aim of the surgeon. It is more than doubtful that any medicine, exhibited with a special view of procuring resolution without suppuration, will be of any avail without due attention be paid to the general health. It is usual to stock the system with iodine, and to apply it locally, as will be presently mentioned, under the impression that disintegration and softening with liquefaction having taken place, absorption will rapidly remove the altered tuberculous matter. My own opinion is, that a destructive, or what may often be viewed as a curative, process having advanced to a certain point, ulceration of the covering integuments will, generally speaking speedily obtain, so as to give exit to the pent-up material. It may be that absorption will remove the liquid and least effete portion of the altered tubercle, and leave the solid part to undergo such changes as were described when considering the pathological metamorphosis of tuberculous exudations. Some authors are inclined to believe that such a process frequently occurs; and that a residue of comparatively inert, changed, tuberculous matter remains, keeping the affected gland still increased in size, though in a harmless condition. If such changes can be assisted by art, it is certainly advisable to make use of those means which would most materially aid nature in her curative endeavours. With this view, iodine or bromine may be administered, and from M. Baudelocque's experience it would appear that such treatment is often of avail. I am somewhat reserved on this point, because I have failed as yet to obtain any very definite results as to the influence of iodine in producing effects which we know do sometimes take place. Lime-salts, with cod-liver oil and iron, I believe, are important adjuncts in the treatment, although it is doubtful to what extent they are directly useful, and in what manner they exercise any influence over the conditions of the tuberculous alterations.

When suppuration of the gland and ulceration of the integument have fairly set in, notwithstanding the most skilful treatment may have been adopted from the earliest manifestation of diseased action, it becomes advisable to use such medicinal and dietetic means as belong to the art of physic. To support the constitutional powers, which are further distressed by the destructive process which is taking place, is the first call to which the surgeon has to respond. Cod-liver oil, glycerine, iron, quinine, and the salts of lime, with the mineral acids, will ordinarily be found of most avail. If the patient be young, and many glands, as is very commonly the case, be implicated, it will be necessary to support the system by nutritious diet. Milk, eggs, and meat, combined with jelly, and a certain amount of alcoholic stimulus, and ale or porter, will form the best diet scale. I have found a certain flour, made by Messrs. Brown and Polson, of great advantage as an article of food for young children, who will frequently take it when the fancy refuses ordinary viands. The *Semola*, made by Mr. Bullock of Hanover Street, and the *Tous les Mois*, imported by Mr. Fincham of Baker Street, will likewise be found most valuable as a variety in the diet-scale of youthful patients. Should sweating and general languor be present, the mineral acids will be of great use, especially if combined with iron. When the discharge becomes more chronic, and the lips of the ulcerations thicken, and present their peculiar bluish-purple colour, the administration of iodine is often accompanied with great benefit. I have known many such ulcerations heal kindly under a judiciously prescribed course of iodine when they have resisted other treatment. The great aim, however, of the practitioner is to support the general health, and then the local means of treatment, presently to be adverted to, will meet with a fair amount of success.

[To be continued.]

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

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

V.—OPERATIONS ON THE EYE.

[Continued from p. 31.]

CASE CCXXXIX. F., aged 78. I extracted the cataract from the right eye, although she still had useful sight in the left. She recovered well, and has at the present time (four years after the operation) very good sight. The cataract in the left eye appeared, at the time of the operation, to be progressing rapidly, but at the present time it is very little more advanced than it was then.

CASE CCXL. M., aged 68. I operated on both eyes, and he recovered speedily, union taking place in both corneæ by the first intention. He had circular clear pupils and good sight in each.

CASE CCXLI. F., aged 74. I operated on the right eye. It was not a favourable case, the eye being much sunk. She recovered with good sight.

CASE CCXLII. F., aged 65. I operated on the left eye, and she recovered speedily, with excellent sight.

CASE CCXLIII. M., aged 58. I operated on the left eye; went home shortly with good sight.

CASE CCXLIV. F., aged 81, a very feeble and low spirited old woman, suffering from religious melancholy, with fully formed cataracts, but very sunken eyes. I operated on the right eye, and extracted a hard lens. She complained of obscure pain in the brow during her recovery, and when I could examine the eye I found the pupil closed. Six months afterwards I made a cut with the iris knife, and a small pupil was formed. She always declared that her sight was no better; but she walked about her house without stumbling against a chair or table, and when driving out could see the buildings, for she knew whereabout she was. She was provided with glasses, which she used constantly, always persisting that she was blind. I believe she had fair sight.

