

that the formation of ammonia is a continuous process. The portion which maintains fluidity at a given moment does not remain to exercise this office for hours or days, but its evolution from the blood is as necessary and continuous an act as its formation. Hence it passes along with fibrine to every part of the body; and, its duty being performed, the excess is evolved, in consequence of its equal diffusion, from every excretory surface, and very largely, as Mr. Reade had already proved, from the surface of the lungs in the expired air of the breath.

The evolution of ammonia from the surface of the body may be proved by an interesting experiment which happens not to have found a place in Dr. Richardson's list. If a glass vessel, of suitable shape, having its inner surface just moistened with hydrochloric acid, be placed on any part of the body when warm with exercise, and therefore in a slight state of perspiration, evolved ammonia will be taken up by the acid; and if collected in a little distilled water, the hydrochlorate may be received and crystallised by evaporation on a slip of glass for the microscope. The same experiment may also be performed on the bodies of horses and other animals.

There is a new experiment of considerable importance, as confirming the proof of the propositions—that there is a volatile alkali evolved in the breath, and that this alkali, having the property of maintaining the fluidity of the blood, is ammonia. Dr. Richardson has proved that in the experiment of passing the vapour of blood through blood, coagulation is suspended by the agency of a volatile principle; and he has also proved by experiment that this volatile principle is ammonia. The effect of passing the vapour of breath through blood is precisely similar to that of passing vapour of blood through it. If a portion of blood be received into a vessel, and the expired air and vapour of breath, collected in quantity and in a suitable apparatus, be passed through it, the fluidity of the blood is maintained so long as the experiment is continued. This experiment is in all respects most satisfactory. If the vapour of breath, which is characterised by the same volatile agent as the vapour of blood, failed to prevent coagulation, we must unavoidably be led to the conclusion that, notwithstanding the evidence of experiment in a given direction in favour of ammonia, there is a still more subtle agency at work, even during the evolution of this alkali from newly drawn blood, which is the true and ultimate cause of coagulation. Ammonia, like potash and soda, would then be looked upon as a mere proximate agent in sustaining fluidity, and its evolution would cease to be acknowledged as the final and efficient cause of coagulation.

SECTION OF PHYSIOLOGY.

RESULTS OF AN EXTENDED INQUIRY INTO THE QUANTITY OF CARBONIC ACID EVOLVED FROM THE LUNGS UNDER THE INFLUENCE OF VARIOUS AGENTS. BY EDWARD SMITH, M.D., LL.B.

Dr. SMITH had conducted a series of experiments extending over several months, and found, by his new instrument, that the quantity of carbonic acid expired varied most materially under the influence of different kinds of food, different states of the atmosphere, etc. The paper went into an inquiry—first, as to the quantity of carbonic acid expired in twenty-four hours, with the variations hour by hour; second, the influence of season; and third, the influence of nearly all ordinary articles of food and of a few medicines. During the summer, respiration is always feeble, as compared with the colder months of the year; and although the skin exercised most important functions, he found that it was not vicarious for the lungs in the expiration of carbonic acid; for while the lungs expired 600 grains, the skin threw off only six grains. The increase in the quantity of carbonic acid was greater and more enduring after eating oatmeal and rice, than after partaking of arrowroot; whilst wheat produced the greatest quantity, though the increase was less enduring than with oatmeal and rice. Tea, coffee, and cocoa, were found to be respiratory exciters, and consequently increased the waste of the system; they could not be classed as food; but as tea induced perspiration, it was most valuable as a remedy against the action of heat. Tea caused the evolution of much more carbon than it supplied. Tea would also be useful in cases of drowning and interrupted pulsation. Brandy, sometimes administered in cases of drowning, had the very opposite effect to that desired, being a non-exciter of pulsation; whereas tea increased the action of the lungs and skin. If the object were to prevent the waste of the system, then alcohol might be useful, and tea would be improper; but if they wished to refresh themselves, tea should be taken. The experiments made showed that

those who were more susceptible of injurious influence by heat, were the least able to bear any change of climate; and if this were borne in mind, it would be found of service to those who might contemplate going abroad—to the East or elsewhere.

METHOD OF DETERMINING THE QUANTITY OF CARBONIC ACID CONTAINED IN EXPIRED AIR.

BY EDWARD SMITH, M.D., LL.B.

Dr. SMITH reviewed the various methods which have been placed on record for abstracting carbonic acid gas from expired air. He added a detailed description of apparatus which he had himself employed, and which had been successful not only in supplying a means of accurate measurement, but in its adaptation to the wants of the system, in its applicability to the states of sleep or wakefulness, quietude or exertion; in permitting the repetition of the experiment every few minutes; and in isolation of the product of the lungs.

Editor's Letter Box.

THE PRESIDENCY OF THE MEDICAL COUNCIL.

LETTER FROM W. H. GATTY, ESQ.

SIR,—In the JOURNAL for last week, you invite discussion on the question, "Is the President of the Medical Council to be a Member of the Medical Profession, or a Layman?" and yourself briefly state some of the reasons for and against each view of that question. In answer to your invitation, I beg to offer to the consideration of my professional brethren one or two arguments in favour of the election of a lay President.

