

properly collected and sifted beforehand by an intelligent clerical assistant. It seems quite likely, however, that the careful filling of major positions would do away with any great necessity of reform in the methods of filling minor positions.

PICARD'S ALGEBRAIC FUNCTIONS OF TWO
VARIABLES.

Théorie des Fonctions algébriques de deux Variables indépendantes.

Par ÉMILE PICARD, Membre de l'Institut, Professeur à l'Université de Paris, et GEORGES SIMART, Capitaine de Frégate, Répétiteur à l'École Polytechnique. Tome II. Paris, Gauthier-Villars, 1906. 8vo, v + 528 pp.

As the general scope of this great work has been explained and discussed in a very full review of volume I,* it only remains to give an idea of the large amount of additional material contained in the second volume, which is more than twice the size of the first.

Three principal objects are aimed at. The first is to present a systematic account of the theory of algebraic surfaces as developed by the Italian mathematicians. This theory deals chiefly with systems of curves on any given surface and certain numerical invariants connected with them. The other objects of the book have in view the transcendental side of the theory and deal with two of its main problems, namely, (1) the theory of the double integrals of the second kind, and (2) the integrals of total differentials of the third kind.

The work cannot be regarded as a treatise, since the subject matter with which it deals is still in a formative state and not yet sufficiently matured to admit of such a treatment. Its leading aim is rather to present in an accessible and connected form the numerous investigations of Professor Picard in this field. It accordingly consists in large part of reprints of memoirs and notes previously published in various journals together with such changes and additions as are needed to unite them into a systematic whole. A number of other notes relating to the subject, but not bearing directly on the three problems just mentioned, are collected together in an appendix of twenty pages. An additional note of about forty pages entitled "Sur

* By Mr. A. Berry in this BULLETIN, 2d series, vol. 5 (June, 1899), pp. 438-451.