

ASTRONOMY-GEOLOGY

Comet Larger Than Halley's May Have Hit Atlantic Coast

Ice Age Depressions Are Found to be Shaped Just as if They Had Been Dug Out by Celestial Bullets

SPECULATIVE romancers of the Verne-Wells type, who like to imagine what would happen to the earth if a comet should hit it, may find their answer in a series of wide holes in the ground in the Carolinas, known locally as "bays." At the meeting of the American Association for the Advancement of Science, Prof. F. A. Melton and Prof. William Schriever, of the University of Oklahoma, set forth reasons why they believe the "bays" to have been gouged out by the impact of a globular cluster of meteorites constituting the nucleus of a comet greater than the famous Halley's comet.

Cover 40,000 Square Miles

The bays are shown by geological evidence to be older than certain strata of pleistocene or Ice Age date, but younger than another formation of pliocene date, which preceded the Ice Age. They all lie in the Atlantic coastal plain area, between Norfolk, Va., and the Savannah river, an area of approximately 40,000 square miles.

A mosaic airplane photograph map shows all the "bays" to be smoothly elliptical in shape, with their long axes all parallel, extending from northwest to southeast. Some of the depressions have elevated rims completely encircling them, and all such rims are higher at the southeastern end. Sometimes the depressions intersect each other. The bigger the hole the longer it is, relative to its width.

Hit Mountains and Sea

All these features, the two scientists said, can be explained on the hypothesis that the depressions were caused by the blows of a group of high-velocity masses of meteoric material, tearing through the atmosphere from the northwest and striking the earth like projectiles. Successively striking masses could cause the intersecting depressions, and the greater energy of impact of the larger fragments would of course explain the relatively longer holes they plowed. The direction of their impact

would account for the greater height of the raised rims toward the southeast.

The comet that made the "bays" also bombarded the adjacent mountain regions and dropped fragments into the sea, the two scientists conjecture. But the scars they caused in the mountains have been eroded away due to the more rapid weathering of the earth on steep slopes. The pieces that fell into the sea of course left no traces.

When Halley's comet last visited the neighborhood of the earth, astronomers could look right through its head and see small spots on the sun. This was taken to indicate that its nucleus was made of fragments rather than a solid piece. Such a cluster of meteoric masses, striking the earth like a handful of pebbles thrown into a snowbank, would cause a cluster of depressions essentially like the Carolina "bays."

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PSYCHOLOGY

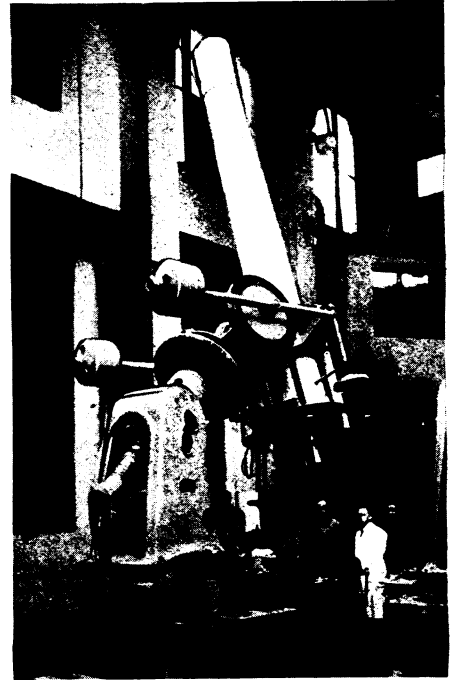
Noise Increases Activity of Infants

NEWBORN infants respond to noise in their surroundings by increased activity, Dr. Karl C. Pratt, Central State Teachers College, Mt. Pleasant, Mich., told the American Association for the Advancement of Science.

Dr. Pratt reported tests he had made on 28 babies from two to eleven days old. The infants were placed in a special cradle to which electric recording devices were attached for the purpose of making a record of every kick and squirm. High-pitched, intense noises produced the greatest activity, but musical tones had a quieting effect.

Even such young infants are able to adjust themselves to noisy surroundings, however, for after the noise was continued for a time it produced less effect. The activity was a response to each individual noise and not the result of increased restlessness, irritability, or fear, Dr. Pratt said.

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NOT FOR ASTRONOMERS

ASTRONOMY

Big Telescope Made Especially for Public

A BIG TELESCOPE weighing seven tons, with a tube 14 feet long and lens ten inches in diameter, has been specially constructed, not for astronomers, but for laymen who wish to view the skies. It was built so that the public can use it with least inconvenience. The instrument has just been completed at the Zeiss works in Germany and will be set up in the Franklin Institute Museum, Philadelphia, as the first telescope of its kind to be erected in the United States.

If this were an ordinary telescope it would be supported close to the center of its 14-foot tube. This would mean that the eyepiece, through which the visitor looks, would move a vertical distance of half the length of the tube, of seven feet, as the telescope covers the skies from the horizon to the zenith. Then the visitor would have to climb a high ladder to follow the eyepiece. But this inconvenience is avoided because the instrument is supported close to the eyepiece. Counterweights balance the overhanging end that points to the sky.

The instrument will be used in conjunction with a reflecting telescope with a 24-inch mirror.

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