

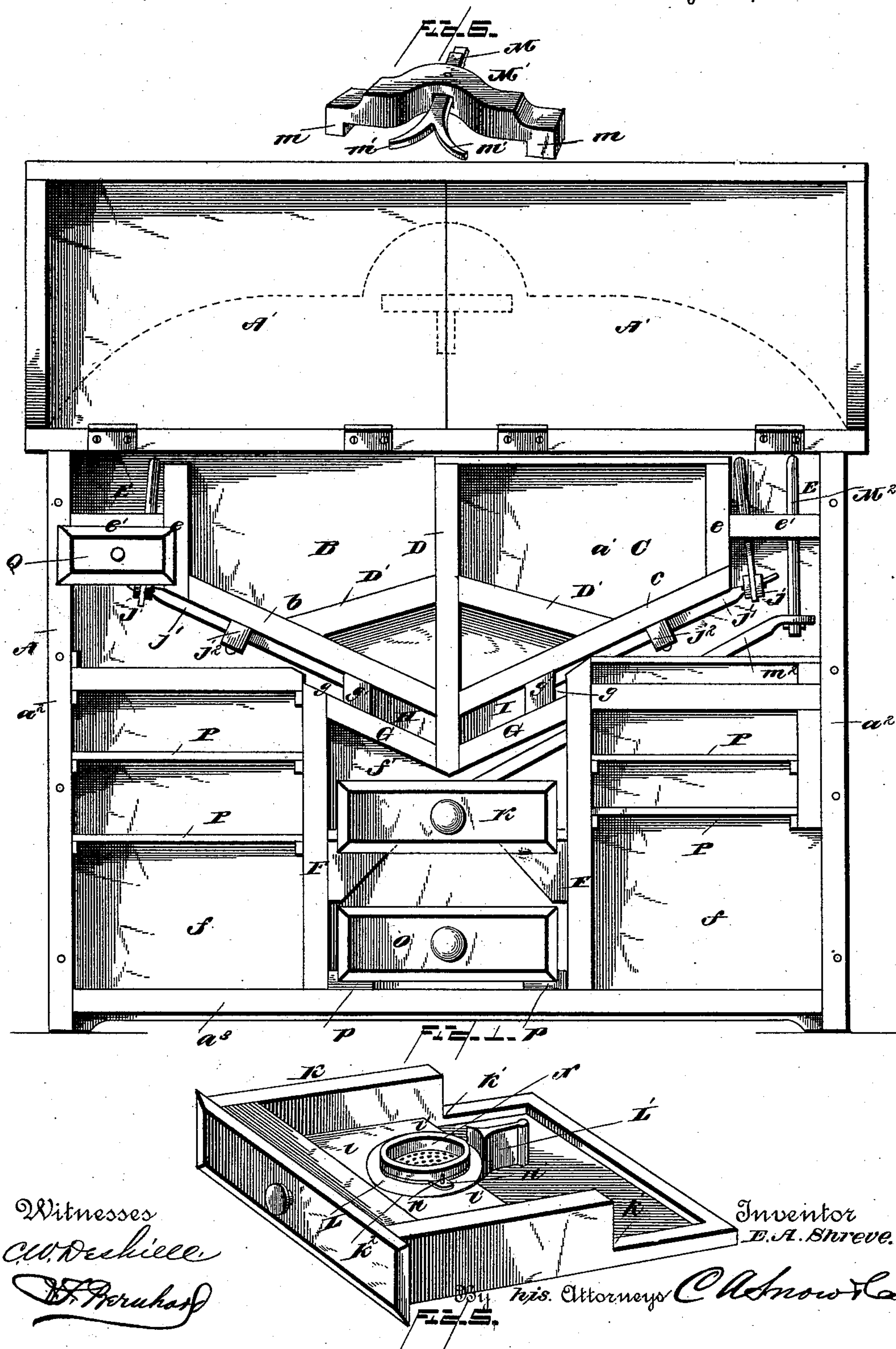
(No Model.)

2 Sheets—Sheet 1.

E. A. SHREVE.
KITCHEN CABINET.

No. 362,590.

Patented May 10, 1887.



