nexion with this subject, I may call attention to an article by M. Beau in the *Presse Médicale Belge*, Jan. 3rd, 1856, translated for the *American Medical Monthly* for March of the same year, on the "Arthralgia of Phthisical Patients." "Under this term the author comprehends settled pains in the limbs of phthisical patients." "These pains," he says, "show a decided preference for the lower limbs." "They are rarely confined to the lower extremity," or "to the thigh, leg, or foot, almost invariably occupying both lower limbs to their entire extent." "It is very difficult to localize these pains; they affect the lower limbs in a mass, without our being able to fix their seat in the nerves, the muscles, or the osseous tissue."

The presence of these pains in many cases of phthisis must have attracted almost universal attention, and the description here given of them is just such as would best describe those of which I am speaking, save that the confinement to the lower limbs is by no means so invariable as the author insists, though often seen. Now, what are some of the facts with regard to fatty degeneration of the muscular tissue bearing on this point? 1st. "The muscles most exposed to it are the *voluntary* muscles, especially of the lower limbs."—*Rokitansky*. "It is met with in the substance of the heart, and in the fleshy coat of the gall-bladder, but is most common in the muscles of the lower extremities."—*Ibid*. "This fatty metamorphosis does not only occur in the above-mentioned transition stage, &c., but likewise independently of any such connexion, and accompanied with general emaciation, as the result of tuberculosis and tuberculous phthisis."—*Ibid*. "The fatty transformation of the liver is almost confined to phthisis pulmonalis."—*Dunghison*. "Anomalous pains are apt to occur both in this and the next stage of phthisis, in different parts of the body, which add greatly to the distress,"—*Ibid*.

Montague-street, Russell-square, June, 1857.

(To be continued.)

ON THE DIAGNOSIS OF SCABIES BY THE PRESENCE OF THE OVA OF THE ACARUS AMONGST THE SCALES OF THE EPIDERMIS.

BY DR. GULL.

SCABIES often presents such difficulties in diagnosis by the eye only, that every additional microscopic aid is valuable. It is admitted not to be always an easy task to find the acarus itself; but each animal (female) lays many ova, which are readily found attached to the roughened and undermined cuticle in the neighbourhood of the vesicles. I need not say the ova are well known, but their presence as a diagnostic test of itch has been overlooked. The ova are about $\frac{1}{800}$ of an inch in their long diameter, and in many instances the fetal acarus can be seen within the shell.

Ova of *Acarus Scabiei* $\frac{1}{800}$ of an inch in long diameter.

June, 1857.

SUMMARY OF SEVENTY-FIVE CASES OF ALBUMINOUS URINE.

BY THOS. R. HEYWOOD THOMSON, M.D.,
Liverpool.

SINCE the pathology of the urine has of late years been more generally taken into account in the investigation of disease, and the examination of it conducted with greater care, the more frequent discovery of the albuminous condition in cases not

essentially nephritic has demonstrated that this ominous feature results not so often from change of structure in the kidney—Bright's disease and its modifications—as from mere functional derangement, brought on by over-work in eliminating certain morbid products from the blood in some diseases, or while operating compensatively (so to speak) in others. In proportion, too, as the urine has been submitted to the test of the microscope, as well as the ordinary tests, have we been enabled to estimate more surely the import of those cases in which albuminuria has obtained. The mere detection of less or more flocculence on heat and nitric acid, however portentous, is comparatively valueless without the aid of histology. The former merely indicates a condition, striking the alarm-note, as it were, but the latter brings under review the products of the change, and very often shows the exact stage reached in the complication. What the crucible is to the toxicologist, we may hope the microscope will become to the investigator of this pathological state—affording conclusive evidence. To use the words of Dr. George Johnson, "a microscopic examination of the urine is essential for the formation of a correct diagnosis;" "a microscopic examination of the urine is the best and only means of ascertaining the epithelial deposit;" "for the accurate discrimination of all forms of renal disease, the microscope will be found an invaluable aid;"—or of Mr. Simon, who states, in his admirable paper on the Kidney, published in the 30th vol. of the "Transactions" of the Medical and Chirurgical Society of London, "so much more delicate is the microscopical than the chemical test, that it has twice happened to me lately, in cases of scarlatina, to find groups of blood corpuscles in the urine, when nitric acid had given no precipitate visible to the naked eye."

