shall nourish the blood, and through the blood we shall nourish the body. I am here supposing a simple physiological process, which although unseen, is in constant operation in the animal organism. The necessity for nutrition is proportioned to the loss of material; the waste creates the necessity for supply.

In the retort house of our gas factories, where perspiration is excessive and is continued through the entire day, the men are allowed a certain quantity of oatmeal which is made into thin gruel, and drank largely as often as the waste of fluids occasions thirst. The men are the gainers by the exchange, they give out waste water and used up solids, and they receive in exchange fresh water and nutritious solids. It is needless to say that by this process they get into high condition both of structure and health.

If we have a weakly and ill-nourished child, or a thin and emaciated adult, in whom there is no organic disease, but simply a powerless condition of the nutritive functions, may we not hope by means of the thermæ to bring about a more active and healthy nutrition and thereby change that which is weak into strength; that which was skin and bone, into flesh and blood and their usual concomitants.

The same argument applies to disease in all its protean forms; we must apply ourselves to the hope of improving nutrition, of draining away that which is bad, and supplying its place with that which is good. It is here that our pharmacopeia will afford us important auxiliaries, and those auxiliaries will be placed on the best footing for developing their most useful properties. Viewing the operation of the thermæ in this way, we are imperceptibly led to the conclusion that every morbid process, of whatever kind, must be relieved by its use, and we ask ourselves, not, what disease will be benefited by the thermæ? but, what disease can resist its power?

Looking at the thermæ in a social and political point of view, we find that it is wonderfully adapted for the preservation in health of large bodies of men, combining in itself the respective advantages of air, exercise, and ablation. The Romans were so impressed with its importance, that they carried with them the genius of their thermæ wherever they migrated, and they put it in operation wherever they were located even for a short period of time. Thus we discover vestiges of the thermæ in all their temporary encampments as well as in their cities; and by its means they kept themselves in health even when hemmed in and surrounded by warlike enemies.

Adopted by our own army, there cannot be a doubt that it would very considerably reduce the rate of sickness and death and add to the efficiency of the men. It is applicable also in all cases where numbers of persons are collected together, as in barracks, prisons, poorhouses, factories, and schools; in large business establishments where a considerable number of young men or young women are assembled; or in places of temporary meeting as the House of Commons and clubs. It must always be borne in mind that the thermæ not only offers advantages as respects physical health, but it also conduces to moral vigour. Those who have recourse to it would be more likely than others to shun vicious excesses of all kinds, particularly of stimulants and be disposed to respond in their hearts and lives to the beautiful sentiment of the poet Thomson:—

"Even from the body's purity, the mind
Receives a secret sympathetic aid."

But the usefulness of the thermæ has even a wider sphere; the Londoner, or the inhabitant of a large city, would live as healthily immersed within his city walls as the rustic amidst the fields and meadows of the country. His thermæ would be to him in the place of a country house, of a horse, it would give him air, exercise, freshness, health, and life.

I might add very materially to the long list of conditions to which the thermæ might be applied with advantage, but I limit myself to a single one more; it is that of extensive works, employing a large number of men, either in operations in themselves unsalutary, or in unhealthy localities. The importance of preserving a body of working men in a state of health, and in the best condition for the performance of their duties, must strike every one, and is an object worthy a moderate sacrifice on the part of proprietors or owners. There are many localities in which miasmatic fevers abound, and constantly incapacitate the working force of large operative establishments. I believe that a few pounds expended in thermæ would correct this evil; would put the men into condition to resist the miasmatic force, and to eject the poisonous elements from the blood when they had already found admission into the organism.

In conclusion, I feel that I cannot do better than leave the important questions raised by this communication in the hands

of the members of the British Medical Association, from whom, I feel assured, they will receive all the attention and practical consideration which they deserve.

Original Communications.

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. PRICE, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

III.—TUBERCULOUS DISEASE OF THE EXTERNAL LYMPHATIC GLANDS.

[Continued from page 757.]

