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accelerating electrodes, whereby both electrodes have a geometry so that the equipotentials at the mouth of said anode are shaped to obtain near uniform resolution of the electron image focused upon said flat converter screen over essentially all parts of said converter screen.

2. The apparatus of claim 1 wherein the central aperture of said electrode immediately preceding said anode has an exit portion with dimensions constricted substantially relative to the dimensions of its mouth portion.

3. The apparatus of claim 2 wherein said central apertures in said electrodes have approximately the following relative dimensions where d is the maximum diameter of the first upstream focusing electrode, anode electrode apertures $0.12d$ in diameter and $0.19d$ in length, next preceding upstream electrode from said anode having an aperture $0.45d$ in diameter at the

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mouth constricted to $0.27d$ in diameter midway along its length with the length of the mouth portion being $0.13d$ and the constricted mid portion being $0.22d$ in length, the second upstream electrode from said anode having a central aperture $0.60d$ in diameter and $0.29d$ in length, and the first upstream one of said electrodes having a central aperture $1.0d$ in diameter and $0.53d$ in length.

4. The apparatus of claim 3 including means for producing and applying the following potentials to said electrodes where A is the potential applied between said photoemitter and said converter screen: A potential to said anode electrode, $0.1A$ potential to said next preceding electrode from said anode, $0.03A$ to said second electrode upstream from mid anode and $0.01A$ to said first electrode.

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