

(Continued from previous page)

were of wattle and daub construction in which clay is applied to thatched twigs. There is no way of knowing whether the roof was arched or domed. Entrance to the house was through a mud-plastered, tunnel-like passageway leading out to the east—reminiscent of the passageways Eskimos crawl through to enter their igloos. Just inside the house, a low, curved, stone wall protected a fire pit from drafts.

Beneath the floor of the dwelling the inhabitants had hollowed out three storage pits; in the largest of these, the Museum party found whole charred corn. This grain storage chamber was protected by a ring-slab cover of chipped sandstone, which was found broken within the pit. Also inside the home were several stone metates and manos, tools used for grinding corn into flour.

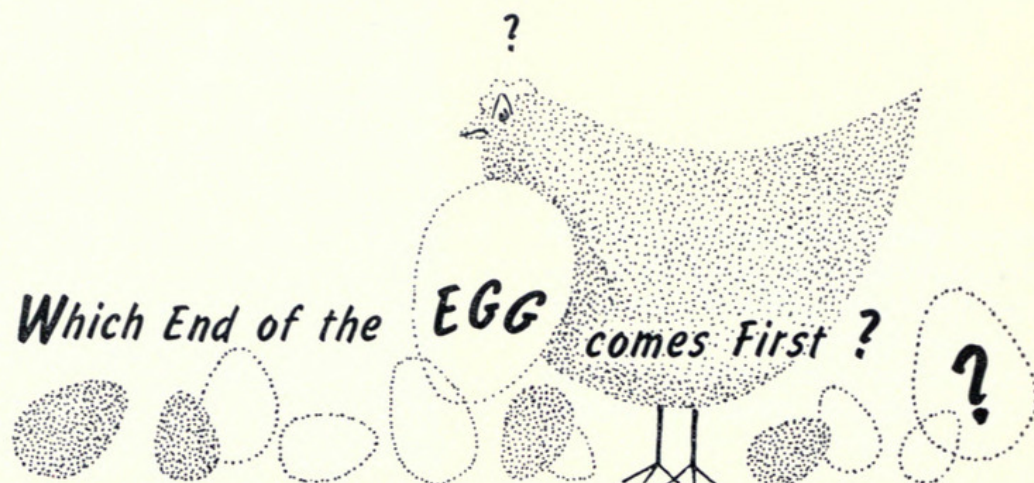
The chipped stone implements that were recovered from the site make it possible to assign the house to the Desert Culture. The presence of corn, however, is unusual in a habitation which Martin and Hill believe antedates the pit house builders who are known to have practiced agriculture in this region around A.D. 400. The Snowflake site thus provides the first evidence of grain cultivation by Desert Culture people living in the Upper Little Colorado drainage area. Final determination of the age of the dwelling awaits the results of carbon-14 tests now being made on the charred house posts and the corn itself.

AS THE excavation proceeded, remnants of 8 to 10 more houses were revealed. Materials recovered from all of them are now in the Museum. During the winter, these data will be intensively analyzed by statistical methods in the hope of finding answers to such questions as where, within the village, was food preparation done? Cooking? The various stages of stone tool-making? How were these tasks divided among the men and the women? Where on the site did different family groups, or clans, live? Was there any division of labor among the clans? The answers to some of these questions will probably have to await further intensive digging now being planned for next summer.

Dr. Martin, who is president of the

American Archaeological Association, is a pioneer in the use of statistical research to recover information about the social organization and actual day-to-day manner of living of extinct peoples. The attempt to answer such sociological questions is a new trend in archaeology, made possible by the application of experi-

mental methods, the collection of statistically valid samples, and the use of computers to analyze data. Such methods reinforce the archaeological discipline as a social "science." The present discovery should enlarge still further the exciting promise of this new kind of archaeological research. ■



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THE 918-page book called *The Avian Egg* contains more information about hens' eggs than most people will care to know. Between the quote on page 1 about a bird's egg being the most perfect thing in the universe, and the paragraph on page 806 on "other art forms," there is an exposition of the egg from genesis through morphology and chemistry to preservation and industrial uses. These last include uses in cakes, cosmetics, and in the leather industry.

The question of which came first, the chicken or the egg, is not touched on by the authors, A. L. and A. J. Romanoff of Cornell University. But they do settle the question as to which end of the egg, the blunt or the sharp end, is laid first. It is strange that so simple a question should have been so long unanswered. In the historical preamble to the answer, a nice touch of erudition is given the discussion by a reference to the classics, among which Aristotle's comments seem the first recorded. In the early 1800's there was keen interest in the subject. But only in the early 1900's was observational and experi-

mental evidence gathered and presented in quantity and quality that seems to settle the matter.

The question as to whether the contracting of the appropriate muscles forces the egg down the hen's oviduct with pointed or blunt end first seems capable of two possible answers. But actually there are three. Curiously, about 90 per cent of the time hens' eggs have the shell formed around them while the sharp end points down the oviduct, but only 70 to 80 per cent of the eggs are laid sharp end first. Some 20 to 30 per cent are laid blunt end first.

Having answered the question with "yes and no," it now remains to give the third answer to complete the survey. It appears that sometimes the descending egg pushes a bulge in the thin wall of the oviduct, and in being squeezed along it rotates, end for end. Thus it makes part of its journey with one end first, part with the other.

The Romanoffs should know, being associated with the Poultry Husbandry of Cornell University. Further, from internal evidence, the very nature of the answers invites the confidence of biologists. Very often we find our answers, "yes," "no," and "sometimes." It is the nature of life. ■





Rand, Austin Loomer. 1964. "Which End of the Egg Comes First?" *Bulletin* 35(11), 4-4.

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