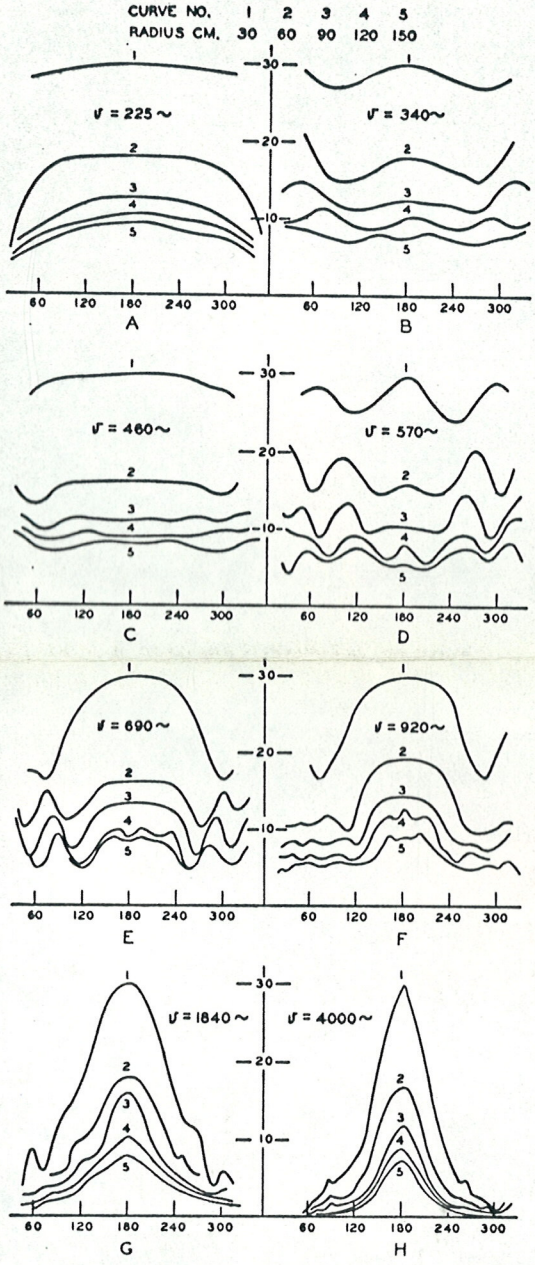

FIG. 3. Sound pressure *vs.* azimuth angle for cornet.

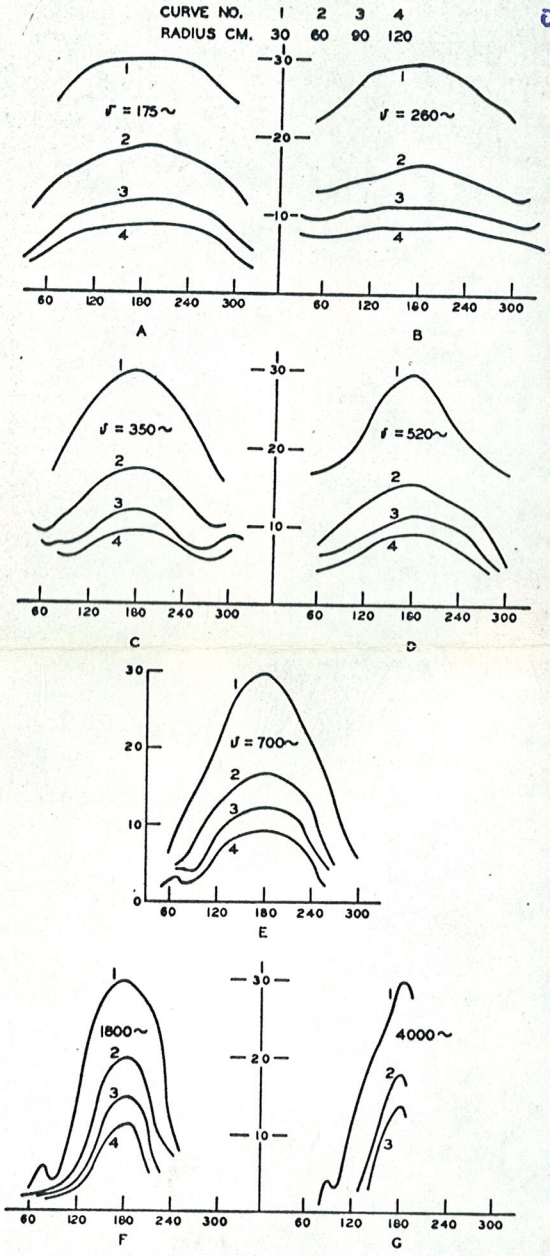

FIG. 4. Sound pressure *vs.* azimuth angle for French horn.

an improvement on the single-point analysis, although a family of curves showing how the pressure wave analysis changes with position would give more complete information. Use of a power output analysis would recognize the existence of radiation properties in the summation process. Furthermore, such an acoustic spectrum could be more easily related in theory to the driving force and to the transmission properties of the instrument. It is probable that tests made on the same instrument by different reliable methods used in different surroundings would be in better agreement if the acoustic power spectrum were used exclusively.

The following experiments furnish an example showing how such an acoustic power spectrum may be obtained. As shown in Fig. 2, a cornet was played by a system consisting of an electrical