

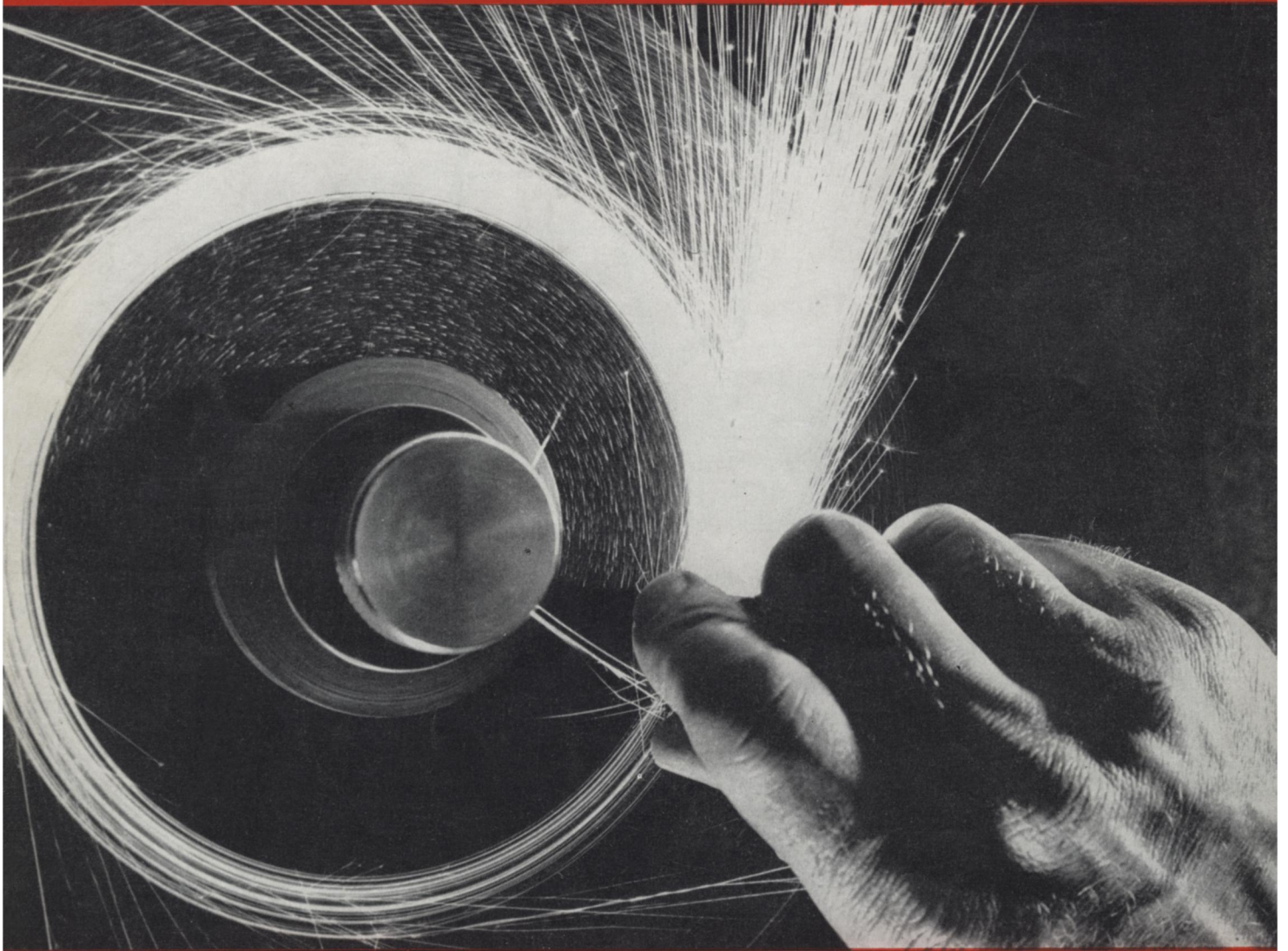
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FEBRUARY 11, 1950

# SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



**Outmoded Sparks?**

See Page 91

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New scintillation counter, using electron tube developed at RCA Laboratories, gives faster, more accurate measurements of atomic radiations.

## *What can you hear through an **ear of grain?***

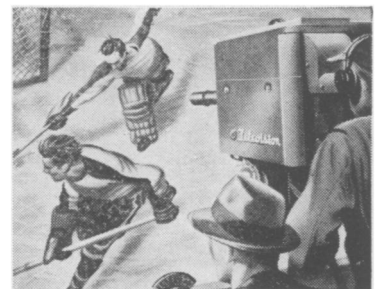
**W**hen agriculturists want to learn what nourishment a plant is getting, they inject radioactive materials into the soil and trace their absorption with sensitive instruments. Industry and medicine also use this ingenious technique to gain needed knowledge.

