

terminated his existence. The abscess did not open externally. I presume one of the branches of the internal carotid artery must have given way, and caused this sudden unexpected dissolution of my little patient.

This very rare termination of scarlatina—I might almost say scarlatina simplex—induces me to place the case upon record, as I can find no like case related in the treatises of either Watson, West, or Tanner. Dr. West mentions a case in which, from extensive sloughing of areolar tissue, the vessels were laid bare, and a branch of the external carotid in that case gave way and caused immediate death. My partner, Mr. Worship, had, many years since, a case in which the ulna artery was laid open by an abscess supervening upon scarlatina, and death took place immediately from hæmorrhage, as the unfortunate patient was some miles from his doctor.

I may mention that, even during the night before my child's death, he swallowed without the slightest difficulty, and when the bleeding occurred the nurse was just preparing his wine-and-water.

It seems to me that the remarkable features in this case are: that the fever was of a mild type; there was never diarrhoea to any extent, neither was there ever the slightest tendency to a typhoid condition; never any difficulty in swallowing, nor ulceration of throat or pharynx; he took nourishment well throughout; and beyond the fear of the probability of deafness on the right side, or a scar on the neck in the event of the abscess coming forward, the case never caused the slightest real anxiety.

For the first three or four days I gave him the ordinary febrifuge medicines, with chlorate of potash drink in abundance, followed by ammonia and bark, with port-wine and plenty of good beef-tea and milk; the last few days I prescribed hydrochloric acid, bark, and chlorate of potash, and gave, in addition to the other nutriment, the yolks of eggs beaten up in milk, of which he consumed a considerable quantity, even to three eggs in the course of the day. I may state that there was no evidence of lung mischief.

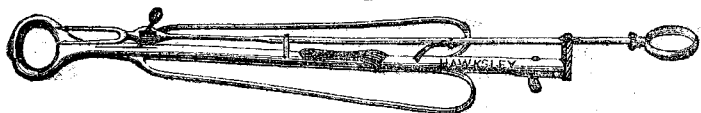
Sevenoaks, March, 1870.

## A NEW TONSIL GUILLOTINE.

By JOHN EWENS, L.R.C.P. LOND., L.R.C.S. ED.

I PRESUME that many of the readers of THE LANCET, as well as myself, have experienced a difficulty in removing the tonsils of children, owing to the natural inclination which is felt to close the mouth on the tonsil being pressed against, thus obstructing the view of the operator.

It seemed to me that a gag might be so adjusted to the instrument of Mathieu as to prevent this closure, at the same time acting as a tongue depressor. Mr. Hawksley, of Blenheim-street, Bond-street, London, has met my difficulty, and has constructed for me an instrument which answers the purpose fully. After being adjusted over the tonsil, by a single continuous movement of the thumb transfixion and amputation are instantaneously accomplished, without a chance of failure, and with the utmost facility, the mouth being kept wide open by the gag for the adjustment of the instrument over the tonsil and during its removal. I have thus removed the tonsils of three children very recently, with the utmost comfort to myself and security to the patient; and, as the majority of cases come under the notice of medical men whilst the patients are children (and generally intractable), I consider the improvement in the instrument will prove a great boon to any who have to perform this, if not formidable or generally dangerous, at least troublesome, operation.



The annexed engraving will correctly illustrate the action of the instrument. It is equally adapted for either side of the mouth.

Cerne Abbas, Dorset, May, 1870.

**BROMIDE OF POTASSIUM.**—It has been determined by the researches of Dr. Namias, of Venice, that this salt, after its administration, can be detected in the brain, lungs, and liver, as well as in the blood.

## BROMIDE OF POTASSIUM AND ITS IMPURITIES.

By ARTHUR E. DAVIES, PH.D., F.L.S. &c.

I HAVE recently had occasion to analyse several samples of bromide of potassium; and as the use of this comparatively new drug is now so rapidly increasing, perhaps the results of my experiments may be interesting to readers of THE LANCET. The object of my investigation was, to ascertain the degree of purity of this drug as usually sold. The samples which I tested were purchased in four different towns, and all from highly respectable druggists. The results of my analyses are given in the following table.

