

## MATHEMATICAL INSTRUCTION IN FRANCE.

BY PROFESSOR JAMES PIERPONT.

*Introduction.*

THE following paper falls into two parts. In the first part, I propose to give an account of the way France is educating those of its youth who wish to become mathematicians, to indicate rapidly what positions a young man of talent may hope to reach, how he attains them, and what his duties are in the various stages of his career. In the second part, I wish to call attention to the advantages which Americans can enjoy in studying mathematics in France, particularly in Paris.

An article of this nature seemed to me to be not only of general interest, but also of considerable importance, and for this reason. We American professors discharge a double office : we are not only professors, in that we investigate and teach ; but we are also administrative officers. The direction and form that our secondary and higher instruction takes depends in a large measure upon us. It is therefore advisable not only to know what England and Germany have to teach us on this subject, but also to inform ourselves of the system of mathematical instruction current in France. At the present moment our graduate schools are in a period of formation. What is plastic and easy to mould now will fifty years hence be difficult or quite impossible to change. It is patent to every one that our new university life is being moulded largely after German ideals. Ninety-nine per cent. of our younger men have received their inspiration in Germany ; it is only natural that we should have German methods before our eyes in shaping the course our graduate instruction shall take. It is at first sight indeed remarkable how ignorant we are of the scheme of mathematical instruction that prevails in France. The land that has produced Cauchy, Poncelet, Laplace, Monge, Hermite is quite ignored by us. How many of us know anything of the famous *Classe de mathématiques spéciales*, or of the rôle the *École Normale* plays in forming the elite of French mathematicians. It is a question in my mind whether it is wise for us to imitate so freely German methods, and be so largely dominated by the German way of looking at things. America is not a New Germany. To counteract this excessive German influence, it seems desirable that we should have among us a respectable minority who have spent con-