interpretation, and that the tubercles ought to be viewed as the consequence of the continuance of the disease, in constitutions naturally predisposed. Even without any predisposition, all that we know of the formation of tubercle, would lead us to dread its occurrence under the great perversion of the blood-making processes of assimilation and digestion, that attends this disease.

Pathology is not at all times the safest guide to practice; and if it teaches anything here, it is to endeavour to arrest the disease in its earliest stages. Mercury and guarded depletion are our great resources; but the rock upon which practitioners have foundered, is the fear of giving mercury to the character of constitution in which this affection prevails. It is an axiom in medicine not to use mercury in strumous habits, and when we recollect that the rule has been handed down from those who measured the powers of mercury by the quantity of saliva that it could promote, we ought not to be surprised at their horror of it.

Dr. O'Beirne correctly discriminating between the use and the abuse of the remedy, saw that by being rapidly introduced, so as not to weaken the constitution by long-continued excitement, it might be of service in acute scrofulous diseases of the joints. The result fully justified his expectations, and the hint was simultaneously acted upon by Sir Henry Marsh and Drs. Graves and Stokes, who applied it in a similar manner to the treatment of phthisis; or, more correctly speaking, of pneumonia in phthisical habits. It has been since tried by several practitioners, particularly by Dr. Munk, and I have myself had an opportunity of testifying to its great value.

We know that it is the essential character of strumous disease to assume a low intractable character, and our object ought to be to arrest it in its earliest stage; this rapid mercurialization will effect, and mercury used in this manner will not produce those injurious effects that we so often witness when it is slowly introduced. Valuable assistance will be derived from local depletion and blisters. Local depletion is particularly to be recommended, even though the presence of inflammatory action may not be indicated by pain, as we know that pain is not an invariable attendant on inflammation; and call it either inflammation or congestion, there can be no doubt of the existence of a loaded state of the capillaries, which is considerably relieved by depletion, and by removing which the mercury will more readily produce its influence. This remark applies with equal force to cases of chronic pleuritis and pericarditis, and deserves to be borne in mind when treating these affections.

The treatment of this disease has been very imperfectly understood hitherto, as may be seen by referring to some of the latest works, for instance, the Library of Medicine. Even Dr. Copland, in his great work, does not insist so strongly on the use of mercury as its importance requires.

Dr. Churchill claims the priority of this mode of treatment for Sir Henry Marsh; but in the second volume of the *Transactions* of the Provincial Medical and Surgical Association, he will find it recommended by Mr. Thompson, of Whitehaven. This does not, however, in the least detract from the value of Sir Henry Marsh's excellent paper.

A very important point of practice remains to be

noticed in connexion with the case I have detailed. At a time that the bowels were being moved twelve times in the day, there was a progressive increase of the peritoneal effusion, distinctly pointing out that in cases of ascites dependent upon, or complicated with, peritoneal disease, we ought to employ other measures than the application of drastic purgatives to the intestinal tube, to remove the effusion.

I am aware that this view of the subject is recognized by many practitioners, but it does not prevail as generally as it deserves. I know of no individual who entertains a more enlarged or philosophic view of it than my talented predecessor and esteemed friend Dr. Maclean, in whose hands this principle has been most successfully carried out. I saw, a few months since, a case of ascites, resulting from peritonitis and tubercular disease of the liver, in which the effusion was thrice removed by mercurial frictions to the abdomen; but the tubercular disease of the liver was found, on examination, to be so extensive, that recovery could not have been expected; and I believe from the very exhausted state of the system that it would have been impossible by any other means to afford the same amount of even temporary relief.

I believe, that in the treatment of disease generally, far too much importance is attached to the evacuation of the bowels, and that our minds are warped by early prejudice, into a habit of giving purgatives, without adequately attending to the quantity, and quality of the ingesta, upon which the necessity for their evacuation must depend. Even in enteritis the purgative treatment is questionable, and when we recollect the nature of the remedies in general use, we may well doubt if any advantage is derived from them, quoad their purgative effect, and whether the action of the bowels that ensues, is not rather to be attributed to the antiphlogistic effect, (so to speak,) of the bleeding, fomentations, and calomel and opium, and the purgation more an evidence of the improvement than the cause of it.

(To be continued.)

RESEARCHES ON THE COMPOSITION OF THE BLOOD IN HEALTH AND IN DISEASE: A MEMOIR PRESENTED TO THE ACADEMIE DES SCIENCES, PARIS,

By A. BECQUEREL, M.D., and A. RODIER, M.D.

(Translated from the *Gazette Médicale de Paris*, by EDGAR SHEPPARD, Esq., M.R.C.S.)

(Continued from page 615.)

PLEURISY.

The five cases of pleurisy were acute, simple, and uncomplicated with tubercles; they all occurred in men, aged 20, 35, 47, 52, and 59 years. One venesection was made on the third day, one on the eighth, two about the twentieth, and one at so late a period that it could not be determined when the attack actually began. In all but one the fever was well-marked, and even intense. In all there was an effusion, disclosed by auscultation and percussion. Two of the patients were of good and strong constitution, two were enfeebled prior to the attack of acute disease, and one was debilitated by the existence of an old effusion.

