

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 KO + 6 Br = 5 K Br + K O Br O₅). 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