

nomenclature; for, under the old names, opium could be prescribed without the knowledge of the patient. This change has only been made after mature consideration on the part of the Committee. They felt that it would be much better to name or imply the active drug contained in the compounds. Of the components of opium, morphia is *par excellence* the important principle. It possesses the anodyne and soporific powers of opium, and gives to opium its valuable properties. Good Turkey opium contains only about ten per cent. of morphia, and it is only four times as strong as crude opium; hence all the power of the drug is not contained in morphia. Codeia is another alkaloid contained in opium. It has been prescribed in France and England as a substitute for morphia. Perhaps many may remember that the irritation of the skin which arises on the administration of hydrochlorate of morphia was attributed to the presence of codeia; but the same is seen in preparations of morphia which are free from codeia. Does, then, codeia exert the beneficial effects of morphia? From the experience of the lecturer, it produced neither the beneficial nor the injurious effects attributed to morphia. In the case of a man with a tumour in the orbit pressing on the fifth nerve, and causing excruciating pain, one-fourth of a grain of morphia was found to be an efficient anodyne, whereas five grains of codeia failed to afford relief. Whether codeia exerts any action on the spinal cord remains to be seen. Narcotine was at one time thought to be the narcotic principle of opium; but such has been proved not to be the case. Meconine is also devoid of power. The resinous matter of opium, doubtless, exerts considerable power. It is soluble in spirit. The resins have been administered to patients, and have produced contraction of the pupils, nausea, and giddiness. Possibly many of the unpleasant effects of opium may be attributed to the resinous portions of the drug. On this point Dr. Garrod desired to speak with diffidence. The only preparation of morphia is the hydrochlorate. The acetate of morphia has been omitted. Why has it been omitted? Because it can be proved to possess no peculiar property differing in its therapeutic action from the hydrochlorate of morphia, although some medical men believe that the acetate of morphia more especially affects the skin; but he (Dr. Garrod) had failed to find the reason for this belief. In the case of a man suffering from neuralgia of the fifth nerve caused by a tumour in the orbit, he found no difference whether he administered the hydrochlorate or the acetate of morphia. Could we imagine for one moment that a quarter of a grain of acid would exert any special influence upon the system?

Lactucarium, or the inspissated juice of the lettuce, had been introduced into the British Pharmacopœia, and was only removed about three months ago. It was supposed that if lettuce were eaten by wakeful people at bed-time it would allay restlessness and induce sleep. He (Dr. Garrod) had made some experiments in order to investigate the action of lactucarium. He had given it to patients with pain and cough in the usual dose of from five to ten grains; and the result was that it neither allayed the pain nor procured sleep. He had also made further experiments with the extract of lettuce, and he could not help doubting its utility.

The lecturer called attention to the Second Part of the work. He said we should find in it a strictly alphabetical arrangement. In the British Pharmacopœia we should find the processes given for nearly all the articles in the First Part of the work. In the London Pharmacopœia for 1851 very many of the processes were omitted. One of the advantages of having the processes inserted in the Pharmacopœia is the considerable amount of chemical knowledge which is necessarily diffused; on the other hand, it adds materially to the bulk of the work, and it cannot be expected that manufacturing chemists will always follow the directions ordered in the Pharmacopœia. Take the processes in the Pharmacopœia as a whole, they are good; although in all cases, perhaps, the best process has not been given, yet by the process given the desired result can be obtained.

Of the infusions some are directed to be made with cold water, as quassia and chiretta; the remainder with boiling water. Another slight alteration in the nomenclature may be noticed—viz., the omission of the word “compound,” unless the preparation contains more than two active medicinal agents.

Some years ago Dr. Garrod gave largely the decoction of dulcamara. In the case of a girl with obstinate psoriasis, he gave it in large doses. After a time she got nearly well and left the hospital; but some time after, she came back with the same affection. He presumed that in the first instance the disease had worn itself out. This drug is not so poisonous as is generally supposed: he had seen as much as five pounds of the berries taken in ten days, and no ill effects had resulted.

Seven liniments had been introduced; of these the liniment cantharidis was very useful as a blistering agent.

Modifications in the strength of the solutions had been made. The solution of morphia contained half a grain to the fluid drachm. The liquor potassæ is reduced in strength, so also the liquor sodæ. There are some interesting facts connected with the therapeutic action of the salts of soda and potash: soda appears to affect the liver, and potash the stomach. Soda in cases of eczema seems to produce a beneficial effect, and potash the reverse. The liquor calcis is stronger; it contains eleven grains to the pint.

Dr. Garrod, in concluding his lectures, said that occasionally he had expressed doubt with reference to the value of certain remedies; when he had done so, however, it was from clinical evidence. In carrying on his investigations in the therapeutic action of remedies he wished for no particular result. The simple search after the truth was his object; he had therefore made no scruple in making known negative results. That the book should be perfect, or approach perfection, could not reasonably be expected, considering the nature of the many difficulties which had to be overcome in the publication of a national Pharmacopœia.

