

minor derangements of health frequently ensue. All must have noticed the pallid, bloodless faces presented by painters in general.

In all these cases the cause of the ailments alluded to is the same—namely, the inhalation of the lead, which acts on the system as a poison. That a large sacrifice of life takes place from this cause, and that a still greater amount of disease and suffering is produced by it, is unquestionable. If, therefore, any means could be devised whereby these evils might be avoided, great indeed would be the boon.

But what will be said when it is known that the means of prevention do exist, although as yet they have been adopted only to a very partial extent? Several reasons have concurred to produce this result. It is not alone in Government departments that routine and red-tapeism are met with. Master painters, like many others, are opposed to change, although that change may be an advance on the previous state of things; they also have sharp eyes for their own interest, and scan closely the question of comparative profit. On the other hand, the public are too often indifferent, even in cases involving health, although, indeed, I believe that, in the present instance, they err rather from ignorance of the facts than from indifference.

The remedy to which I refer consists in the employment of zinc in place of lead paint.

Now, zinc possesses certain important advantages over lead when used as a paint, or as the basis of paints:—

1. It preserves its colour for a much longer period; and hence is more durable.

2. Its cost is somewhat less.

3. It does not give rise to colic, palsy, wasting of the arm, or any of the other formidable diseases and symptoms which so often result from the employment of the lead paint.

The objections urged against its use are, that it possesses less body, and that it requires to be laid on in a different manner. These are, however, but minor objections: the first, which is not well founded, may be met by the application of an additional coat of the zinc paint; and the second, by a little practice on the part of the workman. Another objection of the master—the force of which the public will be well able to appreciate—is its great durability, which renders a repetition of the painting necessary only at very long intervals.

The rapidity with which white-lead paint loses its colour, especially in towns and cities, passing successively through several shades of yellow, brown, and black, most persons have had opportunities of observing; it has scarcely been laid on a week, in most cases, before the discoloration becomes perceptible. In closets and in ships, from the action of the bilge water, the discoloration is extreme, and it is this circumstance which has led to the very general use of zinc paint for vessels. The cause of the change of colour of the lead paint is this: the sulphuretted hydrogen diffused through the air, especially of cities and in the vicinity of decomposing organic matter, unites with the lead of the paint, forming a black sulphuret of lead; indeed, lead is one of the most delicate tests which chemists possess for sulphuretted hydrogen.

Most persons have also noticed the discoloration of the ceiling over gas lights, and have probably blamed the gas as the cause; but there is another cause which must share the blame. White lead is sometimes mixed with the lime used to wash the ceiling, a fact which, of course, fully explains its speedy discoloration. Were oxide of zinc resorted to in this case, no such result would ensue.

In a sanitary point of view, therefore,—and it is this which I desire to advocate,—the substitution of zinc for lead paint is greatly to be desired. It rests with the medical profession to enlighten the public on the subject, and thus ensure the more general adoption of zinc as a paint.

I am, Sir, your obedient servant,

Wimpole-street, Feb. 1860.

ARTHUR HILL HASSALL, M.D.

following erratum in the hands of my printer, and it will appear in all the copies of the work unsold:—Erratum: p. 74, line 11 from the top, for 'No. 3,' read 'No. 1.' Mr. Wakley's instruments are figured and fully described at p. 90-91.

"I am, Sir, yours faithfully,

"Thomas Wakley, Esq."

"R. WADE.

To the Editor of THE LANCET.

