2. If there is a constitutional cause of lung-disease, but only a small area of lung at present suffering, and that in the upper lobes, while there is a capacious chest with large areas of lung in the lower portions quite sound and insufficiently used, then it is safe to secure localised rest for both upper lobes, and to make the lower portions do a fairer proportion of the work; but, even under these circumstances, the respiration should be kept at as low a point as practicable. A case illustrative of this rule has just occurred to me. A fine young man, with a very capacious thorax, who has practised all sorts of gymnastic exercises with his arms while restricting the lower parts of the chest by dress, has thus acquired a habit of breathing almost entirely with the upper portions of lung. He has a tuberculous family history; and, after foolish over-training, by which he reduced his flesh considerably, he overtaxed his lungs in a race, and he has since become the subject of partial consolidation of the apices and recurrent hæmoptysis. Finding that he has large tracts of scarcely utilised lung at the lower parts of the chest, I have not hesitated to get Mr. Bigg to apply mechanical restraint, by means of lung-splints, to both upper lobes; but I have, at the same time, secured rest for the whole lungs by sending the patient on a long sea-voyage to a warm climate, under careful watching against over-exercise.

3. If a portion of lung has become disintegrated, under the influence of constitutional causes, and remains obstinately unhealed after all constitutional symptoms have been arrested, and, for some time past, no other portions of lung have shown a tendency to yield, then I think it is quite safe to secure localised rest for the disintegrated portion, so as to give it a fairer chance of healing; while an amount of air and exercise may be allowed to the patient, for the purpose of improving his reparative powers, which could not be permitted while the damaged lung was exposed to the same amount of action as the sound parts. But even here the utmost caution is required not to carry the exercise beyond a very limited amount.

4. If the constitutional tendency to lung-disease—"the abnormal physiological state"—is strong, and signs of impending mischief in the lungs are scattered, no localised rest should be attempted, but every means should be brought to bear upon the important object of maintaining respiration at its lowest point, consistent with life and nutrition, until the constitutional tendency has become passive and the local symptoms have been removed.

In conclusion, to prevent misapprehension on so vital a point, let me remind my readers that, in urging "the importance of rest in consumption," I am referring to cases in which the lungs are already damaged, or in which the constitutional disease has declared itself in sufficient force to render tuberculation imminent. "If the symptoms are only what is commonly called premonitory, that is, if they are those of commencing tuberculosis, and no reason or sign is discoverable which justifies the suspicion that tuberculation has commenced; if a sufficiency of fat remains without calling upon the albuminoid tissues, the principles of treatment are quite opposite to those above detailed." (*Tuberculosis*, 2nd ed., page 47). "It must be admitted that the proper regulation of this matter is one of the greatest trials of the astuteness of the physician, and it is almost impossible, unless he can make the patient and his friends comprehend its meaning and importance. But not less does it test the skill and judgment of the physician to decide upon the moment when restrictions upon fresh air and exercise ought to be removed. The argument so often used when a patient appears to be 'doing well,' that 'it is best to let well alone,' may be fatal if applied to this case. The very fact that he is 'doing well' may be the sign that he must not be 'let alone;' that he is now in a state in which it is safe to make a call upon his mechanical force, to accelerate histogenesis, to supply fresh oxygen—in a word, to set about the restoration of active nutrition. And then, again, how scrupulously these new tasks should be set; how carefully watched in their effects, lest even now they cannot be continued with safety! On the first sign of their being badly borne, they should be moderated or promptly stopped." (*True First Stage*, page 46.)

ON BRONCHIAL ASTHMA.

By JOHN C. THOROWGOOD, M.D.,
Physician to Victoria Park Hospital for Diseases of the Chest, etc.

I SHOULD like to offer a few remarks on Dr. Berkart's ingenious and interesting paper on the nature of so-called bronchial asthma, in the JOURNAL of November 8th.

