be inherited. I have seen so many instances, however, in which foreigners making a short stay in America have become affected with postnasal catarrh, that I think there is little doubt that atmospheric conditions—and those, let me add, of an accidental and controllable character—are much more powerful than heredity.

MODERN THERAPEUTICAL TENDENCIES; PURGATIVES AND TONICS; THE APPRENTICESHIP SYSTEM.

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THE history of medicine and of therapeutics shows that the treatment of disease and the choice of therapeutical agents are guided and modified by the prevailing doctrines of the day. Any physician who has studied, practised, thought and observed for half a century, or even less, must have passed through these waves of opinion, and have personally witnessed great changes, both in doctrines and in therapeutics.

Such has been my case. I commenced the study of medicine in 1834, nearly fifty years ago, at the age of 18, when the antiphlogistic doctrines ruled, and when therapeutics principally consisted in purgatives, bleeding, and spare diet. Disease was then thought to be generally sthenic in its type and character, and was considered to require a lowering treatment. Since then, in recent days, doctrine has changed, and with it treatment. Now disease is considered to be generally asthenic, connected with organic debility, with anæmia, and the treatment generally recommended is a sthenic or tonifying one. This change in views is partly founded on an asserted change in the type of disease in general, formerly sthenic, now asthenic. Some of the seniors have made the assertion, perhaps, to cover their own changed therapeutics, whilst the juniors accept the truth of this view on their authority. We are told, the juniors say, on good authority, that our fathers, formerly sthenic, is now asthenic, and we accept the statement as that satisfactorily explains the change that has taken place in therapeutics.

I would state, *in limine*, that my own personal experience does not corroborate the doctrine of the change of type. In my eyes, disease in general is exactly what it was when I commenced to study it, nearly fifty years ago, in 1834. I perceive no difference in the diseases I saw and treat, and in the results of treatment, except what is easily explained by the laws of general pathology, and by the progress of medical knowledge. Thus, the type of disease is different in town and in country, in the mechanic and in the agriculturist, in phthisis treated by confinement and starvation, or treated by an out-of-door life and a generous dietary. But such was the case, or would have been the case, in days gone by.

I was educated abroad, in a Parisian college, from 7 to nearly 18, and duly examined in medicine, surgery, anatomy, general practitioners, all three educated at Guy's Hospital. Having decided on pursuing medicine as a career, after a couple of months' amateur attendance at Guy's Hospital, under the guidance of the late Mr. Doubleday, of Blackfriars Road, a family friend, I was apprenticed to one of my uncles, Mr. Osmond Taberner, of Repton, Derbyshire, in 1834.

My uncle took me without a premium, discharged his assistant, and said, "You are older than apprentices usually are, you look older than you really are, and considering the circumstances under which you come to me, I expect you to make yourself as useful as possible, and as soon as possible. On my side, I will do all I can to bring you up to the mark." Mr. Taberner was a clever, well informed, country surgeon, brought up in the practice from early youth by an elder brother, to whom he had succeeded. He had only been two winters in London previously to passing at the College of Surgeons and at the Apothecaries' Hall, and told me that during those two winters he had principally attended to anatomy and surgery. His knowledge of his profession, which was considerable, although more practical than theoretical, had been acquired but entirely in the arena in which he had lived and practised. Repton is a large agricultural village, with a well-known free grammar-

school. He was the leading practitioner; he had under his care the village, the school, many circumjacent parishes (it was before the days of Unions), many farmers, many agricultural squires, many clergymen, and some noblemen. He was keen-eyed, discreet, judicious, and had the local medical traditions, no doubt, of hundreds of years to guide him. This is one of the great advantages of the apprenticeship system, which we are losing, the loss being the gradual disappearance of the practical knowledge of one practitioner was handed down to posterity, through his pupils or apprentices, in a plain, forcible manner, which no hospital teaching can replace. Mr. Taberner was as good as his word. He spared no pains to teach me pharmacy and the rudiments of the profession, supplying me with books and carefully guiding me in my studies.

