

15¢

April 7, 1951

SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Turbo-prop Transport

See Page 219

A SCIENCE SERVICE PUBLICATION

\$5.50 A YEAR

VOL. 59 NO. 14 PAGES 209-224



"Mr. Bell, I heard every word you said—distinctly!" Thus, on March 10, 1876, Alexander Graham Bell (left) learned that his invention had transmitted the first intelligible speech.

75 Years of Tomorrows

Like today's telephone, Alexander Graham Bell's invention was a product of research. For several years Bell had been investigating speech and hearing, and devising methods and apparatus for the electrical communication of intelligence. No one had transmitted speech sounds electrically but Bell saw that it must be possible—given the proper instruments.

One day, while experimenting with his harmonic telegraph, Bell's alert ear caught an unexpected sound in the receiver. His trained mind told him that here at last was the proof that sound waves could travel as their facsimile in electric waves. Then followed a year of development, and in 1876, as shown above, he transmitted the first intelligible speech by telephone.

During the next three-quarters of a century, the telephone research which Bell started has grown and expanded to serve your telephone system . . . often fruitfully overflowing into other fields of electrical communication.

In today's Bell Telephone Laboratories, promising ideas find the right skills to bring them to life. Through skilled manufacturing by Western Electric Company and skilled operation by the telephone company they are brought to the service of the telephone user.

The high quality of your telephone today, its fine, swift service at reasonable cost, are the products of work in the telephone laboratories in the past. The greater value you may expect in the future is taking form there already.



BELL TELEPHONE LABORATORIES

Exploring and Inventing, Devising and Perfecting, for Continued Improvements and Economies in Telephone Service

Yardstick for Progress

➤ How can a student measure his progress in science except by comparison of accomplishments with those of others? Unless some easily recognizable standards are established nationally there is no way to evaluate success, or even to suggest paths for improvement by the expedient of comparative methods.

Fortunately, in the field of student-made science exhibits the National Science Fair does present an opportunity for both personal and expert evaluation. This Fair, made possible by local newspaper cooperation with leading educators and Science Clubs of America, the latter administered by Science Service, has as one of its aims and purposes the development of richer science exhibits through National recognition of worthy efforts. Thus it offers National honors in the field of extracurricular scientific efforts comparable in effect with those available in the field of sports and certain scholastic competitions.

Throughout this country and in some foreign lands, science fairs have been galvanized into action by direct efforts of Science Clubs of America. Local awards usually are presented for the outstanding exhibits. By bringing together all exhibits judged best regionally it becomes possible for the student to improve his own performance. Further than that, the student broadens his interest by meetings with world renowned scientists and other student Finalists.

By seeking to attain the rank of a Finalist in the National Science Fair the student performs a service to himself, instructor, school, community and paves the path toward a better, broader scholastic record.

The ability to envisage and portray a scientific event, demanding certain specialization at the student's level far beyond that required of

his classroom studies, encourages original thinking and fortifies it with action.

It is not the hope of capturing part of the \$1,000.00 in "Wish Awards" which is the real thrill, according to the Finalists of the First National Science Fair. They are unanimous in listing as outstanding the opportunity of engaging in the program, the friends they have made and the winning of the Gold and Silver Finalist Medal with its proud reflections on the schools and cities and newspapers.

Each Finalist to the National Science Fair is awarded this solid silver and gold medal with rainbow ribbon, engraved with name and cooperating newspaper. Number of finalists from each area is limited by quota.



Aids National Security

**Local-National Science Fairs Encourage Scientific Leadership
A Message from W. Stuart Symington,
Chairman, National Security Resources Board**

Scientific and technical know-how have made this Nation a leader among nations, and will keep it so.

Newspapers and educators, aware of the critical shortage of scientific personnel, are striking at the roots of the problem in a cooperative effort to encourage scientific interests at the student level through such media as Science Fairs.

With this sort of watchful leadership America never will be caught technically unprepared.

W. STUART SYMINGTON

Finalists to Meet Nobelists

Dr. Arthur H. Compton, Chancellor of Washington University and winner of the Nobel Prize in Physics in 1927, will be the keynote speaker at the dinner in honor of the Finalists of the Second National Science Fair.

Other Nobelists invited to attend are Dr.

Joseph Erlanger, Medicine and Physiology in 1944, and Dr. Carl F. Cori and wife Dr. Gerty Cori, Medicine and Physiology Nobelists in 1947, and Prof. Edward A. Doisy, Medicine and Physiology, 1943.

FAIR FINALISTS BECOME STS WINNERS



Up from the Ranks—When names were disclosed of winners in the tenth Annual Science Talent Search, 17-year-old Mary Helen Martin, Hyattsville, Md., was listed among the top 40. One of the four finalists from the Washington, D. C. Science Fair, she took 3rd place honors at the First National Fair in Philadelphia in 1950. At least 17 of the 260 Honorable Mentions in the tenth Search won one or more awards at local fairs.

Ten States and D. C. in National Science Fair

Exhibits judged best at the Fairs listed below, together with the selected Finalists, will represent their areas and their sponsoring newspaper at the National Science Fair in St. Louis, May 10-12, 1951 and partake of all the ceremonies scheduled for them.

Northern Connecticut Science Fair
Hartford Times, Hartford, Conn.
Tri-State Science Fair
Evansville Press, Evansville, Ind.
Quadri-County Science Fair
Archbold Buckeye, Archbold, Ohio
Oklahoma City Science Fair
Oklahoma City Times, Oklahoma City, Okla.
East Penn Science Congress and Fair
Call-Chronicle, Allentown, Pa.
Third Annual Greater Philadelphia Science Fair
Philadelphia Inquirer, Philadelphia, Pa.
Rhode Island Schools' Science Fair
Journal-Bulletin, Providence, R. I.
Fourth Annual Greater St. Louis Science Fair
St. Louis Star-Times, St. Louis, Mo.
Eastern New York Science Congress and Fair
Knickerbocker News, Albany, N. Y.
Oneonta Science Congress and Fair
Oneonta Star, Oneonta, N. Y.
North Dakota Science Fair
Grand Forks Herald, Grand Forks, N. D.
Martinsville Science Fair
Martinsville Bulletin, Martinsville, Va.
Fifth Annual Washington, D. C. Science Fair
Washington Daily News, Washington, D. C.