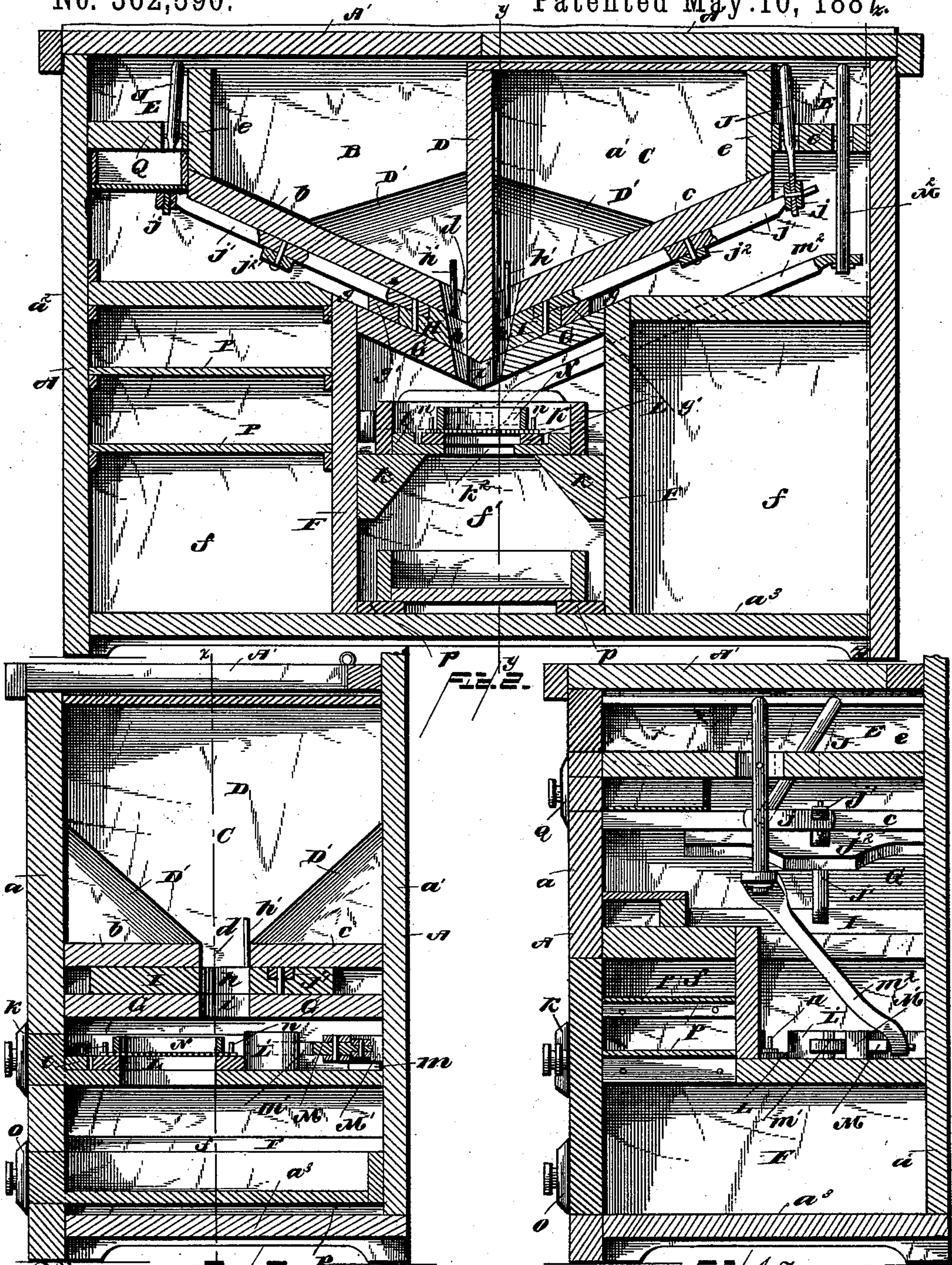
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Witnesses
C. W. Deshille
H. P. P. P.

Fig. 4. Inventor
E. A. Shreve.

By, *his* Attorneys, *C. A. Snow & Co.*

UNITED STATES PATENT OFFICE.