On my side, I did not either as a physician or as a student come up as such to the standard laid down for me. It was, at first, a great fall to pass from Sophocles, Euripides, and Xenophon, from Virgil, Horace, and Tacitus, to the work of a country surgeon. I had to learn how to bleed on a cabbage-stalk, to draw teeth on a sheep's head (as a preliminary to daily surgery practice in those lines); to make thousands of pills, boluses, and powders, gallons of infusions and tinctures. I had to wash bottles every Saturday afternoon, and keep the surgery neat, when it had been swept in the morning. I rather shudder now to think that, before a month had elapsed, I was doing all the dispensing of a large practice, which took me several hours a day; besides the bleeding and tooth-drawing, etc. Then my medical education began. The assistant was gone; and I looked wise, I was told. So I was often put on horseback, and sent long distances, to see how the land lay, and report progress; for, as to our patients, milks and asses, there were constant reasonable and unreasonable summonses, at all times and seasons. My visits, however, were not entirely useless, even at first, owing to the rules laid down for my guidance. "In all diseases and complaints," said Mr. Taberner, "there are three things to do at first, in doing which you cannot go wrong: 1, to clear the *prime vie*; 2, to secure rest; 3, to secure rest. These three objects are furthered by giving a purgative, by enforcing absolute abstinence, with toast-and-water, beer, and by sending the patient to bed." The purgative I took with me in the shape of a pill and draught for a man; the same for a woman; the same for a child. Thus armed, I went on my way rejoicing, initiated the campaign on these principles, and brought back a careful report to my uncle, who himself paid the second visit at his convenience. I soon also learnt to keep the books. Even now, after fifty years' experience, I know no better practice as the preliminary to scientific treatment in all but every malady.

In the meanwhile, I studied the cases in my books with ardour and enthusiasm. I used to get up at five o'clock summer and winter, to read. In the midland counties, the kitchen fires are always banked up at night, and at five o'clock there is generally a good comfortable fire burning. In winter, I rose at that hour, as in summer, and my uncle, in company with my mother, would be in the house until the servants came down at seven and prepared some other room.

Every case of disease that I saw, medical or surgical, made such a vivid impression on me, that it has remained in my mind ever since as the type of that disease, with its social surroundings—the farmhouse, the cottage, the parsonage, the school infirmary—in which it was seen and studied. These impressions have proved much more useful to me than the subsequent records in hospital wards, which must be one of the advantages of the apprenticeship probation. Disease is seen, as it were, in a frame, with surroundings which intensify the impression produced on the youthful mind. Thus also is acquired a practical knowledge of the sick-room, the habit of addressing and communicating with all classes of society, and self-possession under difficulties. Thanks to the judicious training of my uncle, to my own book-ardour, and to the theory and practice, both of the sick, I made rapid progress both in theory and practice, and by the end of two years thought myself nearly as clever as he was; I had my own horse, my own patients, and had become a really efficient assistant.

The lessons I learnt from Mr. Taberner during that time were of inestimable value, and have remained a guide and a beacon throughout life. They have left in my mind also a feeling of deep esteem and respect for the well-informed country general practitioner of this or of any country. Full of practical knowledge in medicine, surgery, and obstetrics, generally left to themselves in emergencies, the better informed are quite equal to the position, both ready and able to minister to the sufferings of humanity in all their forms, and that without assistance from the medical, surgical, or obstetrical heads of the profession. Such was Mr. Taberner, and I have since met

many like him. Many of those to whom we look up as the legitimate heads of the profession would be very much embarrassed were they called upon thus to undertake, unsupported, the sole charge of one of these large general practices—of a large body of men, women, and children.

