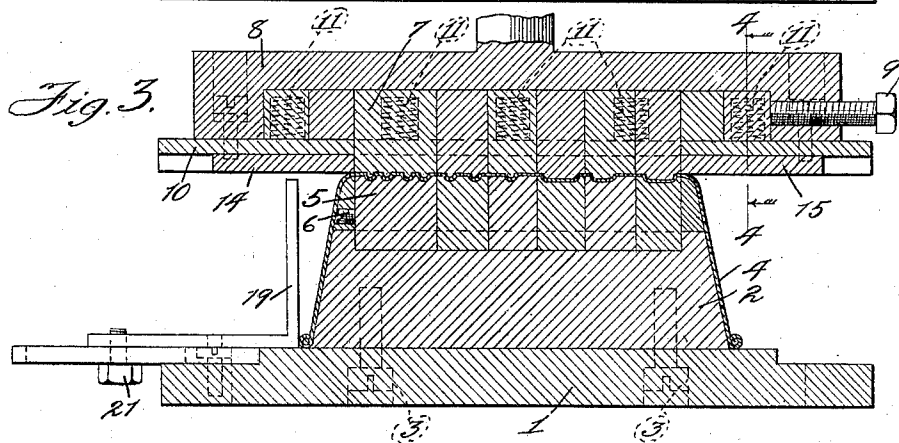
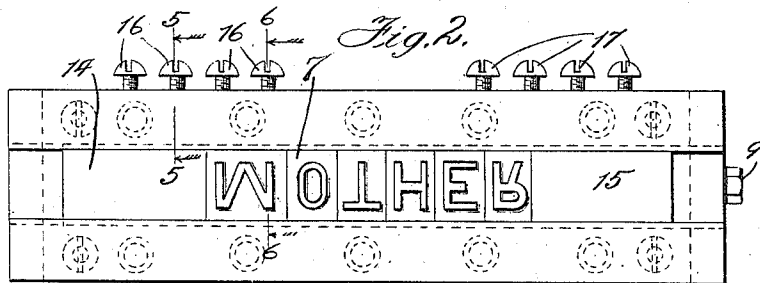
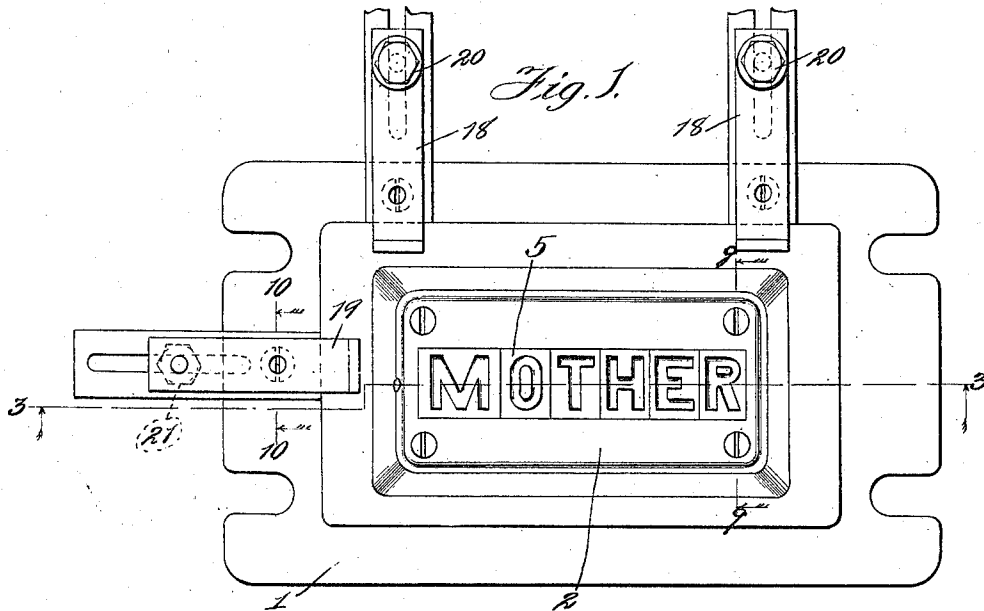


E. KATZINGER.
 MEANS FOR EMBOSSED BREAD PANS.
 APPLICATION FILED NOV. 16, 1905.

984,009.

