



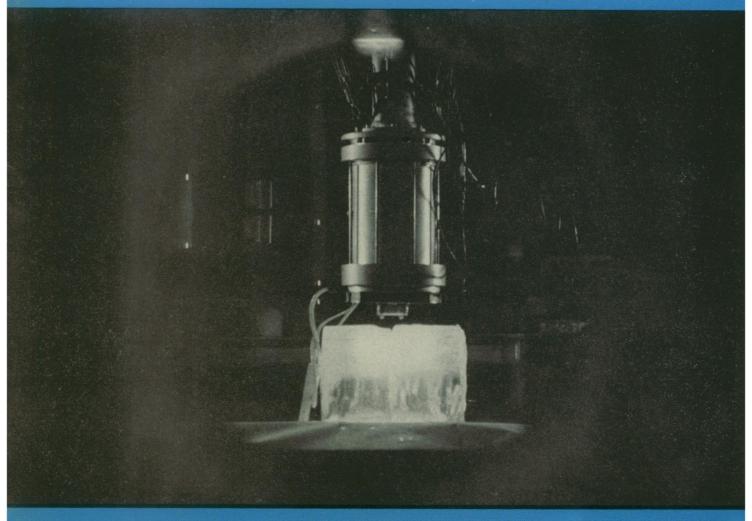
VOL. 73 NO. 18 PAGES 273-288

# SCIENCE NEWS LETTER



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THE WEEKLY SUMMARY OF CURRENT SCIENCE

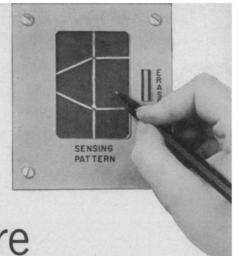


"Hot" Ice

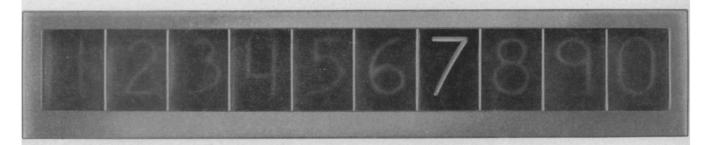
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A SCIENCE SERVICE PUBLICATION

# 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.



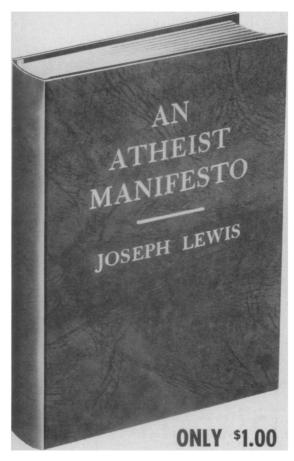
Tom Dimond, a B.S. in E.E. from the University of Iowa, demonstrates an experimental model of his number-reading invention. A similar device can also be made to read alphabetical characters. Small size and low power requirements result from transistor circuitry.



BELL TELEPHONE LABORATORIES

World Center of Communications Research and Development

# A Declaration Of Intellectual Independence



**Highly Praised** 

### PROF. ALBERT EINSTEIN:

Here is my comment on your book, "An Atheist Manifesto." Superstition and tyranny by hierarchy are grave evils, and it is pleasing that you are carrying on such a decisive and determined fight against them . . Because without the struggle of men who can see and are relatively free, conditions in the world would be much worse.

### PROF. A. J. CARLSON:

I have now read the "An Atheist Manifesto" by Joseph Lewis with great care. It is, on the whole, factual and fair. But the historical and scientific information available to Joseph Lewis is not available to hundreds of millions of homo sapiens in our world today. They live, mentally, on past tradition based on ignorance and guessing.

Emotional traditions can be eradicated only by factual

#### WILLIAM J. FIELDING:

I have read with enthusiasm and pleasure your thought-provoking book, "An Atheist Manifesto." It is a devastating onslaught on religious superstition, which unfortunately remains the Sacred Cow—the Untouchable—in all the conventional media of modern life. Your book is a telling repudiation and refutation of the stultifying God-idea. Having smashed the Icons, you point out the road to Reason, the path to intellectual honesty, true social progress and human brotherhood.

Fear and Anxiety characterize our generation. We are being driven far from the Truth. How does Religion promote this condition? How does Atheism work to make all men free?

In simple, yet bold and vigorous language, the author enunciates the basic principle of the Philosophy of Atheism—the Philosophy of Courage.

This new book is a challenge to world thinking, and throws down the gauntlet of battle not only to the religionists, but also to our educators and political leaders.

It is a brilliant call for courage in an age of caution:

It is a profound argument for intellectual integrity in a time of moral cowardice.

It is a book that should be read and re-read. It is truly A Declaration of Intellectual Independence.

It is no easy thing to live as an independent human being in this age of fear and the suppression of ideas. It is becoming increasingly difficult to even think for ourselves—and thinking must come before action. And to be free, man must act.

To men who want to think, Joseph Lewis' new book will be a revelation, a treasure-house of ideas, a continuing source of inspiration.

treasure-house of ideas, a continuing source of inspiration.
"An Atheist Manifesto" is a brilliant call for courage in an age of caution; it is a profound argument for intellectual integrity in a time of moral cowardice. It points the way others took to true Freethought—that company of giants that includes Socrates, Spinoza, Voltaire, Thomas Paine, Robert G. Ingersoll and Bertrand Russell. It is a book to be read and re-read. Be sure to send for your copy today.

### Some of the Subjects Discussed

Was man specially created, or is he a product of evolution?

Is disease a punishment for sin, or is it the natural consequence of life?

Has man a destiny, or is he doomed to oblivion?

Has Prayer even been answered? Are all prayers acts of moral cowardice?

Has a belief in God been a shackle upon the brain of man?

Could a religionist have discovered Anaesthesia?

What has been the influence of a brief in God upon war, intellectual progress and social justice?

Does a belief in God help or hinder the ethical and moral conduct of man?

And many other subjects too numerous to mention in this special announcement.

"An Atheist Manifesto" is printed on fine quality, high bulk book paper and is handsomely bound—with title stamped in contrasting color.

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370 West 35th Street, New York 1, N. Y.
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