

about as large as a horse chestnut, with immediate relief. Nourishment was given him as soon as expedient and the bromide increased. Pulse 125, temp. 102° F., though both were about normal before the hemorrhage. Thirty-six hours later moderate hemorrhage again occurred, lasting twenty minutes. The week following this his temperature ranged from 100° to 102°, but remained normal the balance of his convalescence. Six weeks after the injury the wound was closed by a fibro-cellular membrane, and during this time not more than $\frac{3}{4}$ of pus was secreted. The 4th, 5th and 6th rings of the trachea were divided, the ends separating about half an inch, while the posterior portions of them were somewhat twisted upon themselves. The missile, a square-ended white ash stick $3\frac{1}{2}$ ft. long, $1 \times \frac{5}{8}$ ths in., was broken into two pieces by the resistance it met. It was shot like an arrow from a driving-wheel making 1,400 revolutions per minute, striking immediately above the sternum and a little to the left of the median line. Since the accident he has suffered from dysphonia, and experiences much difficulty in expectorating mucus.

Treatment.—The hemorrhage was controlled by ice, it being impossible to ligate the vessels or to apply sufficient pressure to control it. Inserting a tracheotomy tube and packing the wound was inadmissible while the lungs were loaded with blood. Ergot and pot. bromide were given to lower blood pressure and to lessen the irritation.

Dr. Holmes favored using ergot, but not the bromide, owing to its depressing action and its soothing influence on the bronchial tubes. Thought opium combined with atropine would, perhaps, be better.

Dr. McKeough said a night cap device, applied to the head and fastened to the chest, was very useful, controlling the movements and keeping the chin in flexed position. Opium open to the same objection as the bromide.

The President would be inclined to use ergot and bromide, carefully watching their effect upon the patient. Thought belladonna might be useful. He wished to know the prospects of the patient always retaining a patulous trachea.

Dr. Fleming, in reply, said he used bromide, as the patient had no symptoms of heart failure at any time. Did not fear contraction of the trachea.

Hospital Notes.

REMOVAL OF A PORTION OF INFERIOR MAXILLA FOR MALIGNANT DISEASE, BY DR. GRASSETT.

(Kindly reported by Dr. Dow of the Resident Staff.)

W. C., aged 50, born in England, occupation a baker; admitted to Toronto General Hospital Oct. 23, 1886; operated on January 16, 1887. Family history good.

Thirty years ago patient had gonorrhœa, bubo and chancres; twenty years ago he had small-pox; he has always used alcohol freely and has been a heavy smoker, holding his pipe in the left side of his mouth. One year ago he had a rash all over his body, accompanied with sore throat.

In October, 1885, patient felt a slight roughening on floor of mouth, under the tip of tongue, and on looking at it found a small white patch. He consulted his family physician, who gave him a stick of nitrate of silver, with instructions to cauterize it night and morning. This made it more painful and it continued to increase. He then consulted a quack surgeon who was travelling through Ontario, and who prescribed a lotion. This was useless, and since that time his condition has been becoming worse.

Present condition.—There is an indurated spot on floor of mouth, about the size of a five cent piece, just under the tip of tongue, and on the alveolus of lower jaw is a tumor extending from second incisor tooth on left side to second molar on right side. It is elevated, covered with creamy pus, and painless to the touch.

Operation.—Patient was anesthetized and an incision was made from above downwards in median line of lower lip, the flaps were then dissected away from diseased portion of jaw, the bone was sawn through with a Hey's saw, after which the muscles were separated and the bone removed. The hemorrhage was controlled by means of ligatures and the application of sponges wrung out of hot water, the flaps