Until recently, scientists literally *heard* what was happening, for they followed the passage of atomic materials through plants or machines, or even the human body, with a clicking Geiger counter. Now a more sensitive instrument — a new scintillation

counter made possible by a development of RCA Laboratories—can do the job more efficiently.

Heart of this counter is a new multiplier phototube, so sensitive that it can react to the light of a firefly 250 feet away! In the scintillation counter, tiny flashes, set off by the impact of atomic particles on a fluorescent crystal, are converted into pulses of electrical current and multiplied as much as a million times by this tube.

See the newest advances in radio, television, and electronic science at RCA Exhibition Hall, 36 W. 49th St., New York. Admission is free. Radio Corporation of America, Radio City, N. Y.

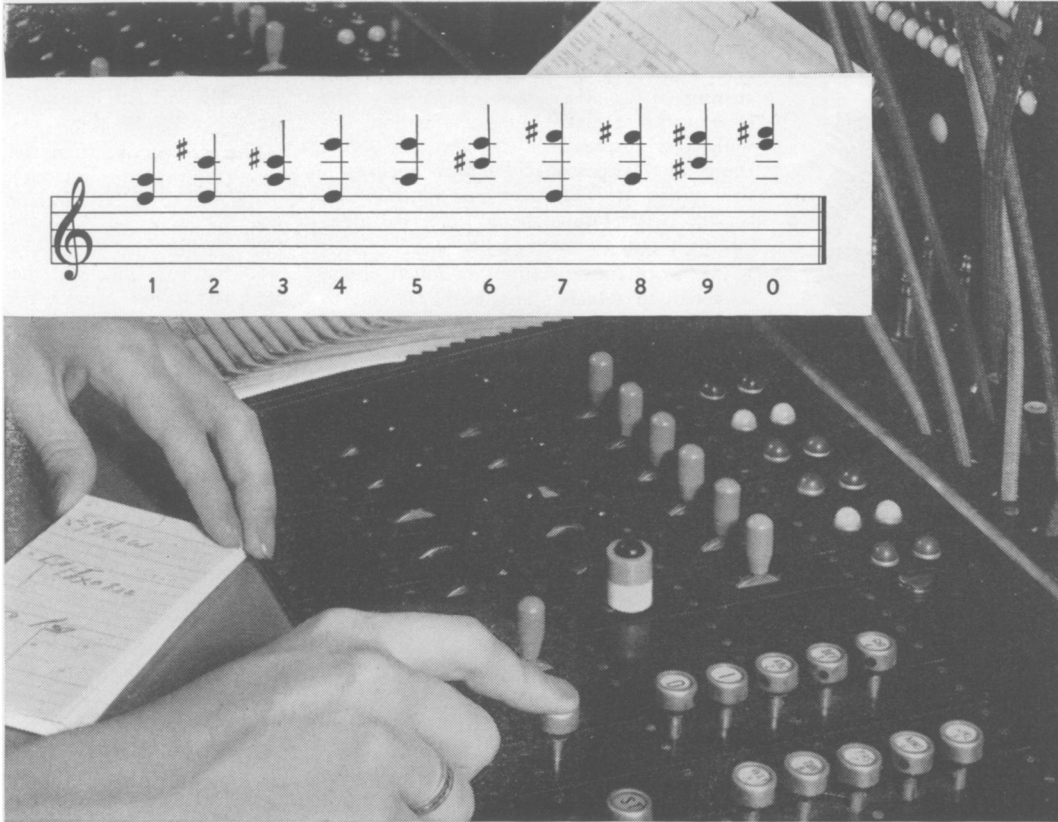


The principle of RCA's multiplier phototube is also used in the super-sensitive RCA Image Orthicon television camera, to give you clear television pictures in dim light.



**RADIO CORPORATION of AMERICA**

*World Leader in Radio — First in Television*



Above is the Bell System's new "musical keyboard." Insert shows the digits of telephone numbers in musical notation, just as they are sent across country.

## ***Playing a tune for a telephone number***

Before you talk over some of the new Bell System long distance circuits, your operator presses keys like those shown above, one for each digit in the number of the telephone you are calling. Each key sends out a pair of tones, literally setting the number to music.

In the community you are calling, these tones activate the dial telephone system, to give you the number you want. It is as if the operator reached across the country and dialed the number for you.

This system, one of the newest developments of Bell Telephone Laboratories, is already in use on hundreds of long distance lines radiating from Chicago, Cleveland, New York, Oakland and Philadelphia, and between a number of other communities.

It will be extended steadily in other parts of the country—a growing example of the way Bell Telephone Laboratories are ever finding new ways to give you better, faster telephone service.

**BELL TELEPHONE LABORATORIES**

Exploring and inventing, devising and perfecting, for continued improvements and economies in telephone service

