

On removal of the entire tongue / by Thomas Nunneley.

Contributors

Nunneley, Thomas, 1809-1870.
University of Glasgow. Library

Publication/Creation

London : [Printed by T. Richards], 1866.

Persistent URL

<https://wellcomecollection.org/works/n73nhhun>

Provider

University of Glasgow

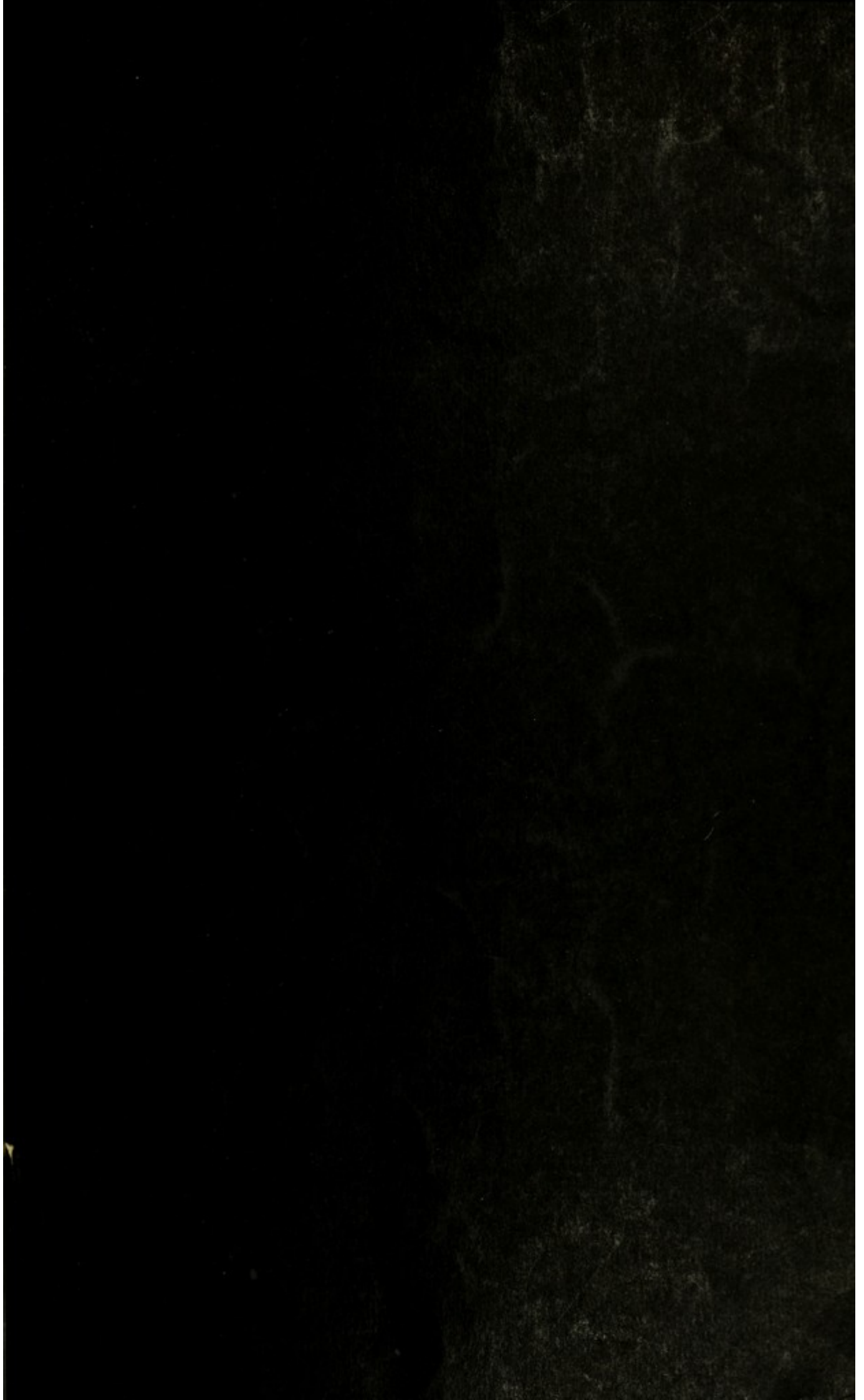
License and attribution

This material has been provided by This material has been provided by The University of Glasgow Library. The original may be consulted at The University of Glasgow Library. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.

**wellcome
collection**

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>



ON REMOVAL

OF THE

ENTIRE TONGUE.