SIR,—I have perused with no ordinary interest the papers and discussions which have from time to time occupied the pages of your journal on the treatment of urethral stricture, having myself once been the subject of a most formidable one. A writer on this subject is impressed with the conviction that strictures of long duration can rarely, if ever, be permanently relieved, unaided by one of two severe artificial modes—namely, urethrotomy, or cauterization to assist the dilatation. I drew attention to the value of the improved method of treating stricture of the urethra, as practised by Mr. Thomas Wakley, in a letter which appeared in your columns on the 17th of April, 1858. I again recapitulate the circumstances, as for many years I had suffered from stricture of the urethra:—

"I have been married twenty-four years, but previously to this period, and in days when passion and feeling in youth are too apt to usurp the throne of discretion, I unfortunately contracted violent gonorrhoea, which I have now no doubt (from improper treatment, particularly the use of stimulating and highly irritating injections) left the usual effects consequent upon specific inflammation of the mucous membrane—namely, thickening and contraction. Some fifteen years elapsed before I had the courage to seek relief, during which period the emission of semen was invariably attended with pain, and the urine escaped in a very small stream, with frequent desire to pass it. One of our first surgeons in the metropolis then endeavoured to pass No. 4 bougie and also catheter, but ineffectually, and each future attempt, persisted in for four months with instruments of various size, proved equally futile. At last retention of urine supervened, and with extreme torture the smallest catheter was introduced by another friend. From this date the attempt to discharge the contents of the bladder gradually became more distressing, and about two years since a second stoppage of urine ensued; this was again relieved after much perseverance by the smallest catheter. Three weeks since, the difficulty, accompanied by frequent desire of voiding urine, was so great and distressing, that having lost confidence in the tedious, slow, and inefficient, with me, 'bougie system,' I called upon Mr. Wakley, and after satisfying myself by minute inspection, and having had explained to me the precise mode of action, of the instruments employed by this gentleman, that a vast improvement had been made in the manner of treating this disease—or, more strictly, effect of disease—called stricture, I placed myself under his care, and I now thank God, that although only a period of seventeen days has elapsed, I can pass my urine with a freedom hitherto unattainable, and in a full, free stream, and I enjoy the exquisite blessing of being myself enabled to pass Nos. 9 or 10 silver catheters. The opinion of Mr. Wakley is, that a firm catilaginous state of a portion of the urethra, fully one inch in length, has existed for a considerable time; but if he deem fit, he is at liberty to enter into detail of my case. Should any of the profession be sceptical as to the rapid and, as I hope, permanent good effect on me, you are free to give my name and address."

The proof of the efficiency of the *modus curandi* adopted in April, 1858, is fully confirmed up to the present time, having during the past ten months discontinued the use of instruments, and accustomed myself to indulge, with tolerable freedom, in various kinds of stimulating drinks, and the flow of urine is now as free as I ever saw it in my life. It appears to me to admit of considerable doubt whether the act of burning or cutting through a diseased tissue, such as that which is ordinarily produced by the specific inflammatory action of the mucous membrane of the urethra (stricture, as we term it), can be considered so really harmless, in relation to the subsequent effects of such operation, as many surgeons imagine. This process of the part is followed, I assume, first, by inflammation; secondly, by its attendants, swelling, increase of bulk, thickening, induration, &c. *A priori*, to apply this doctrine to the treatment of stricture in a canal so narrow as the urethra, would seem, perhaps, puerile; but can we accurately estimate the remote, superadded mischief which destruction by the caustic or division by the knife is so liable to induce, and which is so likely to become more fully developed as years roll on? In plainer language, have we on record a

MR. THOMAS WAKLEY'S STRICTURE TUBES.

[WE have been requested to publish the accompanying note, in reference to an error in the description of Mr. Thomas Wakley's "stricture guides and tubes," which appeared in the last edition of Mr. Wade's work "On Stricture of the Urethra":—]

"Dean-street, Feb. 1860.

"SIR,—I regret to see that in my work 'On Stricture' I have accidentally stated that you commence your proceeding with No. 3, instead of No. 1, catheter. I have placed the

sufficient number of cases of stricture of the urethra treated by incision, or burning, and dilatation conjoined, to justify the conclusion that the former aids the latter? If a simple widening of the canal by the dilating process alone be not liable to the objections which, I think, apply to the other modes, why incur additional risk? for it is "not proven" that the bulk of the part affected in stricture is prone to return to its originally contracted dimensions, if simply *tubular dilatation* has been judiciously persisted in *ab initio*.

I am, Sir, yours obediently,
February, 1860. A PROVINCIAL PHYSICIAN.
(I enclose my card, as before.)

