is desirous of drawing from the observations contained in the paper :—

1. The unrestricted confirmation of the views contained in the former paper as to the existence of the type of compound serous cysts in the adventitious structures referred to. The author had not only found it in man, but in several of the inferior species of mammalia, and in birds. Several able observers had, on examination, coincided with his views, and he mentioned the late Professor Delpsch, and the present Professor Rokitsanski, having personally informed him of their having, independently, been induced to adopt his views.

2. That the microscopic examination of these tissues, though extremely interesting, does not furnish perfectly conclusive tests of any particular form of adventitious structure to which a specimen may belong, but that it demonstrates the application of the nucleated cell theory, whilst it is fatal to that of cancerous matter being formed in the blood, and eliminated at the spots at which the tumors become manifest. It, therefore, furnishes an important argument in favor of operation, though other practical considerations require to be attended to before operation is decided on.

3. That, to have a complete view of the mode of production of these structures, we must combine the cell theory of Schwann and Müller, the coagulation principle which the author had previously suggested, and the process of organisation investigated by Mr. Kiernan—three stages of development which appear to occur in the order just enumerated; and that none of the phenomena, taken singly, is an adequate test of malignancy, which, as stated in his first paper, must be regarded as the sum of several characters.

4. That chemical analysis, though extremely important and interesting, affords an imperfect and inadequate criterion, as the principles concerned may vary or be changed in the progress of development.

5. That, in operating for the removal of a tumor of this class, it is extremely important to leave behind none of those minute cysts which often form granules in the surrounding cellular membrane, though it may appear in other respects perfectly healthy. This appears to be a mode of extension of the disease independent of inflammation.

6. That experience teaches us that the infiltrated form of these diseases occurs in the structures in the neighbourhood of the purely adventitious growth, when these structures have been the seat of inflammation, and that the chances of success from operation are, consequently, infinitely diminished when such surrounding inflammation has taken place. The presence of the peculiar matter of the disease in the interior of the vessels appears to be one of the modes in which infiltration, the result of inflammation, exhibits itself, and is, therefore, not a valid argument in favor of the pre-existence of such matter in the circulating blood.

On the Nature of the Ossification of Encysted Tumors.

By JOHN DALRYMPLE, Esq., Assistant-surgeon to the London Ophthalmic Hospital.

The author removed from the upper eyelid of a patient an encysted tumor, about the size of a pea, which was found to consist of concentric layers of hard earthy material. Upon examining the structure

by the microscope, he found that the layers were composed of epithelium scales closely agglutinated together; but, instead of the usual transparent and thin lamina, with its central nucleus, they were thickened and hard, and contained granular earthy molecules, which could be removed by immersion in weak muriatic acid. No amorphous earthy deposit existed around or among the scales, which were opaque, of a light brown color, with a clear and large central nucleus. Having added some observations on the microscopic appearances of other encysted tumors, the author concluded by noticing shortly the difference between the origin of proper ossific growths and that of the tumor described by him. Accompanying the paper was a drawing, which exhibited the epithelium scales of which the tumor consisted, with the granular earthy material disseminated through them.

On the Varieties, Causes, Pathology, and Treatment of the Inflammatory Affections of the Retina. By EDWARD OCTAVIUS HOCKEN, M.D.

After some general remarks on the frequency of retinitis occurring as a secondary affection consequent on other diseased conditions of the eye, the author drew attention to three tables, which showed the relative numbers of cases of idiopathic inflammation of the retina, met with in three large eye infirmaries during several years. According to the records of the West of England Eye Infirmary, there were 20 cases of retinitis in 3,926 patients admitted for various ophthalmic diseases during four years. Of these, 6 were acute, 9 chronic, and 5 not specified. Combining with these the results of the Glasgow Eye Infirmary, and the London Ophthalmic Hospital tables, the author found that acute retinitis only occurred once in every 1755 cases of other diseases of the eye; and this corresponded with his own experience, that the proportion of subacute cases was 1 in every 500, and that of chronic cases 1 in 330. He then proceeded, in accordance with the title of his paper, to make observations on the pathology and treatment of the different forms of retinitis, and illustrated his views with the details of some cases.

