"Bright's disease," and also by certain morbid states of the blood.

7. Albumen may totally disappear from the urine, *pro tempore*, in the most serious cases of "Bright's disease;" yet it cannot be supposed that the physical conditions of the kidney, favouring filtration of serum through the vessels, have suddenly and completely changed.

8. The reason why there is greater clogging of the tubules (general, or limited and "granular") in the advanced stages of "Bright's disease," (with proto-plastic, or fatty matter, or both,) is, that longer time has been allowed for the morbid blood-elements to filtrate through the walls of the vessels. These elements, in part stagnating within the tubules, in part exuded amid the inter-tubular tissue, accumulate in the renal texture, instead of all passing away with the urine. These elements, deposited granularly, and by uniform infiltration, are the effects of the disease, not its cause. But as the alterations of the blood are not equable and uniform in their advancement, there is no direct ratio between the amount of clogging of the tubules &c. and the severity of the disease, considered in the sum of its general manifestations. So true is this, that (as is clinically well known) the very highest amount of "secondary affections" may exist at the outset (anatomically considered) of the disease of the kidney.

9. From the very outset of "Bright's disease," the existence of blood-changes is certain; they are more marked in degree, and earlier in development (as appreciable conditions) than in any recognised chronic blood-disease.

10. "Bright's disease" has several of the characters of a primary chronic blood-disease. Thus: there is no direct ratio between the anatomical changes and the mass of morbid condition constituting the disease;—"Bright's disease" tends to the production of various secondary and dependent affections; and the character of these secondary affections partakes of that of the primary (that is, primary in the train of organic changes of the solids) renal changes; they too are marked by transudations of serum, and deposition of proto-plastic matter and fat.

11. It may be said, that as urea has been found in the blood at the commencement of acute attacks of "Bright's disease," there is evidence of organic disease of the kidney *ab initio*. But no; functional inactivity is enough to ensure accumulation of urea in the blood; in cholera, there is no textural alteration of the renal substance. The true explanation seems to be, that the state of the blood prevents the kidney from acting properly on the elements it is accustomed to excrete, not that its own functional aptitude is at the outset seriously impaired; in other words, it is probable that in the commencement the renal cells are still quite able to separate urea, if healthily-constituted blood were offered to them by the vessels. This view is, doubtless, hypothetical; but it harmonizes with the well-known and striking fact, that urea may, and does, not uncommonly, disappear from the blood when the anatomical changes in the kidney are carried to extremes, and the case (though a temporary improvement has occurred) is fast tending to a fatal issue. According to the doctrine which regards the accumulation of urea in the blood as the consequence solely of the changes in the kidney, how is this to be explained? According to this doctrine, the effect of a certain cause is decreased as the intensity of that cause is increased.

12. With the progress of deposition within the kidney, the excretory functions of the organ become, partly mechanically, partly dynamically, interfered with, and hence the blood becomes *secondarily* diseased also.

13. It may be objected that if "Bright's Disease" be not essentially a renal, but a blood-disease, *ab initio*, it does not seem clear why the kidney should be the organ on which textural changes are earliest and constantly inflicted. The objection is valueless, until it be explained why tubercle selects the bronchial glands at one period of life for its main nidus, the lungs at another; why cancer chiefly infests the mamma and uterus, &c. As soon as the predilections of blood-diseases for certain organs (or the attracting quality of certain organs for special diseased circulating elements) are explained in the instances *inter alia* of tubercle and cancer, the attraction of the morbid material, present in the blood in "Bright's disease," for the kidney will probably be found simple enough. Meanwhile, I would observe, that a fact, which may not be without its application in this matter, was ascertained some years ago by Simon, from the comparative analysis of the blood of the aorta, and of the renal veins in a horse. The quantity of albumen in the former to that in the latter was found to be as 425 : 446. This natural tendency to excess of albumen in the blood of the renal veins may, perhaps, be in some way connected with its tendency to escape by the channel of the

kidney in "Bright's disease." The urine (according to some chemists) naturally contains albumen, but in a proportion so minute that it is undiscoverable by ordinary tests.

From these facts and arguments it appears to me that the following conclusions may fairly be drawn:—

(a.) That "Bright's disease" is a blood-disease, *ab initio*, essentially tending to chronicity, though (like cancer and phthisis) sometimes running an acute course.

(b.) That the existence of that *ab initio* change follows from—1. Direct analysis. 2. The general accordance of the pathology of the disease with that of chronic blood-diseases. 3. The inadequacy of the local renal states to account for the local renal phenomena, still less for the general phenomena. 4. The total want of harmony between the renal changes and the general implication of the system, and between the renal changes and the local functional disorders. 5. The facility with which that want of harmony is explicable on the hypothesis of blood-disease.

(c.) That the precise nature of the primary blood-change is unknown: at present the main peculiarities ascertained (excess of serum of low specific gravity, excess of fat, excess of urea and deficiency of albumen) are, in all probability, secondary.

(d.) That the renal textural changes are not the cause of the sum of morbid states, included under the name of "Bright's disease;" and that they do not even furnish a measure of the intensity of that disease.

