(No Model.)

F. H. A. DEVLIN.

SAFETY PLATE FOR STOVES.

No. 592,281. Patented Oct. 26, 1897.

Fig. 1.

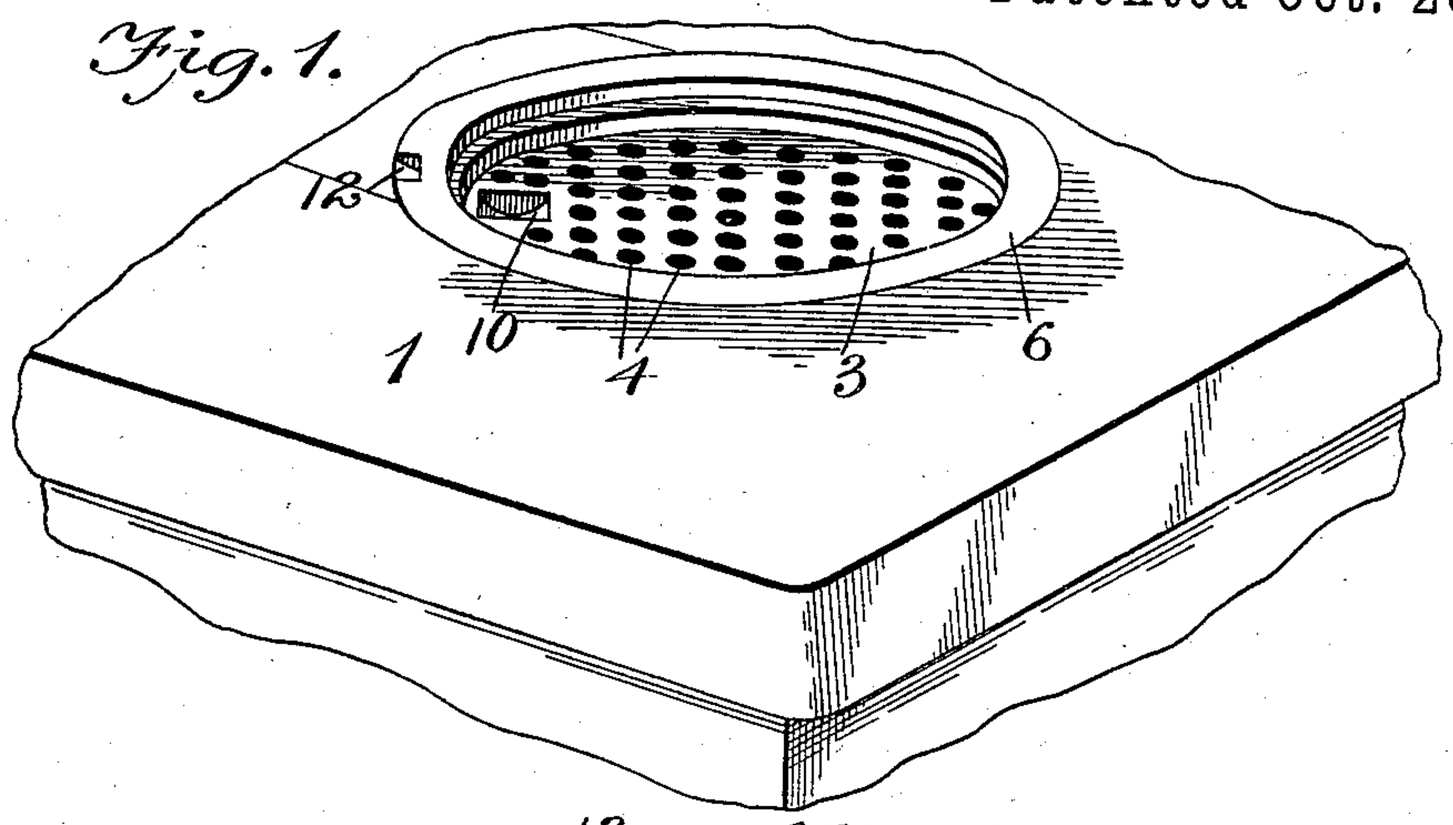


Fig. 2.