CASE CCXLV. F., aged 68. I operated on the left eye, and she recovered speedily and has seen well ever since.

CASE CCXLVI. M., aged 71. I operated on the right eye and extracted the cataract, and he went home in a short time with a weak eye, some prolapsus of the iris, and but little sight.

Nine months afterwards I saw him, and he had a closed pupil, and I therefore incised the iris with the iris knife with the effect of enabling him to see much better for a few days, but as his sight became more dim I removed a portion of iris, and at the fourth and last operation I dislodged a piece of opaque capsule, so that ultimately he went home with good sight.

CASE CCXLVII. M., aged 61. The cataract in his left eye followed a blow sixteen years before his admission, and the right eye had become more recently blind. I made a lower section in the left eye, but owing to the toughness of the capsule could not break it with the curette. The lens was extracted with much difficulty, and he went home with but little sight, returning in the course of a year with the vision improved but the pupil excessively minute. I touched it across with the iris knife, and a central, black, and tolerably circular pupil suddenly appeared and he saw well.

CASE CCXLVIII. M., aged 72, had undergone extraction and the formation of artificial pupil in London without any success. I operated on the left eye, and he recovered with excellent sight. He had dull pains round his brow during his recovery, and I blistered him freely, and when he was quite well his pupil was small and irregular, and I believe that iritis had been going on, and that seems to have been the disease which had

destroyed the sight in the other eye. He sees well to the present day, nearly three years after the operation.

CASE CXXIX. M., aged 57. The cataract in the left eye was deeply seated, and had been coming on four years. The right eye was blind from closed pupil and old internal inflammation. I operated on the left, and he recovered speedily, but had very imperfect sight, for opaque capsule obstructed the pupil. I tried to remove it with the cannula forceps, but in vain, and two weeks afterwards I broke the capsule across with a needle through the sclerotic, and he went home with a circular pupil and good sight.

CASE CCL. M., aged 58. I extracted the lens of the left eye, and he recovered with improved vision, but a portion of opaque matter remained in the pupil; this was removed, and he went home with good sight.

CASE CCLI. M., aged 59. I operated on the right eye, and made the upper section, and when the capsule had been ruptured a quantity of vitreous humour and small portions of the lens suddenly gushed out. The corneal flap fell down, and the lens itself disappeared from view. I let the patient sit quietly on one side while I operated upon a squint case, and when I examined him again the lens was presenting at the pupil, and was easily removed. A very large quantity of vitreous humour had escaped. He recovered in a week, and had good sight.

CASE CCLII. M., aged 43, with remarkably full and prominent eyes and very thin corneæ. I extracted the right cataract, and he went on well until the fifth day, when he accidentally touched his eye and it ran with water considerably. He recovered well and has still very good sight.

CASE CCLIII. M., aged 68. I operated on the left eye by lower section, and a little fluid vitreous humour escaped. He recovered excellent vision, and could see to read well, but the pupil was slightly drawn down. The next year he came down again, and I operated on the right eye by an upper section, and he recovered excellent sight with this also.

CASE CCLIV. M., aged 45. I operated on the right eye without accident, and he received very good sight.

CASE CCLV. M., aged 60. I operated on the left eye, removing some *débris* from the pupil after the lens had escaped. He had an attack of iritis on the ninth day, which was treated with blisters, and calomel and opium, and he went home, after five weeks confinement, with good sight. His sight cleared as he became affected by the mercury.

CASE CCLVI. F., aged 76. I operated on the left eye, and immediately afterwards Mr. Leonard operated on the right, and she recovered excellent sight.

CASE CCLVII. F., aged 57. I operated on the right eye. The corneal flap was rather disposed to fall down. She recovered with fair sight.

CASE CCLVIII. F., aged 65. I extracted the cataract from the right eye, and it was followed by a little clear vitreous humour. She went on well, and, after a tedious convalescence, recovered her sight.

CASE CCLIX. M., aged 86 last birthday, lost his sight in his left eye a few years before from a blow, and cataract had gradually formed in the other. This was an extraordinary old man, who had lived as a hermit all his life, studying botany, astronomy, and mathematics; so suspicious of mankind that no one was allowed to enter his house. He cooked his own food, even when he was blind and 85 years old, and when he was able to walk about he carried his purchases home in his umbrella. He probably knows more of optics, astronomy, and mathematics, than any one in this neighbourhood, and the loss of his only eye was, perhaps, even more distressing than to most. He had a little eye, sunk, and very prominent eyebrows, and it was a very unpromising case, but the helpless condition of the old man induced me to give him a trial. I extracted the cataract in the

right eye, and he recovered his sight, and now (nearly two years after the operation) he can see to walk about everywhere and to read a little. Since the restoration of his sight he has also improved wonderfully in his health, and can walk some miles and attend to his own affairs.