I have therefore thrown into a tabular form the most prominent histological features of seventy-five cases, in which the urine was found to be more or less charged with albumen,—accompanied with such few notes as were considered worthy of being jotted down at the time. The figures specifying the numbers in each section, "granular," "oily," "waxy," &c., do not always coincide with the total of each disease, as it not unfrequently happened that two or more abnormal characters were noted. So, too, the absence of heart-disease from so long a list may surprise those who know how often the two states are associated; but as in all the cases coming under my notice in which they co-existed, the kidney affection, as far as could be traced, seemed to have taken the precedence, or at least had become the most prominent, they were so noted. Even two cases of asthma, of long standing, in which valvular disease existed, together with Bright's disease, are classed in the latter, although it is possible that, could the cases have been traced *ab initio*, the asthma and valvular disease might have been proved to have led to the kidney complication.

	Total.	Granular Casts.	Oily Casts.	Waxy Casts.	Epithelial Casts.	Blood, free or aggregated.	Fatal.
Bright's disease	10	8	2	4	...	...	7
Scarlet fever (malignant). Eruption not well developed	2	...	...	...	...	2	1
Scarlet fever (anginosa). Eruption well developed	17	...	...	1	6	17	...
Scarlet fever. Eruption irregular; only out a day or two	4	...	...	2	4	...	...
Scarlatinal throat, without eruption	2	...	...	1	2	...	...
Rheumatism	2	...	...	2	2	...	...
Gout (obscure)	1	1	...	...	...	1	...
Typhus fever (second week)	1	...	1	...	...	1	...
Kidney, inflammation from calculus?	1	...	...	1	1	...	...
Catarrh	3	...	1	1	2	...	...
Pneumonia	2	...	...	...	...	...	...
Erysipelas	1	...	...	1	1	...	...
Liver, torpor and derangement of	3	...	1	1	3	...	...
Peritonitis	1	...	...	1	1	...	...
Phthisis, in latter stages	4	...	2	1	...	4	...
Chlorosis	4	...	1	...	...	...	...
Oxaluria (strongly marked)	4	...	...	1	3	...	...
Phosphatic diathesis (strongly marked)	3	...	...	...	3	...	...
Pregnancy, latter months	2	...	1	...	2	...	...
Uterine diseases	5	...	...	...	5	...	...
Malignant disease of the bladder	1	...	...	...	1	1	...
Free use of turpentine, internally	5	...	...	...	2	...	...
	75	9	4	12	16	57	13

Of ten cases of morbus Brightii, seven ran the variable, but downward course of that disease when confirmed, and terminated fatally. Three were apparently kept in check by appropriate treatment, but are still delicate. Manifest hypertrophy

of the heart existed in three cases; valvular disease, with hypertrophy, in four; while three had no appreciable derangement of that organ. The waxy form of cast did not present so frequently, as we were led to expect from the experience of others. In one case, the details of which were submitted to Dr. Bence Jones, the quantity of urine passed daily during the last fortnight of life, only averaged nine ounces, and was several times as low as seven, the specific gravity continuing high, never less than 1032, and one day as high as 1045. Under the head of scarlatina I have twenty-five cases, in which there was some amount of flocculum on heat and acid, and after the examination of a considerable number of such, I can confirm the statement of Dr. Begbie, that in almost every case of scarlatina, the urine will be found to have *traces* of albumen, but in the majority it is only to be detected by the microscope, in the shape of free or aggregated blood corpuscles. In several of the cases, the eruption was so irregular and evanescent, that but for the sore-throat, spreading, amongst others, eruptively, and the albuminous condition of the urine afterwards, they would have been difficult to diagnose; while in two cases of scarlatinal throat, *without eruption*, it extended to others in the eruptive form; in both cases there was albuminuria. Two cases in which there was scarcely any eruption, or more properly speaking, suppressed, were followed by general dropsy.

Illustrative of the irregular manner in which this disease sometimes runs through a family, the subjoined may not be out of place. The eldest son, aged sixteen, was the first attacked, and had simply scarlatinal throat and strawberry tongue, followed by albuminous urine, and excessive debility. An elder sister, aged nineteen, had the eruption strongly marked, running the usual course. A younger sister, eight years old, had the eruption only irregularly for a day and a half, with intense sore-throat. A still younger had the eruption running the usual course. Another, yet younger, had a few livid blotches, with great fever, and had sore-throat, followed by albuminuria. The youngest, a baby, had the eruption out vividly, without throat affection. Within the last month I have had two cases of checked (irregular) scarlatina, in which intense albuminuria, with blood and casts, succeeded within four days, and this notwithstanding here (as in every case where scarlet fever is suspected) warm, or vapour baths, to encourage the eruption, were at once ordered.

