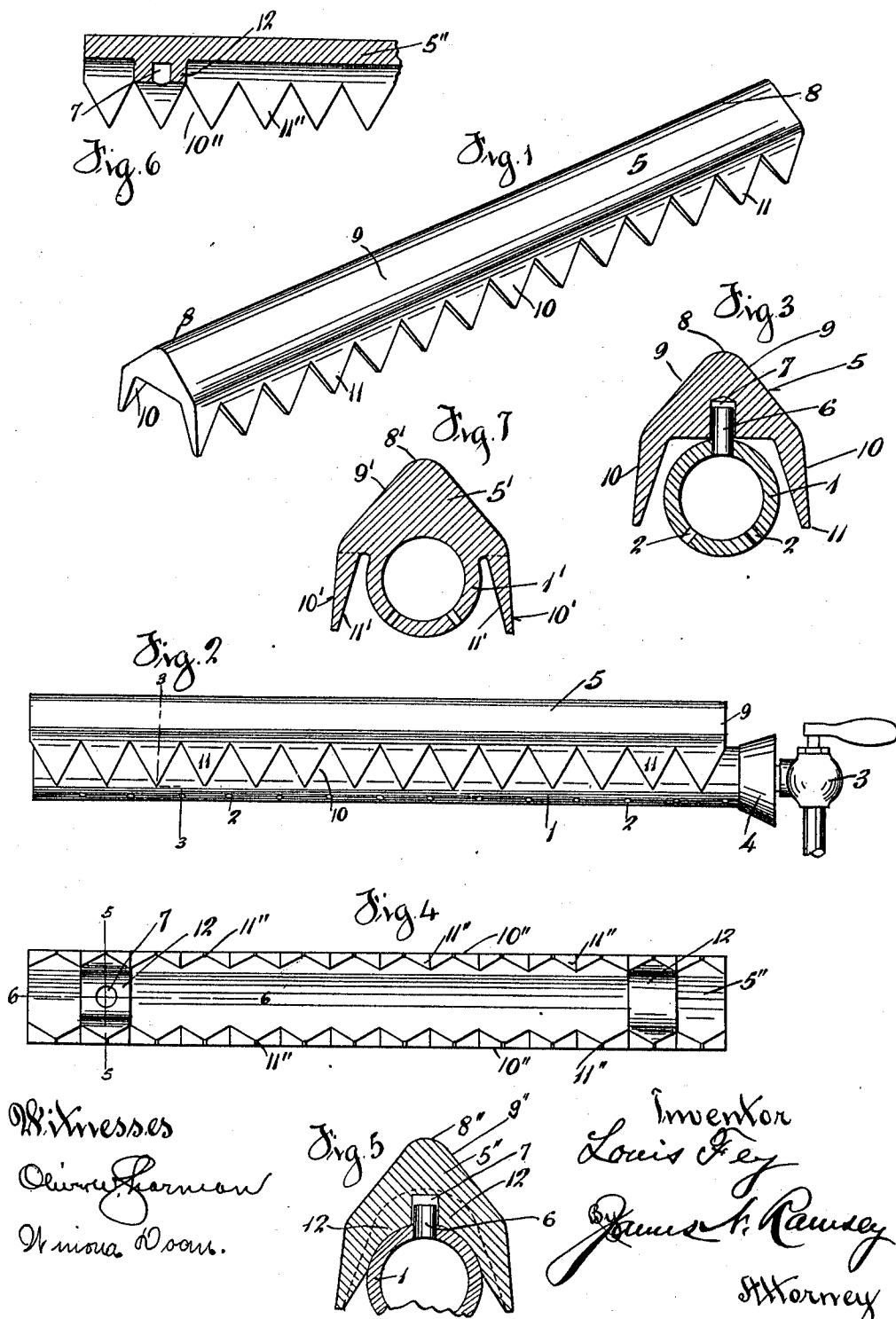


L. FEY.
 BROILER OR WAFFLE BAKER.
 APPLICATION FILED FEB. 23, 1911.

1,004,401.

