

## ASTRONOMY

# Speed of Meteors Determines The Life of Their Trails

**T**HE SHINING but short-lived train of glory left behind by an unusually bright "shooting star" or meteor has a duration measured by the velocity of the meteor itself. The faster the meteor the longer its train remains visible, at least in the case of the three most important annual shooting-star showers, Dr. Peter M. Millman of the University of Toronto told the American Astronomical Society.

Meteors of the brilliance of Jupiter, at present the evening star, have a train-duration of eight seconds if they belong to the rapid Leonid swarm of November, two seconds in the case of the August Perseids and less than one second if they are in the slower Geminids of December.

Meteors that flash into the earth's atmosphere "on their own," not belonging to any of the regular showers, have train-duration periods proportional to their individual brightness, Dr. Millman said. His conclusions were based on studies of more than 5,000 observations of bright meteors made at Toronto and at Harvard College Observatory during the past four years.

Dr. Millman has also studied the altitudes of meteor trains, searching records gathered at many observatories during nearly a century. From 540 descriptions

of very bright meteors he found that about half reported bright trains of luminous dust which remained visible for periods ranging from one minute to several hours after the meteor itself had faded out. Heights of many trains ranged from six to eighty miles.

Average heights at which trains were seen varied with sun's position. They were greater as the sun descended lower beneath horizon, a fact previously unknown to astronomers.

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## ARCHAEOLOGY

## Greek Flood Control Ideas Found in Corinth Digging

**D**ISCOVERY of flood control ideas in ancient Corinth is reported by Prof. Richard Stillwell, who has just returned to Princeton after four years in Greece.

The system, whereby city fathers of Corinth tried to protect the streets and people against flood rains from nearby heights, is the latest discovery of the American School of Classical Studies at Athens. Excavations in the Corinthian market place revealed the system.

The Corinthian device was a large catch-basin to catch rain water from the slopes of Acrocorinth, nearby citadel which towered almost two thousand feet. An entering flume and a conduit led the water from the basin. The course of this conduit is not yet traced, but it is believed to have emptied into the large drain that carried overflow water from the famous fountain of Peirene, where, according to legend, the winged horse Pegasus drank and was caught and bridled by Bellerophon.

By far the most important object of art unearthed during the 1934-35 season, according to Prof. Stillwell, is the right forearm of an ivory and gold statue of the third century B.C., which is outstanding because almost unique.

"Many such works of art have been listed in antiquity," declared Prof. Stillwell, "but all have disappeared except for a few isolated fragments."

The ivory of this piece is well preserved and it has sockets at each end for attaching an upper arm and hand. It is apparently the arm of a woman.

Further information concerning the ground plan of the ancient city was pro-

vided by unearthing another of the principal entrances to the market place. Other important finds of the expedition, which worked for six weeks last fall and ten weeks during the spring, included four small temples and numerous buildings.

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## ANTHROPOLOGY

## "Highbrows" Do Not Have High Brows

**"H**IGHBROWS" do not have high brows. Negroes and Eskimos have higher foreheads than the proud Caucasian.

These and other data, upsetting to anyone who bases his claim to superiority on the height of his forehead, are offered by Dr. Ales Hrdlicka, anthropologist of the U. S. National Museum, in the new annual report of the Smithsonian Institution.

Measurements on many hundreds of skulls in the museum collections, as well as on the heads of living men and women, show that the average forehead height of "Old Americans" of the white race is 2 5/8 inches. American Indians have foreheads hardly a thumbnail-thickness higher. But American Negroes have foreheads averaging 2 3/4 inches high, and Eskimos 2 7/8 inches.

Averages among various white races show Armenians to be the lowest-browed, with 2 3/8 inch foreheads. Irishmen have the highest foreheads, 2 5/8 inches. Hungarians and Frenchmen rank next to Armenians as "lowbrows"; Old Americans and Germans next to the Irish as "highbrows."

But lest any one take undue credit to himself for racial superiority in forehead height, Dr. Hrdlicka makes it clear that this measurement has nothing to do with intellectuality. He measured four groups: Old Americans at large, representing the "average citizen" of native stock; Tennessee highlanders, a group much retarded educationally; Old American members of the National Academy of Sciences, and Academy members without regard to race. The latter two groups, of course, may be presumed to be the very cream of American intellectual life.

Their foreheads were all of almost exactly the same average height. There wasn't a twelfth of an inch difference in the forehead heights of the four groups. And the averages for the Old Americans in the Academy and the Old Americans from the Tennessee mountains were precisely the same!

*Science News Letter, October 5, 1935*

*Famous Naturalists in Search of Vampire Bats and the Bushmaster*

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