(No Model.)

W. S. KLINE & J. C. PARKS.

DOUGH RAISER AND FRUIT DRIER.

No. 488,014 Patented Dec. 13, 1892.

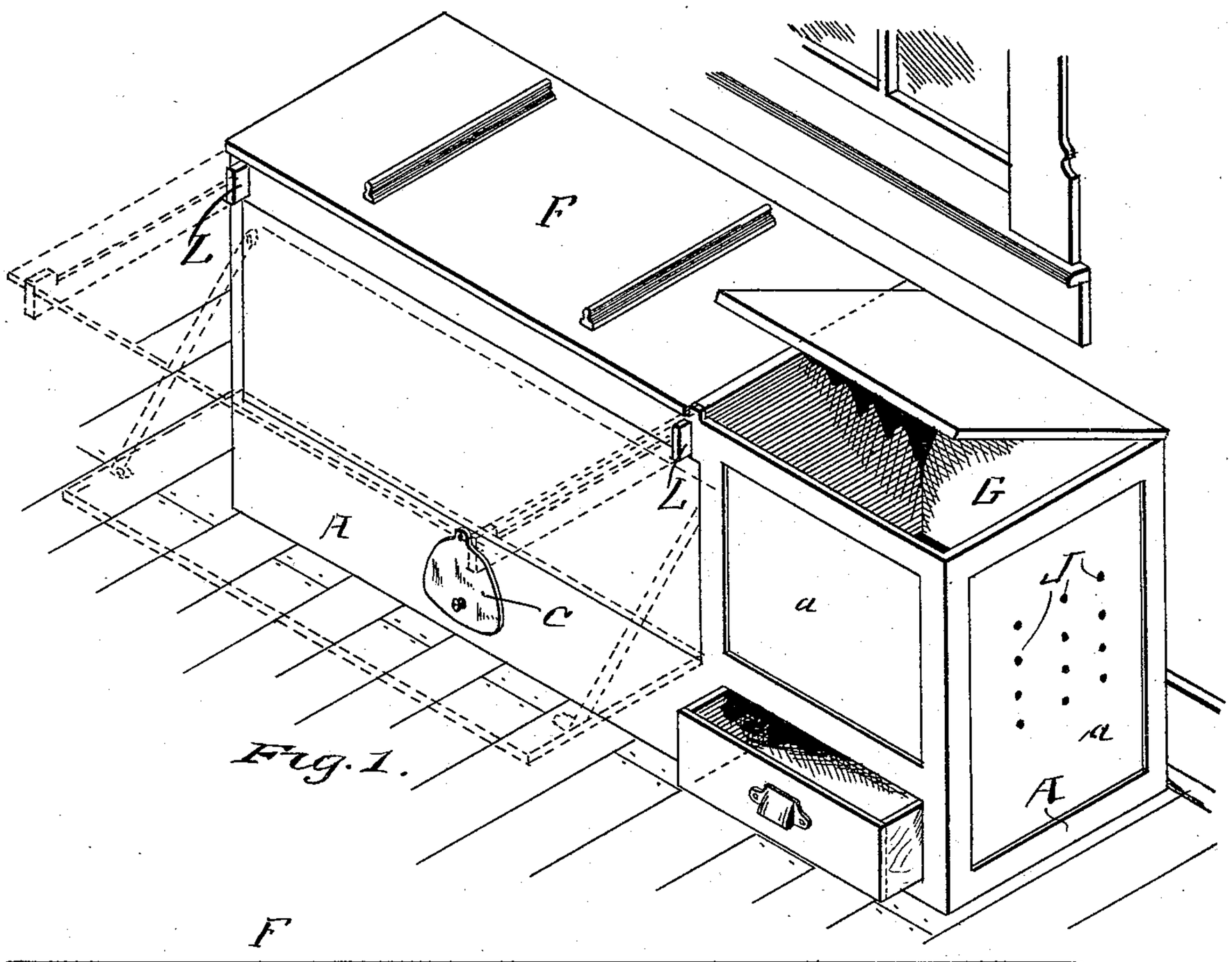


Fig. 1.