THE BRONCHIAL BLOODVESSELS.

(NOTE FROM DR. WATERS.)

To the Editor of THE LANCET.

SIR,—I am sorry to trouble you with any further communication on the above subject; but there are one or two points in the first part of Dr. Heale's letter, published in THE LANCET of the 25th of February, to which I shall feel obliged if you will allow me briefly to reply. The question of the distribution and mode of termination of the bronchial bloodvessels may be safely left to the candid and impartial judgment of future investigators.

Dr. Heale says: "Let Dr. Waters only go into any slaughter-house and cast a glance at the lungs even of the animals that have been bled to death, and I am quite sure that no doubt will remain in his mind as to whether there are any bronchial veins or not." I have never denied the existence of bronchial veins, as Dr. Heale may see on referring to my essay.

Dr. Heale also says: "It is difficult to demonstrate the course of the bronchial veins by injection, on account of their valves." As the existence of these valves has never been proved, and is contrary to the general opinion of anatomists, and opposed to the results of my own researches, I cannot admit the force of Dr. Heale's observation. No such impediment, in fact, exists to the course of the injected material.

And here, Sir, I must close my remarks; and in doing so I desire to express to Dr. Heale my thanks for the courtesy experienced from him, and the willingness with which he afforded me information with reference to his paper during the time I was preparing my essay.

I am, Sir, your obedient servant,
Liverpool, Feb. 1860. A. T. H. WATERS, M.R.C.P.L.

* * On account of certain scientific questions involved in this controversy, we have admitted more communications on the subject than we should otherwise have thought it proper to do. Here we must bring the matter to a close.—ED. L.

ACUPRESSURE IN OPERATIONS.

(NOTE FROM MR. CURLING.)

To the Editor of THE LANCET.

SIR,—In a recent notice of an operation for the removal of a breast, performed by me at the London Hospital, your reporter states that I "endeavoured to arrest the hæmorrhage by acupressure, but it did not succeed." I wish to explain that I made only one attempt with a hare-lip pin, which did not answer, owing, probably, to a defect in the mode of application in this my first trial. The patient not being under the influence of chloroform, I did not deem it right to delay the operation by any further effort, but at once had recourse to a ligature. This slight attempt ought not to be regarded as a failure of acupressure.

I am, Sir, your obedient servant,
Grosvenor-street, Feb. 1860. T. B. CURLING, F.R.C.S.

SYPHILIS IN THE ARMY.

(NOTE FROM DR. T. GRAHAM BALFOUR.)

To the Editor of THE LANCET.

SIR,—Will you kindly permit me to correct a mistake in the remarks made by me on Mr. Acton's paper at the meeting of the Royal Medical and Chirurgical Society, and reported in the last number of your journal. After stating that "of the whole number [1126 men of the Grenadier Guards], 536 were admitted into hospital suffering from specific venereal diseases," I should have said that 212 of these were admitted once, 146 twice, 70 thrice, 55 four times, 24 five times, 19 six times, 6 seven times, 2 eight times, 1 ten times, and 1 fourteen times;

making in all 1250 admissions. It appears from the report that I stated by mistake the number of admissions into hospital instead of the number of men amongst whom the admissions occurred.

I am, Sir, your obedient servant,
Feb. 27th, 1860. T. GRAHAM BALFOUR, M.D.

COLLEGE OF DENTISTS OF ENGLAND.

