

# Green Ray Seen From Ship

Physics

Intending voyagers to Europe during the next few months should carefully watch the setting sun, and they may be able to see the "green ray." This is the brilliant green coloration that the sun assumes just before its last narrow sliver disappears behind the horizon. A really satisfactory sight of it is rather rare, said Prof. R. W. Wood, professor of experimental physics at Johns Hopkins University. On thirty crossings of the Atlantic he has looked for it every time there was a clear sky, and no haze or clouds near the horizon at sunset, but has only seen it three or four times. Only once, he said, was it really striking. At that time it appeared a brilliant emerald green, about the color of a railroad signal.

## Fish Models Now Made

Ichthyology

Museum specimens of fish can be prepared in such a way as to be as bright and interesting and attractive as the mounted animals or birds, instead of the bleached and disappointing things they usually are in their jars of alcohol, according to the claims of M. Schelenz, a preparator at the Karlsruhe Museum, writing in the German scientific journal *Naturforscher*.

In Herr Schelenz's method, one side of a freshly killed fish is carefully cleaned of its coat of mucus, or slime. The specimen is then imbedded in modeling clay, leaving the cleaned side projecting. Then melted paraffin is poured over it forming a solid block and impregnating the fish with the wax.

The paraffined fish is next removed, leaving an exact mould of itself in the clay. Into this mould fine plaster-of-paris is poured and is allowed to harden. Then the clay is dissolved away, and the plaster cast of the fish remains, with every detail of skin and scale and fin exactly as it was in nature.

The last task is one for the artist. He takes the white plaster model, "ages" it for some weeks, and then coats it successively with shellac and with silver or gold leaf. Finally he paints in the life colors and markings of the fish by hand, and gives the model a protecting coat of varnish.

*Science News-Letter, May 12, 1928*

The cause of the green ray is generally supposed to be that the rays of light are bent as if by a prism when they pass through the atmosphere of the earth. This enables us to see the sun for a short time after it is below the line of the horizon. As the red and orange rays are bent least, they disappear first behind the horizon. This leaves the green, blue, and violet rays still visible. Blue and violet affect the eye much less strongly than green, and so the green color predominates.

Dr. Wood accepts this theory of the origin of the ray, but proposes a new theory to explain why it is not always seen at sunset. At the time that he saw the ray so well, the air and ocean were at approximately the

same temperature. Through the rest of the voyage, when it was not seen, the ocean was much warmer than the air. He thinks that when the water is warm and the air cool, the layer of warm air right in contact with the sea would cause the light rays of all colors to be bent less, and so the sun would set abnormally early. When the air is warmer than the water, the curvature of all the rays would be increased, and so the atmospheric dispersion that causes the ray would have a longer time to act.

Anyone seeing the ray from the ocean is requested to send an account of his observation, and the ocean and air temperature at the time, to Prof. Wood in Baltimore.

*Science News-Letter, May 12, 1928*

## In This Issue—

Hibernian sunset, p. 290—P-P, p. 291—Outlet of *underworld*, p. 293—East but not west, p. 294—New honors, p. 295—Ultra-violet dentistry, p. 295—Rheumatic houses, p. 297—Little is needed, p. 298—Throbbing sun, p. 299—Good caudal equipment, p. 299—Felines and simians, p. 300—Blow hard! p. 301—Cipher, rocks and leather, p. 303—Snapshots, p. 304.



SCIENCE NEWS-LETTER, The Weekly Summary of Current Science. Published by Science Service, Inc., the Institution for the Popularization of Science organized under the auspices of the National Academy of Sciences, the National Research Council and the American Association for the Advancement of Science.

Edited by Watson Davis.

Publication Office, 1918 Harford Ave., Baltimore, Md. Editorial and Executive Office, 21st and B Sts., N. W., Washington, D. C. Address all communications to Washington, D. C. Cable address: Scienservc, Washington.

Entered as second class matter October 1, 1926, at the postoffice at Baltimore, Md., under the act of March 3, 1879. Established in mimeographed form March 13, 1922. Title registered as trade-mark, U. S. Patent Office.

Subscription rate—\$5.00 a year postpaid. 15 cents a copy. Ten or more copies to same address, 5 cents a copy. Special reduced subscription rates are available to members of the American Association for the Advancement of Science.

Advertising rates furnished on application.

Copyright 1928, by Science Service, Inc. Reproduction of any portion of the SCIENCE NEWS-LETTER is strictly prohibited since it is distributed for personal, school, club or library use only. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service, details and samples of which will be gladly sent on request.

INTERPRETING week by week, the latest developments in the various fields of science, this magazine attempts also to present its articles in the most pleasing and readable topography and the most convenient arrangement.

The *clippability*, *indexing*, and *automatic dating* of each article are unique features.

This is a *separable* magazine. Each original article can be clipped or torn out without losing or damaging another important article on the other side. These original articles are backed by reprinted quotations or excerpts, short one-sentence items, advertisements, and other material not likely to be clipped and preserved.

Each article is automatically *indexed* by the key word printed in italics just below the heading, or at the end of the article when the article has no heading. Articles can thus be filed easily into any system of classification, whether it be Library of Congress, Dewey, or one of the reader's own devising.

Each article is automatically *dated* by its last line.

All of the resources of Science Service, with its staff of scientific writers and correspondents in centers of research throughout the world, are utilized in the editing of this magazine.