

maintain proper supplies of liquid lymph; and, secondly, from the provisions of the law as regards periods of vaccination being entirely unsuited to small towns and rural districts. The irregularities which have arisen in consequence of the imperfections of the law and the bad arrangements which too frequently obtain independently of the law amount to this: that public vaccination in the kingdom is carried out very generally under no rule whatever. As a consequence of ill-considered arrangements, preserved lymph is used to an extent altogether at variance with any sound system of public vaccination.

The deputation urged that in all arrangements for public vaccination the primary object to be kept in view was, vaccination with well-selected lymph from arm to arm; and they suggested—

“(a) That divisions of unions into districts, and local arrangements, should be subject to such regulations as the Lords of her Majesty’s Privy Council may make, and that power should be given to the Privy Council to make such regulations. This they regard as a necessary complement to the other powers now vested in the Council for securing the more efficient performance of vaccination in England.

“(b) That in places or districts in which, from the limited population, arm-to-arm vaccination cannot be carried on continuously, public vaccination should be carried on periodically; and that no parent residing in such districts should be liable to a penalty by reason of his child remaining unvaccinated after three months from birth, until after the lapse of one of these periodical vaccinations.”

The deputation strongly deprecated any general extension of the limits of age now permitted by the law for the performance of vaccination. They did not, however, see any objection to such extension of those limits as was implied in their recommendation in respect to little populous districts from which small-pox was often absent for long periods. They suggested that these exceptional cases would be best provided for by vesting in the Privy Council “a power to designate—either by general regulation, or on the report of one of their inspectors, or on application from the local authorities—the districts in which public vaccination should be carried on periodically.” A regulative power of this kind is vested in the Board of Supervision by the Vaccination Bill for Scotland.

Finally, the deputation expressed the opinion that it was inexpedient that the control of public vaccination should be vested in two distinct Government boards; and they suggested that the powers now exercised by the Poor-law Board, in regard to vaccination, should be transferred to the Privy Council.

Correspondence.

“Audi alteram partem.”

MEDICAL EDUCATION.

(LETTER FROM PROFESSOR LAYCOCK.)

To the Editor of THE LANCET.

SIR,—The following facts will, I hope, serve to clear up the views of those interested as to the present and past mental condition of the medical student, especially in Edinburgh. They may, I think, be held to be undeniable, being derived from authentic sources:—

I. Medical education as it was thirty to thirty-three years ago.

1. In September, 1830, the Society of Apothecaries of London issued new regulations for students in concurrence with the London College of Surgeons, which took effect on and after 1st January, 1831. The curriculum for College and Hall stood then as follows:—

a. Courses occupying two winter sessions (six months each).

1. Anatomy and physiology. 2. Anatomical demonstrations, or practical anatomy. 3. Surgery. Total, thirty-six months.

b. Courses occupying one winter session, and of not fewer than ninety lectures.

1. Chemistry. 2. Materia medica and therapeutics. 3. Principles and practice of medicine. 4. Midwifery and diseases of women and children. Total, twenty-four months.

c. Courses occupying a summer session of three months.

1. Botany. 2. Forensic medicine, or medical jurisprudence. Total, six months.

For all these courses, sixty-six months.

d. Practical subjects.

1. Practical pharmacy during an apprenticeship. 2. Medical hospital practice for twelve months at an hospital where a course of clinical lectures is given. 3. Surgical hospital practice for twelve months at a recognised school.

The order of attendance on lectures and hospital practice was laid down, and the courses of lectures (which, be it observed, extended over sixty-six months) might be attended in two years.

These regulations were premised by remarks, which after the lapse of thirty-three years may be as usefully reproduced, as if during the whole of that period some of us had learned nothing by experience of what medical education is and ought to be. I subjoin a specimen:—

“The Court of Examiners, in instituting the following regulations, do not by any means conceive that they are requiring the maximum of knowledge that might be expected from the apothecary, but merely that quantity of information which the general advancement of science demands, and certainly not more than is requisite to afford a just security to those whose lives are entrusted to his care, including the majority of the inhabitants of every large city in the kingdom, and the bulk of the population throughout the country.

“In addition to the studies mentioned in the following pages, the Court beg seriously to impress upon parents and guardians who destine the youth under their care to the study of medicine, that a *familiar* acquaintance with the Latin language is indispensable, and that a knowledge of Greek is scarcely less so, since most of the terms of art employed in medicine and the collateral sciences are derived from that expressive language, without a knowledge of which the pupil loses the value of much of the instruction he would otherwise receive from his teacher. Natural history may be said to be essential to the proper study of the materia medica, and an acquaintance with the *exact* sciences will not only enable the student to understand more readily the admirable structure and functions of many parts of the human frame, but also assist him materially in acquiring habits of precise and correct reasoning. He must also take into account the improving spirit of the age in which we live, and must reflect how difficult it will be for him to maintain his proper station in society without the most strenuous exertions on his part.”

