Dec. 1, 1959 G. L. RISHELL 2,915,172

GETTER FLAG

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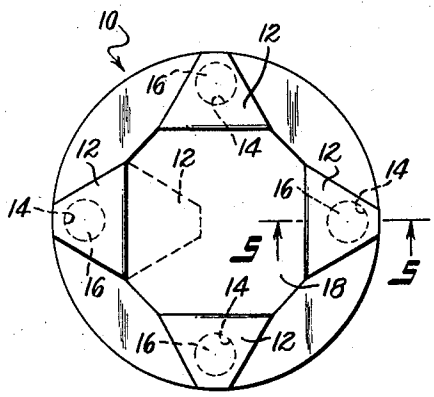


Fig. 1.

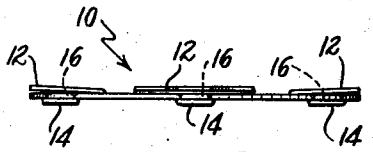


Fig. 2.

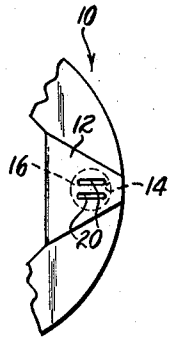


Fig. 3.

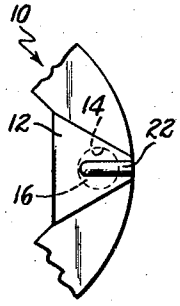


Fig. 4.

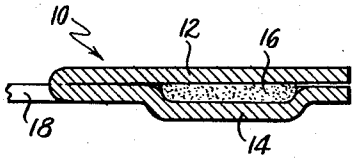


Fig. 5.

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GETTER FLAG

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Application December 19, 1958, Serial No. 781,625

4 Claims. (Cl. 206—.4)

This invention relates to getters such as are utilized in electron tubes to chemically clean up residual gases therein after they had been evacuated through the use of pumps or the like.

In some electron tubes because of the geometry of the electrodes as well as that of the insulating spacers, and because of the desirability of flashing the getter in only certain areas of the tubes, toroidal shaped getter supports or flags have been employed. A common form of getter flag comprises a washer of nickel with indentations in a surface of the washer to receive the getter pellets to be flashed and the washer is covered by a second nickel washer, suitable channels or cuts being made in the washers to permit volatilization and dispersion of the pellets when they are flashed.

It is an object of the invention to provide a getter support or flag of the washer type with getter pellet cover material and yet at a saving of labor in assembling the parts and in the amount of flag material utilized.

For a fuller understanding of the invention attention is directed to the following specification when taken in conjunction with the accompanying drawing in which:

Fig. 1 is a plan view of the getter flag and contained pellets.

Fig. 2 an end elevation thereof.

Fig. 3 is a fragmental view of the flag showing an apertured getter pellet retainer.

Fig. 4 is a similar view showing a channeled getter retainer and

Fig. 5 is an enlarged fragmentary sectional view taken on the line 5—5 of Fig. 1.

In carrying out my invention, a single thickness of a nickel plate is employed instead of the laminated plates of the prior art and the plate is initially stamped out to form a circular disc **10**. By the same tool, four center flaps **12**, trapezoidal in plan view, are formed, as well as four depressions **14** in the body of the plate. After the stamping operation, getter pellets **16** are placed in the depressions. Then the flaps are bent over at their bases into overlapping relationship with the plate, thus leaving a central opening **18**. The flay does not tightly

engage the body of the washer but extends at a slight angle thereto to enable vaporization and dispersal of the getter material held in the washer and serves mainly to direct the flow of vaporized material in the desired directions. In addition, the flaps may serve as a means to ensure retention of the unvaporized getter in the depressions. In Fig. 1, one of the flaps **12** is shown in dotted lines in the position it had been before it was bent over a portion of the plate containing a getter pellet.

If desired, as indicated in Fig. 3, the flaps **14** may be provided with slots **20** to permit easy dispersion of the pellet material upward when flashed or, as indicated in Fig. 4, with channels **22** leading from the far ends of the pellet recesses to the periphery of the washer to facilitate radial dispersion of the material.

The getter loaded flag is suitably carried by a fixed part of the electron tube by being welded thereto, as is customary in the art.

Having described the invention, whaft is claimed is:

1. A getter assembly comprising a washer having an outer periphery and an inner opening bounded by a wall, depressions in the upper surface of the washer, getter pellets in said depressions, and flaps having base portions integral with said wall and overlying the depressions.

2. A getter comprising a planar washer having an outer periphery and an inner central opening bounded by a wall, flaps formed out of the planar material of the washer integral with the washer and having base portions connected with the washer at said wall, depressions in the upper face of said washer, and getter pellets in said depressions, said flaps lying in contact with the washer and overlying the pellets.

3. A getter assembly comprising a washer having an outer periphery and an inner opening bounded by a wall, depressions in the upper surface of the washer, getter pellets in said depressions, and flaps having base portions integral with said wall and overlying the depressions, said flaps being slotted to permit dispersion of the getter material upon vaporization thereof.

4. A getter assembly comprising a washer having an outer periphery and an inner opening bounded by a wall, depressions in the upper surface of the washer, getter pellets in said depressions, and flaps having base portions integral with said wall and overlying the depressions, said flaps being channeled to permit dispersion of the getter material upon vaporization thereof.

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