

Nellore. Four sites near Udayagiri, sixty miles northwest of Nellore, yielded a distinctly different sort of implements. These are definitely more primitive in workmanship and are more weathered. Further study may confirm the theory that a cultural migration eastward can be traced, possibly following a retreating coastline.

At our invitation the collection has been inspected by Dr. F. H. Gravely, Superintendent of the Government Museum, Madras, and by Dr. A. Aiyappan, Curator of Ethnology. They have also gone with us to some of the sites. All specimens have been marked and listed. At the time of writing this preliminary report Dr. Aiyappan is preparing a complete catalogue using our lists and memoranda as to sites.

FRANK P. MANLEY.

Baptist Mission, Ramapatnam,
Nellore District,
February 3, 1940.

The Constitution of Rottlerin

A REDETERMINATION of the rotatory power of rottlerin methyl ether in this Laboratory has not supported the result¹ reported previously. The sample now examined showed no rotation in chloroform solution.

We have extracted Kamala with ether in the cold and the solution on chromatographic adsorption on alumina gave a zone amongst others from which isorottlerin has been isolated. Therefore, there is no justification for the contention of Robertson *et al*² that isorottlerin is formed during extraction of rottlerin by the action of hot toluene. Its presence in the natural product falsifies such a view.

J. N. RAY.

University Chemical Laboratories,
Lahore,
January 28, 1940.

Ascu Wood Preservative and the Forest Research Institute, Dehra Dun

I HAVE read with great interest your editorial on "Ascu Wood Preservative" published in the latest number of your valuable journal. You have very rightly pointed out that "It is not merely the future of a particular process that is involved now; it is the future of a pioneer industry still in its nascent stage". As Travancore has been a pioneer in the scientific utilisation of timber especially for major engineering structures and as Travancore has five Ascu-treating plants in operation, I was specially interested in your editorial.

The Forest Research Institute, Dehra Dun, in *Forest Research and Indian Industry*, published under the authority of the Government of India stated that "It is scarcely necessary to emphasise that the invention of Ascu (wood preservative) has now made it possible for indigenous timbers to compete with steel, iron and concrete for structural purposes so that a new industry of considerable importance is coming into being. This will not only increase the revenue of the Forest Department from sources which gave a poor income before, but will lead to the employment, directly and indirectly, of thousands of educated men, artisans and manual workers and will reduce imports of foreign materials".

I understand, it was on the recommendation of the Forest Research Institute, Dehra Dun, that all the Electrical Inspectors to Provincial Governments removed the ban on the use of wood poles for overhead electrical transmission and distribution provided the poles were treated with Ascu or any other approved wood preservative. It was on the advice of the Forest Research Institute, Dehra Dun, that the Governments of the U.P., Punjab, Mysore, Madras and Travancore either installed or called for tenders for wood poles "treated with Ascu or any other approved wood preservative" to the tune of 30,000 poles involving the investment of many lakhs of rupees. All the above Governments did not surely do this for the sake of experiment, and will have little confidence in

¹ Ray, Narang and Roy, *Curr. Sci.*, 1939, 8, 558.

² *J.C.S.*, 1939, 1582.

future in the Forest Research Institute. Further, in the note issued by Mr. L. Mason, President of the Forest Research Institute, to which reference was made in your last month's sub-editorial on "Ascu" wood preservative, it was stated that "No adverse reports have yet been received with regard to Ascu-treated timber used for general construction work or fence posts, nor any adverse reports came to hand regarding Ascu-treated electric transmission poles installed a few years ago in Mysore State". From a perusal of the appendices of the *Ascu Forest Record*, which has now been withdrawn, it would appear that the Forest Research Institute sent 3 ft. long fence posts to all electrical inspectors in India for testing in order to judge the efficacy of Ascu for the treatment of electrical poles. If no adverse reports have been received on fence posts treated with Ascu after 7 years experience with Ascu, and all that the Forest Research Institute has found is that poles with very shallow penetration and insufficient amount of Ascu have failed, it is not at all clear why the Forest Research Institute has taken the very drastic and unprecedented step of withdrawing what is avowedly an interim report. Without stating a single fact in the note issued by the Forest Research Institute relating to failure of any properly Ascu-treated timber pole or fence post, the action taken and the recommendation made by the Forest Research Institute is most bewildering. Any industrial or chemical process if faultily applied cannot give satisfactory results and Ascu process is no exception. To say that "new factors have been brought to light" by the failure within a year and a half or two years of poles which have been faultily treated is very unconvincing because if there is no Ascu penetration, no new factors of a mysterious character which could not be foreseen during the first 5½ years of the existence of Ascu can be brought into relief. The most obvious reason for the failure of these poles is because they received only superficial treatment with Ascu. It is strange why no reference has been made by the Forest Research Institute to the excellent condition of Ascu-treated poles

treated under low pressure. The note, as drafted, is most misleading.

In a report on Ascu-treated wood for engineering construction printed and published by the Government of the United Provinces, it has been stated that "The Forest Research Institute, Dehra Dun, feels, therefore, justified in recommending Ascu to all Provincial Governments and non-official inquirers and has stated that Ascu appears to be, so far, the most efficient and economical wood preservative known". I feel, very serious issues of considerable public and scientific interest have arisen as a result of the publication of a note casting grave doubts on the efficacy of Ascu by the Forest Research Institute in which they announce the withdrawal for the first time in the history of the Institute, a research publication. The situation created by the action of the Forest Research Institute becomes all the more bewildering, as for the very purpose for which Ascu has been condemned for general use by the Forest Research Institute after Ascu had been in existence for 7 years, the largest pole using concern in the world, the American Telephone & Telegraph Co. of U.S.A. (which purchases annually 9 lakhs of treated wooden poles and which has the world-famous research organisation, Bell Telephone Laboratories, functioning under it) has recently purchased the patent rights for Ascu in the U.S.A. and Canada for a lakh of rupees for treating only electrical poles. As far as India is concerned, pole users are now in a dilemma as creosote has been already condemned to be unreliable and there is no wood preservative that the Forest Research Institute is prepared to recommend for general use. Imported steel poles are the only alternative. The unprecedented withdrawal of the *Ascu Forest Record* and the Institute's going back on their recommendation of Ascu based on failure of palpably improperly treated poles cannot enhance the confidence of the public in the Institute.

S. K. PILLAI.

Office of the Director of Development,
Trivandrum,
February 14, 1940.