## MEDICAL EDUCATION.

To the Editor of THE LANCET.

SIR,—In prospect of some changes being introduced by the Medical Council at its next meeting on the subject of medical education, I am anxious to call the attention of the profession, especially those engaged in teaching, to consider some of the points given by Professor Syme in a pamphlet he lately published—as well as some others—in regard to a fixed minimum curriculum of study, and the order in which it is best to be followed.

The necessity of having completed all the non-professional courses before the commencement of the professional course may be questioned, as to those branches that are only taught at universities: as Mechanics, Logic, Moral Philosophy, Zoology, Botany, and Geology. Some of these might be taken during the first year of medical study, provided a sufficient examination be creditably passed before the beginning of the second annus medicus.

In order to allow students sufficient time to read-up to the lectures they must attend, a considerable advantage would be gained if a change of the length of the winter and summer sessions were adopted, which would prevent the crowding of so many of the longer courses of Surgery, Medicine, Anatomy, Physiology, Chemistry, &c., into the winter session. In Scotland it is usual to commence in November (which in some measure regulates such matters) with the six months' winter course, and in May with the three months' summer course. I have long endeavoured to point out the advantage of having both courses of four months each, with a short interval of a fortnight, during which examinations for the different degrees could be conducted by written papers.

The present regulations require the attendance at medical classes during four anni medicæ, which are constituted by attending either two six-months' courses, or one six months' and two three-months' summer courses. Thus the whole may be accomplished by twenty-four months' teaching during four years. It may be worth considering whether the four years at present demanded might not be reduced to three years by attending the two four-months' sessions each year, which would give the same number of months' teaching as at present.

Without reducing the number of compulsory courses required by the present curricula of the different examining boards, I would suggest the following classification:—

1. Those classes now required to be attended during 100 lectures, or 5 lectures weekly, being demonstrative and experimental—
 

Anatomy,	} Two sessions, four months each.
Chemistry,	
2. Those requiring one session,  $5 \times 16 = 80$  lectures—
 

Physiology.	Medical Jurisprudence.
Pathology.	Zoology and Comparative
Materia Medica.	Anatomy.
Midwifery.	Botany.
3. Those requiring one session, but not daily lectures—
 

Clinical Medicine,	} $2 \times 16 = 32$ lectures each.
„ Surgery,	
4. Those requiring two courses, but not daily lectures—
 

Surgery,	} $3 \times 16 = 48$ , or 96 each.
Practice of Medicine,	

Practical anatomy, chemistry, and pharmacy should be continued throughout the whole *annus medicus*, as at present. The long two-session courses should be divided into a junior and senior course. With regard to hospital attendance, no student should receive a ticket who cannot produce a certificate of having attended at least one course of systematic surgery or practice of physic, as he could not possibly derive much benefit; and by crowding round the beds at the Professor's visit, he interferes with the more advanced students, and deprives himself of the time for dissection, which ought to be the main object of the first year of professional study. When duly prepared in this way, he may really expect to derive benefit from the practical treatment of the hospital, both at the bedside and the operating theatre. It will be necessary to draw up a programme or curriculum of the order in which the prescribed courses of lectures shall be attended, so far at least as one of each, but leaving any repeated attendances to the student's wish. The following sketch may be sufficient to bring the subject under consideration :—

	No. of Lectures.
<i>First Year.</i>	
Anatomy, 1st and 2nd sessions ... ..	= 160
Chemistry, " " " " " " " " " "	= 160
Physiology, 2nd session, three lectures weekly	= 50
Surgery, " " " " " " " " " "	= 50
Materia Medica, " " " " " " " " " "	= 50
<i>Second Year.</i>	
Anatomy, Demonstrative, 1st session, 3 × 18	= 50
" " Practical, " " " " " " " " " "	Daily.
Surgery, 1st session, " " " " " " " " " "	3 × 16 = 50
Practice of Physic, 2nd session... " " " " " "	3 × 16 = 50
Hospital " " " " " " " " " "	Daily.
Clinical Surgery " " " " " " " " " "	2 × 16 = 32
<i>Third Year.</i>	
Practice of Physic, 1st session " " " " " " " "	3 × 16 = 50
Midwifery " " " " " " " " " "	3 × 16 = 50
Diseases and Hospital, 2nd session " " " " " "	5 × 16 = 80
Physiology, 2nd session " " " " " " " " " "	3 × 16 = 50
Medical Jurisprudence " " " " " " " " " "	3 × 16 = 50
Hospital... " " " " " " " " " "	Daily.
Clinical Medicine... " " " " " " " " " "	2 × 16 = 32
<i>Fourth Year.</i>	
Hospital... " " " " " " " " " "	Daily.
Pathology, 1st session... " " " " " " " " " "	3 × 16 = 50
Zoology and Comparative Anatomy, 1st session " " " " " " " " " "	5 × 16 = 80
<i>First Year.</i>	
Botany, 2nd session " " " " " " " " " "	5 × 12 = 60

