

DISCUSSION.

MR. J. S. FITZMAURICE said he would like the author to explain why certain tiles on buildings at Onion's Point were in such a bad condition.

MR. R. POLLOCK asked for information respecting the cost of tiles now used for building purposes.

MR. A. D. NELSON (President) said that as he had been connected with the manufacture of tiles and terra-cotta lumber, the paper was particularly interesting to him. He had seen better tiles than those exhibited by the author, which had been made in the colony. Unfortunately, there were no special appliances in New South Wales for tile manufacture, but as we possessed clay of the very best quality, and it only needed capital to put down a modern plant, when it would be possible to manufacture tiles equal, if not superior, to any yet known.

With regard to Mr. Fitzmaurice's question, he wished to say that unless the clay was of the proper quality, and properly treated, the tiles were, in time, bound to perish.

The author was, he considered, to be commended for having brought this matter before the Association.

MR. A. M. HOWARTH said he regretted the absence of any information in the paper concerning the relative first costs, maintenance, or endurance of some of the well-known forms of roof coverings commonly seen on the older buildings of Sydney. The ordinary hardwood shingle was not nearly so much used now as it was in former days. Probably the frequently refused acceptance of risks against fire had been one of the main causes for its gradual disuse. Another objection was that ordinary shingles as a roof covering had usually a very short life. Neither of the mentioned objections could be sustained in face

of the fact that soft or hardwood split or sawn shingles could, by a very simple chemical operation, be made practically fire and weather proof. There was no doubt whatever that shingles could be made 50 per cent. less impervious to water than some of the roof coverings referred to in the paper.

He was recently informed by a San Francisco engineer, who had 30 years local experience, that ordinary red wood shingles when properly treated in the manner suggested, could not be excelled in first cost or upkeep by any of the other roof coverings known to the trade.

MR. NANGLE said, in reply to Mr. Fitzmaurice's question, he had stated in his paper that the tiles manufactured here some time ago did not give satisfaction, either due to inferior materials being used or a want of knowledge in their manufacture.

With regard to the question of the relative cost of the different kind of coverings, he might say he was not prepared to go into that part of the subject as it varied so much. Slate was the most expensive at the present time, although only a short time back tiles were the most costly; galvanized iron took the next place in cost after slate.