Patented Feb. 14, 1911.

2 SHEETS—SHEET 1.



Witnesses:

Wm. D. Perry
W. P. Kibroy

Inventor:

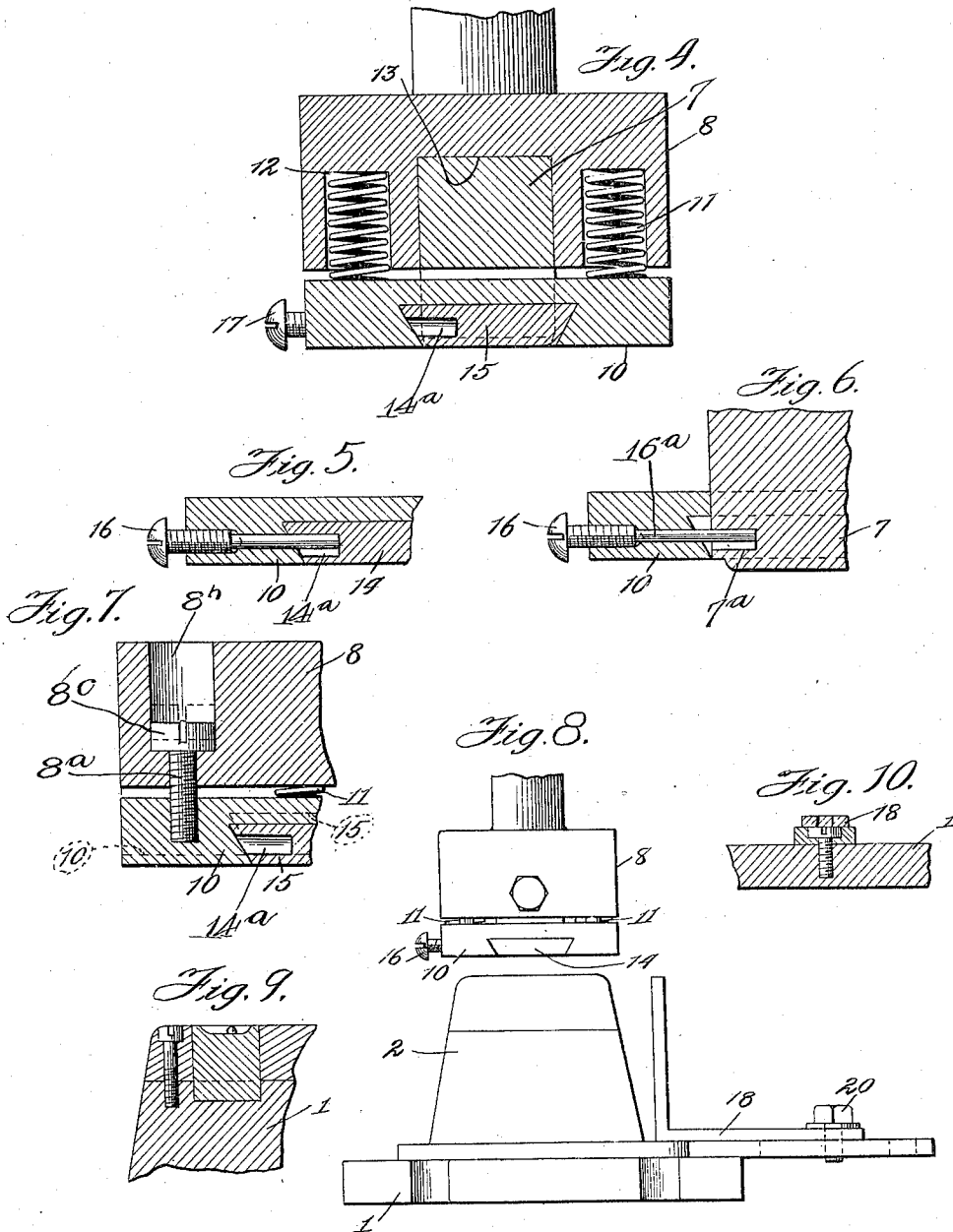
Edw. Katzinger
by Browne & Co. Attorneys

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Witnesses:

W. P. Kibroy
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Inventor:
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UNITED STATES PATENT OFFICE.

