, dated June 6, 1876; application filed May 20, 1876.

To all whom it may concern:

Be it known that I, DAVID L. STILES, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Fire-Pots for Stoves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation. Fig. 2 is a central vertical section. Fig. 3 is a cross-section in line *xx* of Fig. 1. Fig. 4 is an elevation of the lower edge of the fire-pot, showing the open gratings of the same. Fig. 5 is a perspective view of the mica screen.

My improvement relates to illuminated fire-pots, designed to throw light into the room. Such fire-pots have heretofore been made having open gratings in the lower edge for allowing light to pass; but the said gratings being exposed to the direct entrance of air through them to support the combustion, the ignited coals soon deaden at that point, and destroy the illuminating effect.

My invention consists in the combination, with such a fire-pot, having open gratings at the bottom, of a mica screen resting in close contact with the fire-pot, and covering the gratings, so that while free passage of light is allowed, the air is prevented from passing through the gratings to deaden the fire, but is forced to pass under and beneath the fire-pot, in the usual way.

A represents an ordinary fire-pot of a stove. *aa* are the open gratings at the bottom. These extend to any desired height, (usually about three inches,) and may extend a portion or all the way around the circle of the fire-pot. The construction is such that they hold the coals within the fire-pot upon the ordinary grate, but allow the light of the incandescent coal to pass out through the gratings and shine through the ordinary illuminated front of the stove.

B is the mica screen, which covers the low-

er end of the fire-pot. It is made close-fitting to the fire-pot, so as to envelop and cover the gratings before described. *bb* are the mica panels inserted in the screen. The screen may either be whole, in one piece, as shown, or it may be made in sections, each with an independent frame, so as to open and close like the lights in the exterior casing of an ordinary stove. The screen may extend all or a portion of the way around the fire-pot, but sufficiently to cover the gratings before described.

The advantage of this arrangement is, that while the screen allows free passage of the light shining from the open gratings, it also closely covers said gratings, so that the draft cannot pass between or through the gratings, but is forced to pass down beneath the fire-pot, and up through the ordinary grate within the fire-pot, so that the incandescent coal lying next to the gratings, and which furnishes the light, is not quickly deadened, as it would be if the cold air struck directly through the gratings. Another advantage is, that by forcing the air around the screen and up through the ordinary grate, the coal is thoroughly burned without clinker, and is self-clearing, by simply shaking the grate. The gratings or openings of the fire-pot may be of other form than that shown. I do not wish to confine myself to precise form.

I do not claim the open gratings in the fire-pot; but

What I claim as new is—

The combination, with the fire-pot A, provided with the open gratings *aa*, of the screen B, provided with one or more mica lights, *bb*, said screen being made either entire or in sections, and close-fitting to the fire-pot, as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

DAVID L. STILES.

Witnesses:

R. F. OSGOOD,
EDWIN SCOTT.