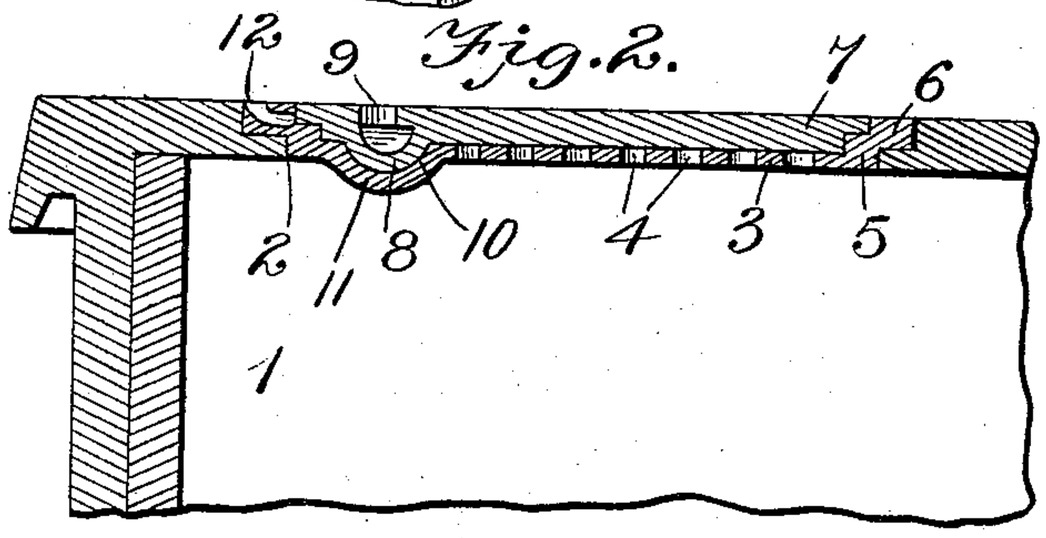


Fig. 3.

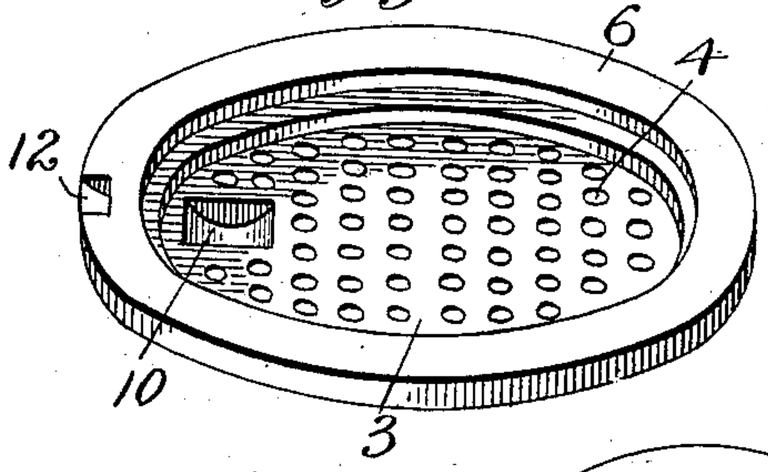


Fig. 4.

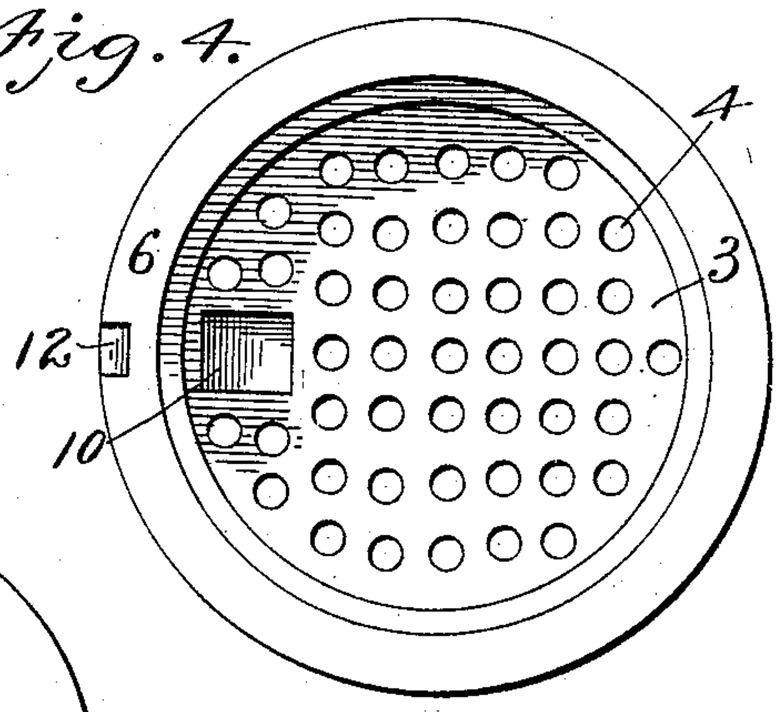
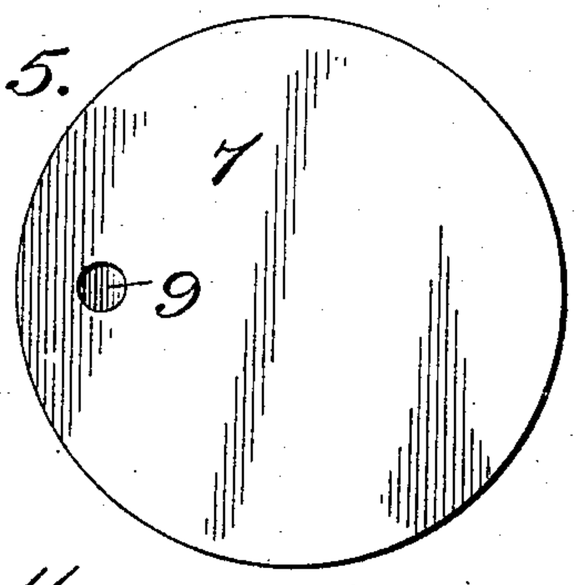


Fig. 5.



