

form of ophthalmia from which Hammond has suffered is designated in most ophthalmic treatises as *par excellence* "strumous corneitis." Very vague, as you know, is the meaning usually attached to this word "struma." If, however, names are to be of any use as indicative of a knowledge of the causes of the malady designated, we must insist upon its receiving a modifying addition in the present instances. These patients are not "strumous" in the sense of being liable to tuberculous affections, or likely to die of phthisis, nor do any of them show tendency to disease of the lymphatic glands. There is no reason for believing that the diseases from which they suffer are other than the direct consequences of the specific taint derived from their parents. The treatment likely to be most useful in each instance is that of tertiary syphilis, namely, full doses of the iodides and small ones of mercurials, whilst comparatively little good would come of the use of tonics and cod-liver oil. The distinction between tubercular struma and heredito-syphilitic struma* is, therefore, one of the utmost importance.

* The word "struma", to which some may object in the sense here used, has been retained after much consideration. We have no other word by which to designate the state of constitutional peculiarity to which reference is made. There is no doubt but that the various affections incident chiefly to childhood and the pre-adult period, which have hitherto been classed as struma, and will be so styled for many years, are yet really due to a variety of morbid causes. Some occur in the tubercular diathesis, some are the direct consequences of one or other of the exanthems, some are due to inherited syphilitic taint, whilst others appear to be chiefly due to a peculiarly feeble state of the capillary circulation. It is quite possible to group the various strumous disorders in relation to their different causes, though very frequently the result is complicated by the coexistence of several of the influences mentioned. Instead, however, of attempting to disuse the term struma altogether, I would propose to acknowledge that it is, when used alone, destitute of all precision as to the exact pathology of the disorder so designated, and to habitually append to it the adjectives, "tubercular", "heredito-syphilitic", "post exanthematous", etc., as the case may be.

SOLID MATTER IN THE WATER. "The quantity of solid matter," says Dr. E. Frankland, "contained in the water varies from five to fifty grains per gallon. When this quantity is exceeded the water generally acquires a taste, and may be regarded as *abnormal* water. The water of the ocean is in this condition. The rivers which flow into the sea carry with them matters dissolved, and leave them there, for the solid matters are not carried back by evaporation. Therefore, the sea contains a larger proportion of these substances than is contained in the water of rivers; and we get this effect on a still more exaggerated scale when in hot climates rivers empty themselves into lakes which have no outlet. This is the case with the Dead Sea. The river Jordan which is constantly flowing into it contains seventy-five grains of solid matter in the gallon; and none of this matter is returned again into the atmosphere, or no practical amount; therefore there is a constant accumulation of the saline matters going on there, and in this Dead Sea we have no less than two thousand six hundred grains of solid constituents to the gallon of water. The same effect takes place in a very recently-discovered lake in the north of Australia, a lake discovered a few months ago. It is highly charged with saline matters, and is known to possess no outlet. There is a similar instance in the celebrated Elton Lake in Russia, which is eleven miles long, eight miles broad, and on an average only fifteen inches deep. In summer it appears to be covered with snow in consequence of the evaporation of the water forming a crust of saline matter. No less than two hundred thousand tons of salt are yearly extracted from this lake." (*Chem. News.*)

Original Communications.

EXCERPTS FROM DAILY PRACTICE.

By ALFRED FLEISCHMANN, Esq., Fellow of the Obstetrical Society, late Physician-Accoucheur Assistant to King's College Hospital.

I.—DIAGNOSIS OF TUMOURS.

SOME cases showing errors in diagnosis as to the nature of certain tumours having recently been noticed in the medical journals, I trust the following example, occurring in my own practice, will not be without interest to the profession.

