

catharsis, diaphoresis,—any or all of these means are successively to be brought into requisition. A plan of treatment, as reliable as any in character, is as follows: place on the back of the neck a cataplasm of mustard and red pepper; put the feet in water, as hot as can be endured; give a full dose of sulphate of magnesia. If now the disease be not held in check, wrap the patient in shawls or blankets and administer spirits of Mindererus until full diaphoresis is secured. If even yet control be not secured, let ten, twenty, or thirty American leeches, or a third of the number of Swedish, be placed beneath the jaw. If the action be still unconquered, blood pro re nata is to be taken from the arm, and the tongue itself freely incised. If yet the swelling go on, and suffocation is threatened, laryngotomy or tracheotomy becomes a necessity.* (See these operations.)

the characteristic voice, the absence of any tonsillitic inflammation,—all these features showed that it was a typical case of idiopathic glossitis.

"Mr. Richardson said he had a case of this kind a short time ago in the Adelaide Hospital. There was rapid swelling of the right side of the tongue and chemosis of the floor of the mouth. In that case he not only made an incision from the base to the point of the tongue, along the dorsum, but he also made a few punctures in the chemosis on the floor of the mouth, and the man was well in a few days. An exfoliation of mucous membrane followed, which, however, did not interfere with recovery. As there was some doubt regarding the period at which the treatment by long incisions was introduced, he wished to state that he had found in the Memoirs of the French Academy of Surgery several cases of this kind recorded. In one of these cases, published by De la Motte in 1725, the tongue became greatly swollen in less than five hours. It soon filled the mouth, and protruded from between the teeth. Bleedings from the jugular vein, arm, and foot were performed without relief, but a rapid cure followed three deep incisions along the dorsum, extending from base to apex. The patient could speak in an hour after the incisions were made. In another case, that occurred in 1744, rapid swelling of one side of the tongue took place in a woman; respiration was obstructed, and deglutition impossible. It was cured by one long, deep incision. Louis mentions a case that occurred in the military hospital at Metz in the year 1740. The tongue became spontaneously swollen. Alexander Benedictus, who published the case, mentioned that M. Casteras, the senior physician of the hospital, directed him to scarify the tongue lightly. This, however, was not sufficient, and the patient died in two days in consequence of the swelling. As Louis truly observes, life might have been saved by a couple of deep incisions along the dorsum of the tongue."

* "Mr. J. Z. Laurence exhibited before the North London Medical Society the tongue of a woman who had died of acute inflammation of the organ. She had been under Mr. Laurence's care for acute rheumatism, when, on the evening of the 5th November, he was called to her, and found her sitting up in the bed, with a countenance expressive of the greatest anxiety, her face pale and bedewed with sweat; she breathed at long intervals, and laboriously; pulse 130. The cause of this was evident; she could not open her mouth to speak, for a swelling of the left half of the tongue, which was red, dry, and glassy. On the night of the 2d and 3d she had had severe rigors. Mr. Laurence at once made three free incisions into the tongue, and about half a pint of blood escaped. About two hours after the bleeding had ceased, the submaxillary region began to swell, twelve leeches were applied, and on the following morning the right half of the tongue began to swell, and by the afternoon it had attained full as great a size as the left. With this was a corresponding engorgement of the tissues about the jaw; the local depletion had had very little effect in reducing the swelling of the left side of the tongue; generally she was worse; rigors now came on, and the pulse intermitted three or four beats. Mr. Quain saw her, and proposed incising the right half of the tongue, but both patient and friends objected. Mr. Laurence saw her the last time

Abscess.—In depraved and tainted conditions of the system, abscesses, of what might be called a cold character, occasionally form among the deeper muscles of the tongue; such abscesses are not necessarily associated with any marked inflammatory phenomena, but may have attention first directed toward them by the swelling which appears on the under surface.

The proper treatment is found in voiding the matter through puncture as soon as fluctuation is perceived; otherwise it has happened that the pus has dissected its way down the neck, pointing in front of the hyoid bone, creating much derangement, and threatening even a fatal result. Treat these cases by local stimulating injections and the internal administration of tonic medicines. Acute abscess is one of the terminations of glossitis. (See foot-note for illustration.)*

alive the same night; her surface was deadly cold; pulse not perceptible at the wrist, yet, strangely enough, the respiration went on tranquilly, though feebly. Mr. Laurence at once perceived that she was dying of slow asphyxia, and that her only chance was in tracheotomy; this was proposed with more impressive force than a surgeon almost dare do. She and her husband doggedly refused. Next morning she was dead.

