so much clotted blood that it appeared as if the placenta itself was come away, which, on examining the cord and membranes was found not to be the case. On examination per vaginam, the placenta was found within the os uteri, and brought away in the hand, and no trace of attachment of the cord to any part of its surface could be discovered.

OPERATIONS PERFORMED UNDER THE INFLUENCE OF ÆTHER.

By WILLIAM PHILPOT BROOKES, M.D., M.R.C.S.,
Surgeon to the General Hospital and Dispensary,
Cheltenham.

Since reporting my former case, I have successfully performed the following operations under the effects of the inhalation of æther:—

Ann Weston, aged 69, living at No. 1, Burton Street, had been suffering for the last twelve months with fistula in ano, and had been during the whole of the time confined to her bed. She was of a very nervous debilitated habit, and would not give her consent to the performance of an operation, but upon hearing of my former painless case, she sent for me, and desired to have the operation performed. On examination I found the whole verge of the anus in a state of ulceration, accompanied with great pain. The probe discovered a fistulous sore, extending full four inches into the rectum, the walls of it of some thickness. Having put her in train for performing the operation, it was done in two days afterwards. The patient was laid on her back, with the head elevated, (so as to have no difficulty with the æther,) the buttocks raised, knees drawn up, and held apart. I then passed up my finger, inserted the director, when the inhalation of the æther commenced, (with merely a bladder and elastic tube,) and she was in a complete state of unconsciousness in two minutes. The bistoury was then introduced, and the fistula divided in its whole length without the patient showing the least symptoms of pain or uneasiness. When it was over I asked her if she had quite made up her mind to have the operation performed. She said, "Yes, please go on with it as quickly as possible." When told it was over she uttered great surprise. At this operation the following gentlemen were present:—Drs. Wright, Bagnall, Bree, Smith; Messrs. Eves, Ocrell, Peart, Alix, Tibbs, Rowe, Norman, and Churches, and all agreed and expressed themselves perfectly satisfied with the result.

The next case was that of Ruth Monk, aged 21, who wished to have the last molar tooth extracted under the æthereal influence. She is of full, plethoric, and excitable habit. In one minute and a half she was in a state of unconsciousness from the æther and became quite unmanageable, her face flushed, and she required two persons to hold her. I lanced the gum without any sign of pain, and she recovered her sensibility immediately. As she was very anxious to have the tooth extracted, she again inhaled it, and when under its influence some excitement returned, and on drawing the tooth with the claw she cried out, "Oh!" but on coming to herself stated she had had no pain; and

having had nine out before, she could judge of its effects, and said, "I will never loose another tooth except I am prepared in a similar manner so as to have no pain."

February 1st, 1847. The following cases were operated on to-day, in the presence of fifteen gentlemen, most of them members of the profession:—

John Coombes, aged 56, a labourer on the roads, residing at Charlton, of a strong plethoric habit of body. Whilst at work he met with an accident (three weeks back,) to the middle finger of the right hand; mortification took place, and the first joint sloughed away; still he would not consent to the loss of the finger, and the disease extended to the metacarpal bone. Having heard he could have it taken off without suffering any pain he applied this morning to have the operation performed. The æther was inhaled and the man under its effects in six minutes. He remained so for five more, and the finger was taken off by a V shaped incision, opening the metacarpal bone half way down with Liston's bone nippers. The patient did not shew the slightest sign of pain, and stated that he heard the bone cut, but positively asserted he felt no uneasiness of any kind, and grumbled much at the suffering we gave him when taking up the arteries afterwards. I allowed this case to remain for half an hour before I dressed it, as I am inclined to think secondary hæmorrhage will often occur after the effects of the æther have passed away; reaction does not until then become perfectly established. Small arteries often escape untied if we dress immediately, and union will not take place so well on account of extravasation of blood. The pulse in this case was before the operation 84, and during the æthereal process it varied from 60 to 70.

William Guy, aged 21, residing at No. 44, Duke Street, of a pale exsanguineous habit of body; has had phymosis from syphilis for several months, and wishing to have the glans penis liberated, submitted to the operation. The æther was inhaled, and produced its effects in three minutes. The skin was then divided down to the end of the glans without any sign of pain, and he states he did not feel anything of it. Pulse when in the æthereal state was 75, and soft, and before that time 90.

A servant, aged 30, had four stumps extracted without giving her the slightest pain, by Mr. S. Tibbs, surgeon-dentist of this town. The æther was inhaled from a modification of Dr. Snow's apparatus, and she got under its influence in less than two minutes, and remained so nearly five. Positively states she felt nothing.