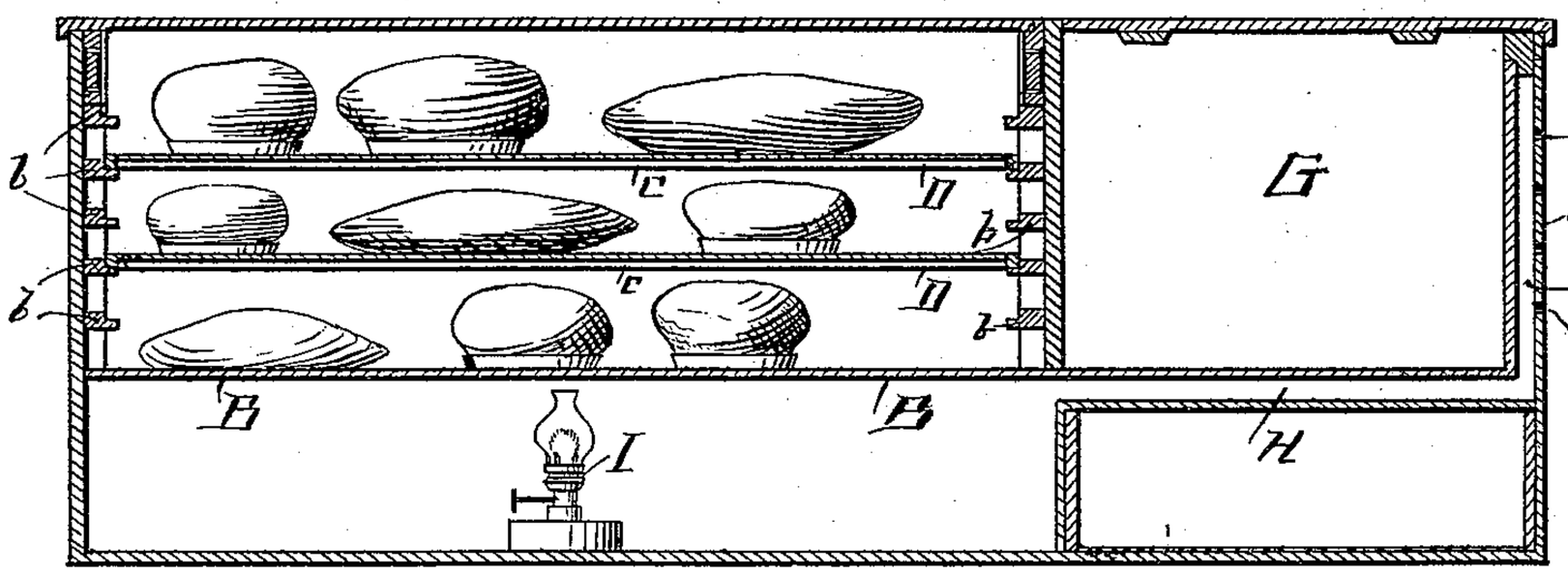
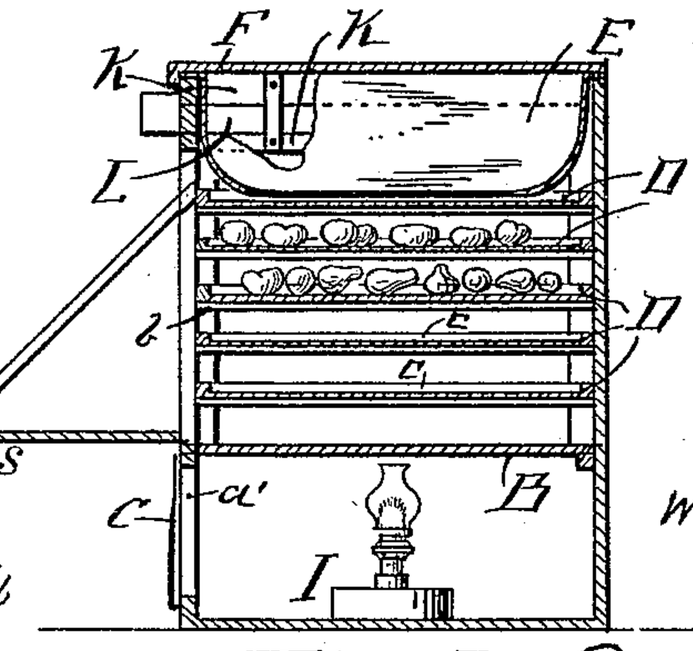


Fig. 2.



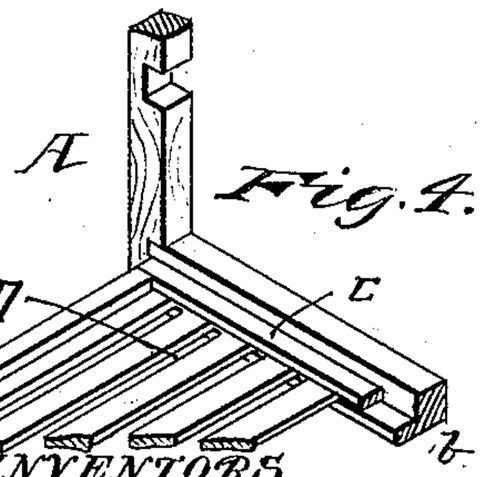


Fig. 4.

WITNESSES
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Fig. 3. By Fred W Benl Attorney

UNITED STATES PATENT OFFICE.

WINFIELD S. KLINE AND JAMES C. PARKS, OF BOLIVAR, OHIO.