Dr. Berkart admits that experimental physiology shows that the bronchial muscles may contract; but, as to *how* and *when*, nothing is known. It is well known how Dr. Williams, years ago, proved the contractility of the bronchial muscle, and subsequent observers have confirmed his

conclusions. Recently, Paul Bert has been experimenting on the contractility of the lungs, and Dr. Berkart tells us how this observer failed to demonstrate the contractility of the lungs in cases where insufflation of these organs was carried to an extreme degree. This is a point of great interest in connection with those cases of very protracted asthma, complicated with emphysema, which we meet with in old persons, and where the difficulty is, as I have more than once been told by the patients themselves, *to get the air out of the chest*. The bronchial muscle is exhausted and paralysed, and cannot contract to expel the air, and the chest is always over-filled with air.

There are, however, some experiments of Paul Bert's that point in another direction. He, as well as Traube, Bernard, and Schiff, has proved that the respiration may be arrested by strong irritation of the pneumogastric or laryngeal nerves, or those distributed to the Schneiderian membrane. This arrest is much more easily produced during expiration than during inspiration, and it is observed that actual contraction of the lung occurs under the influence of the vagi. (*Sydenham Society's Biennial Retrospect*, 1869-70, page 26.)

Now, when we consider the phenomena of a fit of spasmodic asthma, we find it is very apt to come on after complete expiration, as by a fit of coughing or laughing. The lungs are emptied of air, and, under faulty innervation, they will not expand, but remain contracted, and a paroxysm of dyspnoea results.

This may come on quite suddenly without any antecedent catarrh or premonitory symptoms. The case is analogous to a colic in the muscular coat of the bowel, and pure spasmodic asthma has no more to do with inflammation or catarrh than colic has to do with dysentery. Regarding, again, the effects of treatment. Nitre paper, when burned, almost surely relieves pure sudden spasmodic asthma. If, however, bronchitis coexist, the nitre paper fumes act as irritants, and, instead of giving relief, make the patient worse. Stramonium and belladonna, proved relaxors of bronchial stricture (Williams), are very efficacious in relieving the true spasmodic form of asthma.

The experiments of Paul Bert, quoted by Dr. Berkart, and those to which I have myself referred, appear to me of much value in distinguishing between the real spasmodic asthma, with contracted lungs, common to all ages of existence, and that form of asthma which is more common in old people, where the contractility of the lung has been exhausted, and where over-distension of chest, difficult expiration, and degenerative change of tissue are the most evident symptoms, with probably more or less chronic bronchitis due to a relaxed and badly nourished mucous membrane.

ANTICIPATION AND TREATMENT OF POST PARTUM HÆMORRHAGE.

By JOHN BASSETT, M.D., Professor of Midwifery to Queen's College, Birmingham.

THE various communications which are now appearing in the JOURNAL on this subject point to the place which it occupies in the minds of the members of our Association. This is not to be wondered at when we consider the number of lives which are sacrificed annually by this cause. After an active experience extending over five-and-twenty years, and a very careful examination of all the circumstances surrounding *post partum* hæmorrhage, I have arrived at the conclusion that the best method of anticipating it is to prepare the patient for her confinement by a course of medical treatment extending over a period of from four to six weeks, the basis of such treatment being the administration of iron. Of course, this can only be done in those who are subject to flooding, and in those who are so out of health that they seek medical relief. I have found no difficulty in carrying out this plan, for those who are liable to flood are very glad to carry out any method which will prevent it. It is to this that I attribute the fact, that I have never had a fatal case of *post partum* hæmorrhage amongst my private patients, although I have unfortunately seen several in the practice of others.