CASE CCLX. M., aged 56. I operated on the left eye, making the lower section. He recovered speedily, and sees to read and write now without difficulty.

CASE CCLXI. M., aged 63. I operated on the left eye, and extracted a large flat amber lens. On the seventh day his eye was strong and he had excellent sight.

CASE CCLXII. M., aged 55. I operated on the right eye, and extracted the cataract through a small upper section. *Débris* of the lens had to be removed from the pupil. Inflammation followed, brought on, apparently, by cold and diarrhoea, and he went home with closed pupil.

Nearly two years afterwards I made a cut in his iris with the iris knife, but it was insufficient; and, therefore, after waiting a few days, I operated again, making a section in the cornea, and drawing out some of the iris with a hook, and then I introduced the cannula forceps and drew out a piece of capsule. He went home with very good sight, with a four inch lens.

CASE CCLXIII. F., aged 56. I operated on the right eye by the upper section. She made a good recovery from the operation, but some opaque matter filled the pupil and interfered with vision, and thinking it was capsule I introduced a needle to depress it, but it turned out to be quite soft. After stirring it about it was soon absorbed, and she recovered with excellent sight, and is now able to see to read and write. The cataracts in this case were recent.

CASE CCLXIV. F., aged 76, an active little old woman. I extracted first the left and then the right cataract. In making the corneal section in the right eye the globe rolled inwards, and the point of the knife caught the conjunctiva and the aqueous humour rushed out of the anterior chamber into the cellular tissue between the conjunctiva and sclerotic, and a complete chemosis was suddenly produced. She recovered with excellent sight with both eyes in a very few days.

CASE CCLXV. F., aged 73. I made the lower section in the left eye, and completed it with a little difficulty, owing to pressure made by the finger of my assistant. She was a stout woman, subject to headache. I applied belladonna to the brow, and gave her several doses of cathartic mixture, and she recovered and has very good sight.

CASE CCLXVI. F., aged 73. I extracted both cataracts without difficulty, and within a week she opened them both and saw well, and in a few days went home with excellent and strong sight.

CASE CCLXVII. M., aged 52. The cataract in the right eye was irregularly opaque. I extracted it, and it came out enveloped in the capsule, which had the opaque spot upon its upper part. Some vitreous humour flowed out also. His eye was much inflamed for some time, but he ultimately recovered. I have not recorded the exact condition of his sight.

CASE CCLXVIII. M., aged 45. I operated on the right eye. Some soft flocculent matter remained in the pupil after the escape of the lens, and this I removed with the curette. He recovered well and has excellent sight. On examining his eye it would not be possible to say that anything had been done to it.

CASE CCLXIX. F., aged 46. I operated on the right eye. After making the corneal section and rupturing the capsule the lens escaped in two distinct portions, and there was a free flow of vitreous humour, so that the eye looked quite collapsed. She recovered in about ten days with good sight.

CASE CCLXX. F., aged 44. I had operated upon this

patient's left eye with a needle a year before the date of the extraction of the cataract in the right, breaking up the anterior capsule and surface of the lens with a needle, and on an after occasion I depressed a portion of capsule, and at a third operation I removed some with the cannula-forceps, and after all she recovered very good sight. I extracted the cataract from the right eye, and she recovered speedily, and she now has excellent sight in both eyes, being able to read and write and sew well.

CASE CCLXXI. M., aged 72, had only one eye (the right), and from this I extracted the cataract by an upper section. After the lens had emerged from the pupil some flocculent matter remained. This was removed with the curette, and the pupil became black and clear. He recovered speedily, and had good sight.

CASE CCLXXII. F., aged 60. I extracted the right lens by the upper section, and a little vitreous humour escaped at the same time. She did well.

CASE CCLXXIII. M., aged 55. His left eye had been operated on by Mr. Estlin many years ago with the needle, and with but poor success. The right very gradually became dim, and the amount of blindness scarcely corresponded to the slight amount of dulness of the lens. I extracted the cataract from this eye, and at a subsequent occasion I removed some opaque capsule with the cannula-forceps. He recovered sight enough to walk about alone, and by looking through a small slit in a card he could see fairly.