### Analyses of 10 samples of Bromide of Potassium.

	1	2	3	4	5
Moisture.....	1.50...	0.75...	1.05...	0.69...	1.00
Bromide of potassium...	84.19...	81.00...	85.90...	69.00...	81.21
Chloride ..	10.95...	12.93...	7.46...	24.93...	12.61
Iodide ..	None...	1.04...	None...	None...	0.99
Bromate of potash .....	0.68...	1.99...	3.33...	4.03...	2.09
Sulphate ..	2.62...	2.20...	1.74...	2.21...	1.97
	99.94	99.91	99.48	100.86	99.87
	6	7	8	9	10
Moisture.....	2.30...	0.75...	1.75...	2.01...	2.57
Bromide of potassium...	86.23...	83.00...	79.79...	81.52...	78.59
Chloride ..	9.40...	7.47...	10.01...	12.65...	13.19
Iodide ..	None...	None...	None...	Trace...	1.41
Bromate of potash ..	None...	4.98...	6.62...	2.10...	3.29
Sulphate ..	1.57...	4.06...	1.46...	1.99...	1.22
	99.50	100.26	99.63	100.27	100.27

Samples 1, 2, 3, and 4, were purchased in Manchester; 5, 6, 7, and 8, in Warrington; 9, in London; and 10, in Edinburgh. The analyses show that bromide of potassium, as generally dispensed, contains a considerable amount of impurity, ranging in the samples which I have examined from 13½ per cent. (in No. 6) to 31 per cent. (in No. 4). The impurities consist of chloride and iodide of potassium, sulphate and bromate of potash, and moisture. The chloride of potassium and the sulphate of potash are apparently always present, the former generally in considerable quantity. Bromate of potash, though not always, seems to be very frequently present. The iodide is less commonly met with; it was found in only four of the ten samples which I examined. Caustic and carbonate of potash were not detected in any of my samples.

The impurities I have referred to appear to be derived from two sources: impurities in the material used, and imperfect carrying out of the process of preparation. In preparing the bromide, a solution of caustic potash is mixed with bromine in quantity sufficient to combine with the whole of the alkali; the liquid is evaporated to dryness, and the residue reduced to powder, mixed with some finely powdered charcoal; and the mixture is ignited, with certain precautions, in an iron crucible. The ignited mass is digested with water, and the bromide of potassium is obtained from the solution by evaporation. Of course any soluble impurities which were contained in the potash or in the bromine will be found, to a greater or less extent, in the bromide of potassium, unless the salt is purified by frequent recrystallisation; and it is from this source that the chloride and iodide of potassium and sulphate of potash are chiefly derived, except, of course, when they are wilfully added for the purpose of adulteration, which I believe is very rarely done. The bromate of potash is due to defective preparation. When bromine is mixed with caustic potash two salts are formed—namely, bromide of potassium and bromate of potash; six equivalents of potash and six of bromine forming five of bromide and one of bromate ( $6\text{K O} + 6\text{Br} = 5\text{K Br} + \text{K O Br O}_5$ ). When a solution of these two salts is evaporated to dryness and the residue ignited with charcoal, the charcoal combines with the oxygen of the bromate, forming carbonic acid, the bromate being at the same time reduced to bromide; but for this change to take place fully it is necessary that the ignition be very carefully and completely carried out, and if this is

not done the bromide will be mixed with more or less of the undecomposed bromate. M. Adrian (*Bull. Gén. de Thérap.*), by whom samples of French bromide have been examined, attributes highly deleterious properties to the bromate. To determine the correctness of this opinion, and what may be the effect, when the drug is administered medicinally, of this and the other impurities to which I have referred, is the duty, not of the chemist, but of the physician; and to him I must therefore leave its consideration.

Manchester, May, 1870.

## A Mirror

### OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

#### GUY'S HOSPITAL.

##### INTUSSUSCEPTIO IN AN INFANT CURED BY INFLATION OF THE BOWEL.

(Under the care of Dr. WILKS.)

CASES of relief of an intussusception of the bowel by inflation deserve to be recorded, and the first of the two following instances is a good example of this method of treatment. Dr. Brinton, in his posthumous work on Intestinal Obstruction, has referred to it in the following terms:—"There are certainly instances on record in which an obstruction having every symptom of an intussusception has been suddenly removed by an inflation of the patient's rectum with a pair of bellows, the relief having instantaneously followed that severe pain which complete distension brings about." It is probable that, especially in cases where the intussusception is of the large intestine, this method of relief might be more generally employed than it seems to be at the present time. Our notes of this case are derived from the report by Mr. Wm. Stanger.

William S—, aged six months, admitted into Clinical ward on the 28th of March, 1870. The child appeared in perfect health until yesterday afternoon about four o'clock, when, whilst sucking a crust of bread, he suddenly screamed out, fainted, and became cold. The mother took him to a doctor, who gave him a powder, which made him very sick. He continued in great pain, and cried incessantly. At three o'clock this morning he passed a quantity of clotted blood per rectum, and this continued to run from him until he was admitted into the hospital at twelve o'clock. The last fecal evacuation took place at noon the previous day.