CLINICAL NOTES AND COMMENTARIES

By Dr. MARTIN H. LYNCH.

ON THE USE OF THE VAPOR AND HOT AIR BATH IN PREVENTING AND REMOVING DISEASE; WITH A DESCRIPTION OF A CHEAP APPARATUS.

It is not necessary to enter into minute details in order to prove that the vapor bath is a most useful agent in the treatment of many diseases. Medical men are well aware of its powers, and, were this not the case, I would yet be saved the trouble of arguing in support of its merits by referring to the able and elaborate article in the "Cyclopædia of Practical Medicine," by Dr. Forbes, on all the forms of bathing.

But it is not so generally known, even amongst medical men, that the vapor bath may be employed to preserve the human frame in health and vigor, and to crush the earliest approaches of morbid action. On this subject, therefore, I shall devote a few words before I describe my apparatus: in the first place, quoting a very practical and appropriate passage from Dr. Forbes' essay :—

"Most of the cases (says Dr. Forbes) formerly noticed under the head of the warm bath are equally benefitted by the vapor bath, and some seem more benefitted by the latter. We shall only here refer to one of these—namely, the well known condition of the system which precedes many acute diseases, and which is familiarly known by the name of a *chill*, because it is usually produced by the application of cold. This state often exists for several days before the reaction of disease and fever supervene. It is the usual precursor of acute catarrh or bronchitis, asthma, pneumonia, rheumatism, diarrhœa, or dysentery, &c.—in a word, of the numerous class of inflammatory diseases which derive their origin from cold. In most of these cases the vapor bath is a very effective remedy if administered at the proper time and in the proper manner. The most proper time is the earliest possible after the application of the morbid cause; but the remedy may still be applied with benefit, although with much less effect, at any time previously to the actual establishment of the local inflammation. After this has taken place, or is about to take place, the application of the bath will, in most cases, be more injurious than beneficial. In cases of the kind now under consideration, the vapor bath, especially if the vapor is breathed, appears to possess decided advantages over the common warm water bath. But although fully convinced of the admirable effects likely to result from this mode of treatment, we cannot consider it as a practice to be had recourse to at the discretion of patients without medical sanction, as, like all powerful remedies, it is capable of doing harm as well as good. Under proper regulation we have little doubt that it will in many cases effectually check the morbid process, which, if left to nature, must end in fatal disease. The temperature in cases of this kind should not be high; the object being to drive to the surface without exciting the circulation; the application of the vapor should be commenced at the lowest degree which is felt to be agreeable, as about 95°, and the temperature should be gradually and slowly raised, and should rarely exceed 106°. The more copious the perspiration that can be excited at a moderate degree of heat, the more likely is the result to prove beneficial."

This is a very favorable account of the virtues of the vapor bath, and it is satisfactory that English and French physicians of experience, have, after a long residence in Russia (where the vapor bath is deemed one of the necessities of life), borne out the assertions of Dr. Forbes as to its influence in checking disease at its commencement, whilst the singular rarity of phthisis in such an inhospitable climate has been ascribed by one of them (Sir G. Lefebvre) partly to the taking of vapor baths in health, and partly to the high and uniform temperature maintained during winter, in Russian houses, by means of the stove.

It may be objected to the statement of the physicians I have alluded to, that they have not taken into account the preventive agency of a good supply of food, and of a low degree of civilisation, with its exemption from mental anxiety and sedentary occupation. But this objection cannot stand; for in Spain and Italy the people are as well fed (making allowance for the difference of climate), and commerce and manufactures can hardly be said to exist; neverthe-

less phthisis is by no means uncommon in these countries. Hence, it follows that the immunity of the Russians is in all probability produced by one or more of the following causes:—1, The uniform and high temperature maintained in their houses during winter; 2, The frequent use of the vapor bath by the healthy; 3, An influence of climate, which we cannot analyse or define in the present state of our knowledge.