The following was the mean composition of the blood:—

MEAN COMPOSITION OF THE BLOOD IN PLEURISY.
(MEN.)

Density of the blood deprived of its fibrin	1055.
— serum	1026.
Water	798.6
Globules	120.4
Albumen	65.4
Fibrin	6.1
Extractive matters and free salts	7.6
Fatty matters	1.905
Seroline	Variable.
Phosphorated matter	0.703
Cholesterine	0.182
Soap	1.020

IN 1000 GRAMMES OF CALCINED BLOOD.

Chloride of sodium	3.0
Soluble salts	2.0
Phosphates	0.478
Iron	0.461

The examination of the cases individually, leads to the following results:—

The globules were diminished in every case, except the one in which venesection was performed on the third day; the figure representing them was 136, a number inferior to that of the normal state. They were greatly diminished in one case, (89), in consequence of the debility of the patient from the lengthened period since which the effusion had taken place.

The albumen was notably diminished in every case, with the exception of one only, in which the increase was scarcely apparent, and due to the diminution of the globules.

The fibrin was remarkably augmented in every case; it was a little less than the others in the blood of an individual in whom the disease had existed for twenty days, and where there was scarcely any fever.

The aggregate of the fatty matters was somewhat below that of the normal state; the seroline variable and normal; the phosphorated fatty matter abundant in every case; the cholesterine was almost double what it is in a state of health; the saponaceous matter was only slightly changed.

The salts presented nothing remarkable, except an increase of the phosphates, as in every disease.

PNEUMONIA.

We have analyzed the blood in seven cases of pneumonia—two men and five women.

Of the men, one was aged 19, the other 46 years; both were strong, well-formed, and had always enjoyed good health; both were now affected with pleuro-pneumonia of the left side, with intense fever. They were bled on the third day; one of them was bled a second time afterwards, but his blood was not analyzed; the other was treated by tartar emetic.

The globules presented a normal figure, in both cases; the albumen was very much diminished; the fibrin very high; the fatty matters were excessively abundant in the man aged 46; in the other much less so, (half.) In the former the seroline was represented by the extremely high proportion, 0.301, the cause of which was not apparent; the phosphorated fatty matter by a number also very high, 1.122;

the cholesterine was not isolated from the saponaceous product, and they were together represented by the very elevated number, 2.432, the cholesterine being certainly very abundant. In the other, the fatty matters were in normal proportion, except the cholesterine, which stood as high as 0.256. The serum was scanty, clear, and limpid, in one case; abundant, slightly limpid, and of a dirty yellow, in the other. The clot was voluminous in both cases, very resistant; the one cupped, the other marked here and there with greyish stripes.

Of the five women affected with pneumonia, two were bled once, two twice, and one three times. The ages were 17, 33, 52, 61, and 65 years. Two were of strong constitution; two thin and feeble prior to the present attack; one slightly lymphatic, but, nevertheless strong. Two were bled on the fourth day, one on the fifth, one on the eighth, one on the tenth. In two the summit of the lung was affected, one on the left, the other on the right side; in three the base was implicated, two on the right, one on the left side. In every case there was intense fever.

MEAN COMPOSITION OF THE BLOOD IN PNEUMONIA.
(WOMEN.)

	First Bloodletting.	Second Bloodletting.
Density of the blood deprived of its fibrin	1052.6	1050.2
— serum	1025.	1025.
Water	801.	808.
Globules	122.5	113.9
Albumen	61.1	59.7
Fibrin	7.4	6.3
Extractive matters and free salts	6.4	7.4
Fatty matters	1.687	1.618
Seroline	Variable.	Variable.
Phosphorated matter	0.504	0.382
Cholesterine	0.101	0.124
Soap	1.062	1.092

IN 1000 PARTS OF CALCINED BLOOD.

Chloride of sodium	2.8	3.1
Soluble salts	2.7	2.4
Phosphates	0.308	0.445
Iron	0.493	0.512

First Bloodlettings.—From an examination of the cases individually, we have arrived at the following conclusions:—

The globules were generally diminished, except in one case; this was in a strongly constituted woman, on the fifth day of the disease, which had not yet attained its maximum intensity.

The albumen was much diminished in every case; the fibrin notably augmented, but in various degrees. The amount of the fatty matters was almost normal; the seroline was in small or unappreciable quantity; the phosphorated fatty matter was rather abundant; the cholesterine augmented in three cases, was normal in the two others, at a period nearer to the commencement of the malady; the saponaceous matter was normal. The phosphates were a little augmented.

The serum, always dense, was abundant twice; scanty three times; in three cases it was limpid, in one it was slightly, and in one very turbid. The clot, voluminous in all five cases, was always resistant; twice it presented

a buffy coat with whitish striæ; twice with greyish striæ only; once it was of a brownish red.