(e.) That in reality the renal textural changes form at the most the anatomical character of the disease, (and their claim in this respect even is not yet fully made out under all circumstances, *vide* propositions 1 and 2,) just as tuberculous deposit in the lung constitutes the anatomical character of phthisis.

(f.) That the primary blood-changes are the result, probably, of error in the primary and secondary digestion-processes. The toxic condition of the blood, whatever it is, is not derived from influences acting from without, but generated within the frame through imperfect organic actions.

(g.) That, as in all diseases of this class, (rheumatism, gout, tubercle, cancer, &c.) there is a mysterious constitutional *pre-disposition* to those imperfect organic actions; without this, all the exciting and immediate alleged causes of "Bright's disease" fail in the power to evolve it.

REPORT OF

A CASE OF OBSTRUCTED BIRTH, FROM AN OVARIAN TUMOUR; OPERATION, AND SUCCESSFUL TERMINATION OF THE LABOUR.

By WILLIAM MOORMAN, JUN., Esq., M.R.C.S. &c.,
St. Columb, Cornwall.

PHILLIPPA S—, aged thirty-two, married, had perceived, about ten years ago, a swelling in the left hypogastric region, and had been submitted to occasional treatment by blistering, iodine, and other means for the removal of the disease, which was manifestly of ovarian character, without, however, obtaining any reduction of the swelling. She married about nine years since, and went through three pregnancies and labours, without any inconvenience arising from her disease.

On the evening of Wednesday, June 27, her fourth labour commenced, and after regular and strong uterine action had continued for six hours, her nurse required my assistance. On examination, it was found that the first stage of labour had been completed; that the foetal head was at the brim of the pelvis, in the first position; and that its progress into the cavity was completely opposed by the presence of a large, firm tumour, occupying and filling the hollow of the sacrum, and incapable of displacement by pressure. On passing the finger into the rectum, it was perceived that the tumour was here lower and more readily reached, and that it gave, on pressure, more satisfactory evidence that it contained fluid. After some consideration, in conjunction with Mr. Nankivell, who, as well as myself, had treated the woman for ovarian disease, I carefully passed an ascites trochar and canula per rectum, guarded by the left index, and pushing the instrument into the tumour, discharged, on withdrawing the trochar, nearly a pint of pus-like fluid. All impediment was now removed from the pelvic cavity, and in little more than one hour, the woman gave birth to a large, healthy, female child. On the morning of the 29th, the woman complained of more pain than is equally produced by pressing the abdomen after labour, without giving by pulse or countenance any positive indication of inflammatory action, and, as anticipating consequences, she took at intervals

calomel-and-opium; but towards the evening, more decided marks of peritonitis were found, as tension of abdomen, increased pain on pressure, with vomiting and frequent pulse. The abdomen was leeches, and the opium-and-calomel were more vigorously employed down to the evening of the 2nd of July, when these symptoms subsided, and in two days more the woman advanced to convalescence.

Dr. Merriman, in his synopsis of the various kinds of difficult parturition, refers to the history of eighteen such cases in the *Medico-Chirurgical Transactions*, and shows that nine of the women died, and three recovered imperfectly, while of twenty children making the produce of these eighteen labours, only four were born alive. Three of these cases were treated by opening the tumours, and afterwards leaving the labours to nature, with the result of two perfect recoveries and one incomplete one on the part of the mothers, and the preservation of two children; thus showing the advantage of this plan of treatment as compared to the various proceedings taken in the fifteen other cases.

I have no opportunity of referring to the several numbers of the *Transactions* alluded to, in order to ascertain if the tumour in any case was opened by the rectum, and this is my reason for making this communication.

In the case which I have related, the lowness of the tumour as examined by this canal, together with the fact that here only could be perceived a fluctuation, furnished my chief guide for the selection of puncturing through the rectum.

St. Columb, July 6, 1849.

ON AN INSTANCE OF EMPHYSEMA OF THE NECK AS A TERMINATION OF HOOPING-COUGH.

By W. BIRD HERAPATH, M.B. LOND., M.R.C.S.E., &c.,
CONSULTING SURGEON-ACCOCHEUR TO THE BRISTOL-DISPENSARY.

To the Editor of THE LANCET.

SIR,—I send you the enclosed for insertion in your valuable journal. Emphysema of the lung is by no means an uncommon occurrence in whooping-cough, but I am not aware that air has been found in the cellular tissue of the neck by more than two observers, therefore this case is valuable and worthy of record. It is not impossible that it may have occurred more frequently, but that the observers have not published their cases: to all to whom I have related the circumstance it has appeared novel and extraordinary.

I remain, dear Sir, yours most obediently,
WILLIAM BIRD HERAPATH.

CASE.—Mary H.—, aged eighteen months, was placed under my care, August 1, 1848. She was suffering from a spasmodic cough, with an occasional whoop of an indistinct kind; symptoms of bronchitis also existed at this time. She was ordered to have two leeches on the sternum, and small doses of tartarized antimony at short intervals.