What an interesting subject for reflection to the English physician! Our country has reached the highest degree of civilisation as yet attained by any nation in any age. The number of persons engaged in sedentary or unhealthy occupations is very great, and the lives of these persons are peculiarly valuable to their families and to their country. These men live perhaps at some distance from the dark and gloomy site of the counting-house or factory, perhaps in the suburbs or beyond them, but at an early hour in the morning reach the scene of their labors, to remain there until the day is almost ended; whilst on the Sabbath many spend so much as five or six hours in a church, perhaps with the dead rotting beneath its floor and around its walls; they most frequently travel to and from their place of business in private carriages or public conveyances, and, should they walk, the grave and stately pace, which alone is sanctioned by our customs, is insufficient to produce perspiration in winter. Can any one doubt that the healthy functions must be disturbed by the transition from a free cutaneous transpiration in summer to an almost total absence of it in winter? If the merchant, shopkeeper, or clerk, sleeping in his suburban villa or cottage, be likely to suffer injury from his mode of life, how much more damage must be incurred by the constitution of the poorer man, who spends night and day in the heart of a crowded town? Is it wonderful that a mode of life so unnatural, exerting its baneful influence so uninterruptedly, should often induce phthisical cachexia?

I shall briefly allude to two or three circumstances illustrative—1, of the connection between a healthy state of the skin and the disappearance of disease from important organs; 2, of the connection between an inactive state of the skin and disease of important organs.

If healthy dogs be shaved, and their skin covered with varnish, they become indisposed and perish within a short time. Again, let the medical man reflect on the parchment-like dryness of the skin in diabetes and albuminuria, and the striking benefit derived from perspiration in such cases; let him call to mind the dry, dirty-looking skin of the person suffering from severe dyspepsia, and compare it with the skin of the same person restored to health; let him remember the utility of warm baths in the treatment of stricture, chronic cystitis, and many other internal diseases, and he will, I think, be disposed to agree with me in my opinion that the vapor bath used by persons in health, after the Russian plan (once weekly in winter, once in three weeks during summer), may be considered one of our defences against scrofulous cachexia and phthisis.

'Tis true, perspiration excited by the vapor bath is neither so cheering nor so beneficial as perspiration produced by exercise, when that exercise is accompanied by mirth or cheerful occupation of the mind, as in certain athletic games and field sports; but this

is no objection; comparatively few persons can enjoy such sports in our present social state, and the vapor bath forms by no means an inefficient substitute for them.

Medical men are well aware of the circumstances under which the vapor bath should be employed in actual disease; I shall not, therefore, occupy space in this Journal by adding anything on this head. I must not, however, omit observing that it must be a great convenience to the middle and lower classes to possess a cheap apparatus, by means of which a vapor bath (even of an hour's duration) may be had at the trifling cost of fourpence. The London Bath Company charges eight shillings for each vapor bath administered by their portable apparatus, a price which places these baths beyond the reach of all except the wealthy. In the country, persons able to pay this or a higher price must be unable to take vapor baths, unless some apparatus, from its cheapness and simplicity, should come into such general use as to be easily procured in most villages, or even houses.

The construction of my apparatus is very simple, whilst it combines the hot air with the vapor bath:—

A dome-roofed boiler of tin, somewhat more than two inches in depth at the circumference, rests upon a tin stand with iron legs. The stand is four inches high. The boiler is nine inches in diameter, thus giving a larger surface for the generation of steam than any other equally portable apparatus.

The dome-cover of the boiler is fixed, and has two openings—one in the centre, to which a tube of two inches diameter is permanently adapted, the other, close to the circumference, somewhat more than an inch in diameter. This latter aperture serves as a feeder for the admission of water, and has a screw-cover.

The two-inch tube ascends for more than six inches and a half before it is made to turn at right angles, so as to run horizontal to the floor, and joints are added, so that the conveying tube may be made long or short at pleasure.

Should the two-inch tube be made to turn before it has risen six inches and a half, the apparatus will not work so well.

The water should be put in boiling, and should only occupy, at the utmost, one third of the boiler.

As soon as the tube becomes heated, air rushes in at the feeding hole, and rises with the steam. Should the temperature rise too high, it may be lowered by the attendant withdrawing the lamp for a moment or two, or by pulling the cover on the feeding hole, which cuts off the supply of hot air.