EANOCH ALLEN SHREVE, OF KENOMA, MISSOURI.

KITCHEN-CABINET.

SPECIFICATION forming part of Letters Patent No. 362,590, dated May 10, 1887.

Application filed November 3, 1886. Serial No. 217,895. (No model.)

To all whom it may concern:

Be it known that I, EANOCH ALLEN SHREVE, a citizen of the United States, residing at Kenoma, in the county of Barton and State of Missouri, have invented new and useful Improvements in Kitchen-Cabinets, of which the following is a specification.

My invention relates to improvements in kitchen-cabinets; and it consists of the peculiar combination of devices and novel construction and arrangement of the various parts for service, substantially as hereinafter fully described, and particularly pointed out in the claims.

The object of my invention is to provide a kitchen-cabinet with mechanism for sifting the contents thereof at the time that it is desired to empty the compartment of the cabinet with a given quantity for immediate use, which mechanism can be very easily and readily operated by the attendant.

A further object of my invention is to provide an improved kitchen-cabinet with a number of separate compartments for the storage of different articles, which shall be very compactly arranged to take up a comparatively small area or space, and to provide a device or article of the class named which shall be simple and durable in construction, effective and reliable in operation, and cheap of manufacture.

In the accompanying drawings, which illustrate a kitchen-cabinet embodying my improvements, Figure 1 is a front elevation with the front wall of the cabinet removed in order to clearly show details of construction and arrangements of parts. Fig. 2 is a longitudinal vertical sectional view on the line $x x$ of Fig. 3. Fig. 3 is a vertical transverse sectional view on the line $y y$ of Fig. 2. Fig. 4 is a similar sectional view on the line $z z$ of the same figure. Fig. 5 is a detached perspective view of one of the removable trays or drawers; and Fig. 6 is a detail detached view, in perspective, of a part of my improvements.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the inclosing case or shell of my improved kitchen-cabinet, which comprises a vertical front wall, a , a similar back or rear wall, a' , arranged par-

allel with the front wall, the vertical side walls, a^2 , arranged parallel with each other and at right angles to the front and back walls, and a horizontal bottom, a^3 , the whole of which is very rigidly and firmly united or connected together to form a case of considerable strength and stability. The form and size, however, of this inclosing shell or case can be varied and changed to suit the requirements of the purchaser or trade, and the upper end of the case is closed by means of hinged covers A' , which are connected to the rear wall of the case by independent hinges, so that they can be opened independently of one another to permit of ready access to either of the main bins or compartments B and C of the cabinet, in which flour, cornmeal, or other substance is to be stored. These main bins or compartments are arranged in the upper portion of the inclosing case or shell, at the middle or center thereof, and the compartments are divided or separated from one another by an intermediate vertical partition, D, which is very rigidly and firmly secured in place at the vertical center of the inclosing case or shell.

The main bins or compartments B C are provided with inclined bottoms b and c , respectively, these bottoms being inclined in reverse directions toward the vertical central partition, D, so that the contents of both bins will be discharged at the center of the cabinet through a common opening, as will be more fully described presently. The lower inner edges of the inclined bottoms of the main bins or compartments are provided with a single outlet-opening, d , the openings d for the compartments being isolated or separated by the intervening vertical partition, D, and the said bins are further provided with transverse partitions D' , which are inclined transversely across the bottom of the bins, the lower ends of the said transversely-inclined partitions D' terminating at points a short distance from the outlet-opening d in the bottom of each of the bins or compartments, as will be very readily understood, whereby the contents of the bin or compartment are caused to fall or flow from all sides toward the outlet-opening d therein. The upper outer edges of the inclined bottoms of the main compartments or bins are divided from the side walls, a^2 , of the

inclosing case or shell by short vertical partitions *e*, which are rigidly affixed or secured in place, and between these partitions *e* and the side walls of the case are provided small compartments *E*, which are closed at their lower ends by means of horizontal partitions or bottoms *e'*, these separate compartments being provided for the reception of the oscillating hand-levers, presently described, which operate the cut-off slides or valves and the sifting mechanism, so that the said levers will not be clogged up with the flour or other contents of the main compartments or bins of the cabinet, while at the same time ready access can be had to the levers through the upper end of the case, which is closed by means of the hinged covers *A'*.