On admission, the child was seen to be well grown, but face pale, and had a generally collapsed appearance. On examining his abdomen, a lump was distinctly felt to the left and above the umbilicus, which hardened when pressed upon. On passing the finger up the rectum a round projection could be felt about four inches up, with a circular orifice in the centre. The finger, when withdrawn, was covered with blood. The case being thus clearly one of intussusception, Dr. Wilks ordered inflation of the bowel by means of a bellows. Chloroform was given, and an enema tube passed into the rectum, the other end being attached to the bellows. The attempt to inflate was at first unsuccessful, owing to the large size of the rectum; but by increasing the width of the tube by wrapping a strip of lint round it, the colon was well inflated, and then the lump gradually went back until it quite disappeared. A drop of opium was ordered in a drachm of dill-water, and the breast to be given sparingly.

On the following day, March 29th, no lump could be felt. The child had been sick several times, and nothing had passed per rectum. To repeat the medicine.

March 30th. — Child very irritable; apparently much tenderness over abdomen, especially towards the right side. Occasionally sick. Passed a little blood, but no fæces.

31st.—Evidently better. Had a liquid evacuation with no blood, and sucks well.

April 1st.—Passed a natural motion, and altogether better.

2nd. — Child apparently well, and taken out by the mother, who was somewhat discontented at the operation performed on him, as she never could be made to realise the severity of the case.

He remained well until the 10th, when he was brought to the hospital, having had fresh bleeding, and the lump could again be felt. The mother would not allow the child to be again taken in for the purpose of a renewal of the method which had been before so successful, but took him away for the purpose of procuring some physic for him; and no more was heard of the case.

Dr. Wilks remarked that this was a good model case of intussusceptio and of the appropriate treatment. The nature of the involution was of the usual kind—the ileum into the cæcum, and the subject a boy, as is most commonly the case. There was, however, one symptom which had not been hitherto remarked—viz., the collapse at the time of the occurrence of the passing in of the bowel. The sickness and constipation denoted intestinal obstruction, and the passage of blood that this was caused by intussusceptio. This symptom was first clearly established as a characteristic sign of this accident by Mr. Gorham, who wrote an excellent article on the subject in the Guy's Hospital Reports for the year 1838. If there had been any doubt as to the nature of the case, this would have been removed by the discovery of a tumour in the abdomen, which contracted on being handled, and by the fact of the rosebud-like projection to be felt in the rectum. This showed that the intussusceptio was very extensive. The treatment was then clear, and, as in other cases, was completely successful. Dr. Wilks's wish was to keep the child in for some time, continue the opium, and feed him most sparingly. It was also discussed whether a pad over the abdomen might be efficacious in preventing a return of the intussusceptio.

#### TUMOUR IN THE RIGHT HYPOCHONDRIAC REGION; CHRONIC INTUSSUSCEPTIO.

(Under the care of Dr. WILKS.)

The report of the following case is by Mr. W. Blenkarne:—

Emma K—, aged thirteen, was admitted into the Clinical ward on February 1st, 1870. The child was much out of health, and was the subject of a chronic skin disease, which was styled ichthyosis. She also described various other symptoms, but these were of so vague and uncertain a nature that they could not be made use of in the interpretation of her case. She was sent to the hospital more especially on account of a pain she had experienced in the right side during the last week or two. She had had no sickness and no constipation. On examining the side there was felt, below the ribs on the right side, a globular tumour about the size of a hen's egg. This moved somewhat during respiration, but did not seem to be attached to the liver, as the fingers could be thrust down deeply above it. It did not appear, either, to be attached to the kidney, and thus there remained the conjecture that it was connected with the intestine, and the further opinion whether it was a growth in the mesentery, a tumour formed by a mass of scybala, or whether it was intussusceptio.

The child was ordered a calomel-and-rhubarb powder, which purged her well, but with no alteration in the tumour. She was then ordered three drachms of compound decoction of aloes, in peppermint-water, three times a day. After four days, as she was well purged, the medicine was omitted. The tumour the same. Percussion did not afford much aid.

On the 16th she was in bed, as she complained of more pain in the side, and she had a feeling of sickness. On examining her there was much tenderness over the hypochondriac region, and the tumour could not be so easily defined. The swelling was more diffused and superficial.

On Feb. 23rd the pain and tenderness were less; and the swelling had again decreased in size, and on the 28th was much as on admission. She again left her bed, and ap-