SCIENCE

30 May 1958

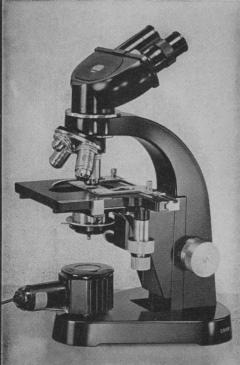
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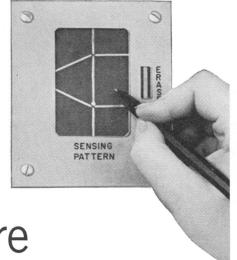


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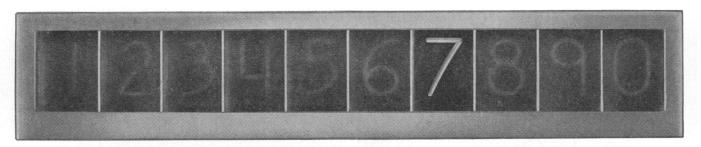
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Write a numeral here



and read it here



on new Bell Labs machine

A new device invented at Bell Laboratories "reads" a numeral while it is being written and instantly converts it into distinctive electric signals. The signals may be employed to make a numeral light up in a display panel, as above, or they may be sent to a computer or to a magnetic "memory" for storage.

The writing is done with a metal stylus on a specially prepared surface. Two dots, one above the other, are used as reference points. Seven sensitized lines extend radially from the dots. Transistorized logic circuits recognize numerals according to which lines are crossed.

The concept of a number-reader has interesting possibilities as a new means of commu-

nication from humans to machines. For example, in an adjunct to a telephone, it might provide inexpensive means of converting handwritten data into signals which machines can read. The signals could be transmitted through the regular telephone network to a teletypewriter or computer at a distant point. In this way, a salesman might quickly and easily furnish sales data to headquarters, or a merchant might order goods from a warehouse.

Modern communication involves many more fields of inquiry than the transmission and reception of sound. The experimental number-reader is but one example of Bell Telephone Laboratories work to improve communications service.



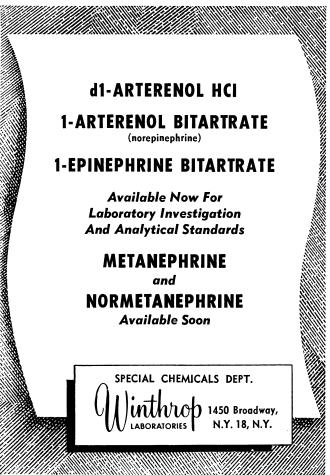
Tom Dimond, a B.S. in E.E. from the University of Iowa, demonstrates an experimental model of his number-reading invention. A similar device can also be made to read alphabetical characters. Small size and low power requirements result from transistor circuitry.



BELL TELEPHONE LABORATORIES

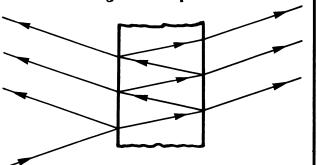
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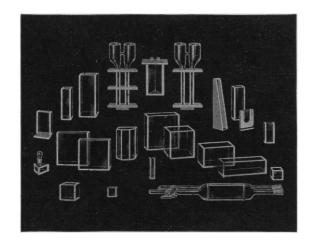
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