"Autopsy.—No organic disease was discoverable. The whole of the tongue was swollen, pale, and soft from maceration in a puro-serous fluid, which infiltrated the substance. The superior aperture of the larynx was greatly narrowed by serous effusion; the rima glottidis to a less extent; below this point the whole of the trachea was perfectly unobstructed; the submaxillary region and anterior triangles of the neck were infiltrated with a serous fluid, which, among the suprahyoid muscles, had assumed a purulent aspect. The lungs were singularly healthy; the heart, kidneys, and bladder presented no signs of disease.

"From the above facts, it follows that tracheotomy would in all probability have saved the woman's life; and Mr. Laurence believes he proposed it at the proper time. It is true there was, throughout the case, not one fit of suffocation. On the contrary, she died choked in the most gradual conceivable manner; and were he to meet with another case, he would not defer the operation until the patient was in his last gasp, as was too commonly the case, but resort to it as soon as he saw the patient sinking, previous measures not having ameliorated his condition. A curious pathological fact, which Mr. Laurence noticed and pointed out to Mr. Phillips, who attended the case with him, was the successive and separate invasion of the two halves of the tongue by the inflammatory action, offering a remarkable instance of the dependence of pathological changes on the anatomical distribution of the blood-vessels."

* The following suggestive case of abscess of the tongue, ending fatally from hemorrhage, is related by Mr. Ward, being presented before the London Medical Society:

"E. T., aged seven, was born with a slight red enlargement in the centre of the tongue. No inconvenience or difficulty in the ordinary motions of the tongue, or in swallowing, had ever been experienced; the general health had always been good. In the night of Sept. 27, having been in her usual health at bedtime, she was attacked with pain and swelling under the chin and both sides of the lower jaw; slept very little, and the following morning had pain in the tongue, with great difficulty in speaking, or swallowing anything but liquids. She had an aperient powder at night, and the lower jaw was fomented frequently. In this state she continued for two or three days, and was visited by me on Oct. 1, when the following appearances were noted:—Face flushed; eyes very bright; countenance anxious; great swelling, redness, and extreme tenderness of the parts under the lower jaw; very slight swelling of the tongue itself, which is covered with a thick, brown fur; is unable to open the mouth wide, or move the tongue beyond the teeth, or to speak, and has great pain in the mouth; pulse very quick and sharp; great heat of skin, and thirst urgent; bowels confined. Ordered eight leeches to be applied under the chin; to

Neuralgia of the Tongue.—The only neuralgia of the tongue which seems special and peculiar to the organ has its seat about the extreme tip; the

take, at bedtime, four grains of calomel; James's powder and sugar, of each three grains; a saline mixture, containing a scruple of nitrate of potash; one tablespoonful every three or four hours.

"Oct. 2. Slept more last night than since first attacked; fever great; pain slightly relieved; swelling and redness less; mouth nearly closed; was able to swallow the powder in jelly, but refuses the mixture, of which very little has been taken; bowels freely relieved, evacuations dark and offensive; to take calomel and James's powder, of each three grains, and jalap, five grains, at bedtime; use a chloride-of-soda gargle, warm, to the mouth, by means of a syringe. Fluids taken in the mouth return by the nose.

"4th. Less fever; rests better at night; difficulty in swallowing or speaking the same; can open the mouth sufficiently to allow the tongue to be seen, which is nearly fixed, very little swollen, and still thickly coated; the breath extremely fetid; external redness and swelling still considerable; the tenderness great; pulse soft, quick, and weak; the bowels act freely; was able to pass my finger into the mouth; under each side of the tongue distinct fluctuation can be felt; while pressing on the left side the lining membrane gave way, and was followed by a profuse discharge of fetid pus, mixed with blood; the point of the finger passed easily to the depth of the first joint, under the tongue, giving the sensation of a large pulp-cavity; the tongue not very tender, can be moved from side to side by means of a small teaspoon, but not voluntarily. Apply strong poppy fomentation frequently, and linseed poultice; continue the chloride-of-soda gargle under the tongue, with the syringe, and take, of a mixture consisting of six grains of quinine, a teaspoonful every four hours; give a little port wine and water frequently, and milk or thin arrowroot for drink.