In the consideration of this subject must be borne in mind the peculiar position which, up to the present time, the medical profession has held in relation to the public—that relationship being essentially a private one; that the profession has no public rights, duties, responsibilities, recognition, or status; and that the only legislative privileges attached to it have been with regard to the municipal authority of one or two distinct and local corporations. This state of things, however, is gradually passing away. A more thorough appreciation of the capabilities of medical science and the duties of medical practitioners is growing up, not only in the ranks of the profession, but amongst the public generally; and sanitary science is allowed to be one of the most interesting, and sanitary legislation one of the most necessary, branches of social economy. It therefore behoves us, as a profession, to be especially careful how we bear ourselves under the present trying circumstances; to justify by our conduct the proud boast we have always so loudly made, of being the least selfish and most benevolent body of men as a class; and to show, indeed, that the chief object of our desire, throughout our long agitation for medical reform, has been really the benefit and improved sanitary condition of the masses, not, under such cloak of philanthropy, merely our own social and pecuniary advancement.

For my own part, I am compelled—though reluctantly compelled—to state my opinion that the profession is not yet ripe for assuming the direction of the great sanitary movement that is required, and has now commenced. However skilful and able to apply medical science to working out the details of any legislative arrangement determined upon they may be, and however useful and necessary is all the information they can bring to bear on the subject before any enactment is made, still, from the peculiarly private nature of their occupation, and their little acquaintance with the management of public questions generally, medical men are at present unfit for so difficult a position, and would therefore be much more efficiently presided over by some eminent layman, accustomed to direct his attention to the consideration of such questions.

Again, we must bear in mind what will be the position, and what the duties, of the President. These will be more especially to preside over and direct the discussions of a Council, in which, being entirely composed of professional men, there will be no fear of professional interests being lost sight of, and which, being composed of a number of conflicting elements, representatives of bodies who have scarcely yet been able to agree as to what relative weight and influence each shall possess, will be much more likely to submit to the authority of a President entirely unconnected with any one of the antagonistic parties, and whose only interest can be to promote the beneficial influence of the profession generally, than to one who,

however honourable, however pure, will be suspected of having an involuntary bias towards the party from which he is taken.

Whether in the course of time it may not be advantageous, both to the public and to the profession, to hold out the presidency of the Medical Council as an honourable object of ambition to medical men, is scarcely now worth taking thought about; as a considerable time must necessarily elapse before, in my opinion, such can be the case. Perhaps, however, it may be when the heart-burnings and jealousies which have hitherto divided and lessened the influence of the various branches of the profession have ceased, and when from increased attention having been given to questions of public utility, medical men have attained to that more extended information and more widespread view of general subjects, which I believe is necessary for the efficient development of this great social question.

I am, etc., W. H. GATTY.

Market Harborough, October 19th, 1858.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

* In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

- LITHGOW. On October 13th, at Weymouth, the wife of James Lithgow, M.D., of a son.
 PESKETT. On October 9th, at Leyton, Essex, the wife of Alfred Peskett, M.D., of a daughter.
 TUPPER. On September 25th, at Halifax, Nova Scotia, the wife of Frederick Tupper, Esq., Surgeon to the 62nd Regiment, of a daughter.

MARRIAGES.

- FREER—TROW. Freer, Alfred, Esq., Surgeon, of Stourbridge, to Catharine Elizabeth, youngest daughter of William Trow, Esq., of Ismere, Worcestershire, at Churchill, on October 12th.
 HOME—HALLETT. Home, Anthony Dickson, M.D., V.C., Staff-Surgeon to the Forces, to Jessie Elizabeth, second daughter of T. P. L. Hallett, Esq., barrister-at-law, of Lincoln's Inn, at St. George's, Bloomsbury, on October 19th.
 HYSLOP—KENNEDY. Hyslop, —, M.D., Residency Surgeon at Bagdad, to Marion, eldest daughter of James Kennedy, Esq., of Cairn Mill, at Brandleys, near Sanquhar, on Oct. 14th.
 LIPSCOMB—GIBSON. *Lipscomb, Richard Nicholson, Esq., Surgeon, of Tring, Herts, to Eleanor Ann, younger daughter of the Rev. John Edgar Gibson, M.D., rector of Bermondsey, at St. Mary's-in-the-Castle, Hastings, on October 14th.
 METFORD—WAIT. *Metcord, J. Seymour, Esq., Surgeon, of Clifton, to Emily Frances, daughter of the late W. Killigrew Wait, Esq., of Clifton, on August 17th.
 SALVI—BARKER. Salvi, Hyacinthe, M.D., LL.D., of Novi, Piedmont, to Sophia, youngest daughter of W. Barker, Esq., of Belinda Cottages, Islington, at the Sardinian Chapel, Lincoln's Inn Fields, on October 16th.

DEATHS.