The spirit-lamp should not be more than half filled with naphtha, or spirits of wine.

The lower surface of the horizontal tube rests upon a plane, *thirteen inches elevated* above the floor; a stool, hence, is required of this height, large enough for a chair to rest upon it, and also a small foot bath. I consider the immersing of the feet to the ankles in hot water adds much to the comfort and efficiency of the bath, as the hot air and steam *ascend*, and it is some time before the feet become enveloped in them. Laths should be nailed around this stool to prevent the chair from slipping off.

An earthenware spirit-lamp, like that sold by Griffin, of Glasgow, is the best; it need not have more than

one wick orifice, and this should be three-quarters of an inch in diameter. I use the cylindrical wicks burnt in the library lamp, first rolling them up, so that the wick orifice may be completely filled. A metal lamp does not answer; the heat generated by the combustion of so large a wick is very great, and, being readily conveyed by the metal, makes the naphtha, or spirit, boil. In this way it might give rise to troublesome accidents; I have found these to occur with a well made copper spirit-lamp, but never with the earthenware one.

A copper lamp, with four or five wick holes, is attached to some forms of apparatus, but two or three of the wicks cannot be burnt separately from the rest unless very well made screw-caps be made for each wick hole. These screws would bring the price of the lamp *alone* up to eight or ten shillings, whilst, if it become necessary to remove one of the screw-caps (in order to increase the heat), there would be a difficulty in effecting its removal, in consequence of its being too hot to admit of being touched.

The person taking the bath sits upon a chair placed upon the stool or table thirteen inches high, with his feet immersed to the ankles in hot water. A wooden hoop (of sufficient diameter to include the back of the chair and his body, and to extend forwards as far as his knees do in the sitting posture) is slung from his shoulders by two tapes, having cross belts extending across the breast and back, immediately before and behind the neck, which is included in the rectangular space inclosed by the cross-straps and the suspending tapes.

Behind, the hoop should be fastened to the back of the chair, so as to make it lie as much forwards as possible in front.

The cloak should be ample and long, sufficient to cover the patient, chair, and hoop, and to lie on the floor. There should be a slit behind, about thirteen inches above the lower edge, with a short sleeve (a foot long) sewed to it. Through this the steam tube is admitted.

In front there should be another short sleeve, capable of being easily reached by the hand of the person taking the bath; this sleeve is to be used for the purpose of passing out the thermometer and ascertaining the temperature. Strings should be attached to this sleeve, which strings may be tied or untied by the attendant.

The best material for making the cloak is the woollen stuff used for laundresses' ironing blankets, or Irish frieze, as recommended by Professor Macartney. The best description of the latter stuff can be had at three shillings per yard, and the cloth is about a yard wide; it is very thick, and impervious to steam. With a little attention, however, the bath may be effectively administered with the aid of common blankets; this I am able to assert from experience.

Professor Macartney's apparatus is well adapted for the purpose of applying steam at a *low* temperature in inflammations of the extremities or joints, but is not calculated for giving a general vapor bath for exciting general diaphoresis. Professor Macartney directs that, for the purpose of giving the general bath, the boiler and lamp should be included within the blankets or cloak. This alone is enough to condemn his apparatus, for the spirit-lamp and boiler

should (for obvious reasons) always stand outside, and open to the inspection of the attendant.

The only apparatus which comes near mine in efficiency and portability is that of Duval, which, I believe, is in use at Guy's Hospital. This apparatus, entirely made of copper, is extremely neat in execution and ingenious in its plan; but the surface of water exposed for the generation of steam is much less extensive than in mine, the hot air (with the gases generated by combustion) rushes in much greater quantity and at a higher temperature, rendering it impossible to remain as long in the bath as when my boiler is used, and, finally, the price of the apparatus is at least six times greater than that of mine. Moreover, the plan and workmanship are so peculiar that (even if it were not a patent article) it would be difficult to have repairs made in the country.

