Germans Find Year's First Comet

The first comet of 1929 has been found by the same two astronomers who found a comet in November, These are Drs. Schwassman and Wachmann, of the Hamburg Observatory, in Germany, which is located at Bergedorf, a suburb of Ham-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.

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

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

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.



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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.

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