

## ASTRONOMY

**Comet Returns For Visit**

The Grigg-Skjellerup comet, found in the constellation of Orion on March 30 by Dr. George Van Biesbroeck of the Yerkes Observatory in Wisconsin, was seen earlier by European astronomers, according to information reaching the Harvard Observatory from the International Bureau of Astronomical Telegrams at Copenhagen. On March 27, James Hargreaves and Gerald Merton, of the British Royal Observatory at Greenwich, picked it up with one of the large telescopes, while on March 21, E. Delporte, at the Royal Belgian Observatory at Uccle, observed it.

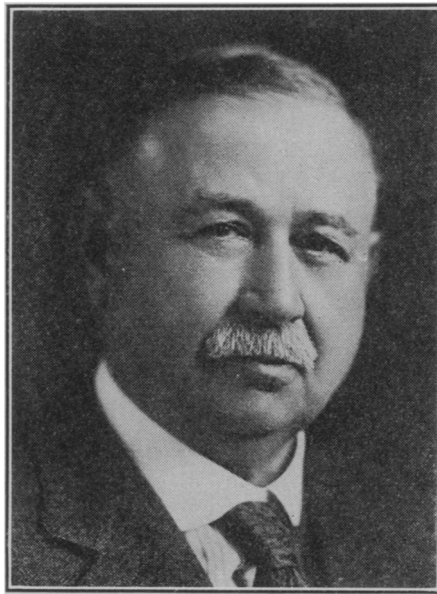
When the earlier observations were made, however, it was not quite certain that they were of the Grigg-Skjellerup comet. The object seen was close to the position predicted, but it sometimes happens that an entirely unknown comet reappears near the position that another on a return is expected to occupy. The careful search of part of the sky for the returning visitor may reveal another that would otherwise have been missed. However, after three observations have been made of a comet, it is possible to calculate its orbit, and thus definitely determine whether it is a periodic comet returning, or a new one appearing for the first time.

Now it has been ascertained that this comet is actually the same one, which returns to the neighborhood of the earth once in about five years. It was first located by Grigg in 1902, but was lost until 1922 when J. F. Skejellerup, an Australian astronomer, found it again on May 6, and so both discoverer's names were attached to it. When observed by Prof. Van Biesbroeck, its position, expressed astronomically, its position when discovered was right ascension 5 hours 50 minutes and 48.4 seconds, and declinations 3 degrees 7 minutes and 30 seconds south. This is in the constellation of Orion, now in the southwestern sky early in the evening. The comet was just east of the familiar "belt," the three bright stars in the constellation. However, as it was of the fifteenth magnitude, it is far too faint to be seen with the naked eye.

Science News-Letter, April 9, 1927

Within ten minutes after a camera in an airplane had taken a picture, in Indiana, it was finished and dropped by parachute to the ground.

## MEDICINE



VICTOR C. VAUGHAN

**Physician And Philosopher**

Dr. Vaughan is the worthy successor of that long line of humanist-physicians which includes Sir Thomas Browne, Sir William Osler and Silas Weir Mitchell. His big three-decker textbook on "Epidemiology and Public Health" is the leading and latest authority on that subject. His administrative and constructive ability is evidenced by his building up in the country town of Ann Arbor a great school of medicine, sought by students from all over the world. Few teachers have influenced so many thousands of young men and women in their professional training, and still fewer have been regarded with such personal affection throughout their subsequent career. He was Dean of the Department of Medicine and Surgery of the University of Michigan from 1891 till 1921 when he resigned at the age of seventy, and went to live in Washington.

But he did not retire from work when he retired from collegiate duties, for he has since taken an active part in the development of the National Research Council which was founded during the Great War as the agency through which the National Academy of Sciences could give technical aid and advice to the Government. Here his wide knowledge of epidemics was particularly needed for the rapid assembling of recruits from all parts of the country without quarantine or change of civilian clothes brought into the concentration camps the germs of all current diseases. As Dr. Vaughan

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## ARCHÆOLOGY

**Roman Wall Mystery**

The famous stone wall of Hadrian, built by Roman soldiers 1800 years ago to divide the north half of Great Britain from the south, may at last be completely understood. In a lecture before the Royal Institution, Sir George Macdonald pointed out that the dramatic discovery of a strip of turf wall joined to the great stone wall and ending beneath it reveals a missing chapter in the wall's history.