Three months ago, a farmer's widow, aged 64, asked me to remove a tumour of the size of a pullet's egg, which was present over the nape of the neck, exactly in the median line. It had existed for six months, and for the last six weeks had rapidly increased. Since its appearance, it had been painless, except for two nights before I saw her. The occurrence of pain, together with the rapid growth, induced her to apply for aid. The tumour was superficial, moderately resilient to the fingers, very circumscribed, moving freely over the subjacent tissue; and the skin, though somewhat adherent, was perfectly healthy. There was no suspicious family history. The patient's own health up to the present time had been good, but some of the neck-glands were decidedly enlarged. On my remarking this to the patient, she positively assured me that at the time she had a cold; and that, when this was the case, her neck-glands invariably sympathised; that they had been in that condition a few days only; that, since the existence of the tumour, they had once before enlarged, and again entirely subsided. She assured me this with so much emphasis that I was disposed to give full credit to her belief, and considered the tumour to be steatomatous. She had previously shown it to another medical man, who, from what I could learn, had formed a similar opinion.

Two days after consultation, I operated; and, on transfixing the base of the tumour, I found I had certainly made an error. The incised tumour appeared of a dull, non-vascular, opaque white. Fearing malignancy, I now made a clean removal (skin included), which, from the circumscribed character of the mass, was not difficult. I then secured the wound with silver suture, and hoped the end might justify the means.

Examination by the unassisted eye and by the microscope made me none the more satisfied; and I forwarded a portion of the tumour and an outline of the case to an eminent surgeon and microscopist, saying that I feared its malignancy, and that to my eye it appeared to consist of spheroidal granular cells, with, as far as I could make out, very sparing if any fibroid stroma. He confirmed these appearances, and added: "I am disposed to regard it as a non-malignant growth. In some respects it is not unlike the more solid molluscous tumours; not the steatomata or atheromatous cysts, but the solid growths which consist of imperfectly developed gland-tissue." Such was Mr. Hulke's opinion.

For about ten days all seemed to go on well; the wound was healing, and the neck-glands were, according to my patient, *in statu quo*; and, though my hands and eyes began to dispute her evidence, my mind was only too glad to believe her. In a few days more it was useless to deny what was too plainly to be seen. The wound was not healthy, and the glands were larger and more painful. The disease then began in earnest to declare itself; day by day its progress could literally be seen; in

three weeks more, the neck-glands had coalesced into one mass, and the unclosed wound became a hideous rodent ulcer. The whole circumference of the neck became involved, upwards to the occiput, downwards to the seventh cervical vertebra; in front, as low as the clavicles and as high as the jaw, with indications of yet further encroachments. The great vessels at the root of the neck were pressed upon, and œdema of the face and arms strangely altered the expression of the patient and incommoded her movements. It was curious to remark how the fasciæ of the neck determined the limits and mould of the tumour. The middle line in front was not invaded, and hence dyspnœa and dysphagia were not distressing, though the outline of the trachea was obliterated by the tension of the integument.

For the last three weeks of her existence, the disease did not increase in superficial extent. She sank exhausted, rather more than two months after the operation. No autopsy was obtained.

It may be that the tumour was non-malignant. That the glands were truly cancerous when I first saw her cannot now, I think, be doubted. It is possible that some obscure internal malignant disease was present, the coexistence of which with the tumour of the neck was purely accidental; that the primary obscure disease led to the gland-disease, which again led the wound to assume an unhealthy and ultimately a malignant aspect. I cannot say that I have much faith in my own theory.

Perhaps, there is no one cause which has had such a blighting influence upon the progress of scientific truth, as the vicious nomenclature which everywhere obtains, much of which has been handed down from the earliest times. Anatomy, physiology, and pathology, are smothered in a mass of uncouth, irrelevant, and false names. We are used to them; and use them without remembering that we promulgate an untruth every time we utter them. We forget how, as tyros, we were confounded and worried; how we were made to believe in impossible triangles, rotund squares, and angular circles; to use terms half Latin half Greek; or of which the etymology appears hopelessly hidden, or only to help the memory on the *lucus a non lucendo* principle. It is true, that many names appearing at first to express a meaning, might well, in process of time and progress of knowledge, come to be unmeaning or untrue; but there is no necessity to attach to words meanings based upon fancy or theory. Of late years there has been an improvement in this respect, *e.g.*, albuminuria or leucocythemia imply simply well-ascertained pathological facts, which no subsequent knowledge can controvert. On the other hand, gonorrhœa and cancer are both fantastic names, either having a false meaning or meaning nothing. Scirrhus is, I consider, an unexceptionable term; it indicates a leading feature, and is a "handy" word. The time is gone by for alteration; we might as well attempt to ostracise the English grammar as to forbid the word cancer—a fact that should be a warning to future nomenclators.

