May 13, 1941. J. R. DENISE 2,242,176

RIBBON BURNER

Filed Nov. 9, 1940

Fig. 1.

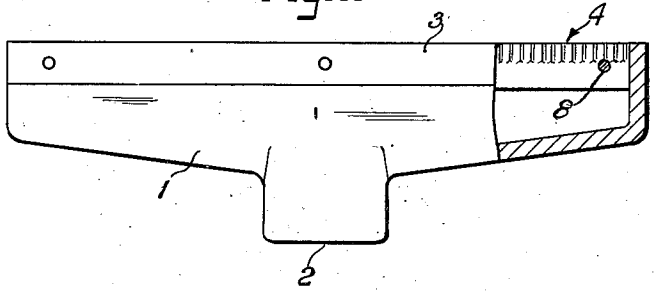


Fig. 2.

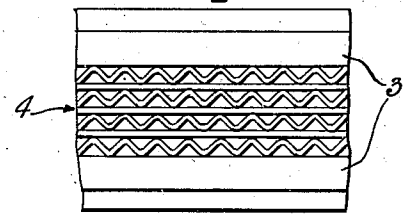
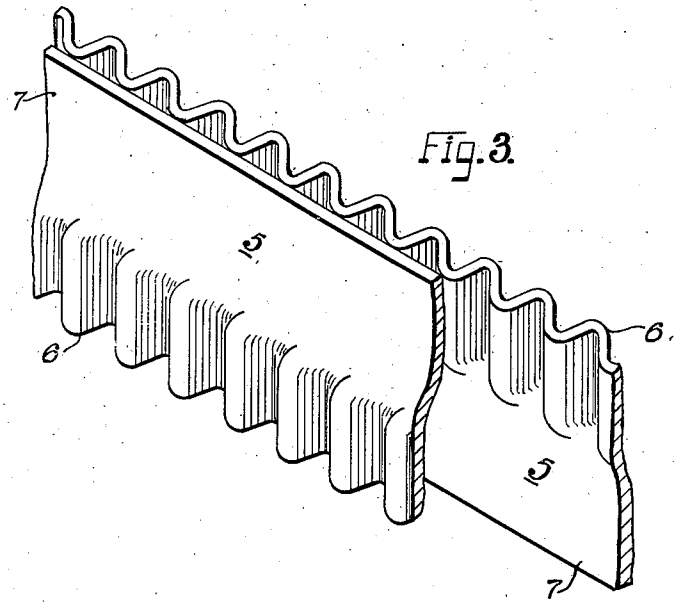


Fig. 3.



Inventor

J. R. Denise

By

Charles A. Lind

Attorney

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RIBBON BURNER

John R. Denise, Columbus, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a corporation of New York

Application November 9, 1940, Serial No. 365,077

3 Claims. (Cl. 158—116)

The present invention relates to ribbon burners and has for its object to provide an improved strip or ribbon for use in making up the grid of the burner.

In the accompanying drawing wherein the preferred form of the invention is shown,—

Fig. 1 is a side elevation (with a part broken away) of a burner head embodying the present invention;

Fig. 2 is an enlarged fragmentary plan view of the burner shown in Fig. 1, and

Fig. 3 is an enlarged perspective view of a sufficient portion of the grid to show the form and arrangement of the strips of which the grid is comprised.

In both Figs. 2 and 3, the size of the crimps or corrugations as compared with the thickness of the strip has been considerably exaggerated for clarity of illustration.

In the drawing, 1 indicates a conventional type of hollow burner head having an inlet 2 for combustible mixture and having a relatively long and narrow gas discharge passage in its top side, the side walls of the passage being indicated at 3. Mounted in said passage for dividing the issuing gas into a multitude of small streams is a grid 4 made up of a plurality of parallelly extending strips.

In accordance with the present invention the grid 4 comprises a strip 5 having a longitudinally extending series of transverse crimps or corrugations 6 which extend part way but not more than half way across the strip, the other portion 7 of the strip being flat. By arranging the strips side by side with the crimped edges alternately facing up and down, it is evident that the crimped portion between two flat portions will form a longitudinally extending series of relatively small size gas discharge ports. The assembled strips are held in place in the head in any preferred way as by cross pins 8.

What I claim is:

1. As an article of manufacture for a ribbon burner, a metal strip having a longitudinally extending series of transversely extending crimps along one longitudinal edge only of the strip whereby the said one longitudinal edge but not the other is sinuous in edge elevation.

2. As an article of manufacture for a ribbon burner, a metal strip having a longitudinally extending series of transversely extending crimps along one longitudinal edge only of the strip whereby the said one longitudinal edge but not the other is sinuous in edge elevation, the crimps being of a length not greater than one-half the width of the strip.

3. In a burner, a grid for dividing a stream of gas into a multitude of smaller streams comprising a plurality of metal strips arranged side by side in contacting relation, one longitudinal edge but not the other of each strip being sinuous in edge elevation and the sinuous edge of alternate strips being next to the non-sinuous edge of the other strips to form the grid.

JOHN R. DENISE.