muscles of the mouth; he could not whistle, nor could he prevent air escaping when blowing out his cheeks. The tongue was protruded in the middle line, and there were some fibrillary twitchings of it. The movements of the palatal and pharyngeal muscles were normal. The voice was weak and wanting in tone.

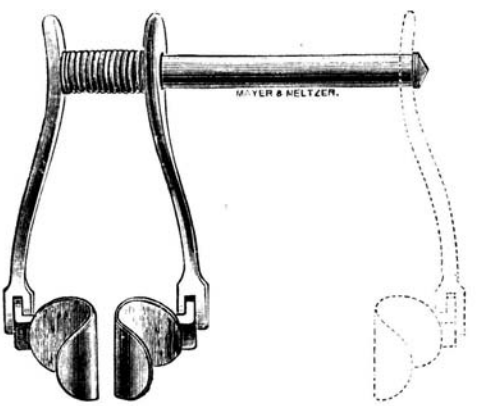
I examined the larynx and found both cords moved well, both in abduction and adduction. About a month afterwards I examined the larynx again and found some want of power to abduct completely in the cords: adduction still normal. The patient then left the hospital, and I did not see him again till July of this year, a fortnight ago. His condition was then much worse, and he presented the typical picture of bulbar paralysis. Lips, and tongue, and soft palate, almost completely paralyzed. On examining the larynx I found both abductors completely paralyzed, and some want of power in adduction.

This is a rapid case of bulbar paralysis which will, no doubt, soon end in death; whether it is the typical nuclear disease, of course, remains to be demonstrated *post-mortem*. Dr. Barr has, however, no doubt that it is. Here, then, we have a case where bulbar disease has given rise, first to abductor, and then to adductor paralysis of the cords, coming on at apparently the same time as paralysis of the palate, and seeming likely soon to become complete. I shall be interested to know the experience of observers in cases of bulbar paralysis, particularly as even special works on nervous diseases give nothing like an adequate idea of the condition of the laryngeal muscles.

IMPROVED MOUTH GAG.

By JOHN BARK, F.R.C.S.ED.,
Honorary Surgeon Liverpool Throat Hospital.

THE accompanying cuts show a gag, which is a modification and improvement of one I reported in the JOURNAL OF LARYNGOLOGY for



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February, 1893, and which I have used for some years in all operations about the mouth and throat with the utmost satisfaction. It consists of a vertical and two horizontal bars ; one of the horizontal bars is fixed to



one end of the vertical bar, while the other is perforated by the vertical bar, and moves freely up and down on it. They are kept apart by a strong spiral spring, which surrounds the vertical bar; at the end of each horizontal bar is suspended a tooth plate, which is covered by soft dental rubber, and has free lateral movement.

The chief feature of this gag is the position of the tooth plates. They are attached by one extremity to the horizontal bars and curve well towards one another ; the result of this is, that when the mouth is propped open, the horizontal bars are well above and below the incisor teeth, and so leave the mouth and throat perfectly free for manipulation.

It is extremely useful in the removal of enlarged tonsils and adenoids, under chloroform, ether, nitrous oxide or even in the absence of an anæsthetic.

Its advantages are—

Firstly : It gives a full and uninterrupted view of the mouth and throat.

Secondly : It is easily placed in position and removed.

Thirdly : It is automatic, and therefore needs no assistant to hold it in position.

Fourthly : The one instrument is adapted for any sized mouth, children or adults.

They are well made by Messrs. Mayer and Meltzer, 71, Great Portland Street, London, W.

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