

to the conviction, that the finest quality of gun cotton, which we have had no difficulty in preparing, is insoluble, or nearly so, in that liquid. A gun cotton, of ready solubility and easy manufacture, may be prepared as follows: Take of nitric acid, sp. gr. 1.350 (the ordinary sp. gr. of commercial nitric acid) 5ij.; sulphuric acid (commercial) 3iv. Having mixed the acids in a glass vessel, stirring them with a glass rod, add immediately, of freshly carded cotton, 5ij. 3ij., and digest for the period of fifteen minutes. The acid is now to be poured off the cotton, and the latter washed with water until litmus paper is not affected. The cotton is to be finally squeezed between the folds of a clean towel, to remove as much water as possible; teased out, and finally pressed between sheets of blotting paper, until quite dry, and instantly thrown into rectified sulphuric ether. The quantity of gun cotton thus formed is sufficient for about a pound of ether. It should form a transparent, colourless liquid, somewhat of the appearance of thin mucilage.

SHEETS FROM MY PORTFOLIO.

By A. VON IFFLAND, Esq., M.D.

(Concluded.)

It is scarcely necessary to enter at length here upon the numerous advantages which hospital practice possesses over every other means of medical instruction; suffice it to repeat, that the patients are more absolutely subjected to the disposition of the practitioner; he is not embarrassed by the contrariness, the whims, and prejudices of the sick; his ordinances are superintended by intelligent students, and executed by vigilant nurses; the facility and number of *post mortem* examinations serve to test the correctness of the diagnosis of each case, to correct mistakes, and to ascertain, with precision, the nature of the organic lesions, that have given rise to each train of symptoms. These are some of the circumstances that impart to hospital practice and experience its great value, and has caused it, at all times, to be regarded as furnishing the most important and precious information on practical details, as well as shedding a flood of light on pathological science.

If, then, we contrast the advantages which a student must derive from attending hospital practice, with the frittering away of four or five years of the most valuable time of his life in the closet of his country patron (or perhaps city or town), reading medicine, surgery, anatomy, and even that all important branch, chemistry,* without order or method, and without any

other assistance, save the occasional explanation of terms by his superior, sometimes even unintelligible to him—can it be possible, that a few months attendance at lectures upon all these departments of the profession, in any university, college, or school of medicine, could possibly qualify him to enter upon all the duties of a practitioner! and thereby assume a charge, certainly the most responsible and the most important which can be confided to any member of the human family!

Here I could portray many deplorable results of an imperfect medical education, but details so humiliating and revolting are remote from my present purposes; yet the bare mention of their having occurred ought, on the part of the student, to induce him to leave no means untried, and to spare no labour, however long, to master every branch which he may ultimately be called upon to exercise.

The situation and prospects of the country practitioner have, I believe, been sufficiently reviewed, to leave nothing very desirable on the part of those who, now proceeding in the course of their studies, are looking forward to the rural sections of the province, in which to commence their professional career. The actual state of the profession is such, indeed, whether in town, city, or country, as to prove far from flattering in the way of prizes* to the aspirant, and, I must confess, that unless the misplaced vanity or misdirected ambition of parents, is timely arrested, in educating their sons to a profession, for which there exists, probably, no aptitude (but to attain which, requires long protracted studies, enlarged intelligence, a judgment solid, strong, and clear, and a habit of application, which no difficulties can shake, no labours tire), their future life will be embittered with regret and sorrow.

proceed in his physiological inquiries; without it, one of the most important of the animal functions, respiration, is beyond his comprehension; and, that it is impossible to acquire an accurate and precise knowledge of chemistry without actually making experiments himself. The necessity of chemical knowledge to the practitioner in medicine is sufficiently apparent; for without it, he can neither become acquainted with the various solids and fluids of the animal body, nor can he understand the action which different medicinal substances exert on each other reciprocally. In pharmacy, this branch of knowledge is still more essential, as being continually called for. There exists, however, a fundamental error in the education of young men in this respect; they usually pass much time in learning the preparations of a great number of medicaments, in a sort of routine, and afterwards attend a course, or at most two, of lectures on chemistry, from which they, at best, acquire a superficial knowledge of the science.

* Whatever political influence country medical practitioners may attain in their localities, they certainly cannot all expect to become M. P.'s, and thereby secure a round hundred (exclusive of quadruple travelling expenses) a year, as the wages of seven or eight weeks' labour in cushioned chairs—much less of all becoming superintendents of schools, deputy adjutant generals, &c. &c.

* Every step which the student makes must remind him of the necessity of a knowledge of chemistry; without it, he cannot