- FORDE, Robert, M.D., Surgeon to the Downpatrick Infirmary, at Downpatrick, on September 30th.
 GLADSTONE, William, M.D., Deputy Inspector of Hospitals and Fleets, at Blackheath, aged 86, on October 12th.
 GRIFFITHS, Thomas, Esq., Surgeon, of Hammersmith, at Glenlee Park, Kirkcudbrightshire, on October 11th.
 HAWTHORNE, George Stuart, M.D., of Liverpool, aged 65, on October 16th.
 OGILVIE. On October 13th, at Tannadice House, Forfarshire, Janette Le Clerc, widow of the late Walter Ogilvie, M.D., formerly first member of the Medical Board, Bengal.
 STUART, Alexander, Esq., Surgeon R.N., Medical Superintendent of the Haslar Asylum, at Haslar, aged 48, on October 13th.
 WATTS. On October 11th, at Thatcham, Berks, aged 58, Bessie, wife of George Watts, Esq., Surgeon.

APPOINTMENTS.

- ADAMS, Robert, M.D., appointed, by His Excellency the Lord Lieutenant of Ireland, a member of the Senate of the Queen's University, in the room of the late Sir Philip Crampton, Bart.
 McDOWELL, Benjamin George, M.D. T.C.D., elected Professor of Anatomy and Physiology in the University of Dublin, in the room of the late R. Harrison, M.D.
 WHARTON, —, M.D., appointed Surgeon to the Meath Hospital and County Dublin Infirmary, in the room of the late T. H. Ledwich, Esq.

PASS LISTS.

ROYAL COLLEGE OF SURGEONS. MEMBERS admitted at the meeting of the Court of Examiners, on Friday, October 15th, 1858:—

- BLAKER, Nathaniel Paine, Hurstpierpoint, Sussex
 BRADSHAW, Samuel, Stratford-on-Avon
 BUCKENHAM, John, Belfast
 GRAHAM, Adolphus Frederick, Kirklington, Cumberland
 HORSFALL, Henry, Masham, Yorkshire
 KING, Joseph Henry Thomas, Moresby, Cumberland
 LINEKER, Elisha Harrie, Baldeston, Newark-on-Trent
 RIX, Charles James, Manchester
 SUTCLIFFE, George Gilbert Angell, Rathmines, Dublin
 TODD, George, West Auckland, Durham
 WYNTER, John St. Thomas, Winslow, Bucks

LICENTIATES IN MIDWIFERY admitted at a meeting of the Board, on October 18th:—

- ALSTON, William Evelyn, Studland, Dorset: diploma of membership dated May 3rd, 1858
 BATEMAN, Charles, Leicester: July 28th, 1856
 EASTON, John, Russell Square: April 23rd, 1858
 GODDARD, Richard Walter, Nutford Place, Bryanstone Sq.
 HENDERSON, Joseph, Welbeck, Nottinghamshire: June 13th, 1851
 JENVEY, John Henry, Trinidad, West Indies: April 23, 1858
 JONES, William, Dolgelley, Merionethshire: Dec. 7, 1855
 LINEKER, Elisha Harrie, Baldeston, Newark-on-Trent
 MOORE, John Daniel, Leicester
 ORD, George Rice, Brixton Hill: May 10th, 1858
 OWEN, Owen, Leamington: June 11th, 1858
 RIX, Charles James, Manchester: October 15th, 1858
 SPRATLY, Samuel, The Mount, Tamworth: June 13, 1856
 SUMMERS, William Alexander, Ilminster, Somerset
 TUNMER, James Robert, Ipswich, Suffolk: April 15, 1853
 WATERS, Edmond, Coventry: August 15th, 1845
 WILLIAMS, John James, Northamptonshire

QUEEN'S UNIVERSITY IN IRELAND. At a meeting of the Senate of the Queen's University in Ireland, held on Friday, October 15th, in Dublin Castle, for the purpose of conferring honours and degrees on the successful candidates sent from the three Colleges, Belfast, Galway, and Cork, the degree of M.D. was conferred on the following gentlemen:—

- BARRY, Garrett, Cork
 DOWLING, Jeremiah, A.B., Cork
 JENNINGS, Alexander, Belfast
 LAND, James Stewart, A.B., Cork
 LUTHER, Francis M., Cork
 M'CARTHY, James, Cork
 M'CREA, John, Belfast
 M'MANUS, James H., M.D. Aberdeen, *ad eundem*
 SHINKWIN, Thomas Crofts, M.D. Aberdeen, *ad eundem*
 TAGGART, David, Belfast
 WARREN, Robert Thomas, Cork
 WATERS, Robert, Belfast
 WHITE, Thomas H., Cork

Certificates of first medical examination were obtained by—

- BOURNES, William Henry, Galway
 BURDEN, Henry, Belfast
 COOPER, George, Cork
 DIVERS, Edward, Galway
 GELSTON, Thomas, Cork
 HANNA, William, Belfast
 HEAZLE, Thomas, Cork
 HOOPER, Robert, Galway
 LEVIS, John S., Cork
 MAGUIRE, Edward, A.B., Galway
 NEDWILL, Courtney, Belfast
 O'FLAHERTY, Thomas A., Belfast and Galway
 READ, Richard, Cork