Dr. M'Clintock states that, where we have an uterine tumour, the hand, say in its ulnar edge, cannot be passed down but to a very small extent between the internal abdominal wall and the tumour. In ovarian tumours, the ulnar edge of the hand can be passed deeply between them. However unpleasant it is to differ from so high an authority, I am compelled to say that my experience cannot confirm this statement. This is particularly the case in those examples where the uterus is lengthened by the fibrous growth and the bladder pushed up with it. Wherever, also, in an ovarian case, or even in an ordinary abdominal tumour, there are adhesions, the test fails. But, even without such adhesions, and in ovarian tumours, it cannot be done.

In conclusion, I must say that there are a class of cases which are still more puzzling; I mean those examples of fibroid coexisting with ovarian disease and solid ovarian tumours. I have collected notes of several such cases.

The case before quoted of M. Bouchet (*Bull. Soc. An.*, xxviii, p. 10) was an instance of a fibroid of the uterus with ovarian cysts. M. Jury's case (*ib.*, p. 135) was also an example of fibroids in both uterus and ovaries. M. Jules Simm (*ib.*, 2nde liv., iii, p. 69) has recorded a case of fibrous tumour complicated with hernia and with ovarian cysts. This patient was operated upon for hernia. An artificial anus was the result, of which, with gangrene of the parts, the patient died.

The *post mortem* examination revealed an uterus studded on its whole surface with fibrous tumours, from the size of a lentil to that of an apple. One of these was encysted, and contained an unctuous yellow liquid. The uterine cavity was the shape of the letter S. The two ovaries were replaced by two cysts of the size of an egg. Another case is mentioned by M. Bouchet (*ib.*, xxix, p. 136), in which two enormous fibroids, one on each side of the uterus, larger than the fists, interparietal, existed, and the right ovary contained a cyst as large as the two other tumours combined.

Without question, the diagnosis in such cases is very difficult; nor have I anything now to advance on this point.

UNIVERSITY COLLEGE. The Atkinson Morley Surgical Scholarship has been awarded to Mr. Alexander Bruce, of London. The scholarship is of the value of £45 *per annum*, for three years.

THE EXODUS OF MEDICAL OFFICERS FROM INDIA. The *Bengal Hurkaru* states that a large number of the most distinguished of the medical officers of the late East India Company are leaving India.

SMALL-POX IN BERLIN. The small-pox is at present raging in Berlin, and carrying off numerous victims every week. A panic has begun to seize the population on this account, and every morning the public medical institutions are besieged by crowds of adults anxious to be revaccinated, as well as by infants in the arms of their nurses who are to be subjected to the process for the first time.

CAPE COAST CASUALTIES. Returns just issued shew that amongst the many deaths of soldiers which have occurred on this fatal coast—of sixteen officers—are the names of Assistant-Surgeons Rutherford and Hooper. And amongst twenty-two officers invalided home are Surgeon Skeen, Assistant-Surgeon Sandison, Assistant-Surgeon Crow, Assistant-Surgeon Oughton, and Assistant-Surgeon Lewis.

Original Communications.

THE THERAPEUTICS OF CONSUMPTION.

By RICHARD PAYNE COTTON, M.D.; Fellow of the Royal College of Physicians, London; Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

[Read before the Medical Society of London.]

THERE are few maladies in which Medicine has borne so variable a reputation as in consumption. We have heard over and over again of "specifics" for this disease; and over and over again has the honest but disappointed physician expressed his conviction that phthisis is scarcely, if at all, under his control.

In the present communication, I shall endeavour to show that whilst, on the one hand, we may confidently assert that at present, at least, we have no specific remedy for consumption, we may, on the other hand, as confidently assert that our materia medica offers a number of auxiliaries of more or less value and importance in the treatment of this disease.

With a view to determine experimentally the comparative value of different therapeutic agents in consumption, I resolved, some five or six years ago, to prescribe certain substances to a given number of my hospital in-patients, taking care that such cases were free from all acute symptoms, as well as from any particular complications requiring special treatment. Each of the following substances was thus administered to twenty-five patients, this number having been chosen as sufficient, perhaps, for the purpose, and as possessing the advantage of at once showing a *percentage* simply by multiplying by four; viz., phosphorus; liquor potassæ; hydrochloric acid; iodide of iron; iodide of potassium; chloride of sodium; vinum ferri; glycerine; sesquichloride of iron; chlorate of potassa; quinine; phosphoric acid. The experiments were published from time to time in the *Medical Times and Gazette*; but hitherto they have not been compared with each other, neither has any attempt been made at a general conclusion.

