

GENERAL DISCUSSION

MR. FRANK LAQUE.¹—Over a period of 10 yr or so, perhaps further back, a number of people who had mutual interests in what happened to things in the sea, developed the habit of making annual pilgrimages to the Marine Testing Stations, operated first at Kure Beach, now at Harbor Island, N. C. The object of these pilgrimages was first, to examine test specimens taken from the water and, secondly, to talk to each other.

The discussions developed from small groups meeting informally to a full-day meeting arranged to accommodate a large number of people. This has led into regular meetings of university scientists, manufacturers of preservatives, and the users of preservatives.

This group acquired the name of Marine Borer Conference, and arrangements were made to hold meetings with the so-called Sea Horse Institute, which was basically concerned with metals. This worked out fairly well. The name of the group was changed to the Biological Marine Deterioration Conference, rather than the Marine Borer Conference. The possibility of amalgamation with the National Association of Corrosion Engineers is being considered.

CHAIRMAN WAKEMAN.²—Is the standardization of test methods such as these *apropos* for ASTM consideration?

MR. LAQUE.—I do not believe that I can answer the question entirely. It

is perfectly evident by reason of the nature of ASTM, that it is the logical organization to deal with the standardization of methods of tests used in this field, and to leave to the corrosion engineers any aspect of the subject that deals with the practical results and certain amounts of theoretical aspects dealing with the nature of the organisms and mechanisms by which they are resisted.

A MEMBER.—I would like to ask what material is considered to be the best preservative material for wood piling and waterfront construction?

CHAIRMAN WAKEMAN.—There are two different problems connected with deterioration of marine piles. One deals with fungus attack above the water line; the second, to which I will confine my remarks, is the attack by marine borers below the water line. I might say that of all the numerous preservatives which we have had for field testing, creosote is by far the most outstanding and the most effective. We wish it were better but it is still the most effective. There is one other preservative which we have experimented with a little, which shows promise, but only on a laboratory scale, and that is a mixture of creosote and naphthenate.

We have made full scale field tests in which more than 100 piles were treated with a solution of 30 per cent coal tar and 70 per cent creosote, but insufficient time has elapsed for evaluation. This was published by the American Wood Preservers Assn., their publication giving a full history of those tests.

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MR. REGINALD H. COLLEY.³—The best over-all job on piling that we can do is to use a thorough creosote treatment. One of the problems on the practical side of the wood preservative industry is whether to use creosote alone, or creosote and coal tar. We have a little controversy on the handling of refractory timber, represented by the magnificent Douglas fir on the West Coast. Up to the present time we have not agreed to use coal tar. It has been used to a somewhat larger extent on the East Coast. If we could make sure that we saturated the wood with creosote, or creosote-coal-tar solution, we would be doing about all that could be done.

MR. RALPH H. BESCHER.⁴—We are commercially interested in marine piling.

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I would like to concur in the general statements made by Mr. Colley. I know of no material that has been developed that approaches the creosote-coal-tar solution for use in marine piling. It is outstandingly better than any other preservative for this purpose; however, it has limitations in that the normal 8-lb retention used for telephone poles is quite inadequate for marine piling. In fact it is practically useless. It is, therefore, necessary to have high retentions in order to give adequate protection against marine borers. The assay method is, in my opinion, the best protection the customer can have to assure himself of high retentions.

CHAIRMAN WAKEMAN.—As a consumer I would like to endorse the assay method. I hope that some day we can buy creosoted piling on the basis of actual assay, rather than penetration.