Second Blood-lettings.—The proportion of globules was here still more notably diminished. The albumen preserved the same low figure, and the fibrin was a little less than what it was on the first venesection. The fatty matters varied but little, except the cholesterine, which was in every case increased. The phosphates were very abundant. These results were manifested without exception, in the three second blood-lettings.

It should be added, that the serum was once slightly, once considerably, and once very abundant; and in all three cases slightly turbid. The clot was voluminous and resistant in each; twice it was buffed with striæ; once it only presented whitish striæ.

The third blood-letting gave a fresh diminution of the globules, and a slight decrease of the fibrin; the albumen remained low. There was a diminution of the phosphorated fatty matter, and an increase of the cholesterine.

(To be continued.)

CASE OF CEPHALOMA, CURED IN THE FOOT, SUBSEQUENTLY DEVELOPED IN VARIOUS INTERNAL ORGANS.

By RICHARD FRANCIS GEORGE, Esq.,
Senior Surgeon to the Bath Hospital.

A healthy woman, aged 35, in October, 1843, discovered in the hollow of her left foot, a painful purple tumour of the size of a pea, which continued to increase for six weeks, when the skin cracking over it, she first sought medical advice. From December to June, in the following year, when she came to reside in Bath, were applied in succession, poultices, strapings, nitrate of silver in solution and substance, Bates' copper lotion, a double ligature, potassa fusa, and finally the caustic paste, while her failing powers were attempted to be sustained by a generous diet, with quinine and steel. At the time she came to Bath, the tumour had attained the size of a pullet's egg, but was circular in form and much elevated; its surface was smooth, of a purple chocolate colour, and bled upon the slightest touch, while the edges of the surrounding skin were hard and everted; and in the integuments, for four or five inches round the tumour, were scattered several smaller ones, firm and rather insensible, resembling in colour and shape the original at the time it was first noticed. The glands in the upper part of the thigh were enlarged and tender; the patient's complexion, naturally dark, had acquired the sallow leaden hue, which usually accompanies malignant disease; her flesh and strength were gradually decreasing, her appetite was bad, and her nights rendered sleepless by pain.

The obviously malignant character of the tumour, and the state of the femoral glands, forbidding the doubtful resource of amputation, the woman was directed to apply moistened linen to the part, and to take three times a day twenty drops of Brandish's alkaline solution, combined with cascarrilla, with the view, if possible, of causing some renewal of appetite and strength. For the first five weeks that this treat-

ment was pursued, no perceptible change took place, either in the tumour or health; but in the sixth week there was an evident improvement in both, and when the patient left Bath, in September, she had recovered her appetite and strength, and her complexion had nearly regained its natural colour, while the tumour, contracted to the level of the neighbouring skin, had firmly cicatrized, many of the surrounding tubercles had disappeared, and the glands in the thigh were much reduced in size.

The woman remained well, both as to her foot and general health, up to the end of May in this year, when, though no change appeared in the former, her appetite and strength began to flag. On the 15th of June she was seized with vomiting and purging, followed by pain in the region of the liver and jaundice, and she died on the 11th of July. During the month which preceded her dissolution, the femoral glands had attained the size of a large hen's egg; and many small, firm, pale tumours, appeared beneath the skin covering the thorax and abdomen, some of which were accompanied by enlarged veins, and small extravasation of blood.

An examination was made eighteen hours after death. There were two small pearly deposits beneath the pleura of the lower part of the left lung; both lungs were studded with cephaloid tubera in every stage of degeneration; two very minute tubercles were deposited in the subserous membrane of the left ventricle of the heart; the liver was much enlarged, and throughout was crowded with innumerable cephalomatous tubera, varying in size from that of a small shot to that of a pullet's egg, in every stage of growth, and all more or less deeply tinged with yellow; the substance of the liver was gorged with bile, and in the vicinity of the larger tumours shewed much vascular congestion. In the sub-mucous tissue of the ileum were two purple, oval, flattened tumours; the inguinal glands were connected with a still larger mass, lying behind Poupart's ligament; both were of a firm texture, and of a uniform white colour.

The paper was illustrated by coloured drawings of some of the morbid growths in the lungs, liver, and intestines, made by Mr. Hensley, as well as a beautifully-coloured cast of one of the tumours in the ileum.

MALFORMATION OF THE UTERUS: ONE KIDNEY DEFICIENT: PTYALISM CAUSED BY THE INTERNAL USE OF BISMUTH.

By JOHN CARDEW, M.D., Physician to the Bath Hospital.

Ann Hitchings, aged 38, was received into the Hospital July 7, 1845, upon the recommendation of Mr. Thomas Warner, of Cirencester, by whom, conjointly with Mr. Charles Pooley, the following interesting history of her case was kindly furnished.

She was four feet two inches in height, and always of an active bustling disposition, up to the commencement of her first illness, eight years ago. She did not menstruate till between the twentieth and twenty-first year, and afterwards very irregularly, the interval between each return varying from a week to five months. The catamenia were always scanty and pale, but unattended with pain or uneasiness of any kind. The statements