What constitutes malignancy? A scirrhus may assume the form of a hard, painless, indolent tumour; and, as such, it can hardly be considered malignant, although it may be said that every scirrhus contains the germ and essence of malignancy, and only waits an exciting cause; yet many a true benignant tumour does the same. An abstract definition of a benignant and a malignant mass is not difficult. While the former is composed of histological elements already taking a more or less important part of the animal economy, the elementary tissues of the latter are foreign to the body in a state of health; and, whereas the benignant tumour is at most a mass of normal, but misplaced or redundant tissue, the malignant tumour invades healthy structures, converts them into itself, and usurps their place; muscle, skin, and fat, remain so no longer, their distinctive characters disappear, changed by the active and deadly

power of the all-absorbing cancer. Yet it does not appear, practically, that any one characteristic is sufficient to determine the question; the means at our command before removal are, of course, the most important, and on the whole, perhaps, the most reliable; the previous history of the patient, the duration and rapidity of growth, the general appearance of the tumour and surrounding tissues, and the amount and character of pain, these are considerations with which every surgeon is familiar; yet one or more of these indications may be present and the tumour be benign, or absent and yet malignant. The growth of an adipose tumour is frequently most rapid; glands may enlarge from other causes than the absorption of carcinoma; pain is common to all diseases; and microscopic appearances may deceive the most practised eye.

It is not he who is most conversant with the literature of disease and modern theory who is best able to handle a tumour and decide its character, but he who is most familiar with the hospital ward, and possesses that which brains without practice cannot afford, the *tactus eruditus*.

Tunbridge Wells, May 1861.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By AUGUSTIN PRICHARD, Esq., Surgeon, Clifton, Bristol.

V.—OPERATIONS ON THE EYE.

[Continued from page 412.]

The Formation of Artificial Pupil. CASE CCLXX. M. aged 68, came up to me many years ago with staphyloma of the right eye, and the left pupil was almost closed and blocked up with lymph from rheumatic iritis. The case looked so unfavourable, that I sent him home into the country, although he lived fifty miles away. He would not live contentedly in blindness, and after a time was brought up again, being still able to distinguish light from darkness. I agreed to operate, and made a free lower corneal section with a view to remove a portion of iris. Upon withdrawing the knife, a little pressure being probably made inadvertently at the same time, the adhesions of the iris to the capsule suddenly gave way, and he recovered his sight instantaneously. The eye was strong and well in a week, and he went home with excellent sight, and worked as a labourer for many years afterwards.

This was one of my earliest cases of operation for artificial pupil, and one of the most successful; for his lens had remained perfectly clear; and this patient's unexpected restoration to sight encouraged me to try many others whose cases seemed equally hopeless, and did not turn out so well. There is a very peculiar and indescribable change which takes place in the expression of the face when a blind man is suddenly restored to sight which I have seen several times, but never more markedly than in this instance.

CASE CCLXXI. M., aged 59, a Frenchman, who, by the advice of some relatives here, came over from Paris in search of a cure for his blindness. He had iritic adhesions, with central deposit, in each eye; and the pupil in the left was larger than in the right, but he had only the power of seeing light from darkness.

I operated on the right eye, and made a section in the outer and lower part of the cornea, passed in a hook as far as the margin of the pupil, drew the iris out at the wound, and cut it off. The anterior chamber filled with blood at once; but it was soon absorbed, and in less than a week his new pupil was quite clear, and he could see to tell the time by my watch.

Six months afterwards he came again, having a large clear pupil in the right eye, the central part of the capsule being still covered with lymph; but his sight was