

Germans Find Year's First Comet

Astronomy

The first comet of 1929 has been found by the same two astronomers who found a comet in November, 1927. These are Drs. Schwassman and Wachmann, of the Hamburg Observatory, in Germany, which is located at Bergedorf, a suburb of Hamburg. The announcement was made by Dr. Harlow Shapley, director of the Harvard College Observatory.

When the discoverers picked it up on Thursday, January 17, it was in the constellation of Taurus, which is now high in the southern sky each evening about 9 o'clock. This group of stars is characterized by the red star Aldebaran, and is just to the west of the familiar constellation of Orion. In the astronomical equivalents of latitude and longitude, the comet was in right ascension 5 hours 40 minutes and 32 seconds and declination 20 degrees and 30 minutes north. It

was moving to the northwest and was of the eleventh magnitude, much too faint to be seen except with a large telescope.

Now it has been found that it is not a new visitor but a periodic one that returns to the region of the earth and sun once every six years and ten months. From the study of photographic plates of the comet made with one of the large telescopes at the Yerkes Observatory of the University of Chicago, Dr. George Van Biesbroeck and C. Y. Chang have computed its orbit.

Though the comet is still visible through large telescopes, it is receding from the earth and getting fainter, so that there seems to be no hope that it will become bright enough to be seen with the unaided eye. As it does not approach closer to the sun than two astronomical units, or

twice the distance of the earth from the sun—about 186,000,000 miles—it is never likely to become a very striking comet.

Some of these photographic plates, on which the image of the comet was located, were made before its discovery by the Germans, but the comet had not been identified as such. Similar photographs were found in the files of the Harvard Observatory, some made nearly a month before its discovery.

While the comet came near the sun in 1922, and doubtless on earlier occasions as well, it appears that it has never been observed before. Probably this is due to the fact that on these previous visits it was not in a good position for observation, and so escaped even the vigilance of the astronomers who make a specialty of hunting for comets.

Science News-Letter, February 2, 1929

Earthquakes of 1928

Seismology

Whenever the earth trembles in any part of the world, the first thing the public generally learns, through the daily press, is that some seismograph station has recorded an earthquake at a certain distance. Sometimes the report might say that it appears to be in a certain general direction. A few hours later the papers carry a further report—that, with the aid of data gathered by Science Service by telegraph from perhaps a dozen or more different stations, sometimes as far separated as Manila, Sitka, Washington and San Juan, the U. S. Coast and Geodetic Survey has located the exact center of the quake. Perhaps, as in the case of one famous earthquake a few years ago, in the Kansu province of China, many months may elapse before actual reports from the damaged area reach civilization, though the earthquake itself sent its own message that enabled the experts to locate it within a few hours.

The map on the cover shows some of the most important earthquakes thus located during 1928, with the cooperation of Science Service, the U. S. Coast and Geodetic Survey and the Jesuit Seismological Association, whose stations, at various Jesuit colleges, are among the best in the world. The black dots indicate the location of the quakes.

Science News-Letter, February 2, 1929

In This Issue—

Television Has Arrived, p. 59—*Thunderbolts* at 5,000,000 Volts, p. 61—*German Efficiency* Again, p. 53—*Ship Bumped*, p. 63—*Seeing Lions*, p. 63—*He Bet His Life*, p. 65—*Chemical Shorthand*, p. 65—*That Shadow*, p. 65—*Euclidian Frogs*, p. 67—*Books*, p. 69—*Kilauea Stewing*, p. 71—*Echo Answers Where*, p. 71—*Viking Churches*, p. 71.



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: Scienservice, 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.

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 typography 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.