

No. 727,251.

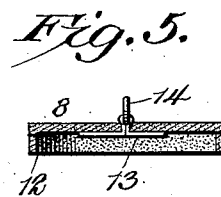
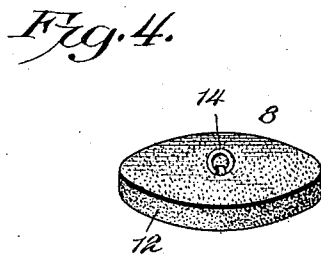
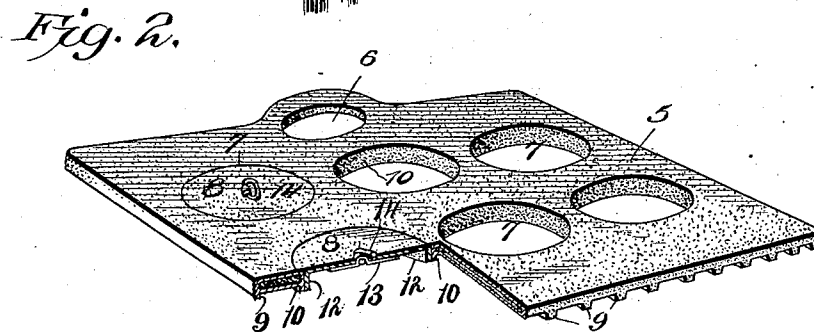
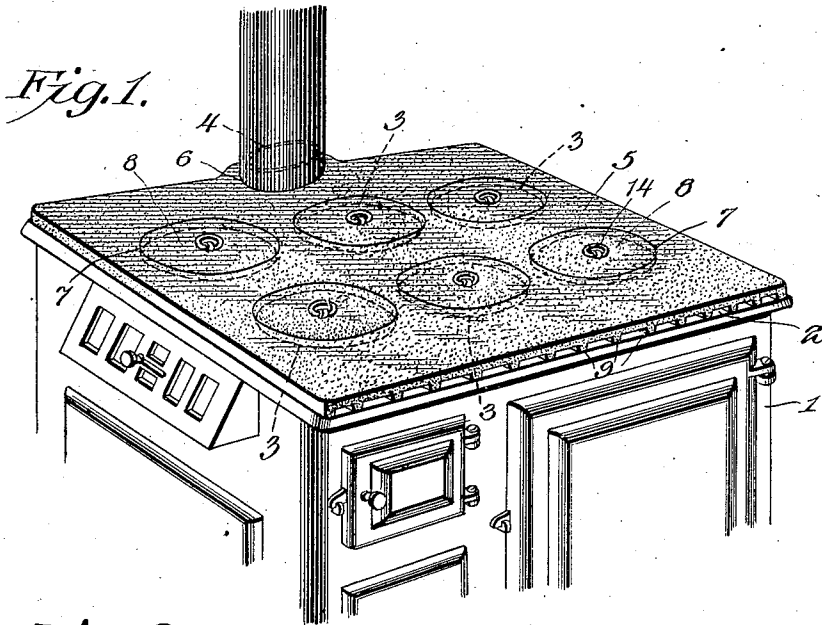
PATENTED MAY 5, 1903.

E. L. ALLEN.
STOVE MAT.

APPLICATION FILED NOV. 7, 1901.

NO MODEL.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 3.

