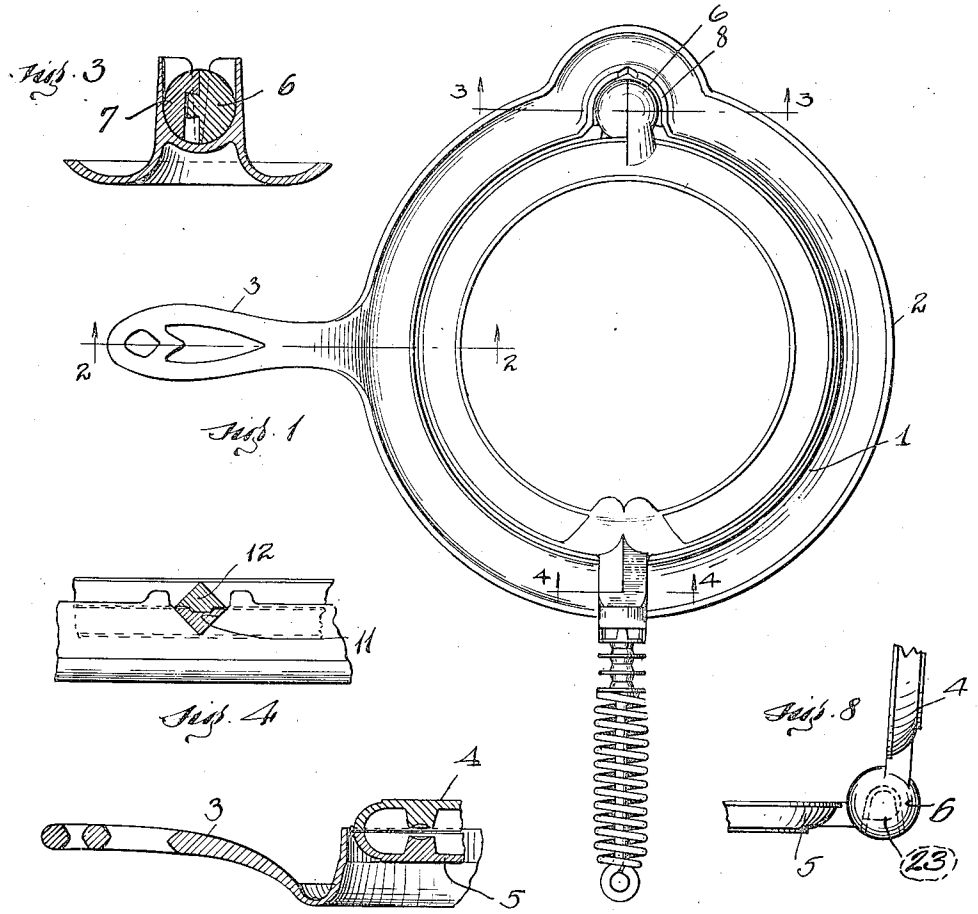
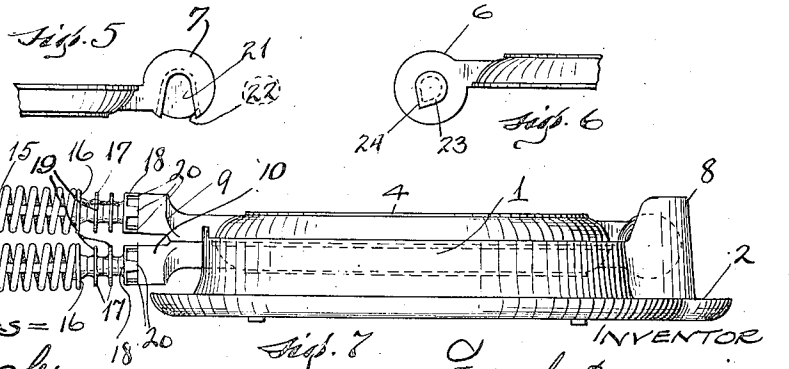
F. MASSING.

METAL WARE.

APPLICATION FILED OCT. 29, 1915.

1,293,849. Patented Feb. 11, 1919.




WITNESSES = 16

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FRANK MASSING, OF CLEVELAND, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE GRISWOLD MANUFACTURING COMPANY, OF ERIE, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

## METAL WARE.

1,293,849. Specification of Letters Patent. Patented Feb. 11, 1919.

Application filed October 29, 1915. Serial No. 58,552.

*To all whom it may concern:*

Be it known that I, FRANK MASSING, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Metal Ware, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

The present improvements relate, as indicated, to metal ware, and more particularly to kitchen utensils, being designed for use in various articles of this type, although their particular adaptation, as here shown, is in connection with waffle irons. To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described, and particularly pointed out in the claims.

The annexed drawing and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing;—

Figure 1 is a plan view of a waffle iron in which are embodied my improvements; Fig. 2 is a section on the line 2—2 in Fig. 1; Fig. 3 is a section on the line 3—3 in Fig. 1; Fig. 4 is a section on the line 4—4 in Fig. 1; Figs. 5 and 6 are partial side elevations of the two complementary plates of the iron; Fig. 7 is a side elevation of the device; and Fig. 8 is a partial side elevation of the waffle iron proper when in open position.

My improvements are intended to make a waffle iron more convenient to operate and to make it possible to handle the same without injury to the operator. As these irons are usually placed very close to the fire and are constructed wholly of metal, the operator very often is burned, and it is to prevent this and at the same time to provide a more convenient device that the present improvements have been developed.