Not a word here about the student being overwhelmed by lectures; yet, as I shall show shortly, this Court required, in 1830, precisely the same number of months’ attendance in two years as are required at this moment at Edinburgh for the degrees of M.B. and M.C., and which are to be attended in four years. On the contrary, they enjoined on the student the necessity of industrious self-training, and thus conclude their remarks:—

“The Court of Examiners cannot too earnestly or too often endeavour to impress upon students the necessity of their pursuing a systematic course of study, which time alone can enable them to do; without it they will be compelled to rely upon some *vade mecum* or other trivial work formed to assist the idle or the *hastily educated man*, instead of drinking at the fountain-head of science, and acquiring their knowledge from actual and persevering research.”

This Court and its licentiates have curiously illustrated how much there is in such a name as “apothecary.”

2. Thirty years ago the Medical Faculty of the University of Edinburgh was hardly abreast of the “Hall and College” as to its requirements for the degree of M.D. In 1831 it first made general pathology, and surgery as distinct from anatomy, an imperative part of its curriculum. In 1833 it added in like manner three months’ courses of clinical surgery, medical jurisprudence, and natural history. Mr. Syme at this time attempted to add also a similar course of practical chemistry, but failed; in 1861, however, it was made imperative, together with an additional course of three months of clinical surgery. I say nothing of the only other addition—namely, a certificate

of attendance on six midwifery cases, as practical midwifery. It thus appears that Mr. Syme is to blame, if blame there be, for all the additional courses at Edinburgh since 1833. And, in truth, the additional course in clinical surgery is made more irksome than it otherwise would be to students coming to Edinburgh to graduate from other schools, because of a regulation of the University to the effect that "no teacher is recognised who is at the same time a teacher of more than one of the prescribed branches of study, except in those cases where professors in the University are at liberty to teach two branches." Now the Professor of Surgery in Edinburgh University, strange to say, is not at liberty to teach clinical surgery; consequently all those lecturers on it in Edinburgh and other schools who also teach surgery are not recognised. It thus happens that students from other schools who hold the certificates of such lecturers on clinical surgery are obliged, unless the regulation be evaded, to attend the course over again, and must, in fact, attend Mr. Syme's course!

II. Medical education in 1864.

With this exception, which rests I believe wholly with Mr. Syme to obviate, no student of the Edinburgh University need attend more than one course on any subject. Now, excluding hospital practice and clinical medicine and surgery, there are nine courses of six months, and four courses of three months—in all thirteen courses, with a total of sixty-six months of lectures spread over four years, required for the degree of M.B. and M.C., being precisely the number required on Jan. 1st, 1831, by the Hall and College, and spread over only two years. At this moment these boards require five double courses and two single courses of six months, and six courses of three months—in all thirteen courses, with a total of ninety months of lectures spread over four years. Yet Mr. Callender has clearly shown* that the time occupied by attendance on them during the sessions "averages even less than two hours daily." It is obvious, then, that "cautious advance in the acquirement of useful knowledge by the medical student is quite practicable."

I am, Sir, your obedient servant,

Rutland-street, Edinburgh, April, 1864. THOMAS LAYCOCK, M.D.

ACUPRESSURE IN AMPUTATIONS, ETC.

(LETTER FROM PROFESSOR SIMPSON.)

To the Editor of THE LANCET.

SIR,—My attention has just been called to some observations of your Aberdeen correspondent upon the arrestment of hæmorrhage in amputations by acupressure. (See THE LANCET for April 30th, p. 508.) He states that when acupressure was tried in Aberdeen by Drs. Keith and Pirrie, they found a difficulty in pinning the artery when seated in an angle of the flap, and had to resort to the ligature for securing the main trunk. I am not myself a practical surgeon, but I have now seen acupressure used in a considerable number of instances of amputation of the thigh, leg, arm, and forearm, and I never in a single instance observed the "disadvantage" to which your correspondent refers; on the contrary, I have encountered more than one instance, and heard of others, where the ligature was found extremely "difficult" or totally failed from the retraction of the bleeding orifice, and where acupressure succeeded in arresting the hæmorrhage.