A stretch of turf wall found in 1895, several miles west of the new strip, had only added to the complexity of the Hadrian Wall riddle, but after this second discovery scientists will now seek for further traces of what appears to have been an earlier barricade across this strategic battle ground of ancient Britain.

The accepted story, so far pieced together, of how Hadrian's wall came to be built begins in the first century A.D. when a string of forts were constructed across this part of the country by the Romans who were trying to Romanize the Britons. About this time, or a little later, an earth embankment was thrown up across the country south of the forts, making a legal boundary dividing north from south.

In the second century A.D. a great stone wall 20 feet high, eight feet wide, was stretched across England, parallel with the embankment for 73 miles, from coast to coast. This was the famous wall now named for the emperor Hadrian, and generally believed to have been constructed by him, while to the Emperor Severus who came a little later is given credit for making elaborate restorations of the great wall. It is this puzzling point in the wall's history that the turf wall find may clear. Perhaps Hadrian built the turf wall and Severus the stone wall itself. Sir George pointed out that further digging is necessary before theorizing will be profitable.

The great wall was the scene of heavy fighting in the first centuries of our era. When the boundary ceased to be a battle ground, the wall served for centuries as an inexhaustible quarry for building stones, which fact has increased the difficulty of restoring the wall and tracing its plan.

"Two or three centuries ago, on the strength of the material that had

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## Wall Mystery

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accumulated," said the speaker, "students of the subject were beginning to feel that it was now possible to formulate a complete and coherent theory which would explain all the phenomena satisfactorily. But they had reckoned without their host. The Spirit of the Wall had a fresh surprise in store.

"In 1895, Prof. Haverfield and his colleagues had discovered at Apple-tree a long stretch of wall built, not of stone, but of turf, abutting at either end of the wall proper, with which it did not seem otherwise to be organically connected. At first it looked as if the turf wall were going to provide a new unexpected way of reconciling the rival claims of Hadrian and Severus. Presently that possibility was conclusively disproved and there followed a disposition to leave the turf wall out of account or to relegate it to the limbo of unsolved and insoluble riddles.

"In 1925, however, it, or another turf wall, made a dramatic reappearance six or seven miles farther east at Aesica, this time on the north of the stone wall and ultimately beneath it. That is how matters stand. The key will probably be found at Birdoswald."

Science News-Letter, April 9, 1927

A recent Canadian survey showed that nearly half of all electrical fires are due to misuse of the electric pressing iron.

Sweet corn should be eaten soon after it is pulled, as over half the sugar turns to starch within 24 hours after the ear is taken from the stalk.

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## Physician and Philosopher

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says in "A Doctor's Memories," his recently published autobiography, "The most insane procedure carried out in 1918, from the standpoint of an epidemiologist, was the sudden and complete mobilization of the students in our universities in the Students' Training Corps. How many lives this procedure sacrificed I can not estimate." But when the danger of such disregard of sanitary science was pointed out in advance to the proper authorities the answer was: "The purpose of mobilization is to convert civilians into trained soldiers as quickly as possible and not to make a demonstration in preventive medicine."

On the program of the American Chemical Society meeting in Richmond on April 12, Dr. Vaughan is listed for an address on "A Chemical Concept of the Origin and Development of Life." This is the culmination of a line of thought and experimentation which he has pursued for many years and which has led him to the conclusion that "life is molecular, not cellular."

Science News-Letter, April 9, 1927

## Do You Know That—

Camphor is used in making celluloid.

Very large trees can now be transplanted.

Almost 150 uses have been found for peanuts.

Einstein's theory of relativity is 21 years old.

There is no satisfactory way to remove freckles.

The scent of a flower is due to volatile oils in the plant.

There are 100 flashes of lightning somewhere every second.

The Russian government made coins out of platinum in 1828.

When a fly eats sugar it spits on it and sucks the sweet solution.

Airplane pictures taken obliquely show the ground in perspective.

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