

The generator should be kept as nearly as possible at the temperature of the air. 3. When the evolution of gas ceases, the receiver is removed from the basin by means of the thumb or a glass plate and placed mouth upwards on the table. It is now only necessary to measure in minims the quantity of water required to fill it. After deducting 180 (which may be taken as 200) minims due to the air displaced by the urine, each 100 minims of water added represent 0.25 per cent. of urea in the urine examined. If the urine contains more than 3 per cent. of urea, it is best to dilute it with an equal volume of water before making the determination.

The following table gives the percentage of urea corresponding to the volume of gas liberated, as shown by the quantity of water required to fill the bottle:—

Minims of water required.	Percentage of urea.	Minims of water required.	Percentage of urea.
200	0.00	900	1.75
300	0.25	1000	2.00
400	0.50	1100	2.25
500	0.75	1200	2.50
600	1.00	1300	2.75
700	1.25	1400	3.00
800	1.50		

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

THE INHALATION OF BROMIDE OF AMMONIUM FUMES.

BY THEODORE MAXWELL, M.D. CAMB., B.SC. LOND.

THE value of the fumes of chloride of ammonium as an inhalation in some kinds of bronchial catarrh, and in oronasal catarrh, where the orifices of the Eustachian tubes are thickened and blocked up, causing more or less impairment of hearing, is so well recognised that there is no need to refer to it at length. It occurred to me, some two or three years ago, that if I could obtain bromide of ammonium fumes they ought to prove even more valuable than those of chloride of ammonium in cases where a good deal of spasm exists, causing dyspnoea, as in winter cough and bronchial asthma. Of course the ordinary solution of hydrobromic acid used in dispensing was useless for the purpose. I then tried one of triple strength, which is sold by some houses. This was equally useless. I then had a very much stronger acid prepared for me, the specific gravity of which was 1.7. With this and the ordinary solution of ammonia I managed to produce very good fumes both in a Verreker's and in a Kerr's chloride of ammonium inhaler, but it was impossible to get them neutral, or at least to keep them so for many minutes, and the inhalation of too much hydrobromic acid is very irritating. I tried this inhalation with several patients suffering from bronchial asthma, and generally found a few whiffs relieved the wheezing in a surprising manner. Latterly I have been using an apparatus devised for chloride of ammonium by Dr. Patrick Maxwell of Dublin, constructed on a different principle, where the chloride or bromide of ammonium is simply vapourised by heat, and drawn through a kind of wash-bottle into the lungs. I have used the bromide in true asthma, and find that if inhaled just as the attack is coming on it will frequently avert it entirely. From what experience I have had I am disposed to think that the inhalation of bromide of ammonium fumes will prove of great benefit to many sufferers from various forms of asthma.

Woolwich.

A NOTE ON HYDROPHOBIA.

BY SIDNEY A. BONTOR, M.B., B.S.

AT the present time, when the interest taken in the study of hydrophobia is almost universal, the following short note, illustrating as it does some of the associations of the disease, rather than its clinical history, to which attention has been chiefly directed, may be of some interest, more

especially as Dr. Ruffer, in his lecture before the Society of Arts on Dec. 4th, 1889, drew attention to several cases, published in the "Annales de l'Institut Pasteur" and elsewhere, where two or more persons being bitten by the same dog, those who underwent inoculation remained well, and those who did not submit to the treatment died of hydrophobia.

At the end of October, 1888, two boys of about the same age were bitten each on the hand by the same dog, one being bitten the day after the other. Both wounds healed readily, and little was thought of the occurrence until about three weeks afterwards, when the boy first bitten showed symptoms of hydrophobia, and died after an illness of three days and a half. That there might be no doubt as to the accuracy of the diagnosis, a portion of the spinal cord was sent to Mr. Victor Horsley, who kindly inoculated five rabbits with it. They all developed unmistakable symptoms of rabies, while the incubation period in no case exceeded five days. Since that time I have kept the other boy who was bitten under observation, and he was seen quite well only a few days ago, nearly fourteen months having elapsed since he was bitten. How can his immunity be accounted for? For my own part I fancy that the reason lay in the fact that this boy was in robust health, while the boy who died was ill-fed and of a weakly nature, and that the vital energy of the boy last bitten was sufficient to overcome the vital energy of the hydrophobic germ, if I may so call it, or, in other words, that the germ did not find a suitable nidus; while in the case of the boy who died, the vital activity of the various functions of the body being impaired, the germ was able to thrive and multiply.

The question arises also as to how the dog became infected. It was an Irish retriever, of sulky habits, generally kept chained in a yard which was kept closed during the day, so that other dogs were hardly ever known to go into it, none having been seen there for some time before the occurrence under notice. The dog had been bitten once, but that was three years previously. It was killed the day after biting the second boy, but entirely without suspicion that it was suffering from hydrophobia, a slight increase in its sulkiness only having been noticed. When killed there was no wound upon the dog, nor had it been known to have had one for some time before. No other case of hydrophobia had been heard of in the district. How, then, had the dog become inoculated?

As a final note, I would draw attention to the fact that the wound of the boy who died was cauterised with nitrate of silver by a chemist within three minutes of its being inflicted, while that of the boy who survives was left entirely without treatment. I add this not to draw an argument for the general from the particular, but because I believe that the very common practice of using nitrate of silver is but rarely of benefit, while the slough that ensues is frequently a source of trouble, and this case points to the argument already well known, though apparently not sufficiently so, that unless nitrate of silver is applied immediately after the bite, its value is practically *nil*, and its use therefore to be avoided.

Great Berkhamsted.

ACUTE NEPHRITIS FOLLOWING INFLUENZA.

BY E. MANSEL SYMPSON, M.D., B.C. CANTAB., M.R.C.S.

VERY rarely, if I may judge from the silence kept by the text-books on this subject, is nephritis a sequela of influenza. Hence a case which has been under my care recently may be of some interest.

A. B—, a schoolboy aged eleven, had an attack of influenza at the beginning of March this year. Many of his neighbours and some of his own household were suffering from it at the time. He complained of great pain in his back and head (chiefly across and just over the eyes), sickness, and actual vomiting. He had no coryza for several days, till the attack, gradually passing off, seemed to end in a severe cold. He was left in a very weak state, the symptoms lasting about a fortnight. On March 16th he was seized with constant vomiting, great lumbar pain, fever, and headache. In the course of a day or two his ankles were noticed to be swollen, towards evening his legs and thighs swelled, and one evening his abdomen; also he passed a very small amount of urine. On March 23rd, when I first saw him, the note is as follows:—Present condition: Face puffy round the orbits, and very pale; tongue large and flabby; pulse rather