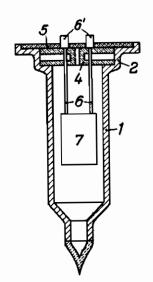
**PUBLISHED** MAY 25, 1943. BY A. P. C.

F. HERRIGER ELECTRON TUBES Filed Oct. 5, 1940 Serial No. 359,952



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## ALIEN PROPERTY CUSTODIAN

## **ELECTRON TUBES**

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Application filed October 5, 1940

This invention is an improvement upon electron tubes of the kind described in the copending patent application of Robert Herzog, Serial No. 295,083, filed September 15, 1939, and will be understood from the following description, reference being had to the accompanying drawing, which shows a longitudinal section of an example of tubes improved in accordance with the invention described hereafter.

In this drawing, I denotes the bulb of a vacuum vessel. The bulb is preferably of metal and has a flanged enlargement 2 in which an insulating disc-shaped member 4, preferably of ceramic material, is positioned. 5 indicates a disc made of moulded glass and sealed to the enlargement 2 in well known manner. In the disc 5 enlargements 6' of conductors 6 are embedded. The conductors 5 are the leads to the electrode system 7. They extend through member 4 in order to be held by it in the proper position when the 20 disc 5 is being sealed to the bulb 1, 2 and thus softened.

In the prior arrangement, disclosed in the said

co-pending application, disc 5 and member 4 are spaced apart so that there is a clearance between the two. During the sealing operation, that is, when the disc 5 is softened the assembly 5, 6', 6, 7 is supported by the member 4 contacting with the enlargements 6'.

According to the present invention member 4 is arranged to contact over its entire outer end face with the inner end face of the disc 5, as shown, so that the disc 5 when sealing it to the bulb 1, 2 will be sealed also to the member 4.

The invention combines the simple manufacture of the glass disc 5 with the advantages due to the supporting member 4. In the novel arrangement the leads 6 are sealed into the member 4 by means of the disc 5 while in the prior arrangement they are not. The disc 5 may be made of a low-melting glass, since this disc, contacting with the member 4 supporting it, need not have any bearing capacity during the sealing operation.

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