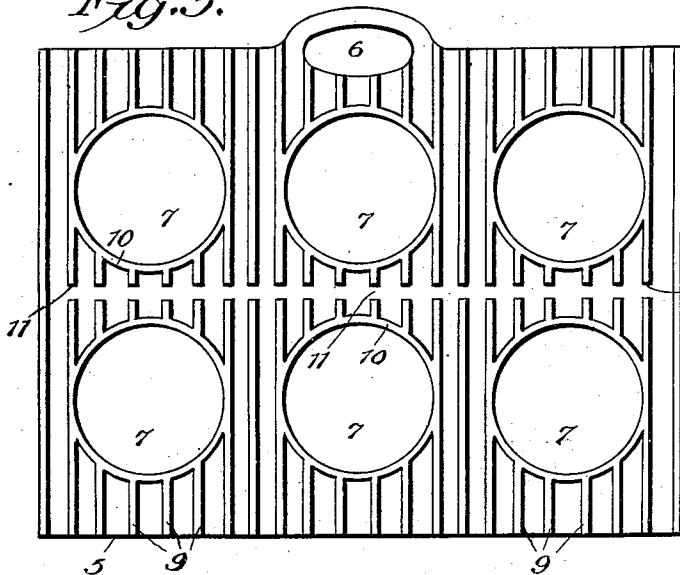


Fig. 6.

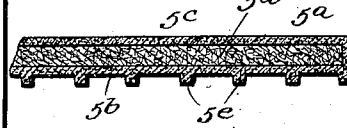


Fig. 7.

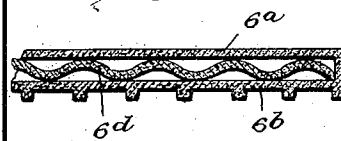
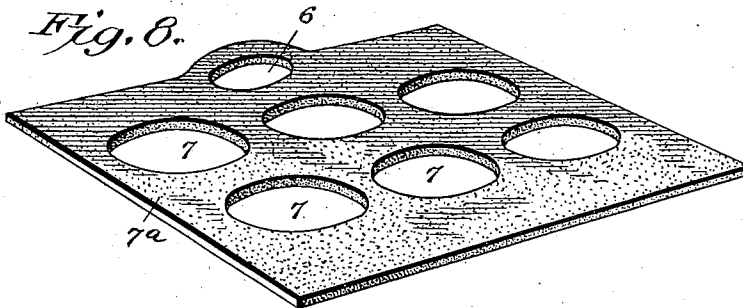


Fig. 8.



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UNITED STATES PATENT OFFICE.

EDITH L. ALLEN, OF MINERALPOINT, WISCONSIN.

STOVE-MAT.

SPECIFICATION forming part of Letters Patent No. 727,251, dated May 5, 1903.

Application filed November 7, 1901. Serial No. 81,463. (No model.)

To all whom it may concern:

Be it known that I, EDITH L. ALLEN, a citizen of the United States, residing at Mineralpoint, in the county of Iowa and State of Wisconsin, have invented a new and useful Stove-Mat, of which the following is a specification.

This invention relates to a novel stove-mat, the object of the same being to produce a simple insulating device or covering designed to be applied to the top of a cooking or other stove for the purpose of preventing such radiation from the top of the stove as would be objectionable to a person engaged in cooking, for the additional purpose of economizing fuel, and to prevent the soiling of dishes or other culinary receptacles, which may therefore be removed from the stove and placed upon the table without danger of soiling the table-linen.

A still further object of the invention is to so construct the mat that it may be readily attached to a part of a stove structure and held in position thereby and to provide it with removable sections, supplemental mats, or lid-covers for the accommodation of kettles and the like which by the removal of said sections may be placed in direct contact with the products of combustion or with the metal stove-lid to receive the direct radiation of heat without disturbing the protective covering extended over the remaining portion of the stove.

To the accomplishment of these objects and others subordinate thereto, all as will hereinafter more fully appear, the invention consists in the construction and arrangement of a non-heating mat, which is illustrated in the accompanying drawings and more fully described hereinafter.

In said drawings, Figure 1 is a perspective view of the preferred form of my insulating-mat applied to a stove. Fig. 2 is a similar view of the mat detached. Fig. 3 is a bottom plan view of the mat. Fig. 4 is a detail perspective view of a mat-section or lid-cover. Fig. 5 is a detail sectional view of the subject-matter of Fig. 4. Fig. 6 is a detail sectional view of another form of mat. Fig. 7 is a similar view of a still further variation of the construction. Fig. 8 is a perspective view of another form of mat.

Referring to the numerals on the drawings, 1 indicates a stove; 2, its top; 3, the stove-lids, and 4 the pipe-collar. It is to be understood, however, that this is simply a representative illustration and that while the mat here shown is designed especially for use with the illustrated type of stove the mats may be proportioned and constructed for use with stoves of any other types.