As regards the treatment of hæmorrhage, the remedies are of two kinds—those which are immediately available, and those which require time and circumstances for their development. Ergot has been put prominently forward, and I have seen it answer admirably sometimes; but it is always somewhat uncertain in its action, and it may throw the uterus into a state of spasm. It has appeared to me on several occasions that, where the uterus has been shy and lethargic, it would have been better to leave it alone rather than to hurry it by the hand and ergot; but I do not think any positive rule can be laid down on this subject. Every accoucheur carries about with him nature's *tourniquet*: the human hand applied to the uterus is not only the most available, but the most efficacious of agents; and, if this do not answer, it is not

difficult to transfer the pressure to the aorta, a proceeding which I have often seen of great service; then cold may be added as an excellent assistant to pressure; in certain cases, opium is a valuable remedy. The precise position which a solution of the perchloride of iron will occupy in the future I cannot tell; it has not, in my hands, appeared to be so innocent an agent as, from what has been written about it, I had supposed; but, as my experience has been limited, I give no decided opinion.

I have written briefly, because I send herewith a paper on this subject, which I had the pleasure of reading at the last meeting of our Branch; in this, I have stated the result of my experience on this very important subject.

ON THE ANTICIPATION OF *POST PARTUM* HÆMORRHAGE.

By EWING WHITTLE, M.D.,

Member of the Royal Irish Academy; Lecturer on Medical Jurisprudence to the Liverpool Royal Infirmary School of Medicine.

IF the short paper which I read before the Obstetric Section of the British Medical Association should have no other result, it has at least given the profession the benefit of an excellent paper by Dr. Atthill. In his very judicious advice, in every respect, I fully concur, and I thank him for his strong condemnation of what, I fear, is rather a common, though a very dangerous, practice, viz., the emptying the uterus too rapidly. I would also endorse his recommendation of a carefully applied binder; and I refer to this, because I know that some modern obstetricians discard the use of the binder altogether. However, Dr. Atthill has rather misunderstood the point of my brief paper. It was not a paper on *post partum* hæmorrhage generally, but only proposed an additional means of reducing such cases to a minimum. I did not mean to describe cases in which the uterus became exhausted by prolonged labour as suitable for the treatment which I recommended; in these cases, as the pains flag, they become irregular, feeble, and jerking; an altered condition, evidently due to exhaustion, and for which the proper remedy is the timely application of the forceps, as recommended by Dr. Atthill; in the cases to which I referred, labour may go on rapidly and steadily, and may not last more than one, two, or three hours, there being no apparent exhaustion of either patient or uterus. In these cases, the pains are strong, though of short duration, and the intervals proportionately are too long. These are very different from cases of exhaustion, but they are the cases in which the danger of hæmorrhage is of the most grave character; and I have found, during an experience of more than twenty years in this practice, that the timely administration of a full dose of ergot will always correct the pains, making them longer and the intervals shorter, and so obviating the morbid tendency to hæmorrhage; but I do not pretend for a moment that the having administered ergot would excuse the rash practice of emptying the uterus too rapidly, in using the forceps, or removing the placenta immediately after the delivery of the child.

THE ANTICIPATION AND TREATMENT OF *POST PARTUM* HÆMORRHAGE.

By D. DE BERDT HOVELL, F.R.C.S.E.

IN addition to other remedies and modes of treatment, I beg leave to call Mr. Moorman's attention to my uterine truss, of which he will find a description in the *Medical Times and Gazette* for February 1853.

It was invented to lessen the fatigue and anxiety of one of a class of obstetric patients called "flooders;" that is to say, patients liable to *post partum* hæmorrhage, usually occurring an hour or more after delivery, just when the practitioner is congratulating himself that it is all safely over.

It is simply a 7 lbs. spring bandage, with one pad for the sacrum, the other to go over the uterus. It differs from other bandages in being elastic, and so stimulating the uterus to contract, instead of compressing. It is simple in construction and adaptation; a great comfort to patients, who, having once used, frequently ask for it. It is a great safeguard, as, under its use, the uterus cannot much dilate. I have used it extensively, and never known dangerous or fatal hæmorrhage to occur. It has often enabled me to leave a patient half an hour earlier than I otherwise should, as, with it on, I always leave with comfort and confidence. It may be had of Messrs. Weiss, Strand, London; or Messrs. Krohne, Whitechapel. It was exhibited at the Plymouth meeting of the Association.