Patented Sept. 26, 1911.



UNITED STATES PATENT OFFICE.

LOUIS FEY, OF CINCINNATI, OHIO.

BROILER OR WAFFLE-BAKER.

1,004,401.

Specification of Letters Patent.

Patented Sept. 26, 1911.

Application filed February 23, 1911. Serial No. 610,175.

To all whom it may concern:

Be it known that I, LOUIS FEY, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Broilers or Waffle-Bakers, of which the following is a specification.

My invention relates to protecting devices for burners, and more particularly to hoods and the like for covering burners to protect same from grease, juices and other refuse which so often drop from the grid when broiling meats and the like.

The object of my invention is to produce a burner protector of simple construction, inexpensive to manufacture, which is not liable to become overheated and which may be easily cleaned.

Heretofore a broiler has been produced employing a hood for the burner, but said hood being constructed in such a manner as to form gutters along the top and sides of same to carry off the grease, juices, etc., it has been found that these hoods are extremely difficult to keep clean, the top surfaces being too irregular to clean easily. Another disadvantage of the above mentioned hood is that it is expensive to manufacture, and it also heats up when the gas is burning in the burner, due to the fact that the extending points from which the grease is carried off are too near to the burner.

My invention consists in the construction of a burner protector, the top surface of which slopes from the central portion thereof, and the sides of which are denticulated for the purpose of causing the refuse to drop from said sides at points between the orifices in the burner.

My invention also consists in a hood for gas burners, having a series of projections on the sides thereof adapted to allow liquid refuse to drop from the central points thereof, at the bottom, the top of said hood being higher at its central point, the sides of said hood diverging therefrom.

My invention also consists in that certain novel construction and arrangement as herein set forth and claimed.

In the accompanying drawing, which

serves to illustrate my invention: Figure 1 is a perspective view of my improved burner protector. Fig. 2 is a side elevation of my improved burner protector mounted on a gas burner. Fig. 3 is a cross section taken on the line 3—3 of Fig. 2. Fig. 4 is a view looking at the bottom of my improved burner protector, the construction of same being slightly modified. Fig. 5 is a cross section taken on the line 5—5 of Fig. 4. Fig. 6 is a longitudinal section taken on the line 6—6 of Fig. 4. Fig. 7 is a sectional view illustrating a modification of my invention, in which the burner and hood are cast in one piece.

In the embodiment of my invention as illustrated, 1 represents a gas burner of the tubular type, having orifices 2 therein for the purpose of allowing the gas to escape therethrough. 3 is a valve and 4 a suitable mixer for gas and air commonly found in this style of gas burner.

My improved hood 5 is adapted to rest upon the burner 1, as shown in Fig. 2, and in order that it may maintain its proper position upon the gas burner, I provide a pin 6 on the gas burner 1, which is adapted to enter a socket 7 provided on the under side and at the top of said hood or protector 5. The hood or socket 7 preferably extends only part way through the hood from the under side, as clearly shown in Figs. 3 and 5, thereby preventing said socket from becoming clogged or caked with burned grease or batter, which would render the hood difficult of removal.

My improved hood or protector is provided with a raised ridge 8 on its upper surface and along its longitudinal center line, from which the top surfaces 9 slope to either side, thus forming a water shed for the top of said hood. From these sloping top surfaces, the denticulated sides 10 extend.

It is readily seen that I provide a protector with a plain surface on the outside, thus preventing any refuse from accumulating on the top of said protector, and producing a protector that can easily be cleaned. The dentiform projections 11 are adapted to be placed a little above and at a point half way

between the orifices in said gas burner, in order to allow the refuse to drop off the dentiform projections 11 and fall between the blazes of the gas burner 1, thereby preventing grease or any ignitable substances from igniting.