5 indicates my insulating protective mat, shield, or covering, composed of any suitable fireproof material, preferably asbestos, mineral wool, or the like, having the form of a sheet or board and cut to fit the contour of the stove-top 2. For the purpose of retaining the mat in place it may in some instances be desirable to provide retaining means, any suitable form of which may be employed. In the illustrated embodiment of my invention, however, I have disclosed what is perhaps the preferable mode of attaching the mat—that is to say, the mat is provided with an opening 6, designed for the reception of a projecting portion of the stove structure, in this instance the pipe collar or flange 4, which is of oval form and is designed for the attachment of the stove pipe to the stove. The opening 6 for the reception of this collar or flange is of course of corresponding oval form, and it will therefore appear that not only is the mat retained against displacement, but it is held against any slight movement which would tend to change its proper relative position.

It should be understood that my invention consists, broadly, in providing a fireproof mat or covering for the top of a stove, preferably formed, as in the present instance, for interlocking engagement with some part of the stove structure; but in a further aspect the invention consists not only in providing a protective insulating-mat, but one of sectional form designed particularly for use upon cooking-stoves, the top of which is provided with lid-openings, each fitted with a lid, as illustrated in the accompanying drawings. Such a sectional mat is disclosed in said drawings, and besides being provided with the opening 6 for the reception of a part of the stove structure is provided with other openings or cut-out portions 7, preferably coinciding with the lids of the stove and normally closed by re-

movable sections or lid-covers 8, snugly fitting the openings and designed for independent removal without disturbing the location and arrangement of the mat proper or the other removable sections or lid-covers thereof. Thus it will be seen that while these several independently-removable sections of the mat are in interfitting relation therewith they may either of them be removed for the purpose of permitting the removal of a stove-lid when it is desired to place a kettle or other culinary receptacle in direct contact with the products of combustion or for the purpose of permitting a vessel to be placed directly upon a hot metal lid. When this is done—that is to say, when one of the removable mat-sections or lid-covers is removed and a kettle or the like placed over the opening—the heating of the kettle will be effected in a comparatively short space of time, because the non-conductive mat, while protecting the person standing over the stove from the radiation of heat therefrom, also economizes fuel and facilitates quick heating of culinary vessels by permitting the radiation and absorption of heat at a single point—to wit, at that point where the non-conductive cover is removed and substituted by a vessel of conductive material.

The mat structure as thus far described is effective under some circumstances and constitutes a complete embodiment of my invention in the simplest form thereof, as illustrated in Fig. 8 of the drawings. In the preferred form of my invention, however, illustrated in the first five figures of the drawings, provision is made for the separation of the mat from the top of the stove by a sufficient interval to permit the circulation of air beneath the mat. The purpose of this provision is to eliminate the possibility of the warping or burning out of the stove-top, and the desired end is attained by forming projections, corrugations, or ribs 9 on the under side of the mat and having any arrangement which may be deemed desirable or found to be effective.

As best shown in Fig. 3, the ribs 9 intersect with stiff circular flanges or ribs 10, which depend from the under side of the mat at the edge of each of the lid-openings. A freer circulation of air may be facilitated by dividing the ribs 9, as indicated at 11, at one or more points in their lengths. In this preferred construction the removable mat-sections or lid-covers 6 are also held out of contact with the stove by means of depending annular flanges 12, and for the manipulation of these covers or sections they are preferably provided with clips 13, passed through the insulating material and bent back, as shown in Fig. 5, and serving to retain a ring or handle 14, which may be grasped for the purpose of handling the lid-cover.

A further variation of the invention (shown in Fig. 6) contemplates the building up of the mat 5^a from a plurality of stiff board-like

layers 5^b and 5^c with an intermediate loose fibrous filler 5^d, preferably asbestos or mineral wool in a loose flocky state.

