ASTRONOMY

Indoor "Shooting Stars"

Several hundred sky-lovers expected to watch marvels of indoor heavens. Features include shower of "shooting stars," a gigantic fireball and variable stars.

➤ AN INDOOR shower of "shooting stars," a gigantic fireball that bursts in a planetarium sky, and stars that get brighter or fainter at will, all are to be featured in one morning.

Several hundred sky-lovers are expected on Labor Day to watch these marvels of the indoor heavens at the Morehead Planetarium of the University of North Carolina in Chapel Hill when the 1951 Astronomical League convention is held Sept. 1 to 3.

Stars will vary in brightness as one watches the man-made sky. Amateurs will be challenged to estimate their magnitude as they vary between maximum and minimum by comparing them with three nearby stars whose brightness is known. Novices will be surprised to find out how small a difference in brightness can be detected by relatively untrained eyes.

To produce variable stars on a planetarium dome, a special device is being created. The amount of light will be varied either by rotating polaroid disks such as are used on binoculars or by varying the brightness of the light passing through the hole.

A shower of meteors will momentarily gleam against the planetarium dome. Then bright meteors will flash one by one in the heavens. Not only will amateur astronomers enjoy the beauty of the spectacle, but they will learn to count meteors during a shower, to estimate their brightness, speed and color, and to plot their paths. Light shining through revolving disks will create the "shooting stars." A fireball will also burst in the heavens.

The sun will literally "change its spots" in this heavenly hunt. Suddenly switching from night to day, pictures of the sun with its numerous pock-marks will be shown and spectators asked to estimate the number of sunspots.

These heavenly events were rounded up by G. R. Wright of Washington, D. C., convention chairman. Edwin Bailey and John Streeter of Philadelphia's Fels Planetarium of the Franklin Institute are working out the details.

Science News Letter, April 28, 1951

DENTISTRY

Dentists Now Make Fillings With Plastics and Resins

➤.A NEW type of dental filling material made of synthetic plastics or resins is being used by dentists with encouraging results.

The new filling material, to match the color of the tooth, is reported by the Jour-NAL OF THE AMERICAN DENTAL ASSOCIATION as more impervious to stains and more permanent than the synthetic porcelain or cement fillings in common use.

"Not since silicate cement was introduced 50 years ago has any material made such an impact on operative dentistry," the editorial

Comparing the two substances, the editorial asserted that "at the moment there seems to be sufficient evidence to tip the scales slightly in favor of the resins." It cautioned, however, that more research was needed to determine the value of the

Science News Letter, April 28, 1951

RADIO

Saturday, May 5, 1951, 3:15-3:30 p. m., EDT "Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broad-casting System.

Dr. C. C. Little, director, Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine, will discuss "What Men Can Learn From Mice and Dogs."

SCIENCE NEWS LETTER

VOL. 59 APRIL 28, 1951

44,800 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

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, 1951, by Science Service, Inc. Republication 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). publishes CHEMIS 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. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925, 39 U. S. Code 283), authorized February 28, 1950. 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. Advertis-ing Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., PEnnsylvania 6-5566 and 360 N. Michigan Ave., Chicago. STAte 2-4822.

SCIENCE SERVICE

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

organized 1921 as a non-profit corporation.

Baard of Trustees—Nominated by the American Association for the Advancement of Science: Edwin G. Conklin, Princeton University; Karl Lark-Horovitz, Purdue University; Kirtley F. Mather, Harvard University. Nominated by the National Academy of Science; Harlow Shapley, Harvard College Observatory; R. A. Millikan, California Institute of Technology; L. A. Maynard, Cornell University. Nominated by the National Research Council: Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution; Rene J. Dubos, Rockefeller Institute for Medical Research. 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: Jane Stafford, A. C. Monahan, Marjorie Van de Water, Martha G. Morrow, Ann Ewing, Wadsworth Likely. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. In London: J. G. Feinberg.

Question Box

ASTRONOMY

What is the difference between the moon's changing phases and those of Venus? p. 267.

CHEMISTRY

What vitamin has been discovered essential for reproduction in rats? p. 262.

DENTISTRY

Of what materials do dentists now make fillings? p. 260.

GENERAL SCIENCE

What are the five possible ways of using the sun's energy? p. 262.

What means are being urged to promote more stable international relations? p. 268.

What is the best treatment for syphilis? p. 265

NEUROLOGY

Which part of the brain does the worrying? p. 263.

NUTRITION

How can persons with poor or no sight make a garden? p. 269.

ORNITHOLOGY

For what bird is the towhee frequently mistaken? p. 270.

PSYCHOLOGY

When will pigeons work the hardest for a reward? p. 258.

Photographs: Cover, B. F. Goodrich; p. 259, U. S. Navy; p. 261, Amherst College; p. 263, University of California at Los Angeles.