ANTICIPATION AND TREATMENT OF *POST PARTUM* HÆMORRHAGE.

By W. BOYD MUSHET, M.B., M.R.C.P.

I HAVE watched with interest the remarks and opinions of leading men as to the use and efficacy of perchloride of iron and other means in the control of uterine hæmorrhage. I am induced to describe the remedy adopted by myself, as I have not seen it definitely mentioned. I therefore deem it novel. I employ an ordinary stomach-pump or enema apparatus, and inject cold water freely into the uterus, passing the long tube well up for the purpose. I throw in the water again and again, having previously introduced my hand to ascertain that the uterus is free from retained fragments of placenta. The fundus should, of course, be grasped externally as firmly as possible.

Where there is a suspicion of the occurrence of hæmorrhage, I have the apparatus prepared, water ready in a basin, and a dose of ergot on the mantel-piece; the last given as the head passes the perineum. In one patient, on two occasions, where the flow, without hyperbole, was appallingly like a cataract, I succeeded in arresting the discharge instantly. In this case, against my wish, chloroform was each time inhaled for some hours, which, I believe, increases the proclivity to hæmorrhage.

The virtues of the perchloride of iron are mainly, I think, to be ascribed to its vehicle, cold water, when used with the latter. I have no dread of cold water injections; no compunctious fears of pyæmia or metritis from caustic or irritant influence on the uterine tissues or sinuses, as I have never witnessed any injurious effect from their employment, which cannot be affirmed of the perchloride, if we trust the evidence adduced at a former meeting of the Obstetrical Society.

Whilst, on this subject, I would add that, in a protracted case of scirrhus of the uterus, in which periodical attacks of severe bleeding occurred, attended with great anxiety on the part of the patient, I always found injection of cold water more promptly valuable than ergot and less distressing than the plug—so markedly, that the poor emaciated sufferer, to whom an euthanasic dose would have been an act of grace, invariably begged for the injection, in which, after experience of the several remedies, she reposed utter confidence, though it produced very severe temporary shock on her attenuated system.

BRIGHT'S DISEASE: SUPPRESSION OF URINE FOR TWELVE DAYS: RETURN OF DIURESIS: DEATH FROM CONVULSIONS.

By ALBERT KISCH, M.R.C.S.

ON August 15th, I was requested to visit Mrs. P., aged 47, multipara, who was said to have passed no urine for eleven days. The statement of the previous medical attendant and the surrounding circumstances seemed to negative the natural supposition of deception; the evacuations had always been seen by the doctor, and the catheter was passed several times without drawing off a drop of urine. On one occasion about half a teaspoonful of turbid urine was passed; it was seen by the doctor, but was not examined.

There was nothing in the countenance or general aspect of the patient to arrest attention, but the tongue was exceedingly anæmic and slightly coated at the back, and there was a continual sense of nausea, and she had vomited once on the previous day. There were no other prominent symptoms. The catamenia were regular. For some years she had been subject to diarrhoea, but less frequently during the past two years; for about four years she had been liable to continual drowsiness at all times, often passing into sleep with heavy snoring; she would frequently complain of aching in the back; the urine, which was never very copious, was observed to be rather reduced in quantity during the past two months; and a little puffiness about the lower eyelids had been occasionally noticed. She was not of hysterical temperament, and had never had fits; was in the habit of taking brandy rather freely, but was never known to be intoxicated.

Having made a careful examination of the abdomen, externally and *per vaginam*, without detecting anything abnormal, I passed a catheter, but not a drop of urine escaped. The bowels having been freely relieved by saline cathartics, I treated her by dry cupping in the loins, fomentations of digitalis over the abdomen, and infusion of digitalis internally. The diet was ordered to consist of water and skimmed milk *ad libitum*, with a little bread and beef tea.

August 16th.—At 11 A.M. to-day (the twelfth day), she passed three drachms of very turbid urine, albuminous, crowded with blood-