BY

THOMAS NUNNELEY, Esq.,

LEEDS.

[*Reprinted from the BRITISH MEDICAL JOURNAL, November 3rd.*]

LONDON:

PRINTED BY

T. RICHARDS, 37, GREAT QUEEN STREET.

—
MDCCCLXVI.



ON REMOVAL OF THE ENTIRE TONGUE.

THE operation for the removal of the entire tongue may, without hesitation, be declared one of modern surgery ; so modern, indeed, that I believe it belongs to the latter half of the nineteenth century. Though portions, larger or smaller, of the tongue have, from time immemorial, been in various ways removed, the idea of its being feasible to remove the whole of the organ does not appear to have been entertained, or, if ever entertained, ever to have been put in practice. So strong in all ages has been the popular idea for the necessary presence of at least some portion of the tongue, that, when the historian of the introduction of Christianity into the Roman Empire recorded, amongst other gross barbarities to which the converts were subjected, that one of the martyrs who had the tongue torn out not only survived, but afterwards spoke, he thought it necessary to call in the aid of direct miraculous intervention as the only explanation of so astounding a fact. Referring to this statement, Gibbon, who, as is well known, had no belief in miracles, sneers at the credulity of those who can believe in the possibility of such a mutilation being recovered from, and regards the whole statement as a romance. So also accounts have from time to time reached the western world, of the barbarous chiefs of some of the tribes in Central Asia, as an extreme measure of political vengeance rather than of criminal punishment (for which it appears to have been considered too horrible), ordering the tongue to be torn out, and the occasional surviving of the victim. Though the evidence in support of the truth of the stories, obtained by one of our ambassadors at the Persian Court, and by other persons in the East, would have

been considered in many matters of inquiry sufficient to justify the belief in the statement, still so opposed was the general opinion to the possibility of any one living and speaking after such mutilation, that most commonly it was thought the well known tendency to exaggeration and mystification in these regions had imposed upon the credulity of those who related the tales. This opinion was rather confirmed than not by the fatal result which followed in the first two cases in which the operation was performed by a British surgeon, and by the very discouraging conclusions which he arrived at on a consideration of the operations. Mr. Syme says: "I think there should be no hesitation in deciding against the repetition of this procedure. In promoting the progress of surgery, it is hardly of more consequence to determine what is expedient than to ascertain what is not expedient; and I venture to hope that the experience now related may not prove useless, by saving others from the disappointment which I have myself experienced." (*Lancet*, Aug. 14th, 1858, p. 169.)

The reasons which mainly have weighed with surgeons in deterring them from attempting to remove the entire tongue, are—

1. The difficulty of reaching the base of the tongue so as to cut through it.
2. The difficulty in arresting hæmorrhage in a part so deeply seated, so elastic in texture, and supplied with large arteries in immediate continuity with the carotids.
3. The immediate danger to life from other important organs becoming involved.
4. Even though the immediate danger be escaped, the improbability of life being maintained for any lengthened period, owing to the difficulty in deglutition and the loss of the sense of taste.
5. The miserable condition to which it was supposed the sufferer must be reduced by condemnation to perpetual dumbness, from the loss of what has been universally regarded as the necessary instrument of speech.

Yet, in practice, it has been found that none of these reasons possess nearly the same importance which has been assigned to them. The entire tongue may be removed without any very great difficulty. The hæmorrhage is not necessarily severe; in some

cases there has literally been none; and in no case has its arrest been difficult. The immediate danger to life has not proved great. Instead of deglutition being rendered impossible by the ablation of the whole tongue, on the contrary, after the first soreness caused by the operation has passed off, the patient is found, as compared with his previous condition, to be able to swallow both solids and liquids with facility. Indeed, no one who has not watched a person wholly without tongue, would be prepared to see him drink off half a pint of beer without stopping, as I have repeatedly seen more than one person do. The sense of taste is not lost, but remains in a considerable degree; and, so far from emaciation following the operation, in every case which I have seen the patient has rapidly improved in flesh and strength, which may partly, no doubt, be attributed to loss of the pain and want of sleep he has suffered, but to which the improved facility of deglutition mainly contributed. So far from dumbness ensuing, the loss of the diseased organ is speedily followed by greatly improved articulation; and the power of speaking and reading aloud with sufficient distinctness to be easily understood is surprising. Indeed, one of my patients, who was fond of exhibiting his power, when in company often took part in the conversation, and contrived to lead it towards the subject in which he was so interested, frequently had to exhibit his empty mouth before his incredulous companions would believe him to be without a tongue.