If it is desired, the protector or hood 5 may be provided with ribs or arches 12, as best shown in Figs. 4, 5 and 6, and which are adapted to fit snugly to the burner 1. As many ribs 12 may be provided as desired, two being shown. The underneath part of the hood may then be hollowed out to allow for an air space over the burner 1, and between said arches or ribs 12. This provision for ribs may allow the protector to be kept cooler than otherwise. However, it is thought that the construction shown in Fig. 1 will not become overheated, even though it does engage the burner along its under surface, due to the fact that the orifices in the burner are placed near the bottom of same, and thereby direct the flame downwardly and away from the denticulated sides of the protector.

The sides 10 are preferably formed with saw tooth like or triangular projections extending downwardly, the space between each tooth or projection forming an inverted triangular or V shaped space. Thus any liquid refuse, such as grease or batter, running down the sides of the hood will be carried to the apex of the triangular projections and will then drop therefrom. It is readily seen that all grease, batter, etc., will reach the apex of said projections due to the fact that any refuse striking the apex or sides of the inverted V shaped spaces between the projections will follow the sides thereof to the extreme points or ends.

It will be apparent that my invention is capable of some modification without material departure from its scope or spirit, as for instance, instead of making the protector separate and detachable from the burner as above described, it may be formed integral therewith, as shown in Fig. 7, in which 1' represents the gas burner, 5' the hood, 8' the raised ridge, 9' the top surfaces, 10' the denticulated sides and 11' the dentiform projections, or it may be formed with hood 5'' raised ridge 8'' top surfaces 9'' denticulated sides 10'' and dentiform projections 11'' as shown in Figs. 4, 5, and 6.

What I claim as new and desire to secure by Letters Patent is:

1. In a broiler or waffle baker, the combination with a tubular gas burner of elongated formation, having a series of gas jet orifices extending therethrough downwardly and outwardly at its lower part, a substantially inverted V-shaped or triangular hood adapted to straddle said gas burner

and provided upon each side with a series of downwardly extending V-shaped triangular projections, each having a plain outer surface, each of said projections being arranged to extend between the adjacent gas jet orifices, whereby any liquefied refuse is adapted to pass down the edges of said projections and to drop off at the points thereof, substantially as set forth and for the purposes specified.

2. In a broiler or waffle baker, the combination with a tubular gas burner having a series of gas jet orifices extending therethrough at its lower part, a hood therefor adapted to straddle said gas burner and provided upon each side with a series of downwardly extending pointed projections, each having a plain outer surface and each being arranged to extend between the adjacent gas jet orifices, whereby any liquefied refuse is adapted to pass down the edges of said projections and to drop off at the points thereof, substantially as set forth and for the purposes specified.

3. In a broiler or waffle baker, the combination with a gas burner, a hood therefor provided with a series of downwardly extending pointed projections, each having a plain outer surface and arranged to avoid contact with the flame from the burner, substantially as and for the purposes specified.

4. In a broiler or waffle baker, the combination with a burner having gas jet orifices, of a hood therefor, having a plain outer surface and having a series of downwardly extending pointed projections integral therewith, said pointed projections having plain outer surfaces, and means for mounting said hood over said burner with a ventilating air space extending upwardly between said burner and said hood, and with the points of said projections extending downwardly midway of the adjacent gas jet orifices, substantially as set forth and for the purposes specified.

5. In a broiler or waffle baker, the combination with a tubular gas burner of elongated formation, having a series of gas jet orifices extending therethrough downwardly and outwardly at its lower part, a hood therefor provided upon each side with a series of downwardly extending pointed projections each having a plain outer surface, and each being arranged to extend between the adjacent gas jet orifices for the purposes specified, said hood having a socket in its under side and a pin projecting upwardly from said burner into said socket to detachably hold said hood securely in place, substantially as set forth and for the purposes specified.

6. In a broiler or waffle baker, the combination with a gas burner of elongated for-

mation, a hood therefor provided with a series of downwardly extending pointed projections, each having a plain outer surface and arranged to avoid contact with the flame from the burner, said hood having ribs upon its under side to support said hood out of contact with the burner during the greater portion of its length, substantially as set forth and for the purposes specified.

LOUIS FEY.

Witnesses:

JAMES N. RAMSEY,
WINONA DOAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
