

labours had to fit in with the general plan, to find a place in the one great edifice.

35.  
Combina-  
tion of re-  
search and  
teaching.

Thirdly, the German man of science was a teacher; he had to communicate his ideas to younger minds, to make the principles and methods of research clear, to guarantee, in his course of lectures, something like completeness, to give a comprehensive survey; not to teach "une science faite," but to draw out original talent in others, to encourage co-operation in research, to portion out the common work to the talents which surrounded him, or it might be to direct the flight of the aspiring genius.<sup>1</sup>

<sup>1</sup> Here the two main objects of academic teaching are to impart a knowledge of the right method in the special science, and to give a survey of the whole domain of the science. The two principal institutions by which these objects are attained were first set going in the classical branches of study, and may be defined by two terms—the "seminary" and the lecture on "encyclopædia." Both terms are taken from earlier institutions. The seminary was originally a training-school for priests or teachers. Under such masters of methodical research as F. A. Wolf and Gottfried Hermann, the institution acquired a different character. "The seminaries are the real nurseries of scientific research. They were founded, indeed, with a different object; the first seminaries, the philological seminaries, which were started during the last century at Halle and Göttingen, were or should have been pedagogic seminaries for the future masters in the learned schools. In reality they were—especially that of F. A. Wolf—in the first place institutions in which the art of philological re-

search was taught. This is even more the case in the philological seminaries and societies which during the nineteenth century have been conducted by G. Hermann, Fr. Thiersch, Fr. Ritschl, and others: they were nurseries of philologists, not of teachers. And the same may be said of the numerous seminaries which in modern times have grown up in the other sciences within the philosophical faculty, and also in the faculties of theology and law: they set up as their aim—with few exceptions—the training for scientific work and research, not the utilisation of knowledge for a practical purpose" (Paulsen in Lexis, 'Die deutschen Universitäten,' vol. i. p. 74, &c.) The same idea was in the mind of Liebig when he started the first chemical laboratory at Giessen (see *supra*, p. 188, note). The encyclopædic treatment of every large subject in a special course of lectures arranged for this purpose had the object of preventing the different studies from falling asunder or ultimately failing to unite in the realisation of one great aim. This great aim of all philological studies, for instance, was always held up by men like Wolf, Hermann, Böckh, and Ritschl, among