

The big chunk of ice was found in Texas last May by a Pittsburgh, Pa., scientist. Dr. R. A. Glenn of the Coal Research Laboratory of the Carnegie Institute of Technology, Pittsburgh, was visiting his parents at a farm outside McKinney, Texas, May 3. The hail fell in connection with a tornado which cost three lives and injured 43 people. But Weather Bureau records of the storm indicate no damage from the hail.

The biggest hailstone he found was photographed beside a baseball. The stone was

bigger. Dr. Glenn also reported that the hail had dented a corrugated sheet iron roof.

The picture is being added to the Weather Bureau's "rogues' gallery" of hailstones. But it is not the biggest one. The Texas stone was 11 inches in circumference, compared with one 17 inches around, which fell at Potter, Nebr., July 6, 1928. That one still rates as the largest ever recorded in the world.

Science News Letter, August 21, 1948

Letters To The Editor

200-Inch Poem

On the completion of the 100-inch telescope on Mt. Wilson several years ago, Dr. Alfred Noyes was invited to be one of the first to inspect the new instrument. He wrote a wonderful poem on the occasion which is the introductory portion of his extensive poetic work on astronomy, *Watchers of the Sky*. I think it would be a splendid idea for the California Institute of Technology to interest Dr. Noyes at this time when the new 200-incher is getting itself ready for service.—Dr. Harold T. Mead, Head of Science Department, Rider College, Trenton 9, New Jersey. *Pasadena, please take notice.*

Hillside Farming

There are a few points I would like to raise with regards to your comments on farming on hillsides (SNL, July 10).

First of all, I agree with you that it would be more rational to try to find some high yielding food plants that could be grown on hillsides. But this is only part of the story. There is a lot hidden behind the innocent sounding words "clean cultivation." William Faulkner in his *Plowman's Folly* (University of Oklahoma Press) showed that clean cultivation was the culprit behind erosion, decreased farm productivity, and floods. The simple fact is that plants and decaying plant materials act as

a sponge to absorb water, and also act as a binding agent to hold soil particles together. In fact the very concept of soil becomes meaningless as such without the presence of decaying organic materials. Plants will not grow in crushed stone or sand alone. It is important to note at this point that soilless farming (hydroponics) is a basically different method of farming and data applicable to one method is definitely not applicable to the other.

Returning to our original line of thought, clean cultivation is the real "force of habit" culprit and a little investigation discloses that it originated at a time when the soil was so rich in organic material of all sizes that the farmer had to drag tree branches and other large materials out of the way of his plow. The result of clean cultivation is that the materials necessary for plant growth are not replaced in the soil. This leads to a gradual decrease in farm productivity as the materials in the soil are used up. As the United States was being settled and the West was being opened up, a man was not a real farmer unless he had "used up" two or three farms in his lifetime. There was plenty of rich virgin soil to the west, so why should he conserve the farm he had? Our country is settled and the total acreage is relatively fixed, yet "force of habit" farm methods are unchanged. . . .—Fred J. Mocking, Chicago, Ill.

Story of Grass

"The Blessed Meek" (SNL, Aug. 14) is an inspired piece of writing; its point is the very point of grass, which I am afraid many persons miss, and it pays honor to Mrs. Chase in a most heart-warming way.—Alfred Stefferud, Editor of the Yearbook, U. S. Department of Agriculture. *Thanks.*

Science News Letter, August 21, 1948

Cashew trees are important economically in the tropics where they grow; their decomposed leaves make good fertilizer, the wood is suitable for many uses, the sap yields a resinous gum and the bark contains a high percent of tannin.

The red color of *strawberries* is due to the presence of an anthocyanin pigment.

SCIENCE NEWS LETTER

Vol. 54 AUG. 21, 1948 No. 8

57,250 copies of this issue printed.

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N. St., N. W., Washington 6, D. C., North 2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change, please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1948 by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS of Science (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1879. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566 and 360 N. Michigan Ave., Chicago, State 4439.

SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Edwin G. Conklin, Princeton University; Karl Lark-Horowitz, Purdue University; Kirtley F. Mather, Harvard University. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Warren H. Lewis, Wistar Institute; R. A. Millikan, California Institute of Technology. Nominated by the National Research Council: Hugh S. Taylor, Princeton University; Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution. Nominated by the Journalistic Profession: A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Baltimore Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. Nominated by the E. W. Scripps Estate; H. L. Smithton, E. W. Scripps Trust; Frank R. Ford, Evansville Press; Charles E. Scripps, Scripps Howard Newspapers.

Officers—President: Harlow Shapley, Vice President and Chairman of Executive Committee: Alexander Wetmore, Treasurer: O. W. Riegel, Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Frank Thone, Jane Stafford, A. C. Monahan, Marjorie Van de Water, Martha G. Morrow, Ron Ross. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe.

Question Box

ARCHAEOLOGY

What did Danish men wear in the Iron Age? p. 126

ELECTRONICS

With what machine can you play chess and gin rummy? p. 123

ENGINEERING

How is oil drilling made easier? p. 119

GENERAL SCIENCE

What gain in welfare is resulting from the book translating program in Latin America? p. 117

Photographs: Cover, Dr. R. W. G. Wyckoff, National Institute of Health; p. 115, Dr. R. A. Glenn, Carnegie Institute of Technology; p. 117, Massachusetts Institute of Technology; p. 119, Humble Oil and Refining Co.

INVENTION

What are some of the new inventions needed by the Armed Services? p. 115

MEDICINE

What may cause many baffling fevers? p. 118
What new techniques are aiding cancer detection? p. 119

PSYCHOLOGY

How can children's eating habits influence handedness? p. 121

WILDLIFE

What is the status of the European bison? p. 114.