

stone vault which ran the length of the gallery. The inner base of course rested on the central wall, and the whole construction was repeated for the rear gallery.

Trenching and tunnel operations under this building show another building level twelve feet below it. Similar work under Structure J-6 — the palace which contained a beautiful stone throne now in the Museum [*Bulletin*, June 1933] — showed no less than five super-imposed layers of buildings. A trench from top to bottom of the small pyramid, Structure R-3, in the early South Group, revealed four superimposed buildings. Excavations of this type have yielded pottery vessels and fragments dated with reference to one another, and are beginning to give us hints of the architectural sequences as well. For instance, in none of them have we found evidences of stone vaulting in the earlier periods. It may even turn out that there was an extensive city of buildings on low platforms before the first real pyramid was erected here.

Large areas surrounding the ceremonial heart of the city were cleared and mapped this season. They are filled with low platforms and terraces, almost certainly the foundations of wooden, or combination wooden and stone dwellings of the priests and nobility. An adequate investigation of these is still a task for the future.

L. S.

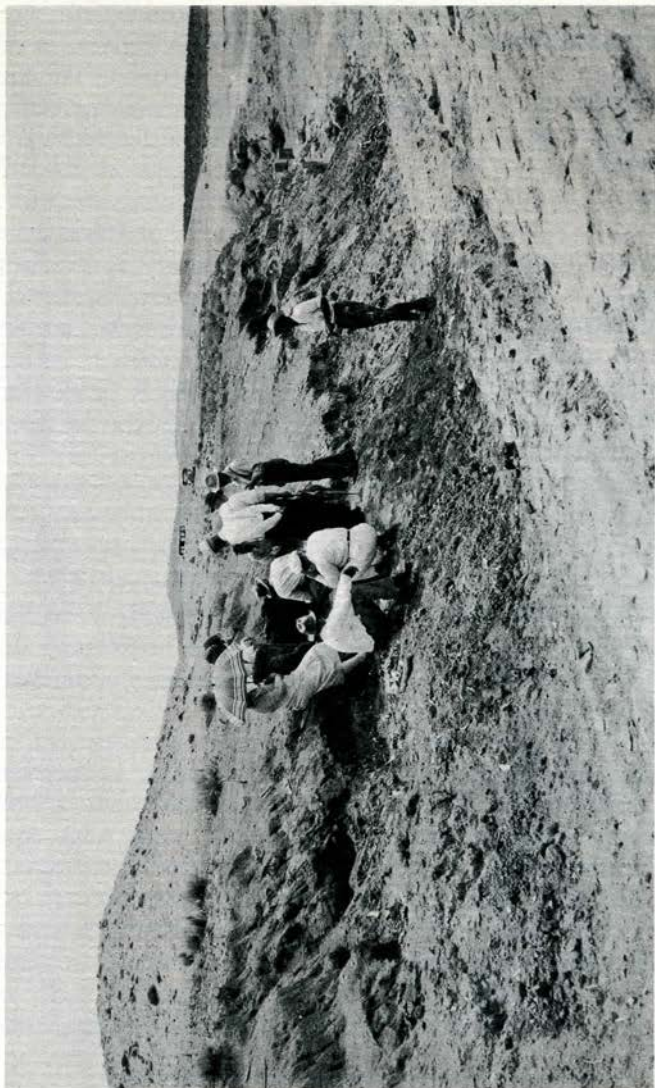
*Excavations in
New Mexico*

THE field-work for the University Museum in the Southwest has just been concluded for this year, and, though certain phases of the work point to fairly definite conclusions, it is unwise to assume that the book can be closed and nothing further done to prove the existence of man in this country at a period antedating our more or less sedentary Basket Maker culture. As a matter of fact, though much evidence has accumulated and a great deal been written upon the subject, only a start has been

made to unravel this complicated problem, and it will require the efforts of many field geologists and archæologists, working at different localities, to give us a very clear picture of the subject.