THE extent to which the externally situated lymphatic glands may become diseased, as was lately described, is well seen in the accompanying woodcut, which represents a patient, a lad, who was sometime ago in King's College Hospital, under the care of Mr. Partridge. The extreme emaciation and rapid enlargement of the superficial absorbent ganglia, including those of the abdomen, was more marked than in any other patient I have met with, and soon led to a fatal termination.

Recognition. Lymphatic glands involved with tubercle may, at an early period, oftentimes be readily mistaken for the more benign kinds of enlargement already described. As a rule, some increase in size takes place in an absorbent gland prior to the positive deposition of tuberculous matter; and hence it is that very great uncertainty is apt to exist so long as the glandular tumour remains entire. It has been too much the custom among many practitioners, to term every enlarged gland in individuals presenting a peculiar condition of constitution,

tuberculous or scrofulous. Both these terms have thus frequently, and with but little consideration, been used synonymously. A very slight acquaintance, however, with the true pathological changes that ensue in really tuberculous glands, and in those which are not affected with tubercle, though occurring in highly scrofulous subjects, will serve to show that the expressions tuberculous and scrofulous are not, strictly speaking, convertible terms. The term scrofulous may be applied to disease of a gland in which tubercle plays the chief part, but the word tuberculous cannot with the same propriety be used to denote the nature and characters of every so-called scrofulous gland which, although appearing in what is termed a tuberculous subject, is in no way dependent for its morbid alteration on true tuberculous deposition. It is exceedingly difficult clearly to define the use and correct meaning of expressions which have inadvertently, though unfortunately, crept into general requisition; but the judicious practitioner will at once see that a broad practical distinction is often necessary and very advantageous.

There is no manipulative distinction, so far as I am aware, whereby the earlier stages of tuberculous mischief may be distinguished from other forms of glandular enlargement. It has already been shown that glands implicated with tubercle either slowly or rapidly pass through various destructive changes, and that such alterations are accompanied with symptoms more or less dissimilar to those in which tuberculous invasion plays no part. When softening and suppuration obtain, and certain indications are manifested, which are usually associated with tuberculous diseases, then the doubt which remains is greatly diminished, and little, if any further difficulty prevents the correct recognition of the nature of the affection. Added to the local mischief, a more or less general constitutional disturbance exists, which oftentimes enables the surgeon at once to distinguish the true nature of the enlargement.

Although tuberculous glands in an incipient state are apt to be confounded with simple hypertrophies and *engorgements*, still there are certain other morbid conditions for which they may be mistaken. Cystic tumours, especially about the lower jaw; medullary affections of the absorbent glands; fatty and fibrous tumours, and chronic abscesses, are among the abnormal formations which occasionally embarrass the surgeon in the ready recognition of tuberculous glands. I have frequently known cysts containing atheromatous, steatomatous, and other secretions, mistaken for tuberculous glands; and so close is the similarity exhibited, both by fibrous and other tumours, that great care is sometimes needful in forming a correct diagnosis. Chronic abscesses situated in the region of the neck not uncommonly assume appearances nearly identical with those exhibited by absorbent glands in an occult stage of tuberculous disease. I have known even the most intelligent surgeons proceed to the removal of tumours supposed to be glandular, but which on the first application of the knife have proved to be of a totally different character. Not uncommonly, the only glands which are found tuberculous are those situated in close relation to the under and front surface of the lower jaw; and within the past few days, I have seen a surgeon proceed to the removal of a single tuberculous gland, situated in the centre line of the neck, under the impression that it was a fatty tumour. Such a mistake may, however, oftentimes be avoided by noticing whether neighbouring glands are similarly affected, or whether unmistakable mischief of pre-existing disease—as old scars and deformities—can be detected. A very marked similarity is sometimes seen to exist between tuberculous and medullary mischief in absorbent glands.