Duval's apparatus certainly has the advantage of being applicable for the administration of baths of steam-and-sulphurous acid gas; but these are seldom required, and when the apparatus is completely fitted up for baths of this kind, the price amounts to about twelve guineas.

My apparatus is so simple that it may be made in any part of the country from my description; but any gentleman wishing to try it, and desirous to avoid the annoyance of tradesmen's blunders, may procure it at Morris and Osborn's, 32, Parliament-street, at the very moderate price of twelve shillings and sixpence, for the boiler tubes, two earthenware spirit-lamps, and a strong wooden box, not much larger than a hat-box, to hold the entire.

The cloak can be made by any tailor or sempstress, and the stool or table may be had for four or five shillings.

Fourpence worth of naphtha is sufficient for each bath.

London, June 6, 1843.

REGISTRATION OF DEATHS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I take the liberty of offering one or two remarks upon the letter of your correspondent, "A Medical Practitioner," inserted in your last Number.

When I proposed, in my communication to the Registrar-General, a very simple method of ensuring a more perfect registration of the causes of death, I never for a moment doubted the compliance of the great bulk of the profession in willingly, and without fee or reward, assisting in a great national undertaking, in the accomplishment of which the *science* they cultivate would be most materially advanced. I am still of the same opinion. Let any medical practitioner, how arduous soever his duties may be, reflect for a moment upon the few minutes in the year that it would cost him to fill up the table I suggested, and then compare this with the aggregate good which he would be one of the means of promoting, and I feel confident we should never hear from any respectable member of the profession the unworthy motive for refusal "that he was not paid"—for what? For a few minutes' labor in the cause of science! Surely a

reflection of this kind ought not for a moment to rest upon a "learned and liberal profession." Do not let me be understood as arguing for the gratuitous performance of professional duties. I am the last person to advocate the non-payment of just claims to an ill paid, and often ill used, body of men. But I do not consider the registration of births and deaths a legitimate part of the duties of a medical man, still less do I concur with the proposal of *compelling* the members of the profession to furnish the registrars with the causes of death, and I should be one of the first to contend against so unjust and arbitrary a measure, and which it is obvious, upon the slightest reflection, would never be carried out. To advance the interests of medical science, few of the medical men in this country would, I trust, hesitate in joining; to comply with an arbitrary and unheard-of enactment, quite as few would, I am sure, come forward.

If I am mistaken about these points, then should I indeed blush for the profession to which I belong.

It is quite clear that something must be done, or the excellent object of the Registrar-General and Mr. Farr will not be attained. The plan of the latter gentleman I consider impracticable, because it would be neglected in the hurry of professional duties, and even when a certificate, as recommended by Mr. Farr, was left with the friends of the deceased, it would not contain the valuable information which a tabular form would supply. If it were considered that a small fee for each registration would ensure a more correct return, by all means let it be granted. All that I contend is, that the present system is worse than useless, for it causes important statistical errors, whereas the omission of registration would only be the loss of statistical facts. Let me briefly illustrate this. In the last number of the Transactions of the Association, there is article upon the Medical Topography of Sidmouth, by Mr. Jeffrey; and I find in his report of the dispensary that, in six years, there were admitted 3655 cases of disease, and out of that number only 11 cases of phthisis. Upon turning to the Registrar-General's Report, I find the deaths under the head "consumption," during the year 1841, in the counties of Essex, Norfolk, and Suffolk, amount to the startling number of 4037!—in the county of Suffolk alone, 1312. How am I to infer that the "phthisis" of Mr. Jeffreys, and the "consumption" of the report, mean the same disease. I am anxious to make a comparison as to the prevalence of this disease, but I am stopped *in limine*, because I cannot rely upon the correctness of the returns sent to the Registrar-General. *Ex uno disce omnes*. I am forced to the conclusion that the present reports afford me no accurate statistical data upon which I can discover the information I desire.

Let me press this matter upon the attention of those who have the real interests of the profession at heart, and I am sure they will agree with me, that a few paltry registration fees are as dust in the balance when compared with the good they have now the means of effecting.

I am, Gentlemen,
Your obedient Servant,
C. R. BREE.

Stowmarket, June 12, 1843.