The excavations near Clovis, New Mexico, during the summer months, were conducted under the joint direction of the Museum and the Academy of Natural Sciences, and part of the time with the aid of the California Institute of Technology, made possible through the interest of Dr. John C. Merriam of Carnegie Institution of Washington. This particular place near Clovis was brought to the attention of the Museum through the interest of local men, whose curiosity about their surroundings took them on excursions on Sundays to look for arrow points and fossils. Unlike many others, however, these men had enough interest in the subject to want to find out more about it. Mr. A. W. Anderson brought the Museum's attention to the possibilities of the region; Mr. George Roberts, also of Clovis, did his share in focussing interest upon this place. Both were of the greatest help in arranging for all the many things that crop up when field-work is undertaken in a new area. Without the help of two young men of Clovis, Jake McGee and Ridgley Whiteman, much would have been lost which their keen eyes found. In fact most of the important finds were made by the former, and this is small acknowledgement of the interest and help given by all of them.

Altogether a good many specimens of spear-points, scrapers, and bones of extinct elephants, bison, horse, camel and other animals were found. Towards the end of the work of excavating, Dr. Merriam visited Clovis, and brought with him Sir Arthur Smith Woodward, formerly of the British Museum, together with Lady Woodward, Dr. V. van Strælen, Director of the Royal Museum of Natural History in Brussels, and Dr. Chester Stock of California Institute of Technology. The opinions of these scientists were of the greatest help in trying to throw light upon the problem, and their complete agreement upon the evidence presented



GROUP OF SCIENTISTS INVESTIGATING EVIDENCE OF EARLY MAN NEAR CLOVIS, NEW MEXICO

in the field indicating that man was contemporaneous with the extinct elephant and bison gives us some foundation upon which to build further investigations. There remains much to be done, however, in the way of checking and identification of the animal bones, and this is now being done by Dr. Stock; there is much to do in regard to the geology and physiography of that region, as well as analyses of the various deposits from the old lake beds, which latter is now being gotten under way by Mr. A. W. Postel at the University. All of this and much more must be undertaken before we can hope to get a clear picture of the problem.

The goal appears nearer, though, of ultimately proving the existence of a culture in North America going back to the 'Early Recent,' that vague time between the retreat of the last glacier and the beginning of that climatic period more or less like the present.

The question of time is the one which seems uppermost in most people's minds in a discussion of this kind, and it is hard to explain one's inability to answer definitely how long ago, for example, the 'Early Recent' might be. Geologists, with a perspective of millions of years, are not prepared to adjust their focus to a comparatively recent time, and until more work is done along these lines, one must fall back upon other methods, less accurate. The findings of authorities upon the subject of climate and glaciers, on the one hand, and of competent archæologists on the other, give us something upon which to base an idea of the time scale, with particular reference to the last few thousand years.

Working backwards from the Basket Makers, whose culture is well established, we find a gap between that time and the end of the last glacial retreat. We know that the Basket Makers grew corn, for we find a simple variety of flint corn in their caves. Dr. A. V. Kidder in his book, *Southwestern Archæology* puts the origin of the Basket Makers at 1500 to 2000 B. C.

Dr. Ernst Antevs places the beginning of the last ice recession at about 25,000 years ago in the western part of the United States,

and takes 15,000 years ago as a probable limit since which time the climate has been as it is today. Thus we have the Basket Makers appearing upon the scene 3,500 years ago, and from there back to 15,000 years ago, a period in round figures of some 10,000 years, the beginning of which might be called the 'Early Recent,' and during some time of which Man co-existed with the mammoth and other extinct animal forms. This is not a very satisfactory answer to our question as to how long ago this might be, but it is a challenge to us to exert our best efforts along varied lines of research to find some way to solve the problem of how long man has existed in North America, and where he came from.

E. B. H.

*The Franklin
Peale Collection*

THREE quarters of a century ago, a member of the notable Peale family, identified with the artistic life of Philadelphia, began the collection of 'Specimens of the Stone Age of the Human Race.' His purpose was to prove, through the similarity of ancient artifacts in the Old and the New World, the common origin of their makers, meeting by like means their common needs. Beside the paleoliths from the bed of the Somme he placed crude chipped implements from American Indian camp and quarry sites, and with Neolithic flints from Switzerland and Sweden he compared ground and polished tools and flaked points gathered in our home fields.

The American Philosophical Society has chosen the University Museum to be a permanent home for the Franklin Peale Collection, which numbers upwards of 1100 pieces. In addition to the more familiar types of American stone artifacts, there are represented the 'problematicals': banner-stones, boat-stones, pierced tablets, and discoidals.

A notable pipe [Plate V], apparently from the Ohio region, is carved with a seated human figure and his totem, both facing the