The above sketch is little more than a suggestion, and the small number entered for the last year allows some of the more important to be repeated, and at the same time to interfere as little as possible with the preparation for examination. The lecturers of the Hospital Schools in England, and of the Royal Colleges of Physicians and Surgeons in Scotland have just cause of objection to the proposition of the Senatus of the Edinburgh University, as it appears in the *Scotsman* of Monday last; and there is no doubt this will be shared and opposed by all beyond the sacred precincts of the Universities. It looks so very like contravening the ordinances of the last University Commission, that it is scarcely possible that it will be persued in. At the same time, it should not be overlooked that this attempt to change the rules of medical education has been brought forward and seconded by two of the Edinburgh Professors certainly not the least influential or energetic members of the Senatus. The substitution of authorised class-examinations during the session, to be credited at future *pass* examinations, is unjust to public teachers, and is liable to abuse and favouritism. Let the class-examinations be conducted in the way best fitted to secure a sufficient acquaintance with the lectures by competition, and registered by the fashionable system of marks; and if his written answers are all written in a book and retained by the Professor for future reference, and certified by his signature, it may be of use at any oral examination for the *pass* of any of the examinations. As this letter is already longer than I expected, I must leave some points to others.—I am, &c.,

W. MACDONALD, M.D. Edin.,  
Professor of Civil and Natural History, United College,  
St. Andrews, Feb. 1864.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

THE increase in the mortality here, as well as in London, has been so great, that a few particulars concerning it may be interesting. In my last letter I gave statistics to Dec. 12th. In continuation I now append a table showing the number of deaths for the following seven weeks, with the increase above the corrected average of the last ten years; and the diseases from which the increase has mainly occurred.

	For the week ending						
	Dec. 19th.	Dec. 26th.	Jan. 2nd.	Jan. 9th.	Jan. 16th.	Jan. 23rd.	Jan. 30th.
Measles ... ..	23	18	14	10	17	9	14
Whooping-cough ... ..	15	29	19	32	24	20	21
Typhus Fever ... ..	28	27	16	18	23	24	25
Diseases of Lungs and Air-Passages ... }	76	112	98	160	208	181	136
Other diseases ... ..	142	186	147	220	272	234	199
From all causes ... ..	127	128	155	159	167	165	152
From all causes ... ..	269	314	302	379	439	399	351
Increase above the corrected average ... }	6	53	11	80	155	106	53

Thus whilst the increase of deaths above the average from measles, whooping-cough, and typhus, which has occurred for so many weeks, still continues to much the same extent, there has been added another and more formidable increase in the deaths from diseases of the lungs and air-passages; the deaths from which in one week amounted to 208, and in another to 181. The extreme cold and frost of the early part of January at once told upon the weakly and debilitated, the half-starved and half-clad, the women and children, and became the immediate and exciting cause of disease where already so many other circumstances were favourable to its development. On the one hand, it is sad to contemplate that the condition of large masses of the community is such that when weather that is really seasonable occurs, so weakened by disease or dissipation, by hunger or nakedness, are numbers of the population that they at once succumb; whilst, on the other hand, it is encouraging to observe how many and great are the provisions in the animal economy for resisting and neutralizing the various evil and injurious influences that are often brought simultaneously to bear upon it, and which make us wonder that the number of deaths is not greater than it is. Amongst the prominent causes now at work undermining the health and sowing the seeds of disease are—drunkenness, or at least too great an indulgence in spirituous liquors; food adulterated with deleterious ingredients, or in a state unfit for consumption; too close confinement; unhealthy occupations; the crowding together of too many persons in a limited space, by which the atmosphere becomes contaminated. There are many other conditions and circumstances which I cannot in this letter allude to; but if the profession as a body could unite with the clergy and benevolent men of the day, already alive to the extent of the evils enumerated, in bringing an influence to bear upon them, how much good might result it is impossible to foretell. So vastly are these causes on the increase in large towns, that if some great and unanimous movement be not made to check them and lessen their effect, in the course of a few years our populations will doubtless seriously decline in physical vigour, and, as a sequence, in numbers. At the meeting of the Medical Society on the 7th ultimo, Dr. Grimsdale related three successful cases of ovariectomy under his care. In one case there was a very large fluctuating tumour, which when tapped discharged sixty-three pints of fluid. Two months and a half after tapping, when it had refilled, the operation was performed. A good many adhesions were found, but they were readily separated, and the tumour removed. With the exception of slight sickness for three or four days afterwards she had not an untoward symptom, and quickly recovered. In another case, also a married woman, the tumour was of irregular shape, composed of separate cysts, and fluctuation could be felt in parts only; the adhesion to the abdominal parietes appeared general. Dr. Grimsdale operated in Decem-