commercial relations with other units of the Bell System; an extensive library service with translators and bibliographers; the maintenance of correspondence files; transcription, photograph, photostat, and blue printing services; the assembling of technical information; the maintenance of the historical museum with its extensive and well ordered collections of apparatus covering almost fifty years; personnel activities, including education, employment, and medical service; and the bureau of publication.

The larger group of the Laboratories numbers some two thousand members of the technical staff. Excluding for the moment certain staff engineers, concerned with commercial developments and the exploitation of the electrical stethophone, the audiometer, the artificial larynx, and other by-products, the technical staff is divided into five main groups. One of these is concerned with patents and it is the function of this group to insure adequate patent protection for the ideas and developments of its associates.

The remaining four groups are known by the terms: Research, Apparatus Development, Systems Development, and Engineering Inspection. The activities of these four groups are, however, so closely related and so harmoniously coordinated, involving as they do the informal exchange of considerable information between members of the various groups, that the contributions of the respective groups frequently overlap and represent cooperative rather than individual activities. Certain broad lines limiting the activities of the groups are, however, implied in the names mentioned above, and are adhered to in the organization and coordination of their activities. It is the general function of the research group to be concerned with the development of physical principles; of the apparatus group with the embodiment of these principles in commercially designed apparatus suitable to perform desired functions in complete systems; of the