All new practices and manipulations are, it must be remembered, liable to be regarded as troublesome and difficult merely because they are new. And I have no doubt that after a few attempts such excellent surgeons as Drs. Keith and Pirrie will find acupressure as easily applied as the ligature, and even, I believe, more so. For as long a period as one or two centuries after the deligation of arteries began to be used instead of cauterization, one of the "disadvantages" alleged against the ligature by such great surgeons as Fallopius, Nuck, Woodall, Wiseman, &c., was the "difficulty" of surrounding the artery with the thread. About a century and a half after deligation was first practised and propounded by Paré in amputations, Dr. Salmon, a celebrated London surgeon of his day, in his "*Ars Chirurgica*," describes the ligature of arteries as "*very troublesome, and not mightily approved of now*." "In my judgment," observes Read, another London surgeon of the 17th century, "Paré's practice is but a troublesome and dangerous toy, as he shall find who shall goe about to make triall of it."

As another objection against acupressure, your correspondent

adduces "further the disadvantage of putting the patient under the influence of chloroform the following day for the removal of the needles." I never saw a patient put under the effects of chloroform for the removal of acupressure needles. Their withdrawal is not attended with any such pain as to require anaesthesia. No surgeon, as far as I know, uses chloroform when he removes a stitch or suture-thread from the lips of a wound; and the chloroforming of a patient for the withdrawal of an acupressure needle is not more necessary than for the withdrawal of a suture-thread.

Your correspondent further states, that "the much vaunted union by first intention" was not verified in Professor Pirrie's case; and adds: "To be sure it was a scrofulous patient, with an extensive diseased knee-joint, where union by adhesion could hardly have been expected." He forgets, too, that the main artery was secured by a ligature, and not by acupressure; and that every ligatured point is necessarily a point of strangulation, mortification, and sloughing in the centre of the wound.

If surgeons, after the amputation of a limb, avowed it as their predetermined intention to implant small morsels of dead flesh into the sides and depths of their wound before they sewed it up; and further, if they fixed and stitched these fragments of mortified flesh into the raw walls of the wound by a series of silken threads, and retained them there for a week or two, would not the practice be considered as most strange and objectionable in its character, and rather discreditable to the advanced state of modern surgery? Still this is exactly and virtually what is done when surgeons resort to the ligature of arteries in their amputation and other wounds; for every arterial point strangulated by a ligature necessarily dies and sloughs,—so far preventing primary union and adding to the mischances of septic poisoning by so many morsels of dead and decomposing tissue being left inclosed between the lips of the wound. By acupressure all this destructive injury and death of the inclosed portion of artery is avoided, and thus far the chances of primary union are greatly increased. But acupressure—thus a most important element in obtaining primary union—is by no means the sole one in large wounds, and hence union by the first intention after amputation and other severe operations is as yet unfortunately the exception to the rule, and not the rule itself; yet the only one of the three amputations in the Aberdeen Infirmary in which the hæmorrhage was stayed by acupressure alone—namely, a case of amputation of the leg, performed by Dr. Keith—did, I have been informed, close throughout from union by the first intention. Has your correspondent ever seen in the Aberdeen Hospital, or elsewhere, another single instance in which, after amputation of a limb, complete union by the first intention occurred? If he has, he has been unusually fortunate, for, according to the testimony of one of the oldest and most experienced surgeons of Europe, Professor Chelius, union of "the wound after amputation of large limbs *never* takes place by complete agglutination in the strict sense of the word;" yet surely when this rare occurrence did take place in one of the three amputations alluded to by your correspondent—and that one the only case, I repeat, in which acupressure alone was employed—the circumstance did deserve a passing notice, though he has thought fit to give it none.

I am, Sir, yours, &c.,

Edinburgh, May, 1864.

J. Y. SIMPSON.

CHRONIC METRITIS.

To the Editor of THE LANCET.

SIR,—As a former editor of THE LANCET, and as a veteran reviewer, I am fully aware that the criticisms contained in a review constitute all but sacred ground, and that they are not to be lightly questioned or impugned. In the able analysis of Dr. Scanzoni's work on Chronic Metritis, which appeared last week, there are, however, some incidental allusions to my views on uterine pathology which appear to me absolutely to require notice.

The terms in which my writings are referred to in the review in question convey to the reader the idea that they are in opposition to the doctrines expounded in Dr. Scanzoni's work; indeed, they all but imply that I refer to chronic disease of the cervix uteri all, or nearly all, the morbid conditions which he describes under the term of chronic metritis.

Now, nothing can be more unfounded, more remote from actual facts, than such an inuendo. I have not read Dr. Scanzoni's late work; but I may safely say that nearly every pathological fact attributed by the reviewer to the talented

* The Present State of Medical Education in England, p. 7.