I have now operated five times. In four of the cases the entire tongue was removed; in the other, more than two-thirds of it. In two of the patients, no constitutional disturbance whatever followed; one did not even require an opiate; and in two others, the disturbance was very slight and temporary. In the first case only were there any dangerous symptoms; and even this man, on the separation of the tongue, immediately recovered. Much of the trouble and suffering in this case arose from its being a first operation, and the unfortunate *contretemps* of the chain of the *écraseur* breaking, and thus necessitating a different and far more tedious proceeding than that originally intended. Hence I think I am justified in saying that, as compared with other important operations, the removal of the entire tongue is

not a very dangerous one. It would be difficult to point out one new capital operation, in which, in the hands of one surgeon, all the cases—five in number—have recovered.

I allude now only to my own cases, because, while I would desire to speak with the greatest respect of the operations of Mr. Syme, whose boldness in conceiving, and whose practical skill in executing, any surgical procedure, all must confess and admire, I cannot dismiss from my mind the feeling that the fatal termination in his first two cases resulted rather from mischief inflicted in reaching the tongue than from the removal of the tongue itself. As in a third and more recent case success rewarded the operator, his former decided opinion as to the unjustifiableness of removal of the tongue, above quoted, has probably been modified.

The operation which I now perform is not a very difficult one. I need not detain the members with the various modifications which the plan of operation has undergone; but merely state that adopted in the two last cases, which appears to be as simple as possible.

The two great indications to be kept in mind are, the removal of the organ just anterior to the epiglottis, with as little disturbance of any other part as possible, and the avoidance of hæmorrhage, which, if free, would be found very difficult, if not impossible, to arrest. This latter indication is to be attained by using the *écraseur* for dividing the tongue, instead of a sharp cutting instrument; this being one of the very few exceptions in which, in my opinion, the *écraseur* ought to be allowed to usurp the place of the knife.

No knife is required, and only one small external wound is made.

I take a sharp-pointed curved blade, about four inches long, and of just sufficient thickness and breadth to carry the wire-rope of the *écraseur*. This rope I have made somewhat thicker than those ordinarily supplied by Messrs. Weiss, with Hick's instrument; and I always have a second in reserve in case the first one should give way.* The middle of the

* A certain amount of strength is required, or the rope will break from the resistance of the tongue. While on the one hand it

rope should be attached by a piece of string to an eye made in its broad end. The patient reclining on his back in a semi-recumbent position, this blade is plunged exactly in the median line, between the base of the jaw and the os hyoides, but somewhat nearer to the latter than to the former, into the mouth, and brought up at the frænum linguæ, and so out of the mouth, the wire-rope following. A good sized loop of the rope must be drawn through, and the needle cut off. The rope must now be carried well back and spread over the base of the tongue, the tip of which being then drawn through the loop, is seized with Luer's tongue-forceps, and pulled forcibly outwards and somewhat upwards. Two or three long and strong hare-lip pins, somewhat curved towards their points, should next be carefully thrust from the underside of the anterior attachment of the tongue through its substance, and brought out on its upper surface as near to the base as possible. One of these pins should pass on each side; and if a third be used, it should traverse the median line. Their points should just appear on the upper surface, and over them the rope should be carried. They will thus serve to prevent its slipping forward when it begins to be tightened, as it might otherwise do. They are not absolutely necessary, but I think are useful, and give rise to very little pain; besides which they serve to indicate the exact portion which has to be removed. Of course, the larger this is, the more carefully must the pins be carried well back. The screw of the instrument should now be turned so as to gently fix the wire, that it may not move from the line in which it is intended to cut.

Hitherto very little pain has been inflicted, and the voluntary efforts of the patient have been useful in facilitating the proceedings; but at this stage he should be put fully under the influence of an anæ-

must not be too thick to increase this resistance to too great a degree, so on the other it must not be too thin, or it will act too much as a cutting instrument, and thus give rise to a danger of hæmorrhage, to avoid which alone it is employed. I am by no means sure that a chain made of small hexagonal pieces jointed together in alternately opposite directions would not be an improvement. It would make a chain equally flexible in all directions, and be somewhat serrated, by which it would be easily introduced, and when fixed easily cut its way through the parts. One of these chains I am now having made.