Of the cases of rheumatism, one was complicated with urgent pericarditis, and the urine continued throughout the attack, and for nearly three months afterwards, very albuminous, with abundance of epithelial casts and some blood, but gradually subsided under the continuous use of aperients and diaphoretics. In a case of obscure gout, still under observation, the albuminous condition recurs with every threatening, and only disappears on the decline of the arthritic symptoms, eliminating great quantities of lithates, and granular casts—a very undesirable symptom. Three cases are noted, in which the symptoms were those of well-marked catarrh, followed by dropsy, the urine being very albuminous, but soon losing this ominous character by restoring the free action of skin and bowels. Three cases of very decided albuminuria had no other appreciable origin than torpor and derangement of the liver; in one case the epithelial casts were freely thrown off for many days. In two persons suffering from intense pneumonia, (in one, both lungs,) the albuminous condition, from free and aggregative blood corpuscles, was very strongly marked for about a week. So, too, in a case of severe general peritonitis, probably extending to the serous covering of the kidneys, the urine was charged with waxy casts and free blood discs for ten days. The not uncommon condition of albuminuria in the latter stages of phthisis was noticed in four cases: in one, where the urine was carefully examined many times, the albumen present was so considerable as to cause a jelly-like consistence on heat and acid, and yet there was no trace of tubular casts or blood, nothing but immense numbers of spermatozoa. In this case some of the fibrinous part of the blood must have drained off by the kidney. In four well-marked cases of chlorosis, accompanied in three with anæmic bruits, the urine was albuminous for a considerable time; in one, continuing three months, with waxy casts; in another, the anomalous condition just described—i. e., highly albuminous urine without a trace of tubular cast or blood—existed. Iron had the usual beneficial effects with all of them. Of seven cases, where either oxaluria or a strongly-marked phosphatic diathesis was present, with albuminous urine, the blood globules were mixed with a considerable amount of vesical epithelium, as well as the characteristic crystals, leading to the inference that mechanical irritation of the surface of the bladder had been the chief cause. In two cases, where the urine was albuminous in pregnant women,

there was an interesting contrast: this condition came on in one of them probably only a few days prior to her confinement, and was not strongly marked, yet she had slight convulsions; in the other—aged thirty-eight, a primipara, who had for years been suffering from a sacculated condition of the œsophagus and almost total obstruction to swallowing anything solid,—the urine was loaded with free blood corpuscles and waxy casts for upwards of two months before her confinement, and, notwithstanding a very long and severe labour, there was never once a threatening of convulsion; it is true, however, that as soon as the local hyperæmia was discovered a few leeches were applied over the region of the kidneys, and other means used to avert the contingency. In the cases of uterine disease, extensive ulceration of the os, the albuminous flocculence was traced to the presence of free blood discs, much vaginal and uterine epithelium, the result of the accompanying discharges. Two persons who had used turpentine improperly for several days (one for gravel, the other for tapeworm) were affected for upwards of a fortnight with albuminaria, blood having been freely passed and some fibrinous blood casts; and the irritation of the kidney was intense.

A few short cases still further illustrative of the importance of a microscopical examination of the urine, *whenever there is the slightest trace of albumen present or suspected*, may not be an unfitting termination to this paper. One case of malignant disease of the bladder is tabulated. This patient, who had passed considerable quantities of blood from the bladder for several years, had consulted the most distinguished surgeons of London and Dublin—was sounded by two of the most eminent practitioners in the former place, and although no stone could be detected, so strong were the evidences of that malady that the sufferings were declared to arise from calculus; others believed it to be the irritation of gout; the kidney, too, was suspected, as the urine was always albuminous: yet no one thought of applying the microscope. Soon after being consulted by this patient at the recommendation of his medical attendant, it occurred to me, on seeing the nasty strawberry-and-cream-looking, slimy deposit, after the urine had stood for a short time, to subject this to microscopic examination; on which—strengthened by several successive results, there being no trace of kidney tubular casts, but abundance of free blood corpuscles, numerous caudate and filamentous multi-nucleated cells characteristic of encephaloid cancer—the case was pronounced to be one of malignant disease of the bladder, an opinion fully confirmed on the death of the sufferer eighteen months afterwards, when both bladder and kidneys were found to be affected with encephaloid disease. Mr. Coulson, in his compendious work on the Bladder, says of such cases: “In general we are never certain of the nature of the disease until the parts are examined after death.” After such a case, we may hope the microscope will enable the diagnosis to be more certain?

