owing to a mistake the patient was discharged before this was done. Had the operation been carried out, it was proposed to anaesthetize the patient with scopolamine and morphine.

CASE IV.

An infant, aged 4 months, presented the symptoms of laryngismus stridulus with some stridor. It was considered to be a case of infantile epiglottitis with inspiratory collapse of the arytenoids.

The child was examined by suspension laryngoscopy with chloroform anaesthesia, but owing to vomiting and a considerable secretion of mucus the view was unsatisfactory. An attempt with the bronchoscope was equally unsatisfactory.

CASE V.

A boy, aged 3 years, was said to have laryngeal or tracheal obstruction, and the attacks of dyspnoea were so severe that an examination by the bronchoscope was considered necessary.

The child was chloroformed and the pharynx and epiglottis were swabbed with 10 per cent. cocaine and adrenalin solution. He was placed in the suspension laryngoscopy position, and a good view of the pharynx and arytenoid region was obtained, but the vocal cords were invisible. Accordingly the apparatus was discarded for the bronchoscope, which showed the glottis and trachea perfectly, but nothing abnormal was found.

The child was then returned to the usual prone position adopted for removal of adenoids and an adenoid growth which was previously known to exist was removed.

For cases requiring examination and manipulation of the pharynx and larynx suspension laryngoscopy will probably supersede the oesophagoscope and bronchoscope.

The comprehensive and clear view obtained, the more efficient illumination, the increased space for the manipulation of the instruments with both hands free, appeals to one who is accustomed to use the bronchoscope.

It is important to select the cases, and as a rule those patients who can be examined by the bronchoscope and its open spatula are suitable for suspension laryngoscopy. It is unnecessary to add that the new method is useless for examinations of the oesophagus and bronchi, but the bronchoscope and oesophagoscope can be used when the patient is already in the position for suspension laryngoscopy.

The patient with a large open mouth and no front teeth is excellently adapted for suspension laryngoscopy, and the suitable case will be easily recognized if a trial or preliminary examination with an ordinary Kirstein tongue depressor is made without the use of local or general anaesthetics. Patients suffering from tuberculous laryngitis, who have been educated by frequent manipulations of the larynx make exceptionally good subjects, in addition they are not adversely affected by morphine and scopolamine. Unfavourable after-results are rare. There is no pain and the unusual position and strain on the hyoid muscles does not cause discomfort, and the tongue can be protected from the sharp lower incisor teeth by covering these with a piece of lint; as a matter of fact the tongue is not so sore as when a tongue clip has been used during a long anaesthesia.

The position is that usually adopted for cleft palate operations, but the method of fixation and gagging is a distinct improvement.

The blood can be siphoned out of the pharynx and naso-pharynx by a soft rubber tube passed through one nostril.

BIBLIOGRAPHY.

Gustav Killian, *Archiv für Laryngologie und Rhinologie*, vol. xxvi, No. 2. Gustav Killian, *Berliner klinische Wochenschrift*, No. 13, p. 581.

RECOVERY AFTER TAKING $8\frac{3}{4}$ GRAINS OF CORROSIVE SUBLIMATE.

By A. LEONARD FULLER, F.R.C.S.I.,

HONORARY ASSISTANT SURGEON, ROYAL UNITED HOSPITAL, BATH.

THE following notes are, I think, interesting in consequence of the age of the patient and the quantity of sublimate.

J. H., aged 85, had been in the habit of passing a catheter for himself four or five times during the twenty-four hours. He was a very careful and methodical old gentleman, and the solid of sublimate containing $8\frac{3}{4}$ grains with which he made a solution for the catheter was always placed in one particular spot on his mantelpiece, whilst a cachet of urotropine, which he always took in the evening, was placed in another.

All went well for twelve years, but on the evening of February 9th, 1912, the unexpected happened and he swallowed the solid in mistake for the cachet. The mistake was at once recognized, and he drank a tumblerful of barley water, as was

his custom after the urotropine, and sent for me. I arrived within half an hour and administered white of egg and water. He retched and brought up blue-stained mucus. I then passed the stomach tube and washed out the stomach with large quantities of albumen-water and milk and water. There was frequent and urgent desire for the bowels to act, but very little more than mucus was passed. The patient became extremely collapsed, he was cold and pallid, and there was a clammy sweat. The pulse was almost imperceptible and quite uncountable. I administered strychnine hypodermically and gave him milk and brandy by the mouth. Hot blankets and bottles were applied.

When I visited him the next morning he had revived somewhat, but was still in a very critical condition. The nurse told me that during the night the soiled linen was stained blue. During the next few days the bowels continued to be very irritable, but his general condition improved. Cremor magnesiae and brandy were administered in milk at frequent intervals, and he took a good deal of albumen water. After a slow convalescence he quite recovered from the effects of the poison.

The dose taken— $8\frac{3}{4}$ grains—appears to me to be sufficiently large to be worthy of record. Though patients have recovered after larger quantities, nevertheless others have died after considerably smaller. A fatal case after $2\frac{1}{2}$ grains is recorded, death ensuing in three weeks from diarrhoea.¹

REFERENCE.

¹ BRITISH MEDICAL JOURNAL, 1905, vol. i, p. 767.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

A CASE OF CARCINOMA OF THE OESOPHAGUS WITH COMPLETE PARALYSIS OF THE LARYNX.

COMPLETE bilateral paralysis of the larynx is so rare a condition as to merit publication of the following case.

The patient, a male, aged 52, and by occupation a coal-heaver, was first seen about the middle of July, 1912, when he came to the Stanley Hospital complaining of loss of voice, difficulty in swallowing, and obstruction to the breathing. These symptoms had developed in the order given at intervals respectively of five months, two months, and one month previously.

On examination the patient was seen to be much wasted. The voice was very weak, being little more than a toneless whisper. Respiration was impeded to the extent that, although there was no stridor, inspiration required distinct effort. No glands were felt in the neck. On attempting laryngoscopy the breathing became very difficult, and there was ineffectual coughing with purulent expectoration. After cocainization, however, a view of the larynx was obtained. Both cords were in the cadaveric position. In endeavouring to phonate they remained motionless, and in the deep, gasping inspiration which the patient took a moment later, instead of flying widely out, they merely flapped slightly downwards and inwards quite passively in response to the partial vacuum produced in the trachea.

The patient was admitted and examined with the x rays. An oesophageal stricture was detected just above the thoracic inlet, and, as some of the bismuth meal appeared in the bronchi, a fistulous communication between the trachea and oesophagus was diagnosed.

The patient became rapidly worse, and after a week in hospital the respiration had become distressingly embarrassed. Since the glottis was known to be fully wide enough for the respiratory needs, this difficulty in breathing was attributed to fungation of the growth into the trachea, and, in the hope of getting a tube through the obstruction, tracheotomy was performed. The operation, however, gave no relief, and the patient died a few hours subsequently.

The post-mortem examination revealed a growth of the oesophagus nearly 3 in. in length, and almost entirely limited to the anterior wall. The upper limit of the tumour reached to within 1 in. of the lower border of the cricoid. Anteriorly the growth had ulcerated into the trachea, largely obstructing it. After careful dissection, both recurrent nerves were found hopelessly involved, and in fact for about 1 in. of their course it was quite impossible to dissect them through the growth. The left