Here I may as well anticipate one or two very possible objections to my experiments. Some may consider that the number of cases was too small to show any satisfactory result; whilst others may suggest that there could not have been sufficient similarity in the cases themselves to render the several conclusions trustworthy. To the first objection I would reply, that it has taken me five years to observe the effects of these twelve substances upon the number of cases I determined upon; and as there is a limit not only to life, but also to the time and capacity for working out such observations, I felt it was impracticable to augment the number of patients for each experiment. And to the second objection I would remark, that, as it is no inconsiderable difficulty to discover even *two* consumptive persons strictly alike in all their symptoms, the attempt to find *twenty-five* parallel cases would have been fruitless. I may, however, at once state that I am desirous that my experiments should be taken only for what they are worth. They do not profess to be absolutely conclusive, but are simply intended as certain additions to that general stock of therapeutical facts which, when put together and thoroughly sifted, may, some day or other, lead to the discovery of important truths.

Phosphorus in many cases proved a good tonic and stimulant, increasing both the appetite and strength

of the patients. In a few instances, however, it obviously disagreed, producing nausea, a distaste for food, and abdominal derangement. Four of the patients (three of whom were in the first, and one in the last stage of the disease) left the hospital materially improved in every respect, and apparently with their general health restored; but several of those who derived no benefit from the phosphorus improved afterwards under other treatment. It was administered according to the formula of the Prussian *Pharmacopœia*, in which four grains of phosphorus are held in solution by an ounce of olive oil. Of this solution, from five to eight minims were given in a little mucilage twice or three times a day. Five minims contained one-twenty-fourth of a grain of phosphorus.

Liquor Potassæ, given in doses of fifteen minims two or three times a day, altogether failed to support its ancient reputation as a "deobstruent" in phthisis. It seemed generally to be inoperative; and a considerable number of patients, in whom it had produced no visible effects, improved afterwards under different treatment.

Hydrochloric Acid, on the other hand, was productive of very marked benefit. In doses of ten or fifteen minims of the dilute acid two or three times a day, it generally increased the appetite, and lessened many of the urgent symptoms, especially excessive perspiration and pulmonary secretion. Under its continued use for several weeks, many of the patients materially improved.

Although, in certain dyspeptic conditions, the alkalies, in various combinations, are oftentimes of very great use in the treatment of phthisis, it appeared that the acids *separately* are far better suited to the so-called tubercular "crasis" than the alkalies *separately*. Several patients, who had made no progress under the liquor potassæ, improved very much when this was changed for hydrochloric acid; and four, who had been taking the acid with advantage, but to whom liquor potassæ was given as a change, urgently begged to return to the acid. In very few instances did the hydrochloric acid disagree; now and then it appeared to cause a little gastric pain, but it was never necessary permanently to abandon its use. I have reason to believe that the other mineral acids will be found as effective as the hydrochloric. The circumstance, however, that the free acid frequently occurring during healthy digestion is the hydrochloric, and that this acid is the well-known solvent of the plastic constituents of the food, made me select it in the present experiments; but I have often prescribed both the nitric and the nitro-hydrochloric acids in the wards of the hospital at Brompton with the same good result.

Iodide of Iron, in doses of a drachm of the syrup two or three times a day, appeared greatly to benefit several of the very early cases, and was particularly serviceable in some which exhibited evidence of chronic secondary pneumonia. In a few instances it was discontinued, on account of its producing headache, with dyspeptic symptoms; but, as a general rule, it seemed to agree with the patients. Under its influence, many gained materially in weight.

Iodide of Potassium, which was at one time held in great repute in the treatment of phthisis, seemed remarkably ineffective in most of the twenty-five cases in which it was employed. Occasionally it gave rise to some dyspepsia, but more commonly its administration was unattended by any decided result. Only six cases materially improved during its use; and, in nearly every instance in which it was given, the patient's weight sensibly diminished.