The main feature of what I may term the Repton traditional therapeutics was a reliance on purgatives, not only administered at the onset of disease “to clear the *prime vie*,” but also for the purpose of derivation during treatment. The results of the combination of purgatives, judiciously chosen and blended, in the treatment of disease, were most satisfactory. Indeed, I have never since then seen so many, scarcely as successful practitioners, either at home or abroad, either in our own or in Continental hospitals.

At the age of twenty, family ties took me over to Paris, and there I found many of my French college companions studying medicine under conditions so favourable that I determined to do likewise; so I got my uncle to release me from the apprenticeship tie, and began again in that city. There I remained seven years, competing for and obtaining everything that could be obtained by competition (*concours*).

The apprenticeship probation had thoroughly prepared me for hospital studies, and I verily believe that I profited more from the opportunities then afforded than I should have done without it, or than my French companions did. Throughout the seven years, however, that I attended and lived in the Paris hospitals, I saw daily exemplified in the patients the want of the knowledge of purgatives that my English practitioners relative to England possessed to his finger ends. Neither physicians nor surgeons knew how to give and to blend cathartics, salines, and mercurials as he did; and I daily saw symptoms which I could have at once relieved had I been the head instead of the subordinate. No doubt this knowledge existed formerly in France as with us; but, under the influence of Broussaisism, which considered purgatives as dangerous, as producing gastritis, and, in the end, the fatal dropsical effluvia, fell into disrepute. All that was ever given was a saline effluvia called “*limonade purgative*,” very rarely even castor-oil. When I could I remedied the deficiency, not without reproof for treating patients *à l'Anglaise*, with *des médicaments de cheval* (horse-medicines).

Not only did my apprenticeship knowledge thus enable me to see deficiencies in the then system of my French seniors, but it also materially helped me in many of the *concours* or public competitions in which I took part. Thus, in one instance, I came out “*facile princeps*” in an important *concours* in which there were two hundred candidates, in a great measure owing to Reptonian reminiscences. The written ordeal, for which three hours were given, was “The Structure of the Skin and Eczema.” Now we had at Repton several cases of chronic eczema which had much bothered my uncle, and which he had handed over to me. So I was well up in the subject, and wrote a regular treatise. The oral ordeal, for which ten minutes was given, was “The Structure of the Liver and Colica Hepatica.” It so happened that Mr. Tabberer had in his practice three old sisters above sixty, living together. The doctor's nephew found favour in their eyes; and (poor deluded ladies) they told him that he might send me whenever he liked. One of them had a severe attack of gallstones, for which I attended her all but alone. This case flashed on my mind, and I graphically, impersonally, *en retourné*, unfolded the history of colica hepatica and gallstones. Most of my competitors floundered in the (to them) unknown ground, and I was thus doubly victorious.

Since these days, and until now, the judicious but fearless use of purgatives has been an important element in my practice and in my professional success. I constantly succeed in accomplishing what my predecessors have been unable to accomplish, by their means.

It appears to me that the neglect of their rational use, which I observed in France forty years ago, has gradually extended to England. This change has coincided with the change of doctrine to which I alluded in commencing, which makes nearly all disease asthenic, and to require tonifying treatment, instead of treatment erroneously considered debilitating. I went as a health exile to Mentone in 1859, and ever since have resided in or practised there in the winter, and I am now the senior of the twenty-four medical practitioners. This position gives me an admirable opportunity of judging what is the tone of practice at home. Every winter I see the prescriptions of most of our leading practitioners, and now seldom find purgatives prescribed, either cathartics, or salines, or mercurials, in the shape of blue pill or calomel. The therapeutical agencies principally relied on are: iron, quinine, arsenic and nuxvomica, with sedatives and antispasmodics. These tonics are often ordered in cases where the stomach and liver are

altogether out of order. Indeed I remember reading in this very JOURNAL some time ago that the state of the tongue is not a reliable guide in conditions of anemia, and that tonics and a copious animal-food dietary might be persisted in, even when the tongue furred and brooded the tongue milky! I think an axiom is arrant treason in my eyes, and would have made my early instructor, Mr. Tabberer, shudder, had he read it. Many of my juniors, on the other hand, shudder at the name of blue pill and calomel, do not even know how to use them, and never prescribe them; not even in congestion of the liver, or in bilious diarrhoea, under any circumstances. I often follow in their footsteps, after lengthened therapeutic failures, and guided by the same reminiscences, cure the patients in two or three days by the judicious use of these “awful” medicines, coupled with a little so-called starvation.

