## The Bell System Technical Journal

Volume XXXI

July 1952

Number 4

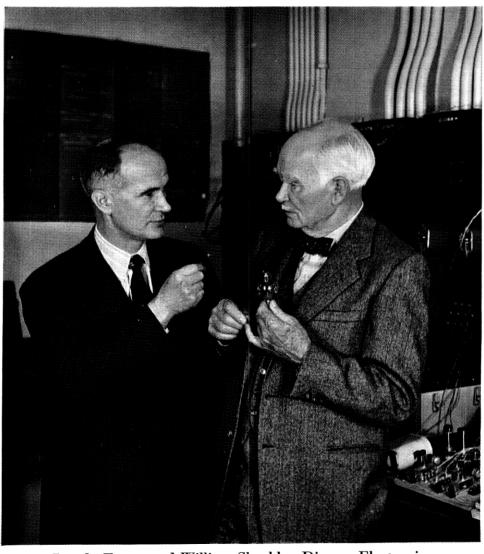
COPYRIGHT 1952, AMERICAN TELEPHONE AND TELEGRAPH COMPANY

## Thirtieth Anniversary

Thirty years ago this month The Bell System Technical Journal began publication. Suggested by Dr. George A. Campbell, it had been under discussion for some years. Dr. R. W. King, who had been one of its most active advocates, became its editor when the staff of the Journal was established. Except for a six-year period following 1928, while he was in England, Dr. King continued as editor until he retired in 1949.

By July, 1922, when No. 1, Vol. 1 of the Journal appeared, research and development was a long established practice in the Bell System. The high-vacuum electronic tube, which had already begun to revolutionize electrical communication, was itself a product of Bell System research. Since electrical communication was a still comparatively new field of study, however, its publications were widely scattered. There seemed a need for a magazine that would serve the communication engineers exclusively, and it was largely to meet this need that The Bell System Technical Journal was launched.

In the thirty years since that time, the art and science of communication has advanced and ramified beyond anything likely to have been then foreseen. A very substantial part of this increase has originated within the Bell System, and this progress has been reflected in the pages of the Technical Journal. There seems little reason to doubt that the next three decades will witness an advance at least comparable with that of the past three, and it is planned to have the Journal present the work of the coming years, with perhaps even greater effectiveness than in the past. Abstracts or titles of all Bell System technical and scientific papers appearing in other publications are listed in the Journal and reprints of many of these papers are available and may be obtained by subscribers. In one way or another, therefore, Journal readers have access to essentially all the technical papers published by the Pell System. With this increased coverage, it is hoped that the Journal will prove increasingly useful to a growing circle of readers.



Lee de Forest and William Shockley Discuss Electronics

Dr. de Forest is the inventor of the Audion from which the modern vacuum tube in its many forms and types has sprung. Dr. Shockley is the leader of the research group at Bell Telephone Laboratories whose members invented the transistor. Standing side by side these two men seem to epitomize the basic change in the pattern of our technical life which has taken place during the first half of the present century—the change from the struggling individual inventor to the great industrial scientific laboratory as the source of much of our technological advance.