CASE CCLXXIV. F., aged 77. I operated on the right eye and cut through a very marked arcus senilis. She went on well for a time, but some inflammation ensued, and the cornea became opaque above where the incision was, and the pupil was drawn up. I divided the iris with the iris knife, and in a few days after the blood effused in the anterior chamber had been absorbed she began to see better, and she could distinguish the things in her room and see to get about.

[To be continued.]

Reviews and Notices.

THE COMPOSITION OF THE URINE IN HEALTH AND DISEASE, AND UNDER THE ACTION OF REMEDIES. By EDMUND A. PARKES, M.D., F.R.C.P., Professor of Hygiene in the Army Medical School. Pp. 404. London: Churchill. 1860.

SOME quarter of a century ago, as scientific records tell, and as many of us can remember, animal chemistry took a sudden start into vigorous existence, and became one of the most welcome of handmaids to the physician and the physiologist. Liebig's fascinating formulæ promised to open a new epoch for the practitioner of medicine; and, at the same time, the then strange and cruel experiments of the famous physiological Professor of the College of France gave us curious insights into diseased processes. Thus the chemist and the physiologist were at work in this hoped-for regeneration of medicine; and so also was the practitioner of medicine in the wards of La Charité—anxious to turn to practical account the new lights projected by the skill of the chemist and the physiologist. In these days, the blood—*la chair coulante*—the vivifying fluid of the body, was the subject of all these profound and enthusiastic studies. It was the source of life, and men thought to find in it the sources of disease also, and, judging by the *plus or minus* of its constituents, to supply or subtract, accordingly, the needed or the

superfluous article. Here was truly a charming prospect opening on the dark and empirical ages of medicine. Given diseases were fitted to given states of the blood; and, in fact, in these abnormal states of the blood was to be discovered the solution of diseased processes, and their appropriate remedies.

But this happy period of hope was not a lasting one. The fluidists were triumphant only for a short day. They found failures in the practice which they based upon their seductive theory, and defects in the theory itself; and were at length forced away from their position of security by the revealments of that great teacher and rectifier of medical errors—experience. It is painful, and not altogether satisfactory, to look back to that little episode of medical history, and to note how little it taught us, *in a positive sense*, either of the essence of diseases or of the remedies appropriate to their cure. What it did for us was—and this, indeed, was much—it removed many of the thick errors which had been theretofore over-weighting and obscuring the science of medicine; but it did not tell us what diseases were, nor bring us any new weapons with which to attack morbid processes. Rapidly theorising on the facts thus opened before them, men rushed too hastily to the deduction of practical conclusions; and thus, indeed, from the very light obtained, spread fresh errors into the path of medicine.

If we refer thus to the modern history of the chemistry of the blood, it is that we may draw a word of moral—a little useful caution—from the tale, for the benefit of the zealous zoochemical and physiological physicians of this present hour. The attention which the blood, the vital fluid, then received, is now concentrated upon an excretion of it—upon the urine—as though from it we may win the history of diseases, and deduce the methods appropriate to their cure. We trust we are not misunderstood. We desire not to damp the ardour of such studies. We know them, indeed, to be absolutely necessary as parts of a scientific knowledge of medicine. But we want to put in a word of caution against those hasty practical conclusions, into which we are so apt to fall when we have chemistry as our guide in the inductive processes which we reason out and apply to this vital body. We fear we must for many a long day yet, notwithstanding all our great discoveries in this direction, be contented to labour merely as gatherers of knowledge; and that an immense stock of facts has yet to be acquired before we can hope for the deduction of any effective practical generalisations from the accumulated mass, and their application usefully to the treatment of disease.

We need not remind our readers of the many philosophic works which have during these last few years made the chemistry of the urine, in some sort, the general study of all of us. One excellent work has just been added to the list. We need hardly say that we refer to the volume of Dr. PARKES, and we are glad to see that he admits the necessity of the caution we here indicate; for in his preface he tells us, for instance, that without a knowledge of the other secretions of the respiratory and the cutaneous secretions, the chemistry of the urine loses half its value. He himself has, it is true, endeavoured, as far as may be, to supply this defect; and he is exceptional, we believe, in this respect, but he discovers, in doing so, his true philosophic mind.

His intention is, indeed, and we most sincerely