I may add, incidentally, that I find active purgation very useful in all hemorrhages, especially in lung-hemorrhage, often succeeding when all the usual styptics, etc., fail. A case I had a few years ago aptly illustrates the powerful influence of purgatives in hemorrhage in general. I was called to a young Russian lady, who was bleeding to death after the extraction of a tooth. She presented the peculiar hemorrhagic constitution so well known, and had already nearly lost her life several times from this cause. The dentist and two or three doctors had been trying every available means, medical and surgical, for forty-eight hours, without success. The mouth and lips were black with the perchloride of iron. They were at their wits' end, and I, myself, as consultant, was puzzled. I thought, however, of the influence of purgatives, and gave her an ounce of castor-oil, repeating the dose in a couple of hours. Free purging took place, and the hemorrhage stopped at once, not to return.

In conclusion, I would say that, although I think it will be a loss to future generations of medical practitioners for the practical lessons gained during the old-fashioned apprenticeship to be entirely lost, and that it is impossible to divide equally pharmaceutical and medical duties to inexperienced youths such as I was. It would be well, however, to devise some plan by which students, at some period or other, or young graduates, should be encouraged, if not obliged, to pass a year or two as assistants to a general practitioner in full practice. Perhaps this cannot be done; but, if so, it is a pity, for our doctors will be less practically efficient than of old, and most of our training will be lost.

An evidence of the want of pharmaceutical knowledge in the rising generation of practitioners is to be found in the advertising columns of this or of any other medical journal. Evidently, the young doctors of the present day do not know how to prescribe, for want of the practical knowledge they acquired formerly as apprentices. The chemists of the present day, equal to the occasion, are providing them with formulae ready cut and dry, which must be rapidly gaining ground, if we are to judge by these advertisements.

In France, where pharmacy and the art of prescribing are even less studied and known than with us, prescribing is being rapidly reduced to ordering some chemist's formula—So-and-so's iron, So-and-so's chloral, So-and-so's antihemorrhagic solution, So-and-so's quinine, ergotine, digitaline, aconitine, arsenic, etc., in capsules, perles, or syrup. Surely, a well-informed medical practitioner ought to know how to combine and prescribe medicinal agents better than his chemist. The latter gains the day with half-educated doctors, by assuming that he only supplies the pure thing, the real unadulterated drug! This system, however, I am told by dispensing chemists, cuts both ways. It diminishes their legitimate profits, although they receive a very large percentage. In France, they get an allowance of fifty per cent. In building up the fortunes of a chemist in a large house, there is great loss of profit. Moreover, the purchaser reads the outrageous advertisements that accompany these “magistral preparations,” as the French call them, and commence amateur doctoring on their own account, to the detriment of the sufferers and of the profession.

In conclusion, as regards the practical value of the apprenticeship system, I would refer to a very valuable and exhaustive essay, which appeared in this JOURNAL, nearly two ago by Dr. Clifford Allbutt of Leeds. It is the recollection of this essay that has led me to give to this paper the form which it has assumed.

WOUNDS AND DISEASE.—Last week occurred the anniversary of the withdrawal of the Allied Forces from the Crimea in 1856. The campaign lasted two years; and the English lost in the war about 25,000 men, of which number 4,000 were killed or died of their wounds, 15,000 of disease, and 8,000 disabled. The French lost 68,500, and the Russians nearly half a million.