F designates vertical partitions, which are arranged or located in the lower portion of the case or shell, beneath the main compartments or bins *B C* therein. These partitions *F* are arranged equidistant from the center of the casing, and they extend from the front wall of the case to the rear wall thereof, while their lower ends rest upon the bottom of the case and the upper ends terminate a short distance beneath the inclined bottoms of the main compartments or bins. Two of these vertical partitions *F* are provided, which thereby form two side compartments, *f*, and a central compartment, *f'*, in the case or cabinet, and the said vertical partitions are arranged out of line with the vertical central partition, *D*, and to one side of the same, so that the central chamber, *f'*, in the lower portion of the case of the cabinet is arranged immediately beneath the lower inner portions of both of the main bins or compartments and the vertical central partition, *D*, which divides the same, as will be very readily understood by reference to Figs. 1 and 2 of the accompanying drawings.

G designates inclined supplemental bottoms, which are arranged in the upper portion of the lower central compartment or chamber, *f'*, of the case; and these supplemental bottoms are arranged beneath and parallel with the lower inner edges of the inclined bottoms of the main bins or compartments *B C*. The lower end of the vertical central partition of the case is extended beneath the bottoms *b c* of the main bins and terminates on the plane of the lower sides of the supplemental bottoms, so that two divided spaces, *g*, are provided beneath the main bins or compartments *B C*, and in these spaces or chambers *g*, beneath the main bins, are located independent slides or cut-offs *H I*, the slide *H* being arranged beneath the outlet-opening in the compartment *B*, and the slide *I* being likewise arranged beneath the outlet-opening in the compartment or bin *C*, as will be very readily understood. These slides or cut-offs are arranged in inclined positions to correspond with the bottoms of the hoppers and the supplemental bottoms *G*, and one edge of these slides impinges upon the ver-

tical central partition, *D*, to be guided in their movements thereby, while the opposite edges of the slides impinge against battens or guide-strips *g'*, which are rigidly affixed to the supplemental bottoms *G*, as will be seen by reference to Fig. 2 of the drawings. These slides or cut-offs are each provided with a transverse opening, *h*, which is adapted to align or coincide with the opening *d* in its bin or compartment to permit the contents of the bin to escape therethrough; and to the slide or cut-off is also affixed a stirrer, *h'*, which is arranged in rear of the opening *h* therein and projects upwardly through the opening *d* in the bottom of the main compartment or bin to agitate the contents of the same surrounding the outlet-opening *d*, and thereby facilitate the discharge of the contents of the bin through the said opening. This stirrer-pin also serves to limit the play or movement of the slide by coming in contact with opposite sides of the opening alternately, and on one side this opening has a notch or recess formed therein, into which the stirrer-pin fits during the movement thereof in one direction.

The supplemental bottoms *G* meet at a point or line immediately beneath the vertical central partition, *D*, and at their middle is formed a single outlet-opening, *i*, which lies immediately beneath the outlet-openings *d* of the bins or compartments *B C*, and when the slide is adjusted to align with the opening in one of the hoppers the contents of the same pass through the openings in the slide and the central opening, *i*, of the supplemental bottoms of the hoppers, these bottoms serving to support the slides, and also to properly direct the contents of the hoppers into the vibrating screen located beneath the said supplemental hoppers in the central lower compartment, *f'*, of the cabinet, as will be more fully described hereinafter.

It will be seen that the slides can be adjusted to throw their openings out of coincidence with the outlet-openings *d* of the hoppers, so that the escape of the contents from both hoppers is effectually prevented, and that either slide can be adjusted independently of the other, to permit the contents of either bin to be separately discharged through the aligned outlet-openings in the hopper, the slide, and the supplemental bottoms *G*, the outlet-opening in the supplemental bottom serving as a common discharge-opening for both of the bins *B C*.