"6th. The pain less since the use of the poppy fomentation, generally sleeping for some hours after using it; the discharge of pus and saliva very copious and offensive; lies with the head on the left side to allow the free exit of the discharge, otherwise the mouth is constantly filled; fever less, as also the swelling and tenderness; redness gone; great debility and considerable wasting of the body already; can swallow fluid, and is eager for the wine; very little quinine has been taken; bowels act twice a day; can open the mouth wider, but is still unable to protrude the tongue, which is cleaner and moister; on slightly raising it by the handle of a spoon, a large jagged opening may be seen on the left under side of the lower jaw, from which, by gentle pressure under the chin, a profuse discharge of thick pus wells up, of which I pressed out at least two ounces; pulse soft and weak. Continue the external applications; apply the chloride-of-soda gargle frequently to the mouth and under the tongue, with the syringe; take a mixture consisting of two ounces and a half of decoction of bark, syrup of orange-peel, and tincture of bark, of each two drachms, a fourth part three times a day; continue the wine, and give strong beef-tea and arrowroot frequently.

"9th. Altogether improved; discharge less, but still fetid; takes fluid nourishment frequently, and the wine; the general swelling and the tenderness reduced; more on the left side under the jaw than the right, and is unable to protrude the tongue further. Continue all the applications and the mixture.

"11th. Has not rested so well the last two nights, and has had more pain, particularly on the right side, which is more swollen and very tender, the left side being almost in its natural state; the discharge has been profuse, but thinner; the tongue is moist and clean; not very tender, but less movable; the opening under the left side of the tongue smaller; fever returned; has constant hacking cough; not able to swallow so well, or to speak so as to be understood. Apply six leeches under right side of lower jaw; continue the fomentations and poultices; also, bark mixture and port wine.

"12th. Has slept very little, from the frequent coughing, which tires her very much; discharge from the mouth less and thinner, but still fetid; emaciation extreme; has changed

pain, which is very irregular in its coming and going, is of the most acute character, seeming indeed as if the organ might be in the grasp of red-hot pincers. This neuralgia is most frequently encountered in the persons of middle-aged men. Vanzetti, for the cure of such a trouble, has recommended and practised the operation of section of the lingual nerve,—accomplished by first drawing the tongue forward and to one side, and exposing the nerve, through incision of the mucous membrane on the border of the internal pterygoid muscle. An excellent obtunder is found in the combination suggested in the paragraph on Epithelioma. Lingual neuralgiæ originating in the offence of jagged teeth have their cause too evident to need comment. The causes of many cases seem beyond finding out. (See *Neuralgia*.)

the position of lying to the right side; left angle of the mouth drawn down; the swelling and tenderness on the right side very much increased since yesterday; feels soft; is more prominent in the centre, and appears pointing here; the finger in the mouth can detect very distinct fluctuation under the tongue, which is thickly coated and very tender; takes very little nourishment, only a teaspoonful at a time; prefers wine to other things. Continue the fomentations and poultices.

"13th. Has had a bad night; is very irritable and feverish; mouth nearly closed; unable to examine the tongue; the swelling about the same; the right cheek and under side of the jaw of a dusky red color, and very shining; so tender that she has again changed the position; lying on the left side; cough less; pulse very small and weak; takes scarcely anything; discharge more copious, thicker, and slightly tinged with blood; it now appears to come from the right side. In the evening, while coughing, a large gush of blood took place from the mouth, mixed with pus, and flowed freely for more than ten minutes. By applying ice internally and externally (which I had directed to be in readiness), the hemorrhage was arrested. A cold lotion was applied externally, and an alum gargle frequently to the mouth.

"14th. Has slept very little; unable to lie down, from the constant discharge of fetid pus and saliva from the mouth; the swelling of the right cheek and side of the jaw less; very tender, of a dull, yellowish color; able to open the mouth so as to examine the tongue, which does not appear enlarged; no power of moving it herself; is thickly coated with a dark fur, and when pressed upon, a profuse discharge of thick pus fills the mouth immediately; no return of the hemorrhage; is very pale and faint; pulse very small and weak; has taken more nourishment since last night than for some days before, such as port wine, isinglass in milk, beef-tea, jelly, etc. Continue the lotion and alum gargle to the mouth with a syringe. At half-past seven p.m., in the act of swallowing a small piece of bread-and-butter, profuse hemorrhage occurred from the mouth, and more than a pint of blood was lost before it was again arrested by the free application of ice; it was of a bright arterial color. She became faint, and expired at nine p.m.

