

peal for its most necessary requirements to the society of scientific authorities, which it professed not to need. "Everything," says the historian of the Academy,¹ "was wanting for the defence of the country—powder, cannons, provisions. The arsenals were empty, steel was no longer imported from abroad, saltpetre came not from India. It was exactly those men whose labours had been proscribed who could give to France what she wanted. Fourcroy, assisted by researches begun by Lavoisier, taught the methods of extracting and refining saltpetre; Guyton de Morveau and Berthollet made known a new method of manufacturing gunpowder, and studied the making of iron and steel; Monge explained the art of casting and boring cannons of brass for land use, and cast-iron cannons for the navy. On the 6th of August 1793 the Convention had again to appeal to the Academy in order to know what advantage it would be to refine as much as possible the coins of the Republic?" In the space of a few years science had become a necessity to society at large.² In the Constitution of the regenerated Academies it was placed at the head, as the most important department of knowledge.

¹ Maury, *loc. cit.*, vol. i. p. 329. See also Biot's 'Essai sur l'Histoire générale des Sciences pendant la Révolution française.' Paris, 1803.

² The last entry in the record of the "procès-verbaux de l'Académie" before the suspension was a Report by Borda, Laplace, and Lagrange, in answer to a demand of the Convention, dated 19th January 1793, for advice on the new system of weights and measures which the Republic should adopt. And so necessary had the assistance of men of science become to the Government, that even during the suspen-

sion, which lasted from the 8th August 1793 till the 22nd August 1795, Lakanal had succeeded in procuring the following decree from the Government of the Convention: "La Convention nationale décrète que les membres de la ci-devant Académie des Sciences continueront de s'assembler dans le lieu ordinaire de leurs séances, pour s'occuper spécialement des objets qui leur auront été ou pourront leur être renvoyés par la Convention nationale" (Maury, *loc. cit.*, p. 331; Aucoc, 'L'Institut de France,' p. ccvii, &c.)