EDWARD KATZINGER, OF CHICAGO, ILLINOIS.

MEANS FOR EMBOSSING BREAD-PANS.

984,009.

Specification of Letters Patent.

Patented Feb. 14, 1911.

Application filed November 16, 1905. Serial No. 287,694.

To all whom it may concern:

Be it known that I, EDWARD KATZINGER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Means for Embossing Bread-Pans and the Like, of which the following is a specification.

This invention relates to dies, and their associated parts, especially adapted for embossing letters or other designs on bread pans and other like pans, and it has for its primary object to provide improved and efficient means whereby letters or designs may be embossed on the pan to a depth sufficient to leave the impression thereof upon the loaf after it is baked without causing the metal of the pan to buckle or wrinkle.

With these ends in view, the invention consists in certain features of novelty in the construction, combination, and arrangement of parts by which said objects, and certain other objects which will hereinafter appear, are attained, all as fully described with reference to the accompanying drawings, and more particularly pointed out in the claims.

In the said drawings, Figure 1 is a plan view of one of the dies and the gages used in connection therewith. Fig. 2 is a face view of the upper die or matrix holder. Fig. 3 is a vertical longitudinal section taken on the line 3, 3, Fig. 1 also showing the upper die in longitudinal section and in operative position with the other die. Fig. 4 is an enlarged cross section on the line 4, 4, Fig. 3. Fig. 5 is an enlarged detail section on the line 5, 5, Fig. 2. Fig. 6 is a similar section on the line 6, 6, Fig. 2. Fig. 7 is an enlarged detail cross-section, showing the manner of connecting the clamping plate to the die head or block. Fig. 8 is an end elevation of the two dies, showing them separated. Fig. 9 is a section on the line 9, 9, Fig. 1. And Fig. 10 is a detail section on the line 10, 10, Fig. 1.

1 is a base, upon which is supported a die-block 2, the block being shown as a separate member attached to the base by screws 3, or other suitable means. This block 2 has the form of the interior of the pan 4, or other article to be embossed, and it is provided in its upper side with a recess of sufficient length to hold the type 5 bearing the letters or design to be imprinted upon the pan. In this exemplification of the inven-

tion, several of these types are shown in the recess, and are secured in place by a set-screw 6 screw-threaded in one end of the block 2 so as to bear against the end one of the types. The types 5 may be either male or female, and situated above them are a corresponding number of coöperating types 7 of complementary form. These are arranged in a die-block or head 8, which, like the block 2, is formed with a longitudinal recess in which the types 7 are held by a set-screw 9, or other suitable means, screw-threaded in the end of the block so as to bear against the end one of the types 7. The surfaces of the types 5 are substantially flush with the surface of the block 2, and the block 2 is provided, all around the cavity or recess for the types 5, with a plain margin upon which the metal of the pan 4 rests while being embossed. The types 7, however, project considerably below the surface of the block 8, and interposed between the latter and the block 2 is a clamping plate 10, which is so positioned and held that when in its normal or withdrawn position its lower face will project below the faces of the types 7, so that as the block 8 is depressed in the act of embossing the pan the clamping plate 10 will be the first to engage the metal and will pinch it and hold it securely against the plain marginal surface of the block 2. The thickness of the clamping plate 10 is so proportioned with respect to the distance between the blocks 2 and 8 that there will be a slight space between the block 8 and the plate 10 at the time the plate 10 first engages the bottom of the pan, so that this space must be taken up by the downward movement of the block 8 relatively to the plate 10 before the embossing action is fully accomplished. In order that this advanced relation of the plate 10 may be utilized for thus pinching and holding the metal without interfering with the subsequent descent of the types 7 relatively to the plate 10, a number of powerful springs 11 are interposed between the block 8 and the plate 10 in suitable sockets 12 formed in the under side of the block 8. Hence it will be seen that when the plate 10 engages the metal, the same, contiguous to the embossed portions, will be held firmly against the face of the block 2 and prevented from buckling or wrinkling while the male embossing members draw the metal into the female

members the necessary depth for leaving the impression of the design upon the loaf after baking.