The slides or cut-offs *H I* are reciprocated independently of one another by means of separate oscillating levers *J*, one of which is located in one of the chambers *E* at one side of the case, and the other is located in the other chamber at the opposite side of the case. These oscillating levers are arranged in a vertical position, and their lower ends are passed through the bottoms *e'* of the compartments *E*, and the levers are pivoted at an intermediate point of their length, so that they can

oscillate freely back and forth, the upper ends of the levers being extended above the bottoms e' of the compartments E, so that they can be very conveniently grasped and operated by the attendant. A horizontal link, j , is pivotally connected to the lower end of the vertical oscillating hand-lever, and to the opposite end of this link is pivotally connected the upper outer end of a swinging inclined lever, J' , which is arranged beneath the bottom of the bins, and is pivotally connected at its lower inner end to one of the reciprocating slides or cut-offs, as clearly shown.

It will be seen that when the lever is oscillated the link communicates the motion thereof to the inclined lever, which in turn actuates the slide to reciprocate the same, the inclined lever being pivoted at an intermediate point of its length in a suitable bracket, J^2 , which is rigidly affixed to the under side of the bottom of the main bin or compartment.

K designates a sliding drawer or tray, which is supported on suitable ways or cleats, k , which are rigidly affixed or secured to the inner opposing sides of the vertical partitions F, which form the central lower compartment of the cabinet. This tray or drawer is shown in detail in Fig. 5 of the drawings, and it is arranged in the central lower compartment, f' , of the cabinet, beneath the inclined supplemental bottoms G thereof.

The rear ends of the parallel sides of the drawer and the rear end wall thereof are cut away, as at k' , for a purpose hereinafter explained, and the front portion of the bottom of the tray or drawer is provided with an aperture or opening, k^2 , which aligns with the common discharge-opening i in the supplemental bottoms of the hoppers or bins when the tray is in proper position in the cabinet. This opening of the tray or drawer is partially surrounded with a vertically-disposed segmental flange or ledge, l , which lies concentric with the opening, and it is divided to form two terminal ends, l' .

An oscillating screen-carrier, L, is fitted in this vertical ledge or flange and guided thereby, and the carrier has a central opening which aligns with the opening in the bottom of the drawer and the common outlet-opening in the supplemental bottoms of the main bins, and is extended into the path of an oscillating lever, M, the diverging arms m' of which alternately strike the arm L' to oscillate the carrier and thereby sift the contents thereof. This lever M is disposed in a horizontal position in the rear portion of the inclosing case or shell of the cabinet, and this lever is arranged in the same horizontal plane as the tray or drawer, the lever being pivoted at an intermediate point of its length in a supporting-bracket, M' , which is arranged transversely across the upper rear portion of the central lower compartment, f' , of the cabinet. The terminal ends of this bracket have depending feet m , which rest upon and are rigidly secured to the fixed ways or cleats for the sliding drawer or tray, and

this bracket and lever therein are fitted in the cut-away portions of the rear end of the drawer, this drawer being cut away, as hereinbefore described, to adapt the bracket and lever to lie in the same horizontal plane as the oscillating screen-carrier in the drawer. The front end of this lever is bifurcated to provide the diverging arms m' , between which the arm of the oscillating carrier is fitted, and these arms of the lever impinge upon the arm of the carrier alternately to oscillate the carrier when the lever is actuated. A horizontally-disposed inclined link, m^2 , is pivotally connected at its lower inner end to the rear end of the lever, and the upper end of this link is loosely connected to the lower end of a vertically-disposed hand-lever, M^2 , which is arranged in one of the compartments E of the cabinet, this hand-lever being extended through the bottom of the compartment and arranged in the latter in such a position that it will not interfere with the lever J for actuating the reciprocating slide or cut off. The oscillating carrier is provided with vertical pins n , which project upwardly therefrom, and these pins pass through suitable openings in projecting lugs n' , that are formed integral with the screen-frame N, thus connecting the screen-frame to the oscillating carrier. The screen-frame is provided with a screen of any suitable character, and it is detachably connected to the oscillating carrier, and the carrier and frame can be very readily detached from the sliding tray or drawer when the latter has been removed from the cabinet. The oscillating lever is not connected with the oscillating screen-carrier, and the sliding drawer can thus be very readily withdrawn from and replaced in the inclosing case of the cabinet without hinderance from the oscillating lever that actuates the screen-carrier.