"On the day following I made a post-mortem examination of the parts affected. The parotid, submaxillary glands, and other parts, having been brought into view, were found (on the right side) so much softened, decomposed, and mixed with coagulated blood and pus, as to be recognized with difficulty, and it was impossible to trace from what vessel the hemorrhage proceeded, such was the destruction of the parts. On the left side, the glands were of a greenish color, very much softened, and bathed in pus. A probe passed readily by the side of the jaw into the mouth. I divided the trachea just above the sternum, and dissected the larynx and tongue carefully out. The morbid state of the tongue is shown in the preparation before the society."

In the discussion which ensued, the case was considered a very remarkable one. The remarks had reference chiefly to the cause of the disease, respecting which various opinions were expressed.

Effusions.—The tongue is occasionally the seat of formidable congestions or effusions. The writer has known an inflamed tongue so swell in a single hour as almost to prevent respiration. The organ, when enlargement increases to an extent which threatens suffocation, looks so vascular that one hesitates to use the knife. The practice is to incise freely,—cut deeply from behind forward, on each side of the median line, avoiding, however, in the depth of the cut, the ranine arteries. A wound thus made will bleed for a time freely, even alarmingly; but the common experience is that such cuts soon close, and are devoid of danger. Velpeau has recommended the opening of the ranine veins in congestion. Leeches may also be applied direct to the tongue.

Erysipelas.—A formidable danger in the tongue is the presence of erysipelas: this may be idiopathic, but is most frequently traumatic, operations about the jaws being, occasionally, provocative of the condition. The treatment of erysipelas in the tongue is the same as treatment of the condition elsewhere. Iron and quinia, internally and locally, are to be freely employed. If this be not found effective, then make incisions. The practitioner is, however, never to forget to extend his observations over any functional disturbances which may exist.

Bites of Insects.—The most severe and threatening glossitis ever met with by the author was the result of the sting of a wasp taken into the mouth while the patient was eating blackberries. The tongue in these accidents is apt to swell enormously, but, happily, tends to a rapid self-cure. If seen immediately, no better application is to be employed than common mud; phénol sodique is a favorite preparation: later, we can only treat such an inflammation like any other of the sthenic type. It is well, however, to remember that the swelling in these cases is from effusion rather than a congestion; incisions, if necessary, are always to be made freely. Iodine, in these instances, sometimes acts happily; paint the tongue thoroughly, and hold cold water in the mouth. If, unfortunately, erysipelas supervene, the iron and quinia combination is at once to be resorted to.* In these cases the pain becomes excessive, the parts may assume a livid hue, and there seems to be a decided tendency to gangrene; particularly does this occur in depraved and broken-down persons. Free incisions are never to be neglected: the degraded expression of the erysipelas depends upon the separation of the molecules—if the expression may be used—from their base of supply; the incisions, draining the organ, allow contraction of the parts, and thus restore the circulatory relationship.

* R.—Tincturæ ferri chloridi, ℥j;
Quiniæ sulphatis, ℥j;
Tincturæ cinchonæ, ℥ij to ℥ss. M.

The author believes that this combination, as a local application, is an approach to, if it is not indeed an absolute specific in erysipelas. It will be noticed that the proportions of the combination as here given differ from that on a preceding page: this relates to application of the mixture as location is concerned.

In ulcers or tumefactions of the tongue provoked by irritating teeth, it is seldom necessary to do more than remove the source of offence. Cases occur, however, where some after-treatment is demanded, the provoked ulcer being indolent, or, in some instances, even semi-gangrenous. For all such sores, one of the best washes to be used is water changed in color to a milky blue by the addition of the compound tincture of capsicum. Where a part is simply indurated and not ulcerated, presenting no evident cause, it is better, for a time at least, to leave the case to nature. The writer's rule is, never to interfere with a non-explainable induration except from necessity. In all these cases injudicious meddling is bad practice.

Erectile Tumors.—Of this character of lingual tumors the author has met thus far with some five cases. Of these, the most marked was in the person of a babe nine months of age, for whose relief an operation was successfully performed at the hospital clinic. This tumor, which was congenital, occupied the whole anterior third of the tongue, protruded from and filled up the oral fissure to a considerable extent, was of a dark-red or purple color, enlarged very much when the child cried, was soft and fluctuating, and through manipulation could be made temporarily to almost disappear.