Instead of the pins I now hold
 wire rope well back with a pair
 of iron forceps curved to the
 shape of the tongue

thetic so that he may not feel, and the screw of the *écraseur* be steadily, but very deliberately turned, the tongue being forcibly extended. It speedily becomes strangulated, and is cut off. The operator must be prepared to find in most cases considerable resistance, and to employ more force in turning the screw than possibly, *à priori*, he might anticipate would be required; though, as the force necessary varies considerably in different tongues, he must be on his guard, or the wire may cut through too rapidly, and serious bleeding from the lingual arteries may ensue. To meet this contingency, I have always had in readiness different forms of cauterising-irons, as well as the solid perchloride of iron (in a liquid state it is of very little use in free deep hæmorrhage), though in only one case has there been any bleeding whatever from the divided base. In that case—the last one in which I have operated—the tongue yielded with much less force than it had done in any other, and was cut through more rapidly than I had intended it should have been. For a moment there was free bleeding from one lingual artery, but none from the other. Though the mouth of the vessel could not be seen, the part was seized with forceps and a ligature placed upon it, when the bleeding at once stopped and did not return.

The small submental wound has in every case healed by the first intention. The mouth and pharynx for the first thirty-six hours are painful, and deglutition is difficult; but these symptoms very soon mitigate, and the patient is able to swallow liquids; though I think it in most cases advisable to administer nutritious enemata and opiates, and thus keep the throat quiet. A little ice placed in the mouth is usually very grateful. In a fortnight or three weeks the wound heals. The two last cases I had, a man and a woman, both returned home in three weeks quite well. It is surprising how speedily the patient improves in condition. The cessation of the horrible pain and restlessness caused by the disease seems to enable the patient at once to rally, and to counterbalance any shock which the operation might otherwise inflict.

In the first case I operated upon, there was certainly diffuse inflammation of the lungs, which ren-

dered the patient very ill for the first few days. This was, as I have already said, rather to be attributed to the mode in which the operation was performed than to any inevitable sequence on removal of the tongue.

It must not be understood I am for a moment asserting, that the operation will be a permanent cure in all cases of cancer of the tongue, any more than the removal of a cancerous tumour in other situations of the body will secure immunity from relapse; but of this I am confident that, by affording the means of removing a larger portion than has formerly been thought to be practicable, and inducing an earlier performance of the operation, so as to secure the entire removal of all parts involved in the disease, it will, in accordance with all practical teaching, give the patient a far better chance of recovery, and, should the disease have been local, and not dependent upon a constitutional diathesis, this may be permanent.

Even in cases which are far advanced, when the pain and distress are great, as they commonly are, I would not hesitate, if I could get fairly beyond the part of the tongue actually involved, after what I have seen, to operate, as a means of prolonging life and lessening suffering, even though I felt confident that the disease could not be effectually eradicated. Thus, I have operated in a man, and also in a woman, in whom the submental glands were implicated. The tongue occasioned so much distress, there was no sleep at night, articulation was so indistinct, and talking so painful, that they could not be understood, and deglutition was so difficult that both were literally starving. On the removal of the tongue, each patient at once rallied, gained flesh and strength, could swallow with comparative ease, and articulate so as to be readily understood. Though in both the disease in the glands progressed, as was anticipated, it did not reappear in the stump of the tongue; and thus the downward path was not only rendered much slower, but it was relieved of much of its horror.

One man upon whom I operated continued quite free from any return of the disease for three years, when he died from hereditary phthisis, accelerated by continual intoxication. Two died, as I have just mentioned, from the development of the disease ex-

ternal to the mouth and in the abdominal viscera. The other two are alive and well, and pursuing their ordinary avocations: the woman attending to her house-work, the man following his trade as a carpenter. The latter says that he is as well as he ever was.

P.S.—I have unexpectedly received the following note from a medical friend, which refers to the woman.

“Barnsley, Nov. 10th, 1866.

“DEAR SIR,—This day I have seen Mrs. Lomas, of Dodsworth, whose tongue you removed on the 10th of May last, which is a complete cure. No doubt you will be glad to hear of the success.

“I am, yours truly,

“THOS. WAINWRIGHT.

“T. Nunneley, Esq.”

I have since operated
 successfully on two more
 cases. One only last week. The
 entire tongue was removed
 as the man declared with
 hardly any pain. He sat up
 the following day and within
 ten days was great well
 eating drinking & speaking
 well. so as to be fit to go

home I used in this case
instead of pins an instru-
ment with branched prongs
which I easily carried
to the back near the
triglotis and saved the
use of the pins - I have now
removed the entire tongue
seven times with uniform
success so far as the operation
itself is concerned. I know
no other capital operation
which can show a like suc-
cess in one of the seven cases
at once recovering