In another case, where the patient, upwards of sixty, was attacked with frequent severe hæmaturia, attended with much irritation of the bladder, and became despondent, being under the impression that as his father and two brothers had died of the same symptoms, with presumed malignant disease, at about the same time of life, his was likewise to terminate in the same way, several of the symptoms led to that conclusion, until, on carefully examining the character of the urine under the microscope, no trace of diseased structure was discovered; only abundance of free blood, vesical epithelial scales, and numerous large crystals of triple phosphate. The case was declared to be one, probably, of simple irritation; treated with acid tonics, gallic acid, and buchu; and gradually recovered.

In another case, a middle-aged patient, presented with anomalous symptoms—melancholic expression of countenance, sallow complexion, suffering from lumbar pains, wasting, and lowness of spirits; and, to render his case more doubtful, the urine was found slightly albuminous. The microscopic test was applied: free blood corpuscles, a few kidney casts, with abundance of octahedral crystals of oxalate of lime, were detected; the case was easily seen through, mineral acids and tonic purgatives ordered, with regulated exercise and diet; and the patient rapidly lost his threatening symptoms. “Nec dum finitus Orestes:” such instances could be greatly multiplied.

It is to be feared in too many cases that, the symptoms pointing almost conclusively to a particular disease, as long as they do not indicate kidney affection, every secretion except the urine is noted. How common it is in fevers, exanthems, and inflammatory diseases, to administer diuretics, without a thought as to the condition of the kidneys; nay, the very fact of the urine being scanty, which should put us on guard, is made the pretext for acting upon organs already perhaps over-axed and unfit for work. It is not unreasonable to suppose

that many a case of Bright's disease, or other chronic form of nephritis, has had its origin in the mistaken attempt to relieve the system by diuretics, when the kidneys were previously overwrought in eliminating from the blood what the lungs or the skin were incapable of effecting. The microscope and test-tube will, if properly applied, often save from such errors; and not only so, but will direct us to the right use of those means by which the kidneys can be brought safely to play their part in restoring the lost balance of health.

Aigburth, 1857.

REPORT OF CASES OF

POISONING BY WHITE PRECIPITATE, AND WHITE HELLEBORE.

By J. GILES, Esq., M.R.C.S.L.

ALL cases of poisoning are of interest at a time when the sale of poisons is attracting general attention. Of the effects of white precipitate, as a poison, little is recorded, Dr. Taylor mentioning only two cases; one of recovery, the symptoms having been those of gastric irritation alone; the other, of death from salivation, in a child aged seven. In neither case is the quantity taken mentioned.

P. T.—, a young woman, brought home, on May 22nd, 1857, a powder obtained from a druggist, and took it mixed in a cup of tea, at about half-past five P.M. She immediately became very sick, and continued so, suffering also much pain at the stomach. Her mother being alarmed as to the character of the powder, brought the cup from which she had taken it at about ten P.M. The cup was coated with an incrustation which, on analysis, proved to be ammonio-chloride of mercury. On visiting her, she was suffering much pain, and had been purged frequently. An emetic of sulphate of zinc was administered; and milk was directed to be given, there being nothing better at hand. The gastro-intestinal irritation had abated by the next day; but great swelling of the face and gums came on with salivation, which lasted several days. She was convalescent by the beginning of June. She stated that she had asked for "precipitate." The paper was marked "white precipitate, 1d." She would not state with what object she had bought the powder; but there is some reason for thinking that it was with the idea of curing the venereal disease. On buying the same quantity at the same shop, and comparing it as well as was possible with the quantity left in the tea-cup, it appeared that she could not have taken much less than half a drachm. Pereira states that white precipitate is largely adulterated with sulphate of lime; but this sample appeared to be almost pure, being nearly altogether dissipated when heated on platinum foil.

