

small-pox, the small-pox will not be prevented or influenced by the re-vaccination. What I recommend to persons exposed to small-pox, who have previously been indifferently vaccinated—and the number, I regret to state, is very large—is to be re-vaccinated at once. When I see fit, in persons of full habit, I recommend them to take an aperient, and to live abstemiously. In this way, the re-vaccination is secured, and the good effects of the aperient come in at, perhaps, just the right time.

It should, however, be stated that where no opening medicine is given, not above one person in thirty will have any illness or soreness of the arm worth complaining of from re-vaccination.

I am, Sir, your obedient servant,

J. F. MARSON, M.R.C.S.,

Resident-Surgeon of the Small-pox Hospital.

Upper Holloway, Aug. 1858.

THE SEWAGE OF TOWNS.

To the Editor of THE LANCET.

SIR,—The all-absorbing topic of the day is, how to get rid of the sewage of our towns without detriment to our own health or that of our neighbours. Another not unimportant question is, how to attain this object and at the same time utilize the refuse matter, by retaining it and applying it to agricultural purposes. I think I shall be able to show that both of these desirable ends may be attained. I propose to carry out my suggestion on the principle of interception, which has been so highly commended by scientific men both in and out of Parliament, and for the interception to commence at the *starting point*. The proposition is to be carried out as follows:—Each owner or occupier of a dwelling or number of dwellings to be required to construct in the soil pipe or drain from the water-closet a *drained dumb well*, or “interceptory reservoir.” The reservoir may be made with blue bricks and cement, or it may be a cast-iron tank, or a dilated sanitary tube; but in either case it must be quite impervious to air or fluid, except through the soil-pipe from the closet and drain leading to the sewer. The entrance to the sewer-drain from the interceptory reservoir will be by means of a hole bored in the bottom of the reservoir immediately over the drain, which must be covered over with a colander, or, to use a more explanatory term, a perforated chimney, fixed firmly over it, and extending vertically to the top of the reservoir. This would effectually carry off the *fluid* from the reservoir, while it would prevent any escape of the *solid* from it. It would also prevent, by keeping the reservoir dry, any percolation of the fluid. The interceptory reservoirs, taking an average, would not require emptying more than once in twenty years, when the contents would be found to be perfectly deodorized. These reservoirs would not have the slightest ill effect in a sanitary point of view, as, being quite air-tight, there could be no escape of the fetid gases; on the contrary, the plan would be of the greatest importance as a sanitary measure. I estimate that upwards of 150,000 tons of solid night-soil are annually wasted by being thrown into the Thames, to say nothing of the intolerable stench and nuisance as it passes along the sewers and the river. The plan would purify the Thames and the sewers, without waiting, as proposed by the Board of Works, five years for its accomplishment, during which time an incalculable amount of injury would be done to the health of the inhabitants of London. Moreover, any scheme that proposes to intercept the sewage beyond the sewers would be attended with such innumerable difficulties, in the shape of blowing up of works, nuisance to the neighbourhood, and consequent injunctions, that it appears too doubtful to attempt it.

I am, Sir, your obedient servant,

Birmingham, Aug. 1858.

EDWIN CHESHIRE, F.R.C.S.

GRATUITOUS ADVICE.

To the Editor of THE LANCET.

SIR,—Although it is not “usual to make comments on an editorial article,” it may not be out of order to speak in praise of one, and I therefore say that yours of the 3rd July, on “Advice Gratis” has given me unfeigned pleasure.

I was somewhat surprised to see in your number of the 17th July an article from Dr. Stookes, of Liverpool, dissenting from your remarks, and I notice it because I think it is the carrying out of the practice he advocates that causes so much of what medical men in general are complaining of—inadequate remuneration.

In the first place, what class is it to whom Dr. Stookes is so

liberal in his advice gratis? To that class which consists of “a very large number of persons,” as may be judged from the number that Dr. S. himself prescribes for, “on an average not less than a hundred and fifty persons on three mornings of the week,” who, “being a grade above going to the parish doctor or a public charity, are able to pay for medicine, but unable to pay for advice also.” And what does Dr. Stookes say in excuse for this liberal outlay of time and talent to a class which, in such a town as Liverpool, must comprise nearly one-fourth of the population? That “it furnishes him with a sufficient number of patients to practise his art upon, and thus to make up for his woefully deficient knowledge of the practical part of his profession.”

Dr. Stookes then asks the question—“Is it better for the medical man to give advice gratis,” to improve his practical knowledge of disease, or “to let the poor public go the chemist and druggist for that and medicine also?” Now, I maintain that the *really* poor, who cannot afford to pay for medical advice, are amply provided with the same by the medical charities for the purpose, and I further maintain that there are a considerable number of surgeons in Liverpool whose medical knowledge is quite equal to that of any who give *advice gratis*, and whose charges are so moderate as to meet the requirements of the class who crowd to Dr. Stookes’s door.

