came into his mouth while in the act of stooping, his head being bent downward, and his body in the position of a farrier engaged in preparing a horse's hoof for shoeing. Here are two conditions directly predisposing to pulmonary congestion,—a sudden and spontaneously checked diarrhoea, and a posture eminently favourable to accumulation of blood in the lungs. However, these conditions are not in themselves sufficient to bring on so severe an attack of hæmoptysis; there must have existed previously the hæmorrhagic diathesis,—a proneness and disposition to congestive plethora in those organs, which being acted upon by the above named concomitant circumstances directly manifested the hæmoptotic attack. A retardation of blood in the pulmonary capillaries, a condition of active hyperæmia of the bronchial mucous membrane, and pouring forth of blood from the ramifications of the bronchi, were the successive series of morbid phenomena antecedent to and immediately causing this disease. Whether the hæmorrhagic predisposition in this case depends on a *tendency* to tubercular deposition; whether, as some of the French pathologists affirm, this hæmoptysis is to be taken as evidence of a series of inflammatory symptoms acting as the essential cause of phthisis, or not; no attack of hæmorrhage from the lungs, except in cases palpably the result of vicarious menstruation, can be viewed otherwise than as expressive of some serious alteration in the integrity of the pulmonary tissues, and tending sooner or later to develope disease more or less fatal to the sufferer.

In conclusion I may remark that it is interesting to witness the varied effects succeeding to conditions of the intestinal canal apparently identical. Here are two individuals both of whom have previously suffered from severe diarrhoea. In the one it yields to remedial measures; in the other it stops spontaneously. In the former, remarkable diuresis follows, in the latter a frightful, almost death-striking hæmorrhage from the lungs. The coincidence of two such cases is remarkable and presents us ample material for thought and reflection.

OBSERVATIONS ON THE OXALIC DIATHESIS, AND THE INFLUENCE OF THE RHUBARB PLANT IN ITS PRODUCTION.

By JOHN S. BARTRUM, Esq., Surgeon, Bath.

Having for some years been in the habit of paying attention to the general and chemical conditions of the urine, it was with much pleasure that I perused the paper of Mr. Wilson, inserted in No. 35 of the *Provincial Journal*, (September 2, 1846,) especially from having, on several occasions within these two or three last years, noted in my own person, the effects on the urine of the rhubarb stalk and other articles of diet. The portion of urine passed after rising in the morning was always examined by the microscope without heat, as the shortest and not fallacious mode.

Being apparently in the most perfect health, excepting rather overworked, and as far as unlike a patient suffering from oxaluria as possible, at first I could scarcely believe myself to have passed oxalate crystals, till confirmed in my supposition by Dr. William Budd, who immediately remarked that I must have been eating rhubarb, which, however, had not been recently

the case. This induced further and oft repeated examinations, the general results of which I can only now give, having not long since destroyed the daily records, considering them as not worth keeping.

While passing the smaller oxalates, and then partaking freely of rhubarb, the first effect was generally to increase the size and quantity of oxalates thrown down, with the occasional addition of some of the reniform bodies; the diet being continued, the crystals of all shapes increased in size, especially the latter, till on two occasions they almost solely were passed. However, after a day or two, the oxalates diminished, and then disappeared, although rhubarb was still partaken of; this may probably be explained by having regarded the appearance of the oxalates, as a sure warning that I must give myself more relaxation. The results have been similar on two or three occasions, when from continuous exertions I have expected their presence and found them; but I have never been able to induce their appearance by the freest use of rhubarb, except in the very fine cuboid forms, for a day or so, unless they were previously present.

If Mr. Wilson continue his inquiries, I think he will find, that any article of diet, adding to the irritability of the kidneys and bladder, will induce an additional secretion of the oxalates; for I always found, that partaking freely of water-cresses added materially to the quantity of oxalates, provided I were already passing them, from the irritation of the bladder, caused by the abundant secretion of free lithic acid. Whether the elimination of oxalates, as well as of lithic acid, was due to the water-cresses, or the common salt accompanying them,* I cannot say. That must be left for future investigation.

It will be found almost universally, that cases characterised chiefly by deposits of oxalates are combined with an asthenic condition of the assimilating organs; some of them corresponding closely with those caused by the excretion of an abnormal amount of urea, the urine then being dense and loaded with lithates, while others, from the excessive excretion give rise to a suspicion of diabetes mellitus, so much so, that of the many specimens sent me for examination, where a large quantity of urine is voided, the greater proportion are of low specific gravity, with some few small oxalates, and often swarms of vibriones. These latter cases, however, are essentially cases of want of nervous power without any specific ailment, sometimes passing phosphates, sometimes oxalates, according to the varying condition of the system, which always displays a very reduced vitality.

In this, as in all other diseases of the urinary organs, where chemistry is called into our aid, there is great danger of their being treated as though the body were a mere laboratory, wherein we could modify these secretions at our will, overlooking the essential cause of the ailment; but, however useful and necessary such examinations may be, it behoves the practitioner carefully to eschew being implicitly guided by them; as some cases of this disease are treated successfully by alkalies, others by acids; some by a restricted, others by a generous diet; for though medicinal remedies are most useful, and in the majority of cases requisite, they will be of little avail, if not well supported by carefully-applied general and dietetic measures.

