of a scientific nature, all of them have participated in varied extracurricular interests such as music, athletics, journalism and dramatics, and all belong to social and educational organizations.

Many of the top 40 have already chosen the lines of study they wish to pursue. Physics attracts eight, while 11 lean toward careers in engineering, and four intend to study medicine. Others plan careers in geology, mathematics, chemistry, biology, entomology, paleontology, geochemistry, and zoology. All hope to do research in their respective fields.

#### 260 Honorable Mentions

Well over half of the 440 winners in the first 11 Science Talent Searches held since 1942 now have undergraduate degrees. Masters' degrees have been earned by 64 and doctors' degrees (M.D., Ph.D., D.Sc.) have been granted to 40 of the 440. More than 85 are now employed full-time in science jobs in industry, government or professions, or are on university teaching or research staffs. None of the 440 previous winners is more than 30 years old.

In addition to the 40 trip-winners, who will attend the Science Talent Institute in Washington, an Honorable Mentions list of 260 in the Twelfth Annual Science Talent Search will be announced Feb. 5. These high ranking contestants will be recommended to colleges and universities for their aptitude in science.

If they are as fortunate as those previously included in the Honorable Mentions list, they will receive offers of scholarships from many institutions of higher education seeking students with talent in science.

#### **Concurrent State Searches**

Through an arrangement with Science Clubs of America, 25 states and the District of Columbia are conducting state Science Talent Searches concurrently with the national competition. Twelve of them have produced winners this year. In these 26 areas all entries in the national Science Talent Search will be turned over to state judging committees.

From their entries they will choose state winners and award scholarships to various colleges and universities within the state. Cooperating states are: Alabama, Arkansas, Connecticut, District of Columbia, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia. West Virginia and Wisconsin.

The Annual Science Talent Search is conducted by Science Clubs of America, administered by Science Service. Scholarships are provided and the Science Talent Search made financially possible by the Westinghouse Educational Foundation, an organization endowed by the Westinghouse Electric Corporation, for the purpose of promoting education and science.

GENERAL SCIENCE

## Winners Selected

\* Indicates girls

H. S. indicates High School

ARIZONA

Phoenix

\*Spangehl, Karen Mateel 16 North Phoenix H. S.

**CALIFORNIA** 

Los Angeles

Brayton, Paul Richard 17 James A. Garfield H. S. Clark, Dennis Richard 18 University H. S. Willis, John Steele 18 Pasadena City College H. S.

CONNECTICUT

Lakeville

Pasadena

French, Thayer Carlton 17 The Hotchkiss School Home: Sewickley, Pa.

**GEORGIA** 

Atlanta Chamblee \*Wright, Nancy Eleanor 17 Joe E. Brown H. S. Menhinick, Edward Fulton 17 Chamblee H. S.

Evanston Glen Ellyn Tangora, Martin Charles 16 Evanston Township H. S. Reynolds, John Charles 17 Glenbard Township H. S.

INDIANA

Bloomington Valparaiso

\*Hopf, Barbara Erika Gertrude 16 University H. S. Swarner, David Reynolds 15 Valparaiso H. S.

MASSACHUSETTS

Weston

Phillips, Edward Alan 15 Weston H. S.

MINNESOTA

Rochester

Moffet, Alan Theodore 16 Rochester Senior H. S.

MISSOURI

Independence

Larson, James Daniel 17 William Chrisman H. S.

NEW HAMPSHIRE

Exeter

Mumford, David Bryant 15 The Phillips Exeter Academy Home: Summerland Key, Fla.

NEW JERSEY

Cranford Highland Park Isles, David Frederick 17 Cranford H. S. Sosin, David Elliott 17 Highland Park H. S.

NEW YORK

Brooklyn

Monsky, Paul Henry 16 Brooklyn Technical H. S. \*Forman, Merle Regina 16 Erasmus Hall H. S.
Gross, Charles Gordon 16 Erasmus Hall H. S.
Rubinstein, Robert Leonard 15 Lafayette H. S.
Resnikoff, Howard Lenard 15 Abraham Lincoln H. S. Resnikoff, Howard Lenard 15 Abraham Shore, Robert Avery 16 Midwood H. S. Pearlmutter, Arthur Edward 16 Forest Hills H. S. Strax, Norman 17 Great Neck H. S. \*Duchane, Emma Marie 16 Hunter College H. S. \*Itokawa, Etsuyo 17 Hunter College H. S. \*Russ, Joanna Ruth 15 Wm. H. Taft H. S.

Forest Hills Great Neck New York

Painted Post Cassidy, Harry Joseph 18 Painted Post H. S. Tottenville

Harte, Kenneth Jeremy 17 Scarsdale H. S. Lubin, Jonathan Darby 16 Tottenville H. S.

Pirone, Dominick Joseph 16 Archbishop Stepinac H. S.

Mansfield

Scarsdale

White Plains

\*Kirtley, Mary Elizabeth 17 Mansfield Senior H. S.

**OKLAHOMA** 

Tulsa

Claytor, Richard Nelson 17 Central H. S.

OREGON

Portland

Wolfe, Jack Albert 16 Franklin H. S.