Would it not be far better for physicians and surgeons, young in the profession, to content themselves with smaller fees by prescribing for the very class who now think themselves entitled to advice gratis, and in that way gain a practical knowledge and tact in their profession which would in a few years’ time command patients of a wealthier class, and in consequence yield larger fees? In this way, both the profession and the public would be gainers: the former, in respectability; the latter, in self-respect. In many of the manufacturing towns, men in the receipt of from 20s. to 30s. per week have actually got into the belief that they have the right to call up a medical man at any hour of the night; and some of them are (as I can testify from experience) as exacting in their requirements as if they paid the guinea fee. They think, forsooth, that that poor slave of the public, the doctor, is supported by Government, or somehow or other—they care not. Yet these same men have too much honesty to refuse payment of butcher or baker’s bills; nay, even their lawyer’s fee is respected, and the parson too gets his dues, because *they*, in their worldly wisdom, have not encouraged the advice-gratis system, but have followed the good maxim from holy writ—“the labourer is worthy of his hire.”

I would, therefore, entreat Dr. Stookes and other advocates of this system, if they wish to raise their profession to the dignity of the sister professions, and to make their poorer brethren respect themselves, to give it up; and they will find many able and zealous young men, just commencing their career, who will take charge of these poorer brethren in the time of sickness, not laying on their shoulders burthens more than they can bear, and who will likewise, I imagine, devote more time and attention to their cases than men in full practice who can despatch fifty patients in an hour or two.

I again cordially thank you for your valuable article, and hope that it is only the first of a series from your pen on the subject.

I am, Sir, your obedient servant,

August, 1858.

LIVER.

VENTILATION.

To the Editor of THE LANCET.

SIR,—In all that has been written upon the infinitely important subject of Ventilation, I have read nothing satisfactory. The two questions to be answered are—first, how to get rid of used or *foul* air; and secondly, how to introduce *fresh* air. To effect these two objects, a great variety of ingenious expedients have been devised. But there is a third question of still more vital importance, which is, How to obtain *pure* air? The sites of some of our large public buildings (our Houses of Parliament, for instance, on the filthy bank of the Thames) are unwholesome, and some are rendered so by their own drainage. It is obvious that air derived from such a surface may be *fresh*, but cannot be *pure*; it must be more or less contaminated by the surrounding emanations. To obtain pure air, as well as pure water, recourse must be had to a pure source, and this the higher region of the atmosphere affords in an inexhaustible measure. Instead, therefore, of admitting air from the surface, it might easily be obtained from the stratum of the atmosphere on a level with the highest part of the building—the Victoria Tower, for example, of the Houses of Parliament. The cellar-

age beneath might be used as a reservoir. The reservoir might be filled by exhausting its air by means of a furnace, and a tube opening at the top of the tower on one side, like the ordinary wind-sail on board of ship, through which the air would descend, and from this reservoir of pure air it might easily be distributed through the lobbies and passages, and from thence be admitted into all the rooms. In this way the whole interior of the building might be supplied with fresh pure air from the uncontaminated higher region of the atmosphere, far above the reach of any terrestrial emanations.

This hint may be useful in the construction of new buildings, such as barracks, hospitals, workhouses, prisons, asylums, &c., requiring a constant supply of pure air for the support of their numerous inhabitants. The adoption of this mode of ventilation would render the site of the building of comparatively little importance, for the air is everywhere equally pure at a point of elevation a few feet above a high building. A cowl made to present its open side to the wind, by means of a vane, might form the upper end of an air-tube, to descend into an air-tight cellar in the basement, from which might issue air-tubes to supply all the stoves in the halls and lobbies throughout the building, on Cundy's principle. This would afford an abundant supply of fresh, pure, warmed air during the winter months. In summer, the same object would be obtained by means of the ordinary down-draught from the cowl through the air-tube into the reservoir, to be distributed throughout the building by the stoves. The air might be purified from particles of soot floating in the higher regions of the atmosphere by passing it through fine horsehair or gauze sieves, placed before the orifices of the air-tubes leading to the stoves.

With the single exception of the source whence an abundant supply of pure fresh air may be derived, so as to avoid all terrestrial emanations, there is nothing new in this suggestion. The mode of carrying it out so as to render it practically useful must be left to those whose profession it is to regulate the ventilation and warming of public buildings.

I am, Sir, yours &c.,

Montague-street, Aug. 1858.

ISAAC PIDDUCK, M.D.

THE MARSHALL HALL METHOD OF TREATMENT IN ASPHYXIA.

To the Editor of THE LANCET.

SIR,—If you consider the following case of resuscitation worthy of a place in THE LANCET, you will please to insert it at your earliest convenience.

I beg to state that I succeeded in resuscitating by the Ready Method a child apparently dead at birth. There was nothing out of the common about the case, except that it was a face presentation. Duration of labour, thirty-six hours. The funis was twisted thrice round the neck; and the infant gave no sign of life whatever. I thought it almost useless to adopt any plan; but after continuing the above method for some time the child made a deep inspiration, and in about three-quarters of an hour I succeeded in restoring the little fellow to life. He is now nine weeks old and doing well. The mother had epileptic convulsions, at intervals, during labour.