As in the preferred form of the invention, this mat is held away from the metal surface of the stove by the corrugations 5^e, projecting from the under side of the layer 5^b, and, if desired, the stiff board-like material may be continued around the edges of the mat to form a complete envelop inclosing the filler 5^d.

In Fig. 7 is shown another form of my mat comprehending the employment of the upper and lower layers 6^a and 6^b and an intermediate crimped or corrugated filler layer 6^d.

Fig. 8 is a view of what is perhaps the simplest form of mat, which is indicated by 7^a and consists merely of a flat fireproof sheet or board fashioned to fit the stove-top.

It is thought that from the foregoing the construction and utility of my novel stove-mat will be understood; but I desire to be distinctly understood as reserving to myself the right to construct the mat of any suitable non-conductive fireproof material, to change its dimensions and contour in accordance with the various contours and dimensions of stoves to which it may be applied, and to effect any other changes which may be suggested by experience and experiment, provided only that such variations from the structure illustrated and described are comprehended within the scope of the protection prayed.

What I claim is—

1. The combination with a stove having lid-openings and lids in its top, of a non-radiating fireproof stove-mat disposed above the stove and provided with openings registering with the lid-openings therein.

2. The combination with a stove having lid-openings and lids in its top, of a non-radiating fireproof stove-mat disposed above the stove-top and having openings opposite the stove-lids, and non-radiating fireproof lid-covers fitted in the openings in the mat.

3. The combination with a stove having lid-openings and lids in its top, of a non-radiating fireproof stove-mat having openings opposite the stove-lids, and also having projections resting upon the stove-top to retain the mat out of contact therewith, and non-radiating fireproof lid-covers fitted in the openings in the mat.

4. A non-radiating fireproof stove-mat comprising a mat proper constructed of mineral fiber and having openings, and separable mat-sections fitting in the openings in the mat proper and constituting lid-covers, said separable sections also being constructed of mineral fiber.

5. A non-radiating fireproof stove-mat comprising a plurality of interfitting separable sections constructed of mineral fiber, certain of said sections having projections upon the under surface thereof to prevent the warping or sagging of the mat.

6. A non-radiating fireproof stove-mat hav-

ing means of attachment to the stove structure and composed of interfitting separable sections constructed of mineral fiber.

7. The combination with a stove having lid-
5 openings and lids in its top, of a non-radiating fireproof stove-mat having openings above the lids, and non-radiating fireproof lid-covers fitted in the openings in the mat and having projections arranged to retain said lid-
10 covers out of direct contact with the stove-lids.

8. A fireproof non-radiating insulating-mat for stoves formed with an opening for the reception of a projecting part of the stove structure, and also having openings coincident
15 with the stove-lids, and removable sections fitting within said openings.

9. A fireproof non-radiating insulating-mat for stoves provided with openings coincident
20 with the stove-lids, and with a corrugated under face permitting a circulation of air between the stove-top and the mat.

10. A fireproof non-radiating insulating-mat for stoves composed of a plurality of interfitting separable sections, each of said sections being provided with projections upon
25 the under surface thereof.

11. A fireproof non-radiating insulating-mat for stoves formed with openings coincident
30 with the stove-lids, and composed of

board-like layers of mineral fiber and an intermediate filler-layer.

12. A fireproof non-radiating insulating-mat for stoves having a corrugated under face, and provided with openings coincident
35 with the stove-lids, said mat being composed of upper and lower board-like layers and an intermediate filler-layer.

13. A fireproof non-radiating insulating-mat for stoves having openings coincident
40 with the stove-lids, and a corrugated under face, said mat being composed of upper and lower board-like layers and an intermediate filler of loosely-packed fiber.

14. A fireproof non-radiating insulating-
45 mat for stoves constructed of mineral fiber and having openings coincident with the stove-lids and projections extending from its under face, and removable mat-sections or lid-covers fitted into the openings of the mat
50 proper and likewise provided with projections arranged to retain the lid-covers proper out of direct contact with the stove-lids.

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

EDITH L. ALLEN.

Witnesses:

PHIL ALLEN, Jr.,

CHARLES W. MCILHON.