Lot Organ, aged 36, residing in Grove Street, of spare habit of body, has had a disease of the left elbow-joint for the last year or two, and would not consent to its being amputated before, but the general health becoming injured, he now consented. The æther was given with Snow's apparatus, and after its inhalation for nearly four minutes, he appeared quite unconscious; the healthy arm dropped involuntarily to the side when

raised, eyelids closed, and all the usual signs of insensibility to pain. The circular incision was now made through the skin, and he cried out most lustily, and continued doing so through the whole stage of the operation. After it was all over he stated he felt the first cut, and also the bone sawed, but he was in a dream, and smoking a pipe, which some one tried to take from him.

I can only view this case as a failure, and I think it right alike to report all, whether failures or not. The other cases were decidedly successful. I may state in the above operation the mouth-piece did not nicely fit the mouth, and he appeared to have inhaled fresh air by its side.

Albion House, Cheltenham,
February, 1847.

REMOVAL OF THE GREAT TOE AND PART OF THE METATARSAL BONE, UNDER THE INFLUENCE OF ÆTHER.

By T. HERBERT BARKER, M.B., M.R.C.S.

Emma Rawlins, aged 23, of Cople, near Bedford, had been labouring under strumous disease of the great toe, involving the phalanges and part of the metatarsal bone, during the last five years, and was anxious to have the diseased parts removed by operation.

Desirous of giving her the benefit of inhaling the vapour of æther, I procured the apparatus constructed under the directions of Dr. Boott and Mr. James Robinson, and sold by Mr. Hooper, of Pall Mall, London, and yesterday removed the parts in the following manner, with the kind assistance of Mr. Hurst, and in the presence of Messrs. C. W. Hyne, W. Bailey, Anthony, Birch, Cox, and Ravenscroft:—

Having succeeded in about four minutes in getting her thoroughly under the influence of the vapour, a flap of good size was made, with a scalpel on the inner side of the foot, the metatarsal bone being laid bare beyond the extent of the disease. A strong bistoury was then passed through the space between the metatarsal bones of the first and second toe, in close contact with the former, and brought out anteriorly; the flexor and extensor tendons were divided, and the metatarsal bone nipped through with Liston's forceps. The exposed surfaces were sponged, and the flap secured by three points of interrupted suture.

During the operation, which lasted but a short time, the supply of vapour was cut off by means of the stop-cock; she did not in the least shrink from the knife, nor did she manifest in any way the slightest sign or expression of pain. On regaining her consciousness, she inquired when the operation would commence, and on being told that it was all over, stated that she had been asleep and dreaming.

The testimony of so many operators has already been recorded of the efficacy of the inhaled æther, in completely deadening the sensibility of the system, during severe and protracted operations, that there cannot be a doubt that this is one of the *greatest* discoveries of the age, productive as has been that age of great discoveries.

I thought it desirable that my patient should be previously tutored in the process of inhaling, and for that purpose induced her to inhale the æther the day before the operation, which she did, to the entire satisfaction of both of us. This appears to be a matter of some importance, and likely to contribute to the success of the process, for there are several precautions which are better thus explained beforehand, and the patient will be less likely to be affected by timidity at the time of the operation.

The points which appear to require particular attention are:—

1. To tutor the patient beforehand in the process of inhaling.
2. To give charge of the inhaling apparatus to a trustworthy assistant, who should keep the mouth-pad in firm contact with the lips.
3. To allow two or three inspirations to be made *before* removing the small stopper, and applying the nasal spring, otherwise the full volume of the vapour will be likely to excite coughing and a sense of suffocation.
4. To cut off the supply of vapour for a time, by turning the stop-cock and removing the nasal nipper, when deep insensibility has been produced.

The *morbid* effects of the inhalation of æther have yet to be made out, and good service will be rendered to the profession and humanity, by any one who will investigate the precise effects of this powerful agent, when administered in cases complicated with pulmonary, cardiac, or cerebral mischief. Some affections of the heart, and a strong predisposition to cerebral disease, will probably be found to be the morbid conditions more particularly contra-indicating its employment.

Bedford, February 16, 1847.

REMOVAL OF THE NAIL FROM THE GREAT TOE, UNDER THE INFLUENCE OF THE VAPOUR OF SULPHURIC ÆTHER.

On Monday, January 18th, Mr. Rudall, surgeon, of Sheepwash, North Devon, in the presence of J. G. Maxwell, Esq., performed the operation of removal of the great toe nail with part of the toe, on the person of an athletic farm-labourer, aged 22 years, the patient being put under the influence of the æther vapour. The result in the most satisfactory manner, confirmed all that has been reported of this extraordinary means of subduing pain in the performance of surgical operations. The vapour was administered by means of an apparatus extemporaneously constructed, and consisted of a large-sized bullock's bladder, to which was connected a tube of half an inch in calibre, and two and a half inches in length, this was attached to a bulb capable of containing about eight ounces of fluid; continued from this was a tube seven inches in length, and a quarter of an inch in calibre. The æther (six drachms,) being put into the bladder, which was afterwards inflated, and the tube being introduced into the patient's mouth, the inhalation was commenced. In rather less than one minute perfect insensibility was produced, a gentle tremulous motion of the lips,