

THE MANUFACTURE AND USE OF CONCRETE PILES.

Mr. Henry Longcope, recently read a paper on this subject before the National Association of Cement users of the United States. After stating that he had, through the courtesy of Messrs. Constantine Schuman and Percy H. Watson, two well known engineers, been able to present for the consideration of the Convention a number of illustrations showing the manufacture of concrete piles, and the erection of buildings thereof, under the different methods, he went on to show that the matter of concrete piles and abutments was by no means a modern invention. That it was used by the prehistoric Race of Lake Dwellers which inhabited one portion of Europe. Piles were then driven with very crude instruments. The first method adapted to modern uses was the sand pile, produced by driving a wooden form in the ground and withdrawing the same; the hole was then filled with moist sand, well rammed. The next method was to drive a metal form into the ground and, after withdrawing, to fill the hole with concrete. This he maintained was not successful, because in withdrawing the form the ground would collapse before the concrete could be inserted. The next method that was introduced was that of dropping a cone shaped piece of metal weighing five tons, a number of times from a considerable height, in order to form a hole which was afterwards filled with concrete. This method never passed the experimental stage. Then the plan was devised to mold a pile, using concrete, sometimes reinforced. This pile, after perfectly hard, was driven in a similar manner as is now in vogue. While concrete piles made by this method were effective, yet they were open to several criticisms, such as difficulty in handling and the time wasted in waiting for the concrete to set hard. He said that while it seemed well nigh impossible to construct a form that will entirely resist the repeated blows of the hammer, the only solution was to build all the apparatus of such a rugged nature as to reduce the punishment to a minimum.

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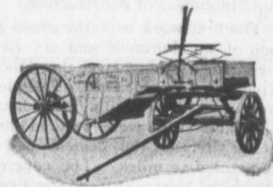
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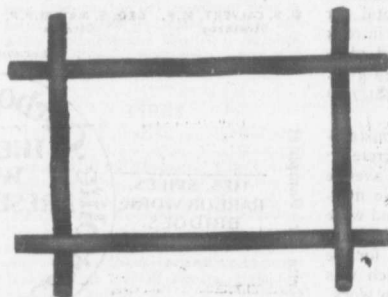


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