Some years ago, in Mr. Partridge's wards in King's College Hospital, I saw a scrofulous but otherwise healthy, though pale-looking man, with a cluster of enlarged cervical glands greatly resembling tuberculous enlargements. The diagnosis was, however, uncertain, and continued so for some time, but eventually unequivocal symptoms of malignancy announced the terrible nature of the complaint.

A few days since, I was requested when at Margate to see, in consultation with my brother Dr. W. Price, an elderly female, who had a tumour of about the size of a walnut, situated over the sternal portion of the clavicle. Ulceration had commenced, and had softened the growth. It presented very closely the aspect of malignancy; but on examining her neck, I discovered various scars which marked the previous existence of tuberculous mischief in many of the absorbent glands.

In arriving at any diagnostic distinction in instances in which dubious grounds exist, it will be advisable always to recollect that there are generally certain peculiarities which particularly distinguish tuberculous invasion of lymphatic glands

from all other conditions; and, although they may not be constantly present and prominent, still they are frequently so.

I allude particularly to the special diatheses in which glandular tuberculosis is apt to manifest itself, the sympathy of other and still more important organs, and to the wholesale way in which, if I may be allowed the expression, the diseased action invades the glandular arrangement of particular regions. And this brings me to make a few observations on a point which has not, as yet, in these pages, obtained any special consideration.

With the older authors, the maladies of syphilis and scrofula were supposed to bear a very near relationship, the latter disease being considered but a modified condition of the former. Indeed, they were often looked upon as one and the same affection, and like remedies were used for their treatment. The erroneous conclusions of those who held this doctrine have been fully exposed by modern research and experience; and, although hereditary or acquired syphilis may exert a more or less direct influence on the acquisition, or at least on the development, of scrofula, still it is now generally admitted that a very imperfect resemblance exists between them. The similitude which obtains between lymphatic glands affected by these two diseases is, however, the only point of immediate importance to the subject under consideration. I have myself never met with an instance of truly tuberculous lymphatic glandular disease which has, in any decided manner, resembled syphilitic enlargement; although the venereal poison may occasion such disturbance in one or more parts of the absorbent system as to give rise to doubt as to the exact nature of the mischief.

When considering the treatment of tuberculous glands, it will be mentioned how necessary it is sometimes to inquire if any marked syphilitic symptoms complicate those of scrofula, so that they both may be combated with advantage.

[To be continued.]

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

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

I.—OPERATIONS ON THE FACE, TONGUE, PALATE, NECK, AND CHEST.

[Continued from p. 776.]

Cancer of the Lip. The number of cases of cancer of lip was nine. In all, the V-shaped incision, more or less modified according to particular circumstances, was made with a scalpel, and the German-silver pins were used. A very short account of each is all that will be requisite.

CASE XII. G. J., aged 26, a weak subject, much accustomed to smoke, had a large ulcerating projection on the lower lip near the left angle of the mouth for six months before his admission; and it was at that time becoming fetid. The disease was removed freely in the usual way. On the fourth day I removed the lower of the two pins, and on the fifth day the upper one. The small separate point of suture which I had inserted in the red part of the lip sloughed out and was lost. The wound was healed, and he went out on the sixth day after the operation, with an excellent lip, but with some swelling of the glands of the neck on the same side as the disease of the lip, and this had existed on his admission. I never saw him again.

CASE XIII. S. B., aged 56, admitted with cancerous tumour of the lower lip, of eight months standing. It was distinct from the healthy part of the lip, and in an ulcerated state.

I removed the disease, and inserted three pins. On the third day I removed two lower pins, and on the fifth the upper, the string of which had caused some slight sore on the lip from pressure. The wound had healed entirely, and he went out in a few days.

CASE XIV. C. D., aged 64, apparently healthy, had suffered from cancer of the lip for some years before I saw him, and the disease had attained a considerable size, that is, from one angle of the mouth to the other there was a space of three inches and a half, and the width of the tumour alone was two inches and a half.

After removing the diseased portion, I was obliged to separate the lip freely from the jaw by cutting through the mucous membrane on each side where it passes from the lip