THE subject of Mr. Hulme's third lecture on the Structure and Development of the Teeth referred to the general characters of the teeth in the mammalia. In these animals the teeth are confined to the maxillary and intermaxillary bones, and to the lower jaw. They are fewer in number than in the previous classes, seldom as many as fifty, as in the opossum. The exceptions occur in the cetacea; in the common porpoise there are as many as 190. In some of the edentata, as the armadillo, there are 98. The structure of the mammalian teeth presents fewer varieties than those of the class of fishes; they are generally composed of hard unvascular dentine, enamel, and cement. In the marsupial animals a structural peculiarity consists in the tubes of the dentine passing into the enamel. In the incisor teeth of the rodentia the enamel is composed of two layers, differing in the arrangement of the enamel fibres. In the sloth the teeth consist of a central mass of vascular dentine surrounded by a layer of unvascular dentine and an outermost layer of cement; these structures, being of different densities, wear away unequally, and produce a rough uneven surface for grinding the vegetable food upon which these animals subsist. This arrangement of the component osseous tissues is identical with what occurs in the teeth of the great extinct megatherium and some other allied species which formerly ranged over various parts of the American continent.

Medical News.

ROYAL COLLEGE OF PHYSICIANS.—At the Comitia Majora, held on Tuesday, Feb. 28th, the following gentlemen were admitted members of the College under the temporary bye-laws:—

Donald Cochrane Campbell, M.D., Brentwood, Essex.
Randle William Falconer, M.D., Bath.
Charles Rooke Prance, M.D., Plymouth.
Martin Heckscher, M.D., Manchester.
John Kelk, M.D., Scarborough.
Edward Howard, M.D., Red-hill, Surrey.
John Ramsay Brush, M.D., Clifton.
Joseph Canham, M.D., St. Lawrence, Ramsgate.
Henry Frederic Augustus Goodridge, M.D., Bath.
William Alexander Greenhill, M.D., Hastings.
Duncan Stewart, M.D., Warley Depot, Brentwood.
Henry Oxley Stephens, M.D., Bristol.
Augustus Hess, M.D., Artillery-place, Finsbury.
Thomas Sanden Watson, M.D., Bath.
Adolphus Albert Frederick Rasch, M.D., South-street, Finsbury.
Henry Amelius Powell Robertson, M.D., Bristol.
James Tetley, M.D., Torquay.
William Herries Madden, M.D., Torquay.
Edward Denis de Vitre, M.D., Lancaster.
Henry Maudsley, M.D., Cheshire.
Edmund Dapples, M.D., New Bond-street.
George Mathieson Ogilvie, M.D., Bombay.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College, at a meeting of the Court of Examiners on the 24th ult. :—

Batty, Thomas, Liscard, near Birkenhead; L.S.A. June 22nd, 1853.
Blades, Charles, Tattershall; L.S.A. Dec. 31st, 1830.
Calcleugh, Simon, Hawley-road, Camden-town; L.S.A. April 8th, 1847.
Clewley, Thomas Mallabar, Whitwick, Ashby-de-la-Zouch; L.S.A. May 25th, 1843.
Dawson, John, Thames Ditton; L.S.A. Feb. 17th, 1831.
Dowling, Thomas, Chew Magna, near Bristol; L.S.A. May 15th, 1823.
Flockton, Rowland, Snettisham, Lynn, Norfolk; L.S.A. May 22nd, 1845.
Furnivall, William, Hutton, near Weston-super-Mare; L.S.A. Dec. 6th, 1827.
Hartley, John, Howden, Yorkshire; L.S.A. March 3rd, 1836.
Hartley, Joshua, Malton, Yorkshire; L.S.A. Oct. 17th, 1850.
Hughes, John Howe, Wednesbury, Staffordshire.
Jump, Charles James, Litcham, Norfolk; L.S.A. Feb. 9th, 1837.
Manning, Henry John, New Zealand.
Middleton, James, Queen-street, Cheapside; L.S.A. April 22nd, 1830.
Miller, William, Poole, Dorset; L.S.A. April 28th, 1842.
Mockatt, George Thornton, Denbigh-place, Pinlico.
Morgan, Moses, Charlotte-street, Bedford-square; L.S.A. Nov. 20th, 1823.
Morris, Charles Henry, Normanby, near Middlesborough, Yorkshire; M.D. Aberdeen, Oct. 16th, 1847.
Pottie, John Rowland, Bath-street, City-road; L.S.A. May 7th, 1835.
Staniland, Samuel, Yoxall, near Burton-on-Trent; L.S.A. Feb. 24th, 1853.