I am, Sir, yours obediently,

West Cowes, Isle of Wight, Aug. 1858.

DAVID THOMAS.

MEDICINE BOTTLES.

To the Editor of THE LANCET.

SIR,—My attention has been directed to a communication inserted in THE LANCET a short time ago under the above heading, which I think calls for some notice in the way of criticism, and which indeed the author seems to desire. The point for which he contends is an alteration in the size of the bottles at present in use, in favour of others bearing a regular proportion to the pint of twenty ounces,—viz., 10 oz., 5 oz., 2½ oz., and 1¼ oz.; and he has endeavoured to prove their superiority by the relation they bear to the numeral 10. He thinks it is an easy matter to calculate tenths, and that it is perplexing to have to deal with twelfths, eighths, and sixths; that by the use of tenths clinical teaching would be rendered easier and the labour of the student lessened; that the dispenser would not be so liable to make mistakes; that constant errors occur from mistaking 6 oz. for 8 oz. bottles, 4 oz. for 3 oz., and 1½ oz. for 2 oz.; and that these numerous sizes are unnecessary. He takes it for granted, moreover, that “spoons” will continue to be made use of in the administration of medicine, it being difficult to suggest any means so general or so accurate!

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I have considered all these points, and I must say I cannot see the force of his arguments. In the first place, with regard to the “spoon measure,” it seems to me incomprehensible how anyone accustomed to prescribe could consider it an accurate one; convenient it certainly is, but far from accurate; and the size of the bottles must bear a relation to the capacity of the measure to be employed. Now, the great majority of teaspoons hold considerably more than 1 drachm—on an average, the 1 oz. phial will not contain more than 5 or 6 teaspoonfuls; so that if the proposed 10 drachm bottles contained some very powerful medicine, in all probability the patient would get a considerably stronger dose than the prescriber intended. In the same way with the dessert- and tablespoons, they almost always contain considerably more than the 2 drachms and 4 drachms respectively; and the only way to attain anything like certainty is to see the size of the spoons and to direct accordingly. But granting that the spoons were exact, or that a graduated measure was made use of (which is the only certain method), I cannot see that the $\frac{1}{10}$ ths would be of any advantage.

At present twelve doses are very commonly prescribed, and for this what can be more convenient than the 1½ oz., 3 oz., 6 oz., and 12 oz. bottles? But the size of the spoon to be used must always be looked to if we wish to make sure that the patient will get twelve doses, and this is a fact of great importance, which cannot be too strongly insisted on. If the size of the spoon is not attended to, the patient would be much more likely to get the proper quantity if the twelve doses were put into 2 oz., 4 oz., 8 oz., and 16 oz. bottles respectively. Moreover, nothing can be more convenient than multiplication by 12; for instance, 5, 10, 15, or 20 min. vin. antim., sol. mur. morph., &c., are often prescribed 1 drachm, 2 drachms, 3 drachms, and 4 drachms respectively. I cannot see anything embarrassing or perplexing in this, or indeed in any multiplication of $\frac{1}{10}$ ths or $\frac{1}{12}$ ths either. But if it was desired to go by one measure, multiplication by 12 would be more convenient than by 10, at least in my opinion. With regard to the frequency of mistakes made in writing directions, such could only happen through carelessness, and I certainly have very seldom seen mistakes occur in this way in my practice. As to the confounding of different sized bottles, this should never be a source of error; any regular druggist could hardly be mistaken, but if he was in any doubt he has the measure-glass at hand.

Reforms are very excellent when they remedy existing evils; but a clear case must be made out before we venture to change a system which has existed for a lengthened period, and with which all our ideas are associated. And I have endeavoured to show that it is quite unnecessary to make any alteration in the size of the bottles, but that greater attention should be directed to the measure with which the fluid is administered.

I am, Sir, your obedient servant,

August, 1858.

SCRUTATOR.

ON THE

EFFECT OF BELLADONNA IN ARRESTING THE SECRETION OF MILK.

To the Editor of THE LANCET.

SIR,—During the last two years I have used belladonna for the purpose of arresting the secretion of milk after delivery; in ten or twelve cases with complete success.

The nurse is directed to spread the extract of belladonna around the nipples, the width of the areola, (in the same way as it is applied round the pupil where dilatation of the pupil is desired,) and to renew the application as often as it is washed away by the milk. In from twenty to thirty hours the milk begins to flow freely, and in the course of five or six days the secretion becomes entirely arrested. In addition to the local treatment I usually prescribe one or two doses of a saline aperient, and order an unstimulating diet.

Since adopting this plan, I have never experienced any difficulty in weaning. The belladonna, by relaxing the lactiferous ducts, induces a passive emptying of the mammæ; and I would suggest that this passive action, by removing the stimulus (retained fluid) for further secretion, is the explanation of the *modus operandi*.

I am, Sir, your obedient servant,

August, 1858.

CHAS. D. KINGSFORD, M.D.

THE Paris papers say that Dr. Corvisart has just left for Biarritz, where a mild kind of small-pox is prevalent in an epidemic form.