Referring then to Fig. 1, there is shown a base ring or support 1 provided with an encircling turned-up flange 2, forming with the inner side wall of the ring an encircling trough which is adapted to catch any batter which has overflowed while being poured on the surface of the iron. At one side of the ring there is attached a handle 3 which is connected to the flange and spaced a sufficient distance from the level of the bottom of the ring, so that an operator may grasp this handle without touching the stove upon which the device is placed.

It is desirable in waffle irons to provide means for readily turning over the iron so that both sides of the plates are exposed to the flame, and for this purpose I have provided on the two plates 4 and 5 the usual semi-spherical lugs 6 and 7 which together form a ball adapted to be rotatably received in a socket 8 formed at one side of the support 1. Diametrically opposite to the lugs 6 and 7 are the handles 9 and 10 which form, when the waffle iron is closed, a substantially square member which is adapted to rest in a V-shaped notch 11 in the ring 1. The handles are maintained in proper relation by means of a projection 12 on one fitting into a properly constructed recess in the other as shown in Fig. 4, and when the handles so rest in the V-shaped notch, the flat sides of this notch tend to prevent accidental tipping or turning of the waffle iron, although permitting the operator to readily turn the same over when desired.

The handles on the plates 4 and 5 are constructed of several members, there being a wire coil 14 of the usual shape and having a central wire 15 adapted to extend beyond the inner end of the coil and to enter a suitable socket formed in the handles 9 and 10. Disposed upon this wire 15 are a plurality of air-cooled members, such for example as washers 16, 17 and 18, provided with relatively thin circumferential flanges 19 for cooling purposes. The washer 18 is provided with a plurality of laterally projecting feet or lugs 20 which contact the handles 9. In this way very little heat is radiated from the waffle iron to the handle, and tests have shown that the device can be used in the hottest flame for several hours without unduly heating the handle.

When it is desired to remove the waffles from the iron, the upper plate is swung pivotally about the lower into the position shown in Fig. 8. Various devices have been used for maintaining the upper plate 4 in a substantially vertical position so that the waffles may be removed, but none of these devices is wholly satisfactory, and in the

present iron I have provided means on the two semi-spherical lugs for not only maintaining the plates 4 and 5 in a relation at substantially right angles to each other, but also for preventing disengagement of the two plates from each other except when they are moved away from each other and kept in a parallel position while being so moved. These means comprise a recess 21 formed in one lug, this recess being shown in Fig. 5, and being of substantially U-shape with an undercut portion 22. On the other lug 6 there is a projecting strip or lug 23 which is wider at its extremity than at its connection to the lug 6, thus corresponding to the undercutting of the recess 21 and being provided with a toe 24 which is adapted to engage against the side of the recess 21 when the plate 4 has been moved to the position shown in Fig. 8. The projection 23 in Fig. 6 is adapted to be received within the recess 21, and the projection has a point or toe 24 which will engage under the edge of the recess when the two irons are moved to the position shown in Fig. 8. Only in the position shown in Fig. 7, and when the irons are out of the holder, can the two halves be separated, as any movement toward the position shown in Fig. 8 engages the toe under the edge of the recess and prevents the two irons being separated. As shown in Fig. 1 the lug 6 and the plate or iron 4, with the handle 9, are uppermost and this iron cannot be removed from the socket without also removing the iron 5, as the lug 23 is engaged in the recess 21 when the two parts are in the position shown. If the two irons are reversed it will also be clear that the recess will prevent the removal of one of them alone from the socket. As the two lugs 6 and 7 fit snugly with the socket 8, lateral movement of the two irons is prevented while they are in the socket. It will thus be apparent that the only position in which the two irons may be separated is when they are in the position shown in Fig. 7 and removed from the socket. When in this position, and out of the socket, the lug 6 may be slightly lowered to disengage it from the recess and the plates may then be moved laterally away from each other. While the irons may be separated when out of the holder, it is clear that they are firmly secured together when in the holder and can only be separated when in one position, that shown in Figs. 1 and 7 when out of the holder.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. In a waffle iron, the combination of two coöperating plates having adjacent projections provided with means for maintaining said plates in engagement when swung away from each other about said projections as an axis, such means permitting removal of said plates from each other when in a parallel relation.

2. In a waffle iron, the combination of two coöperating plates each having semi-spherical projections contacting to form a ball, one of such projections having an undercut recess therein open at one side, and the other having a projecting lug received in such recess but removable therefrom when said plates are in coöperative relation, said lug being formed to lock in the undercut portion of such recess when said plates are swung away from each other.

3. In a waffle iron, the combination of two coöperating plates each having semi-spherical projections contacting to form a ball, one of the projections having an undercut recess in its flat side and the other having a projecting lug wider at the outer portion than where attached to the projection and received in such recess, said lug being formed to lock in the undercut portion of the recess when said plates are swung away from each other.

4. In a waffle iron, the combination of two coöperating plates each having semi-spherical projections contacting to form a ball, one of the semi-spherical projections having an undercut recess therein open at the side, and the other semi-spherical projection having a complementary projecting lug wider at its outer surface than where attached to said projection and provided with a toe, said lug being adapted to be received in such recess and being removable therefrom when said plates are in coöperative relation, said toe being adapted to lock in such undercut recess when said plates are being swung away from each other.

Signed by me, this 27 day of October, 1915.

FRANK MASSING.

Attested by—
E. E. DAVENPORT,
ROBT. R. JAENKE.