

See Sec. 1.13. For example, if the linear dimensions of the new enclosure are two times that of Fig. 1.9, the frequency scale of Fig. 1.10 should be multiplied by one-half.

Another example of diffraction of sound is illustrated by the zone plate shown in Fig. 1.11. The path lengths of the sound from the source to the focus vary by an integral wavelength. As a consequence, all the pencils of sound are in phase at the focus with the result that the sound pressure is considerably greater at this point than any other position behind the zone plate.

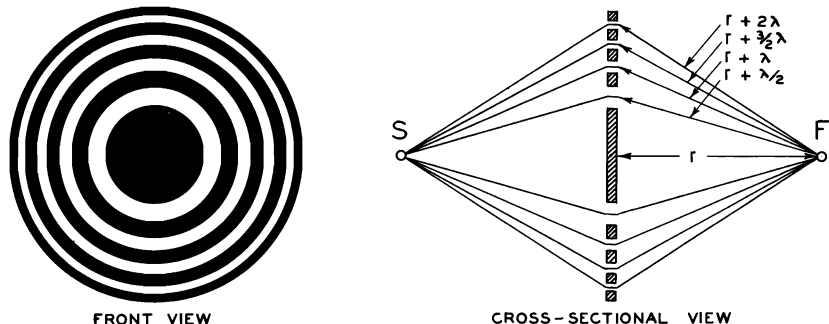


FIG. 1.11. Zone plate. The source S and the focus F are equidistant from the zone plate.