#### PENNSYLVANIA

Allentown Schmoyer, Laurence Frederick 17 Allentown H. S.

SOUTH DAKOTA

Vermillion Winter, John Mack, Jr. 17 Vermillion H. S.

**TEXAS** 

Austin Barnes, Virgil Everett, Jr. 17 Austin H. S.

VIRGINIA

Norfolk \*Mitchell, Merle Almazetta 15 Booker T. Washington H. S.

WISCONSIN

Oshkosh Grant, Michael Peter 16 Oshkosh H. S.

Science Clubs of America is the international organization for science groups, in schools and out. Today more than 15,000 clubs are affiliated here and abroad, with a membership of more than one-third of a million young people.

The judges of the Science Talent Search are: Dr. Harlow Shapley, Harvard College Observatory and president of SCIENCE SERVICE; Dr. Harold A. Edgerton, vice president, Richardson, Bellows, Henry & Co., New

York City; Dr. Steuart Henderson Britt, vice-president and director of research, Needham, Louis and Brorby, Inc., Chicago; and Dr. Rex E. Buxton, psychiatrist of Washington, D. C. Drs. Edgerton and Britt design the examination.

Complete details of the national and the 26 State Science Talent Searches are available from Science Clubs of America, 1719 N St., N.W., Washington 6, D. C.

Science News Letter, January 31, 1953

GENERAL SCIENCE

### Science Decisions Ahead

➤ PRESIDENT EISENHOWER in the next four years will have to deal with forces of science more powerful than all the billions of dollars at his disposal.

He may be able to turn these powerful forces toward constructing a peaceful and prosperous world. Or he may have to turn them toward constructing the most terrible weapons man has ever seen.

Ex-President Truman set the goal for his successor in his farewell message to the people: "Think what can be done, once our capital, our skills, our science—most of all atomic energy—can be released from the tasks of defense and turned wholly to peaceful purposes all around the world.

"There is no end to what can be done." Right now the nation, in its universities, in its industrial research laboratories and in its government, has the greatest scientific plant in all history. The new president will have much to say as to how the more than two billion dollars a year the government devotes to scientific research is spent. Now most of it goes into development of new weapons and improvement of older weapons and military equipment.

Facing him is a decision about the H-bomb. Should the Atomic Energy Commission go all out now on stockpiling H-bombs, or should construction of A-bombs continue to have importance? Here the scientific merges with the strategic. The question becomes one of the most efficient use of scarce fissionable material.

The new President will also have to decide how much of the Atomic Energy

Commission's efforts should be directed toward development of the peaceful uses of atomic energy. Should the attempt to build an economical reactor to produce power for industry be speeded? What part should private industry play in the development of atomic power for factories?

These questions will be discussed in Congress, too. Right now Congressional opinion seems to be in favor of allowing private industry to develop atomic power by giving it the right to own fissionable materials. This will necessitate a change in the present law.

Science News Letter, January 31, 1953

PLANT PATHOLOGY

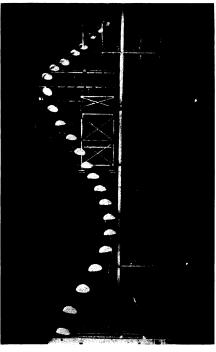
# Zanzibar Clove Crop Is Attacked by Fungus

➤ THE CLOVE crop of Zanzibar, which provides nine-tenths the world's supply of this spice, perfume and medicine, is being destroyed by the sudden-death disease.

Two scientists from Britain's Rothamsted Experimental Station, investigating this disaster to Zanzibar's principal crop, have found that it is due to a fungus of an undescribed species of *Valsa*, which attacks the root system and then spreads to the whole tree.

Young trees are comparatively resistant and seedlings are immune, it is revealed in the report sent to *Nature* (Jan. 17) by F. J. Nutman and F. M. Roberts.

Science News Letter, January 31, 1953



PHOTOGRAPHIC PARACHUTE STUDY—The free-fall tendencies of various kinds of parachutes can be studied, using a series of timed stroboscopic exposures, taken at night under powerful spotlights.

AERONAUTICS

### Parachutes Get Workout In Big Airplane Dock

MAKESHIFT ELEVATOR shafts have given way to a spacious building at the Goodyear Aircraft Corporation, Akron, Ohio, as a site for testing new parachutes for jet-age aviators.

The building, an airplane dock, is the largest in the world without interior supports. It supplants silos, elevator shafts and outdoor tower installations, and reduces the number of expensive actual flight tests that new-design parachutes must go through.

From its 200-foot high ceiling, the largest military and civilian types of parachutes can be dropped. The building shelters the 'chutes from interfering wind currents and lets scientists study their flight paths, drag, stability, weight-carrying capacity and opening characteristics.

The controlled "atmosphere" permits a series of scientific photographs to be taken as the parachute blossoms into fullness and lowers its weight to the floor. The enclosed building also lets one parachute be compared to another under the same conditions.

The parachutes are being tested under an Air Force contract by a team of engineers from Goodyear Aircraft's research and development department. Tests are being run on such types as the standard flat-circular parachute in common use today, and the ribbon and guide-surface parachutes.

Science News Letter, January 31, 1953