A case of poisoning by white hellebore has recently occurred under the care of my brother, Mr. F. Giles:—A man, feeling unwell, and purposing to take some cream of tartar, swallowed by mistake about half an ounce of white hellebore in powder. The paper which contained the powder was marked "Poison." Feeling sick and in pain, he sent for assistance about twelve at noon, four hours after taking the poison. Emetics and enemata were given, and he speedily recovered. The symptoms were purging pain at the stomach, burning sensation of the mouth and throat, but no vomiting until after an emetic. There was no giddiness, or other cerebral symptom.

June, 1857.

THE LATE M. THÉNARD.—M. Thénard, whose death we recorded last week, was, as is known through Europe, one of the most eminent men of science of his time. He had been elevated to the peerage, was formerly Chancellor of the University of France, and died at the age of eighty, June 20th last. At his decease he was member of the Academy of Sciences and emeritus member of the Academy of Medicine. He was a great favourite of Lavoisier, the friend and pupil of Laplace and Berthollet, fellow labourer with Davy and Berzelius, and the companion of Gay-Lussac. He taught by turns at the Sorbonne, the Ecole Polytechnique, and the College of France; and he has endowed his country with a work on chemistry, which has remained for forty years, and passing through six editions, the most esteemed book on that science. M. Thénard possessed large property, which he used in a most generous and Christian manner, his last act of philanthropy being the foundation of a society for the relief of scientific men in distress, his first subscription amounting to £800.

A Mirror OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.* lib. 14. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

TWO INSTANCES OF TUBERCULOUS DISEASE OF THE TESTIS; CASTRATION IN EACH, ONE BY THE ÉCRASEUR, THE OTHER BY THE KNIFE; RECOVERY.

(Under the care of Mr. LAWRENCE.)

THERE were two cases of some interest brought into the operating theatre on the 20th of June, from the fact of both requiring castration. The first of these was an adult, whose right testicle became swollen in March last, with the formation of matter, with fluctuation in the scrotum, which was evacuated, the fluid being of a scrofulous, curdy character. The testicle now grew hard and painful. This was treated by mercury without any effect; and as the man was far away from his family, he was desirous to return to them cured as soon as possible, and wished to have the testicle removed, which was done by Mr. Lawrence with the écraseur. The testis and scrotum were tied with a string, as is usual before applying this instrument, and it was then put on. Just before its complete separation, a piece of the string got entangled with the chain, obliging Mr. Lawrence to complete the division with a scalpel. There was very little bleeding indeed. A section of the testicle showed the structure of the gland to be tolerably healthy; but minute deposits of tubercle had begun in the substance, resembling isolated beads, which were carried so far in the epididymus, especially the globus major, as to have formed abscesses from softening of the yellow crude tubercle. The nature of the case was, therefore, clear enough. It was remarkable to observe, however, that although this deposit was going on, the tubuli seminiferæ were pretty healthy, as they could be drawn out with a pair of forceps. The spermatic cord was also healthy. The écraseur was employed here because the scrotum was loose, and the cord could be easily insulated.

The other instance was one in which the left testicle had attained to the size of a shaddock, with a large ulcer on its anterior aspect discharging pus, which did not communicate with the tumour itself. The patient was also an elderly man, who stated in his history that from the time of his being eleven or twelve years of age, his companions observed he had a large testicle; this was even the case at present with the right. Some weeks ago, his occupation rendered it necessary for him to walk from Paddington to Bow, and then back again daily. This severe exercise caused its increase to the size of an orange; but it further enlarged. An abscess formed at the anterior part of the scrotum, which was opened, scrofulous matter and blood being evacuated. It then shrunk a little; but he returned to the hospital to have the testicle removed, which was done by Mr. Lawrence on the same occasion as the first-mentioned case. The knife was used to accomplish this, as the case was not one suitable for the écraseur. There was a good deal of hæmorrhage during the operation. On making a section of the tumour, a quantity of dirty pus squirted out, which came from the sac of the tunica vaginalis, which was lined with a thick, pultaceous, and partly tuberculous material. All the epididymus was gone, the abscess being in contact with the testis itself, the structure of which looked healthy, but it was implicated in the disease, in so much that it was softer than natural, and the contiguity of the seminal tubules appeared to be destroyed. The disease evidently commenced in the epididymus in this case, of a tuberculous character, the structure breaking down with the formation of matter which communicated with the sac of the serous covering of the testicle, which took on the same diseased action.

In both of these cases the tubercular disease attacked firstly the epididymus, the form in which it generally begins as shown