Witnesses
Edwin G McKee
Edwin Luse

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By his Attorneys.

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UNITED STATES PATENT OFFICE.

FRANCIS H. A. DEVLIN, OF MAUCH CHUNK, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JOHN LEISENRING, OF UPPER LEHIGH, PENNSYLVANIA.

SAFETY-PLATE FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 592,281, dated October 26, 1897.

Application filed March 25, 1897. Serial No. 629,264. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS H. A. DEVLIN, a citizen of the United States, residing at Mauch Chunk, in the county of Carbon and State of Pennsylvania, have invented a new and useful Safety-Plate for Stoves, of which the following is a specification.

This invention relates to safety-plates for stoves, its object being to provide a plate to be used in addition to the ordinary stove-lid, which plate will fit into the ordinary opening in the top of the stove and will also receive the ordinary stove-lid. The plate is perforated in order to permit the fire to be damped or checked and at the same time prevent the coals from flying out of the stove.

With this object in view the invention consists of a stove-plate constructed as hereinafter fully described.

In the drawings, Figure 1 is a perspective view of a portion of a stove, showing my safety-plate in position in one of the openings, the ordinary stove-lid being removed. Fig. 2 is a section through a portion of the stove-top, the safety-plate, and stove-lid. Fig. 3 is a perspective view of the safety-plate detached. Fig. 4 is a top plan view of the same. Fig. 5 is a plan view of the ordinary stove-lid detached.

Similar reference-numerals indicate similar parts in the several figures.

1 represents the stove-top, and 2 the ordinary circular opening therein.

3 represents the safety-plate, which is provided with a series of perforations 4. The plate 3 is adapted to fit in the stove-opening 2 and is provided with an annular flange or rim 6, adapted to fit in the usual recess around the stove-opening to be flush with the upper surface of the stove-top. The rim 6 projects above the perforated plate, and a recess is thereby formed for the reception of the ordinary stove-lid 7, and the flange 6 is also rabbeted, as indicated at 5, to receive the usual annular flange or rim of the stove-lid, and in this manner the stove-lid when in position will also be flush with the upper face of the stove-top and its lower surface be in contact with the perforated portion of the safety-plate, and thus effectually exclude the passage of air through the perforations in the safety-plate. The stove-lid 7 is provided with the usual projection or lug 8 on its lower face and with the opening 9 in its upper face, immediately over the lug to receive the lifter. The safety-plate 3 is provided with a recess 10, into which the lug 8 projects when the stove-lid is in position, and immediately below this recess a projection 11 is provided on the under side of the plate in order to keep the metal plate of a substantially uniform thickness. Another recess 12 is formed in the rim 6 of the safety-plate for the reception of the lid-lifter when it may be necessary to lift the safety-plate and the stove-lid together out of the opening 2 in the top of the stove.

From the foregoing description it will be readily seen that when it is desired to damp or check the fire the stove-lid 7 may be removed and air will pass through the perforations 4 in the safety-plate onto the burning coals, and at the same time should the burning coals explode or burst, as they frequently do on account of the sulfur and gas contained in them, they will not be able to fly out into the room and possibly cause a fire. It is a common practice to tilt the ordinary stove-lid to one side and sometimes to entirely remove it in order to check the fire, but this is a dangerous practice, as frequently the burning coals will fly out through the stove-lid opening and sometimes cause a conflagration. When the stove-lid 7 is in position on the safety-plate, air will be entirely excluded from the top of the fire and combustion will not be checked, and the heat will be conducted to the outer surface of the stove-lid as effectually as if the safety-plate were not present. The safety-plate therefore does not in any manner interfere with the free burning of the fire only when the stove-lid is removed.

What I claim is—

1. A safety-plate for a stove adapted to be removably fitted in the ordinary circular stove-lid opening, and having a depressed central portion provided with a series of perforations to admit air to the top of the fire, said depressed portion being of such form and dimensions that an ordinary stove-lid may be removably seated therein, and when in position in the depressed portion will close the

perforations against the passage of air to the fire, substantially as and for the purpose described.

2. The combination with a stove-top provided with a circular opening having a rabbet or recess around its edge, of a perforated plate adapted to fit loosely in said opening and having an upwardly and outwardly projecting annular flange adapted to be seated in the recess around said opening to be flush with the top of the stove, said flange having a rabbet or recess around its inner periphery, and a stove-lid adapted to fit within the flange of the perforated plate and be loosely supported on the perforated portion of the latter, said stove-lid having an annular flange to fit in the recess or rabbet in the flange of the perforated plate to be flush with the stove-top, the stove-lid being separately removable and the perforated plate and the stove-lid being removable together, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANCIS H. A. DEVLIN.

Witnesses:
E. D. PHILLIPS,
H. B. ROSS.