Chloride of Sodium was prescribed in doses of from one to three drachms dissolved in water, two or three times a day. It was observed that one drachm could

generally be taken without producing nausea; that, in a few instances, two drachms caused a slight degree of sickness; whilst three drachms sometimes gave rise to actual vomiting; although, as a general rule, these larger doses, when gradually arrived at, did not disagree with the stomach. A larger dose could be taken after meals than when the stomach was empty. In only three cases out of the twenty-five was thirst complained of. In this experiment, a fair number of patients increased in strength and appetite, justifying the conclusion that, in many such cases, common salt deserves to rank as a tonic.

A large amount of chlorides was always found in the urine of those who were taking the salt; but so little in relation to the quantity administered, that much must either have passed off by the bowels, or remained in the system. The search after chlorides led to the discovery that the urine of all consumptive patients, even of those in the last stage of the disease, contains such compounds in considerable quantity.

Steel Wine proved a most useful auxiliary in the treatment of a considerable number of patients. It seldom disagreed, but tended rather to increase the appetite and improve digestion. In the cases of children and young persons, especially when combined with cod-liver oil, it was remarkably efficacious. The dose varied from two drachms to half an ounce, and in a few cases to an ounce, once or twice a day. From half an ounce to an ounce of the vinum ferri, taken immediately after dinner, is, I believe, one of the best means of administering steel in phthisis. In this way, it seems to interfere less with the function of digestion, and to be more easily absorbed into the system.

A well-known French author, M. Trousseau, has recently asserted his belief that steel, so far from benefiting, not unfrequently engenders phthisis. Has he not here failed in the distinction between the *post* and *propter hoc*? Unquestionably, many become consumptive in spite of all the steel we can get them to take; but, if consumption were connected with steel-taking, assuredly this disease would be even more common than it is!

Glycerine has been much extolled by some writers as a remedy for phthisis. I gave it in doses of from one to two and occasionally three drachms twice and sometimes three times a day. In five of the twenty-five cases, it either caused sickness or otherwise disagreed. Sometimes it seemed to relieve the cough; but few of the patients derived any material benefit from its use, and very few of them gained anything in weight whilst taking it. Several, who made no progress under the glycerine, improved subsequently under cod-liver oil. Many observations were made in reference to the comparative usefulness of these two agents, the result being invariably and very considerably in favour of the oil. In ordinary cases of phthisis, indeed, I believe glycerine to be of little use.

Sesquichloride of Iron conducted to some very happy results. A large number of cases improved under its use; and six patients in whom the disease was decidedly established, after having taken it for several weeks, left the hospital with their health restored, and in a condition to resume their respective occupations. Were I to be asked which of the twelve remedies I had found most generally adapted to the ordinary run of consumptive cases, I should say the sesquichloride of iron. For several years I have been in the habit of prescribing it in doses of from ten to fifteen minims twice a day; and the mixture of the sesquichloride of iron is one of the most frequently employed formulæ of the Consumption Hospital *Pharmacopœia*. In private practice, it may be agreeably taken in combination with lemon or orange syrup.

and in this way it may be continued with advantage for many weeks, and even months.

Chlorate of Potassa, like glycerine, has won various opinions as to its influence upon consumption. By one physician it has lately been considered even as a *specific*, whilst by others it has been deemed altogether a failure. After a careful analysis of its effects in the twenty-five cases, I came to the conclusion that it was very far from a *specific*; and that its usefulness was seldom apparent, except in those cachectic cases in which it and allied remedies are frequently serviceable.

Quinine, in doses of one or two grains twice and sometimes three times a day, although well suited apparently to a few of the twenty-five cases, generally produced disappointment; its effects being, as a rule, inferior to those of many other tonics. It would seem that quinine, like chlorate of potass, is chiefly useful in a certain class of cachectic patients, in which, irrespective of the tubercular condition, such agents are very generally prescribed. Several of the patients, however, who had scarcely benefited by the quinine alone, improved subsequently under the combined influence of quinine and iron.

Phosphoric Acid was prescribed in doses of fifteen minims two or three times a day. In three or four cases, it seemed to produce pain in the bowels, with nausea and loss of appetite; although, as a general rule, it agreed very well. Only three cases improved materially under its influence; whilst several of those in whom there was a moderate improvement benefited much more under other treatment. Phosphoric acid may be classed amongst the mineral acids as a general tonic in phthisis, but seems to me inferior to some of them, especially the *hydrochloric*.

The following table shows the general effect of these various agents upon the twenty-five cases in which they were administered.