In order that the same device may be used
5 for imprinting different words and designs, the recess for the type in the block or head 8 is made the maximum length, and the extra space at the ends of the type is taken up by additional plain blocks 13 when the word
10 or design is shorter than such maximum length, and these plain blocks are held in place by two end slides 14, 15, which are preferably dovetailed in the sides of the slot or opening in the clamping plate 10 through
15 which the lower ends of the upper set of types project during the embossing operation. These slides 14, 15, are primarily provided, however, for the purpose of producing a solid flush surface contiguous to the
20 ends of the line of types, so that at these points the metal will be securely held down in place on the block 2 and prevented from wrinkling or warping, the surfaces of the slides 14, 15, being flush with the lower surface of the plate 10, as shown in Fig. 4, and the slides being held at any desired position in the length of their slide-ways by means of two series of set-screws 16, 17, respectively, one of which in each series is capable
30 of impinging the slide corresponding thereto in whatever position the slide may occupy in the length of the slot.

In this illustration of the invention the block 2 is shown the exact size of the interior of the pan, but this is not always the case, and in order that the pan may be properly and readily positioned with respect to the embossing members in cases where the pan is larger than the block 2, a
40 number of gages 18, 19, arranged at the side and end, respectively, of the base or bed 1, are provided, and adjustably secured in place by set-screws 20, 21, so that the gages may be moved inwardly or outwardly with
45 respect to the block 2, according to the position it is desired the imprint should occupy on the pan. The block 2 being removable from the base 1, it is also apparent that other blocks for different sizes of pans may
50 be substituted if desired.

The plate 10 is suspended from the head or block 8 by means of screws 8^a, which are screw-threaded in the plate 10 and pass loosely through the bottoms of sockets 8^b in the head 8, and have enlarged heads 8^c which rest on the bottoms of the sockets 8^b when the plate 10 is at the limit of its downward movement, the sockets 8^b and screw heads 8^c constituting guides for the plate 10 as it
30 rises and falls.

In order that the set-screws 16 and 17 which are utilized for clamping the slides 14, 15, in place, may not impinge directly against the beveled edges of said slides,
65 which might damage such edges and bend

the screws, the plate 10 at the inner ends of the screws is provided with longitudinally-movable pins 16^a, which of course might be formed directly on the screws, if desired, and which pins engage in longitudinal
70 grooves 14^a in the edges of the slides 14, 15, whereby the pins are given a firm seating against the slides when the set-screws are set up, and the slides are nevertheless allowed to move longitudinally without interference from the pins when the set-screws are loosened. In order that the type blocks 7 may also move longitudinally of slot 13 in the head 8 without interference from these pins 16^a, their edges also are provided with
80 slots or grooves 7^a, sufficient in width to allow the type blocks to be depressed independently of the pins 16^a during the embossing operation.

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

1. In a device for the purpose described, the combination of a block provided with embossing members and having a gripping surface for the article to be embossed surrounding said members, a second block movable with respect to said first block and provided with a recess for removable embossing members, embossing members situated in said recess and adapted to cooperate with the first said embossing members, a clamping plate situated between said blocks and having a slot through which said embossing members meet, and slides in the ends of said slot movable into close relation with the embossing members in the second said block, and cushions interposed between said clamping plate and one of said blocks.

2. In a device for the purpose described, the combination of a block provided with embossing members and having a gripping surface for the article to be embossed, a second block provided with a recess for removable embossing members, embossing members removably held in said recess, a clamping plate interposed between said blocks and having a slot through which the embossing members in said blocks meet, adjustable means for closing the ends of said slot flush with the surface of the plate, whereby the surface of the plate may be made flush around and contiguous to the embossing members, and cushions interposed between one of said blocks and said plate.

3. In a device for the purpose described, the combination of a block provided with embossing members and having a gripping surface for the article to be embossed around said embossing members, a second block provided with a recess for embossing members, embossing members removably held in said recess, a clamping plate situated between said blocks and having a slot registering with said embossing members therein,

slides following the ends of said slot flush
with the surface of said plate so as to grip
the article around the embossing members
against one of said blocks, a series of set-
5 screws in the edge of said plate for each of
said slides, and cushions interposed between
said plate and one of said blocks.

In testimony whereof I have signed my

name to this specification, in the presence of
two subscribing witnesses, on this 20th day 10
of October, A. D. 1905.

EDWARD KATZINGER.

Witnesses:

E. C. SEMPLE,

J. H. JOCHUM, Jr.