

a really fine shower, in the latter next to nothing. We simply do not know yet what to expect." These meteors are really part of a comet. In 1866, a European astronomer, named Tempel, discovered a comet which has since borne his name. The orbit of the comet is almost the same as that of the meteor swarm, and so it seems quite certain that the meteors are the debris of the comet.

Even more marked is the relation between a second meteor shower of November and another comet, for when the comet disappeared, it left a meteor shower in its place. These meteors are called the Andromedes, because they radiate from the constellation of Andromeda, and occur between November 17 and 27. They are not very numerous now, however, though several brilliant showers have been recorded.

But the Leonid shower is something

else, and it is in their observation that the amateur can help. Watch the north-eastern sky on the night of Nov. 14 and 15, especially after midnight. The greatest display comes between 3:00 and 4:00 a. m. The moon will be just past last quarter and will shine rather brightly in the eastern sky, so that fainter meteors may be lost in its glare. But if you look carefully, you should be able to count ten or so an hour under ordinary circumstances, and perhaps many more if we are beginning to get into the main swarm of the Leonid stream. If possible, draw the path of each meteor among the stars, but if you don't want to do that, count the total number of meteors in half hourly intervals. Send any records of the meteors to Dr. Charles P. Olivier, Flower Observatory, Upper Darby, Pa., to whom they will be most welcome.

Science News Letter, November 8, 1930

PSYCHOLOGY

Fewer Trials for Negro Children But Whites Excel in Speed

NEGRO children, when given a test of learning to associate certain numbers with letters as in a code, were able to learn in fewer trials than those required by white children, but the white children excelled in speed.

The trial was made by Prof. Lyle H. Lanier, of Vanderbilt University at Nashville, who gave individual tests to nearly 500 12-year-old white and negro children in three typical cities: Nashville, Tenn.; Chicago, Ill.; and New York City. Full details of the study are reported in a current issue of *Comparative Psychology*.

Science News Letter, November 8, 1930

ARCHAEOLOGY

84-Year Old Man is Master Maker of Stone Age Tools

Taught by Studying Ancient Evidence Indians Left, He Has Made Thousands of Arrow Heads and Scores of Axes

THE "LOST ART" of manufacturing flint arrow points and granite hammers, like those used by ancient and primitive men, has been successfully revived by a modern hunter, according to a report from Beloit Museum, Beloit, Wis., by Alonzo W. Pond, archaeologist.

For years, the report states, Halvor Skavlem has studied the evidence afforded by the good and rejected stone weapons lying about the Indian village site at his summer home on Lake Koshgonong. Seventeen years ago he first attempted to shape a bit of flint into an arrow point, using a pointed bone for a tool as he imagined an Indian hunter would have done.

A good many archaeologists and amateurs have made such experiments as this first one, the report points out, but Mr. Skavlem has "revived the art for he has made thousands of arrowheads and scores of axes in the past seventeen years, using only the tools available to primitive man. He has done this quickly in the presence of thousands of witnesses with the skill of a true artist

who knows the limitations of his medium and who is master of his technique."

Some other experimenters have said they can demonstrate how flakes are removed in the shaping of stone tools and weapons, the report continues, but they admit that they cannot explain it to others. The Wisconsin arrow-maker has analyzed the primitive techniques and has explained the types of blows and angles of fracture which the Indians used to produce their arrows, hammers, spear heads, and axes.

An ordinary stone arrow point can be shaped in two to five minutes, by this modern master of stone age craft. Within half an hour he can produce the groove of a stone axe. This is cited by Mr. Pond as good evidence that stone age weapon making proceeded with reasonable speed and efficiency, and was not the long, tedious, and difficult labor which it has sometimes been described.

Mr. Skavlem, who is eighty-four years old, is continuing his experiments with the primitive stone worker's art.

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MODERN STONE AGE TOOL

This axe with groove, wedged seat and finished polish was made by Mr. Skavlem, of Wisconsin, in four and a half hours. Most axes left by Indians are less finished and doubtless required less time. The blocks on the left show how cuts were made with the axe.