sidering the idea of applying steam power to boats, but in the description of a boat under construction, given in a letter to Leibniz (March 13, 1704), Papin says: "Je n'ay point préparé celui ci pour y emploier la force du feu: parceque ce n'est pas à moi d'entreprendre trop des choses à la fois." In Robert H. Thurston's History of the growth of the steam engine (New York, 1893), we read (pages 224, 225) that Papin propelled his boat by his "steam engine" and that "an account of his experiments is to be found in manuscript in the correspondence between Leibniz and Papin, preserved in the Royal Library at Hanover." As Thurston does not give the date of the letter, nor quote from it, while Hering supports his contention also by quoting E. Gerland, who for thirty years has been engaged in editing the correspondence between Leibniz, Papin, and Huygens and the Leibnizian manuscripts on mechanics, and who stoutly combats the conclusion that Papin ever built himself a boat driven by steam, it would seem that Thurston must be in error. Were there any real support to the story of Papin's steamboat, then surely the Germans would be the last to deny it.

The pamphlet closes with a chapter embodying statistics and charts to show the effect of the introduction of the steam engine upon industrial life, particularly in Germany.

FLORIAN CAJORI.

NOTES.

AT the April meeting of the Council of the AMERICAN MATHEMATICAL SOCIETY, Professor E. B. VAN VLECK was re-elected a member of the Editorial Committee of the *Transactions*.

THE April number (volume 9, number 3) of the *Annals of Mathematics* contains the following papers: "A necessary condition that all the roots of an algebraic equation be real," by O. D. KELLOGG; "The equilibrium of a heavy homogeneous chain in a uniformly rotating plane," by E. B. WILSON; "The continuity of the roots of an algebraic equation," by J. L. COOLIDGE; "On the differentiation of definite integrals," by W. F. OSGOOD; "Note on the convergence of a sequence of functions of a certain type," by H. S. BUCHANAN and T. H. HILDEBRANDT; "On the inverse problem of the calculus of