line of the description of the village of Mani is repeated at the beginning of that of Mama, where it does not make sense.)

Julian H. Steward's paper on Western Shoshoni myths does not claim to be exhaustive, but is published because information from this tribe in Nevada and eastern California was lacking. The tales are not new for the most part, and local variation is their most interesting feature, so as many different versions of the same tale as possible were collected. The title of one version of the "Theft of the Pine Nuts" story is misprinted "The Origin of People".

The last paper, by Leslie A. White, on new material from Acoma, is a supplement to his book on the Acoma Indians, and contains miscellaneous information obtained since its publication. It includes a brief autobiographical sketch of an Indian, preceded by some particularly interesting notes on the mentality of the Pueblos, which sum up the difficulty of obtaining such material in the words "The autobiography of a Pueblo Indian is about as personal as the life story of an automobile tire"!

G. H. S. BUSHNELL.

THE STONE AGE IN SOUTH AUSTRALIA

A COLLECTION of reprints, all concerned with the stone age industries from certain parts of Australia, has been received*. The novel feature is the collaboration of Mr. H. V. V. Noone, who is an expert in the typology and technology of the older stone age industries of western Europe, and who therefore ensures that descriptive terms used there shall not be employed to describe something different in the Antipodes. This is very important, as heretofore there has always been the danger that, for example, Australian tools described as burins might not really be burins at all. There are few good collections of European stone age industries in Australia, and Australian prehistorians have had to judge solely from pictures—never a very safe proceeding. If any kind of comparative work is to be done, a proper use of sensible descriptive terms universally is a *sine qua non*. It is to be hoped, then, that the above collaborators will extend their activities to other parts of Australia as well.

Similar needs engender similar tools to deal with these needs, and it does not follow that there is any cultural connexion between distantly separated areas because more or less similar tools occur in both. The same may be said of simple industries. Where the industries in the two areas, however, are complex and contain a number of specialized tools, the situation is altered and some cultural connexion may be postulated. Hence the necessity for accurate descriptions and descriptive terms.

In studying Australian stone age collections, one notes the not infrequent occurrence of pigmy types —triangles, crescents, tiny round scrapers, and the like. As these resemble not a little types occurring in the mesolithic industries of western Europe, prehistorians have been tempted to make close comparisons. Actually great care must be taken, because the occurrence of a pigmy industry denotes nothing more than the development of the composite tool—one in which the haft is made of some suitable material such as wood and the 'business' parts of flint and suchlike substances. Such composite tools could be, and were, developed at different times in different parts of the world. Their development probably depended largely on the incoming of climatic conditions allowing of the growth of softwood forests. The pigmy industries of Central India would seem to date from a century B.C. to the tenth century A.D., and those from Ceylon are also not very ancient. It must not be assumed, then, that the pigmy element in the Australian stone age industries is necessarily very old. Once the idea of the composite tool had been adopted, only a few types of pigmy artefact would be suitable—a chipped circle or square would be useless. The only form typical of the western European mesolithic cultures, and not occurring in India, Ceylon or Australia, seems to be the micro-burin.

Students interested in the comparative typology and technology of stone age industries should take note of the above-mentioned excellent descriptive articles.

M. C. BURKITT.

*Campbell, T. D., and Noone, H. V. V., "South Australian Microlithic Stone Implements", *Rec. S. Aust. Mus.*, **7**, No. 3 (May 30, 1943). Campbell, T. D., and Noone, H. V. V., "Some Aboriginal Camp Sites in the Woakwine Range Region of the South-East of South Australia", *Rec. S. Aust. Mus.*, **7**, No. 4 (Nov. 30, 1943). Noone, H. V. V., "Some Aboriginal Stone Implements of Western Australia", *Rec. S. Aust. Mus.*, **7**, No. 3 (May 30, 1943). Noone, H. V. V., "Australia: Material Culture", *Mankind*, **3**, No. 5 (Dec. 1943).

EFFECT OF HORMONES ON PLANT DEVELOPMENT

SINCE it has been shown that synthetic growth substances will supply the stimulus necessary for continued ovary development and hence fruit development in a number of plants, various attempts have been made to increase 'fruit set' in both 'fruits' and vegetables by the use of hormones. These attempts have met with varying degrees of success. L. Greene (*Proc. Amer. Soc. Hort. Sci.*, **42**, 149; 1943) finds that a number of growth substances applied as sprays, lanoline pastes and injections to Starking apples failed to increase fruit set.

Similar negative results are reported by C. S. Pomeroy and W. W. Aldrich (*ibid.*, **42**, 146; 1943), using naphthyl acetic acid on orange and grape fruit, although with the marsh grape fruit used, pollen of other grape fruit varieties did increase the set of fruit; on the other hand, R. H. Roberts and B. E. Struckmeyer (*ibid.*, **44**, 417; 1944) found that aqueous solution of β-naphthoxy acetic acid and 2 : 4 dichlorophenoxy propionic acid sprayed on to tomato flowers induced fruit setting. *O*. chlorophenoxy propionic acid was less effective but both phenoxy-acids caused distortion of the foliage.

The use of the sprays did not prevent fruit or flower abscission due to virus or to nutritional deficiencies. Favourable results from the use of these sprays were also found with pumpkins, outdoor cucumbers, egg-plant and *Nicandra physaloides* but not with apple (nine varieties), greenhouse cucumbers, peppers, potatoes, or strawberries.

In field experiments of a similar nature carried out by A. E. Murneek, S. H. Wittwer and D. D. Hemphill (*ibid.*, **44**, 428; 1944) on snap beans, using naphthylacetamide and naphthoxyacetic acid applied as a spray to the plants every second or fifth day, increases in fruit yields were obtained in hot years, but decreases in cold years, emphasizing the importance of environmental conditions in determining the nature and extent of response to the treatments.