O designates a removable drawer, which is arranged in the central lower compartment, f' , of the cabinet, beneath the sliding drawer K therein, to receive the sifted flour or other substance from the oscillating screen, and this drawer slides upon suitable ways or cleats, which are rigidly affixed or secured to the vertical partitions F within the lower central compartment, f' , of the cabinet.

P designates a series of horizontal removable shelves, which are arranged upon suitable cleats, p , that are rigidly affixed to the vertical partitions F and the side walls, a^2 , of the cabinet, these shelves being arranged in the lower side compartments, f , of the cabinet.

Q are sliding drawers, which are located above the removable shelves P in the compartments f , these drawers working in the space or chamber to one side of and beneath the inclined bottoms $b c$ of the main bins or compartments B C, as shown.

This being the construction of my improved kitchen-cabinet, the operation thereof is as follows: The shelves P and the sliding drawers Q are used for the storage of various small

articles which are very desirable around a dwelling, and the large main compartments B and C are employed for the storage of flour and cornmeal or other desired substances.

5 When it is necessary to remove a portion of the contents of either of the main bins B or C, the attendant elevates one of the hinged lids A' of the case and grasps one of the vertically-disposed oscillating levers J to reciprocate
10 the slide operated by the lever. This movement of the slide causes the stirrer-pins thereon to agitate the contents of the bins and thereby compel it to fall through the outlet-opening in the hopper, the opening in the slide, and the
15 common discharge-opening i in the supplemental bottoms, from whence it falls upon the screen in the oscillating carrier. The vertical lever M' is now grasped by the hand and oscillated, so that the motion thereof is transmitted
20 by the intermediate link to the horizontal lever M, the arms of which alternately impinge upon the extended arm of the oscillating screen-carrier, so that the screen is oscillated to sift the contents thereof, which fall through upon
25 the sliding drawer O, which can be readily removed from the cabinet when the desired quantity has accumulated therein. Either flour or cornmeal can be thus discharged from the bins and sifted before being removed from the
30 cabinet, and the operation can be performed with ease and facility, the operator not being compelled to handle the flour or meal until it has been sifted, which thereby prevents the waste of the flour or meal and soiling the
35 clothes.

I do not desire to confine myself to the exact details of construction herein shown and described as an embodiment of my invention, as I am aware that changes therein can be
40 made without departing from the spirit or sacrificing the advantages of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

45 1. In a kitchen cabinet, the combination of a bin having an outlet-opening, a drawer arranged beneath said bin, an oscillating screen-carrier supported by the drawer and having

a rearwardly-extended arm, a pivoted oscillating lever arranged in rear of and in the same 50 plane with the carrier and having the diverging arms adapted to alternately impinge against the arm of the carrier, a hand-lever, and connections intermediate the hand and oscillating levers, as and for the purpose described. 55

2. In a kitchen-cabinet, the combination of a bin having the outlet-opening, the sliding drawer arranged beneath the bin and having the opening and the vertically-divided guide-flange partially surrounding the opening, the 60 oscillating carrier fitted within the guide-flange and having an arm extended through the divided ends of the said flange, the pivoted lever having the diverging arms which alternately impinge upon the arm of the carrier, a 65 vertical hand-lever, and connections intermediate of the hand-lever and the lever for oscillating the carrier, substantially as described, for the purpose set forth.

3. In a kitchen-cabinet, the combination of 70 the bins or compartments having the independent discharge-openings, the vertical central partitions dividing the bins, the supplemental bottoms having the common outlet-opening, the slides working beneath the bins 75 and having the outlet-openings and the stirrer-pins, the hand-levers for reciprocating the slides, the sliding drawer arranged beneath the supplemental bottoms and having the opening and the vertical divided guide-flange, 80 the oscillating carrier fitted between the guide-flange and provided with the extended arm, the oscillating lever having the arms which impinge upon the arm of the carrier, the vertical hand-lever, and the link intermediate of 85 the levers for the oscillating screen-carrier, substantially as described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 90 presence of two witnesses.

EANOCH ALLEN SHREVE.

Witnesses:

T. R. JONES,
T. M. HEADY.