

should, after two or three years, show as much insight in regard to the practical side of medicine as he, the teacher, has, who has been training himself for ten, twenty or thirty years. The student would be a genius, nay, an astounding marvel, if he could measure up to that standard.

Even if five years were devoted to the clinical side the student would still not be a finished product. As it is, he is supposed to acquire a good knowledge of the sciences and at the same time the knowledge and experience in clinical medicine and surgery that those who are much senior to him did not have when they graduated. Take a concrete illustration. Thirty years ago the physiology of the nervous system was an unknown, or almost unknown department, and, of course, clinical neurology was chaos itself. To-day much still remains to be ascertained, but what has been explored and determined is such that to know it well requires years of attention. Is it possible to train a student in five years in clinical medicine generally so that he will readily diagnose a case of disseminated sclerosis, of disease of the cerebellum, of syringomyelia or of anterior poliomyelitis?

The fact is that while the clinical teacher is doing right in training as he does, the motive and expectation prompting it all is wrong. No institution with teachers and staff, all of the genius order, would justify that expectation. It is not possible to turn out a thoroughly scientific physician after five years of training, and it is as impossible to equip thoroughly a student with the clinical lore and experience so as to enable him to deal intelligently with all the cases that he meets in the first few years of his practice. Further, as the years pass, the discrepancy between the aim and the achievement of the teacher in this respect must grow greater and greater.

The question which may now be asked is what ought to be the aim? I hold that the first requisite in the attainment of the student is not quantity but quality. To know a great many things in medicine is of no value if there is not therewith the ability to apply the knowledge in concrete cases. The quality demanded involves a special training, a training that should develop precision of thought, the rigidly logical power of the mind and the capacity to recognize whether the facts ascertained in a particular case are adequate to afford the basis for either a generalization or a diagnosis. To attain that result is to develop the Scientific Spirit.

That Spirit is to be developed in the student of medicine by a rigid training in all those subjects which permit exactness, in the sciences, for instance. The sciences serve a double purpose in medical education. A knowledge of them is the basis of the art and practice of