DOUGH-RAISER AND FRUIT-DRIER.

SPECIFICATION forming part of Letters Patent No. 488,014, dated December 13, 1892.

Application filed March 24, 1892. Serial No. 426,183. (No model.)

To all whom it may concern:

Be it known that we, WINFIELD S. KLINE and JAMES C. PARKS, citizens of the United States, residing at Bolivar, in the county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Dough-Raisers and Fruit-Driers; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view. Fig. 2 is a longitudinal section showing the device used as a dough-raiser. Fig. 3 is a transverse section showing the device used as a fruit-drier and showing the dough-trough in proper position. Fig. 4 is a view showing a portion of one of the trays, also showing one of the supporting-bars and the post or upright.

The present invention has relation to combined dough-raisers and fruit-driers; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claim.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the frame, which may be of any desired size, reference being had to the size of dough-raiser and fruit-drier it is designed to construct. The panels *a* are preferably formed of sheet metal and are attached to the frame A in any convenient and well-known manner.

To the frame A is attached the sheet-metal partition B, which sheet-metal partition extends nearly the entire length of the frame and is located substantially as shown in Figs. 2 and 3. To the front side of the frame A is pivoted the door C, which may be of the form shown in the drawings, or it may be of any other desired form, and, if desired, a sliding door may take the place of the pivoted door C. Back of the door C is an opening—such as *a'*—which is for the purpose of providing a means for passing a lamp inside of the frame A and under the sheet-metal partition B, and when the lamp is in proper position for heating it is located substantially as illustrated in the drawings. Above the sheet-metal partition B is located a series of trays D, which trays are held in proper position by means of the ribs *b* or their equivalents. Above the trays D is located the dough-trough E, which dough-trough is formed somewhat shorter than the inside of the frame, and is so formed for the purpose of clearing or passing the ribs *b*.

Upon the top or upper part of the frame A is placed the cover F, which cover is so constructed that it will form upon its bottom or under side a kneading-board. To one end of the frame A is located the flour-chest G. For the purpose hereinafter described an air-chamber—such as H—is formed between the end of the frame A and its panel and the flour-chest G, which air-chamber extends under the flour-chest, as illustrated in Fig. 2.

In use the sponge is placed in the dough-trough E and the lamp I or its equivalent placed under the sheet-metal partition B, which lamp supplies a sufficient amount of heat to heat the sheet-metal partition, thereby communicating heat to the chamber located above the sheet-metal partition B, in which chamber the dough-trough is suspended and around which the heat acts to heat the dough-trough. After the sponge has remained in the dough-trough a sufficient length of time to raise, flour is mixed with the sponge until a sufficient amount of flour has been added to form dough, after which the dough is removed from the trough and placed upon the kneading-board F and kneaded in the ordinary manner, after which loaves are formed from the dough and placed in pans, when the pans, together with the dough, are placed upon the trays D. The cover or kneading-board F is to be placed in the position illustrated in Fig. 1.

It will be understood that the lamp I or its equivalent is to be used to furnish the desired amount of heat to raise the dough and bring it in proper condition for baking. The air-chamber H extends under the flour-chest G and upon one side thereof and is for the purpose of heating the flour during the time the sponge is raising, thereby providing a means

for giving the flour the proper temperature to be mixed or kneaded with the sponge.

For the purpose of allowing any smoke that may be formed by lamp I or its equivalent to escape the air-passages J are provided in the panel *a* adjacent to the air-chamber H.

To the top or upper portion of the frame A are attached the ribs K, which ribs are so located that they will form grooves to receive the arms L, said arms being so located that they will slide back and forth between the ribs K.

For the purpose of providing a means for changing the trays D and adjusting them for dough or fruit they are removably placed upon the ribs *b*. For the purpose of forming a tray that will be suitable both for dough and fruit one side of the trays is provided with the flanges *c*, which flanges extend around the tray and are designed to hold fruit. The opposite side of the tray is formed flat for the purpose of forming a tray that pans can be easily placed upon and removed from. In the drawings the trays are shown provided with slats; but it will be understood that trays formed of wire gauze or netting can be used in place of the trays provided with slats, if desired, without departing from the nature of our invention.

In the drawings we have shown a door designed to be hinged at its bottom side; but it will be understood that any kind of door can be used; but we prefer to form the door D′ and locate it as illustrated in Fig. 3. The dough-trough is removably attached to the top or upper part of the frame A and is so arranged that it will be suspended within the frame.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the frame A, provided with the sheet-metal panels *a*, the sheet-metal partition B, the trays D, the dough-trough E, removably attached to the frame A, the combined cover and kneading-board F, the sliding arms L, the flour-chest G, located at one end of the frame and provided with a hot-air chamber upon the bottom and one side of said chest G, and means for heating, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

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Witnesses:
F. W. BOND,
CHAS. M. STANDS.