The bronchitis was controlled in the course of four or five days by persisting in this treatment; the febrile symptoms diminished; and the whoop became more fully formed. The antimony was continued, but at longer intervals, during the whole of the subsequent week, in consequence of which the cough became less teasing and troublesome, and by the 15th, the whoop had almost entirely disappeared, but the spasmodic cough remained at this time. All fever had vanished. The child had lost its appetite, and its strength was considerably diminished; the pulse was small, weak, and rapid; the respirations were short and frequent, and more dyspnoea existed than the symptoms warranted; but little mucous râle remained; the face was pale and exsanguine; the lips almost white. I prescribed one grain of the citrate of iron and quinine three times a day.

No improvement resulted; the dyspnoea steadily and rapidly progressed; the axillary muscles of respiration were brought into play; but the countenance did not become livid until after a fit of coughing; the chest sounded well on percussion everywhere. I at first attributed this dyspnoea to excitement, until the friends assured me she was always so. The cough was almost nothing at this period; it was readily smothered by the child.

On the 17th of August, after a more than usually violent fit of coughing, a swelling made its appearance in the neck, just over the sternum; the depression between the origins of the sterno-mastoid muscles disappeared, and was converted, in shape and appearance, into an enormous goitre; but the boun-

daries were more diffused and extensive than this disease usually assumes. I saw it some hours after its first origin. It then appeared very prominent and diffuse; the inferior extremity stretched downwards over the first and second bones of the sternum, and terminated in an acute point; from hence the two external margins took a curvilinear direction upwards and outwards to the middle of the clavicle on each side, so that the tumour had a triangular appendage to it inferiorly. This appendage was elevated about three-eighths of an inch above the surface of the surrounding skin. Above the sterno-clavicular articulation it was a rounded prominent tumour, extending even up to the larynx, and outwards to the margins of the sterno-cleido mastoids on each side; it had a very transparent appearance; "it looked watery," as the relatives expressed it, but the crepitant feeling experienced on handling it at once declared it to be air in the cellular tissue—emphysema. Whence came this? I was at a loss to conjecture. It struck me as probable that one of the muciparous follicles of the trachea had ulcerated through all the coats, and permitted an escape of air under the fascia. The dyspnoea rapidly increased, as also did the swelling; it at length extended to the ramus of the lower jaw; the face became livid, and the extremities cold. The child gradually passed into asphyxia, and died quietly on the 19th of August, ten A.M.

A carefully-conducted post-mortem was made on the 21st. Decomposition had not commenced. The dissection of the neck clearly showed the air to be in the cellular tissue, beneath the deep cervical fascia, and around the trachea. The whole of the cellular tissue here was emphysematous; it passed downwards, behind the sternum, into the anterior mediastinum, the cellular tissue in which was excessively distended by air. The lungs were also broken up by emphysematous dilatations. The upper lobe on the right side was most extensively disorganized by it; many of the cells were as large as currants and grapes, and all of them larger than natural. Air was proved to pass from the root of the upper lobe of the right lung into the anterior mediastinum, behind the pleura; therefore one of the distended emphysematous lobules at the root of this lobe must have given way, and allowed the air to escape into the cellular tissue in the manner described. The other organs of the thorax and abdomen presented no appearance worthy of remark; they were all anæmic. No air existed in either of the pleuritic cavities.

This case is an interesting one,—the rarity of its occurrence makes it especially worthy of note. Upon a reference to Dr. Copland's Medical Dictionary, I find that emphysema of the cellular tissue of the neck has already been noticed to occur, by two reporters, after whooping-cough: not possessing the original communications, I am unable to say whether both these cases were fatal; but from the urgent dyspnoea in this particular instance, and the irremediable nature of the injury, I must presume that it is almost impossible to be otherwise than a very fatal accident. The peculiar shape of the tumour is at once indicative of the affection: I should now have no difficulty in recognising it again in a moment. It is evident to every anatomist that the peculiar shape is owing to the attachments of the cervical fascia to the various salient points about the neck, which of course did not permit the air to insinuate itself under the fascia in these positions. I greatly regret that auscultation was not practised upon this little patient's thorax, to explain the cause of the dyspnoea on the 15th. Had that been done, the condition of the lung would have been detected, and the cause at once revealed. It would, however, have been impossible to have foreseen this accident; in fact, I should never have expected it, as, until the present case happened under my observation, I was perfectly ignorant of its existence.

Old Market-street, Bristol, 1849.

ON A CASE OF POISONING BY THE ROOT OF DIGITALIS PURPUREA.

By JAMES EDWARD, M.D., Surgeon, Forfar.

AMONGST the numerous cases of poisoning which have hitherto been brought before the notice of the medical profession, few, if any, have been caused by the root of our official foxglove, and it is on this account that I take the liberty of soliciting, in your valuable periodical, a corner for the following case:—

John R.—, aged seventy, of a strong healthy constitution, when attending the plough, several years ago, in the month of April, received a blow from the stilt, on the right side of his chest, the sock of the plough having come in contact with an earth-fast stone. From this blow the parietes of that side of