

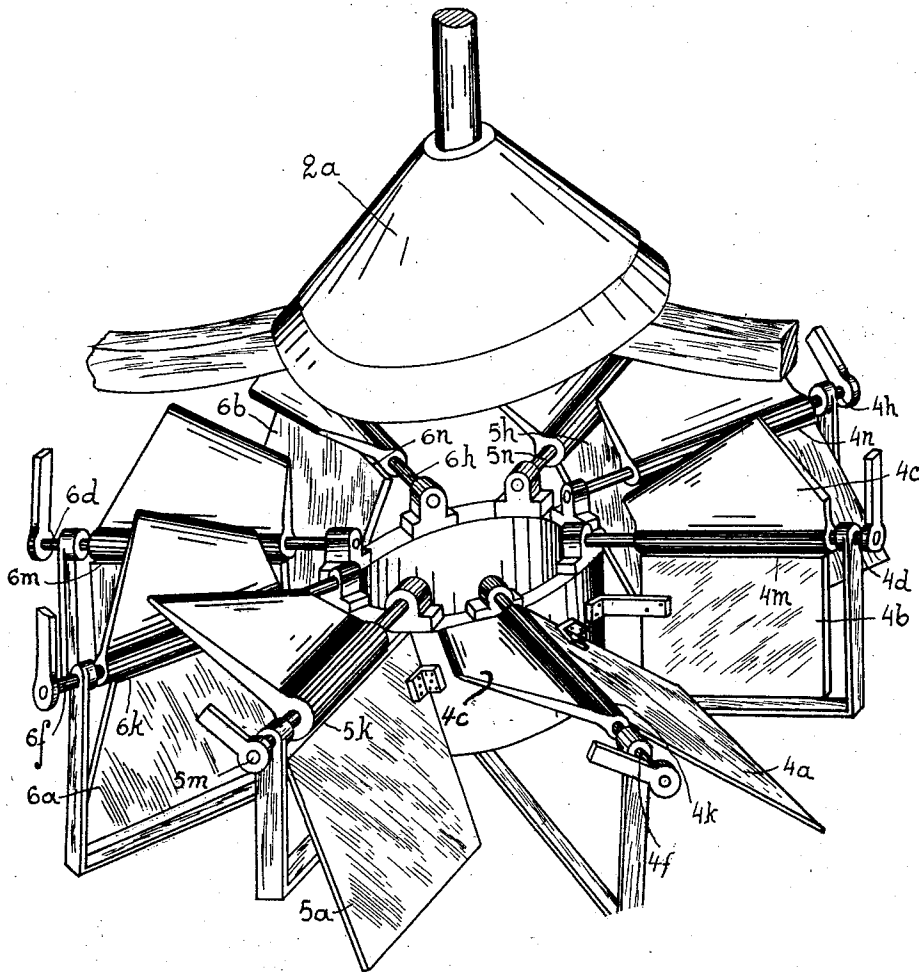
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DEVICE FOR DISTRIBUTING THE CHARGE IN AN OVEN

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DEVICE FOR DISTRIBUTING THE CHARGE IN AN OVEN

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The present invention relates to a device for distributing the charge in an oven served by a cylindrical cage.

As these cages are generally discharged through an annular aperture, it is not possible to uniformly charge an oven of rectangular section.

The object of the present invention is to solve this problem.

The arrangement is particularly suitable for the uniform distribution of charges in an oven the section of which presents dimensions which are comparatively large with respect to the surface which the charge would cover by its normal fall.

According to the invention, diaphragms suitably arranged in the throat and beneath the cage divide the charge as it falls, and by a chosen inclination direct the portions of the charge towards the surfaces they must cover.

Due to local arrangements of ovens and charging apparatus, it is sometimes impossible to place these cages in the axis of the oven for charging the latter.

The device according to the invention presents the advantage of compensating for the displacements in question by a suitable orientation of the diaphragms.

In order to permit the distribution of the charge in the oven to be varied at all moments, either for compensating the more or less uneven descent of the charges or for distributing the charge at will to the desired points, for example towards the walls of the oven, for protecting the latter from the passage of the gases, the invention provides for movable shutters adjustable from the outside to be arranged directly below the edges of the said diaphragms.

One form of construction of the invention is illustrated by way of example and in a non-limiting manner in the accompanying drawings. The latter extends to the various original features which the arrangements shown comprise.

The single figure is a perspective view of my device showing the arrangement of the movable shutters when the gas-intake is central.

In the drawing, there is shown a plurality

of diaphragms 4a, 4b, 5a, 6a, 6b, surrounding the gas inlet. The diaphragms 4a, 4b, 5a, 6a, 6b, are positioned so as to effect a distribution of the charge deposited on them and are fixed in this position by being secured to the gas inlet as shown.

In order to effect adjustments of the distribution of the charge, a plurality of adjustable diaphragms or shutters are provided. These adjustable or movable shutters are indicated on the drawing by reference characters 4c. As shown, the shutters are mounted on shafts 4d, 4f, 4h, 5m, 5n, 6f, 6d and 6h, which are positioned in alignment with the upper edges 4k, 4m, 4n, 5h, 5k, 6k, 6m and 6n of the fixed diaphragms. Thus, it will be appreciated that the shutters cooperate with the fixed diaphragms to distribute the charge.

In operation the base 2a of the cage (not shown) is lowered and the charge is allowed to flow through an annular opening between the base 2a and the body of the cage. The charge flowing through the annular opening is discharged onto the adjustable shutters and by means of the shutters and the fixed diaphragms is distributed as desired.

What I claim is:

In an oven, served by a cage having a movable base for the lading, fixed diaphragms suitably inclined so as to direct the portions of the charge towards the parts to be covered, and movable shutters pivoted on axes in alignment with the upper edges of the said diaphragms, in order to vary at will the amount of material delivered on to the said diaphragms.

In testimony whereof I have affixed my signature.

ALBERT DE SAINT HUBERT.