* *Vide Provincial Journal*, page 415.

I think that the size of the crystals of oxalates passed will often afford a good indication of the extent of the oxalic diathesis. If the crystals, especially the reniform, be large, distinct, much inclined to become clustered,* or to crystallize on the hairs, &c., much oxalate of lime is passing. As the case improves, the crystals lessen in size and numbers till at length they become undistinguishable, except to the educated eye. Though it is unusual, the reniform bodies may continue to the last, when, in some positions, they may become in appearance almost like a blood-corpuscle; in the majority of cases these crystals are not to be found.

It has been suggested (by whom originally I cannot learn,) that these reniform bodies are not oxalate of lime, but lithic acid, modified in shape by the presence of oxalic acid. This can scarcely be, for I have, with several different specimens, macerated the whole deposit in liquor potassæ, to get rid of any free lithic acid; then, in diluted acetic or muriatic acid, whereby the phosphates and lithates are separated; yet both the cuboid and reniform crystals have remained quite unaltered. I have not succeeded in throwing down crystals of oxalate of lime, when a deposit of free lithic acid and oxalates was dissolved in sulphuric acid, and the former separated by the addition of water, perhaps from sufficient care not having been taken in the matter.

Should it be desired to separate any deposit of these salts for examination, it is most easily effected by decanting the upper layers of fluid, adding distilled water to the remainder, with or without potass, or acetic acid. The oxalates soon fall to the bottom, and may be readily collected on a watch-glass, without heat or any other process that could modify its composition after leaving the body. By careful manipulation you may obtain and weigh all the crystallized salt in a given specimen. To those not conversant with the salt naturally deposited, yet desirous to examine it, one of the best modes of learning all its usual shapes and sizes is to add a dilute solution of oxalic acid to fresh healthy urine, when after some hours the characteristic crystals will be found in abundance.

I do not know whether this city more abounds with cases of this disease than most others, but among its labouring population, of the class next above the poor, such as policemen, schoolmasters, carpenters, &c., (some hundreds of whom come wholly under my observation,) dyspepsia, of an atonic character, and marked by the pallid, depressed, emaciated countenance, with more or less hypochondriasis, pain of the side, (often of great intensity,) or of the back, and the passage of oxalate crystals, is most rife, though in most cases readily amenable to judicious treatment. From my own observation this form of dyspepsia does not seem so common among the women of this class as among the men, even in those, wherein from their appearance and symptoms I had fully expected to find it. Of the presence of the oxalates in the more acute or in cutaneous diseases, I can say nothing, not having examined them for that purpose.

* The larger crystals when clustered are truly small mulberry calculi.

Bath, Oct. 26, 1846.

ON THE USE OF COD-LIVER OIL IN TUBERCULAR DISEASE.

By DAVID EVERETT, Esq., Surgeon, Worcester.

Having perused a letter from Dr. Toogood in the Journal, upon the efficacy of cod-liver oil in phthisis, I am induced to make a few observations corroborating his testimony, especially as the kind of oil I have employed is less offensive than that generally used.

There are several varieties; that which is estimated the best is of an orange tinge, but it is very objectionable to the palate. I have procured a pale straw-coloured oil, which is but slightly offensive, either as regards taste, or odour; and I have seldom found it difficult to persuade patients to use it, and as rarely known any important inconvenience result from its administration. Having found it very successful, though I do not undertake to say it is so efficacious as the darker and more offensive oil, I do not hesitate to recommend it to those who, though desirous to try the medicine, may be deterred from doing so by the general prejudice against it.

The conditions under which the oil seems most likely to prove serviceable are where emaciation exists, and the nutritive functions are languidly performed, always in the absence of febrile symptoms. These are the circumstances under which I have prescribed it. The general results I have witnessed have been increased animal heat and bulk of the body; the removal of erratic pains, and the imparting of vigour to the system. Nor is the appetite often diminished during its use; and even when the patient is taking three fluid-ounces per diem, an amount of nourishment, which, if added to the ordinary quantity of food consumed, must of itself, in many cases, prove beneficial. It does not purge, and if it induce bilious symptoms, it will of course be necessary to suspend it until these have been removed.

Iodide of potassium and some other remedies appear to act with unwonted efficacy during the administration of the oil, or if given whilst it has been temporarily laid aside, but as all I aim at is to add my testimony to that of others who have successfully employed it, I shall content myself by subjoining two cases, in which the benefit derived from it was very decided, and refer parties seeking further information to the pamphlet published by Dr. Hughes Bennett, of Edinburgh, in which is to be found its history, *modus operandi*, and an enumeration of the various diseased conditions of the body in which it has been useful.

A. B., aged 29, at the time I saw him, early in January last, was remarkably thin and debilitated, having suffered since the previous summer from cough, palpitation of the heart, and repeated attacks of hæmoptysis. He had then severe cough attended with muco-purulent expectoration and inability to expand the chest, which was exceedingly contracted. The right side, on the upper portion of the thorax, emitted a very dull sound upon percussion. The left much clearer. On the left side the respiratory murmur, though feeble, was more distinct than on the right, where it was replaced by the bronchial. A grating murmur was evident at the first sound of the heart at its base, and a loud saw-sound at its apex; pulse about 100 per minute. He had night sweats and the usual concomitants of debility and tubercular disease.