	Considerably improved.	Slightly improved.	Not improved.
1. Phosphorus	4	5	16
2. Liquor Potassæ	1	2	22
3. Hydrochloric Acid	11	6	8
4. Iodide of Iron	10	4	11
5. Iodide of Potassium	6	5	14
6. Chloride of Sodium	8	6	11
7. Vinum Ferri	13	3	9
8. Glycerine	4	2	19
9. Sesquichloride of Iron	12	5	8
10. Chlorate of Potassa	5	4	16
11. Quinine	7	5	13
12. Phosphoric Acid	3	8	14

It must not be forgotten, in estimating the therapeutic value of these different substances, that this is illustrated by the table rather *comparatively* than *absolutely*; since we must not exclude from its proper share in the result the combined influence of hope, rest, good diet, and general hygiene, under which, even by itself, many phthisical cases are well known to undergo very considerable improvement. The figures, indeed, can only be taken as a fair expression of the *comparative* usefulness of the various agents as therapeutical auxiliaries to general treatment.

The experiments to which I have thus briefly alluded, and which will be found more fully described in my papers in the *Medical Times and Gazette*, appear to be suggestive of the following general conclusions.

1. Since, during the administration of each one of the agents described above, several cases of phthisis were observed to run through the various phases of the disease, some even to a fatal termination, it is obvious that, whatever the amount of benefit which in some cases followed their use, no one of such agents deserves the title of "*specific*".

2. It may, therefore, fairly be concluded that the

good effected by any of these agents was due to their respective tonic and upholding influence upon the general system.

3. In the majority of phthisical cases, steel (especially the sesquichloride of iron) and the mineral acids appear to be the most effective; but tonics generally are productive of more or less improvement.

4. Since, however, even steel and mineral acids, as well as other useful tonics, are undoubtedly inert in a certain proportion of cases, it is not improbable that there are varieties or modifications of phthisis, each of which may require a particular treatment. As there are special varieties of many other diseases, requiring special modes of treatment, and yielding to none other, it is possibly the same with consumption.

I would observe, in conclusion, that I think we are too apt to consider and to treat phthisis as a separate and always similar disease, disregarding the almost endless varieties it presents. Whether such varieties are dependent upon original differences in the nature of the disease itself, or are determined by peculiarities in the individuals it may attack, we at least have before us a large field for experimental therapeutics. My own idea is, that the time is not distant when observation and experiment will show that, under certain at present obscure conditions of system, phthisis assumes definite and special forms, each of which requires definite and special management; and that the "therapeutics of phthisis", which many may now consider both unsatisfactory and unpromising, will contribute, some day or other, to great and unexpected results. I am not so sanguine as to look for a *specific* in consumption; but that the disease will ultimately prove as amenable as many others to proper management, is, I hope, not a mere day-dream.

TARTARISED ANTIMONY AS A REMEDY IN STRUMOUS OPHTHALMIA.

By WILLIAM PRICE, M.D., Surgeon to the Metropolitan Infirmary for Scrofulous Children; Surgeon to the Metropolitan Establishment for Scrofulous Adults, Margate.

A SHORT but valuable notice, from the pen of Mr. Edwin Chesshire, appeared in a recent number of the *BRITISH MEDICAL JOURNAL*, on Tartarised Antimony as a Remedy in Strumous Ophthalmia. That the plan of treatment therein recommended is both little known and little practised, I am fully convinced; and my object in again bringing the subject forward in these pages is to endorse the statements of Mr. Chesshire, in the hope of inducing practitioners to follow this mode of treatment on a more extended scale.

During the past six years, 109 cases of strumous ophthalmia, occurring in children under 15 years of age, have been admitted into the Metropolitan Infirmary at Margate. Out of this number, thirty-eight suffered with photophobia; and twenty-five had either vascular corneæ or phlyctenular ophthalmia. They had been all, or nearly all, treated by the administration of tartarised antimony in small but repeated doses; and, save in a few instances, with the most marked and decided benefit.

My attention was first directed to this plan of treatment in the Paris schools; and the success I there witnessed attending its employment, induced me early to forsake the more routine practice of giving cod-liver oil and tonics. It must not be supposed that I have overlooked the beneficial effects of sea-air and a liberal diet upon the London poor when removed to this salubrious climate; for the cases mentioned have been generally those in which the children had resided some short time by the sea-side.