A mode of operation which in two weeks resulted in a perfect cure, consisted in first strangulating the mass with a double ligature, and, after three days, effecting separation through the instrumentality of a wire éraseur.

The principle of the treatment of erectile tumors of the tongue is that common to this class of tumors wherever found. (See *Erectile Tumors*.)

Fatty Tumors.—These, like the erectile, are uncommon. A peculiar case met with by the author exhibited the growth looking like a mass of very smooth fat, overlaid by the mucous membrane: the situation was the inferior left surface of the organ. As the patient spoke, the tumor would bulge out over his lower teeth, presenting a most unsightly appearance.

Metastatic Disease.—An example herewith given explains, without other remarks, a character of trouble rare, yet sometimes met with, upon the tongue. We may recognize in the disappearance and reappearance of the various exanthems an explanation of the condition. I have been consulted, says Mr. Wm. McClure, in a paper read before the Harveian Society, by a young married lady, for rather a curious affection. She informs me that her tongue becomes occasionally bestudded with small ulcerations, and, afterward, when these get well, the palm of her left hand becomes affected with a sort of psoriasis palmaris. The tongue is at present quite well, but the palm of her hand is covered with the eruption. When this gets better, however, she expects her tongue to become again the seat of disease, for thus they have alternated for a considerable time past,—she says about two years. The chief reason for which she consults me at present, however, is that she has gout in one of her feet. I believe that the whole series of her complaints depends on some derangement of the digestive organs, though that is not made very apparent by external symptoms. I gave her an alterative pill and a tonic mix-

ture, combined with colchicum and an alkali. The gout has already disappeared, and even the hand is much improved. As soon as the gout was got rid of, I substituted for the tonic mixture—in which, as I have just said, were wine of colchicum and carbonate of soda—a mixture composed of the extract of sarsaparilla combined with the iodide of potassium. As a local application to her hand I prescribed an ointment composed of pure iodine, iodide of potassium, and hog's lard; but this was found, upon trial, to give her so much pain, and produced so much irritation, that I was forced to abandon its use after a few days' trial. For it I substituted the following ointment, viz.: white oxide of mercury four grains, and extract of conium a drachm, rubbed up with seven drachms of prepared hog's lard. This ointment was ordered to be rubbed into the palm of her hand every day, both morning and evening. Besides these remedies, local and general, she took occasionally an alterative and aperient pill, made up of blue mass and the compound extract of colocynth. The consequence has been, after a month's steady use of the remedies, that the hand has become quite well, the skin being now, for the first time these two years, soft, white, flexible, smooth, and completely free from itching, heat, and every unpleasant appearance and feeling. Nor has the tongue as yet shown any tendency to alternate disease, as before; so that we have reason to hope—the constitution having been set to rights by the means employed—the former chain of morbid sympathy between the distant organs of which we have been speaking, and by which a metastasis of the psoriasis, from the one to the other alternately, took place so often, for so long a time, has been at last broken and destroyed, permitting both to remain in their healthy condition.

Urticaria, a very common skin-trouble, has similar metastatic relation. In a case encountered a wheal would appear either upon the cheek or the tongue whenever ice-cream was eaten.

Hypertrophy.—This condition has been met with and described by various writers.* Hypertrophy may be complete, involving the whole organ, or the enlargement may pertain to particular tissues alone. A case is described by Mr. Paget, involving the muscular substance exclusively, the primitive fasciuli being found to divide in a dichotomous manner. The epithelium is another of the tissues most frequently found affected, instances being on record where this structure has thickened so as to resemble a coat of mail. Granular hypertrophy,

* "A case is related by Zacchias, of a male infant well made except that the tongue projected three fingers' breadth from the mouth: the child could suck, and it lived until the age of fourteen months. Bertholin mentions a case of *linguæ portentosa magnitudo*, where a male infant was born with the tongue out of its mouth as large as a filbert: as the child grew its tongue enlarged to the size of a calf's heart. A case is recorded by Dr. Humphrey of a child, eleven years of age, whose tongue from the upper lip to its tip measured three and a half inches; from the under lip to its tip, one and a half inches; from the angle of the mouth round the sides and tip to the opposite angle, six and a half inches. The circumference of the widest part, which was about the middle of the protruded portion, measured six and a half inches circular measurement."—HOLMES.

a condition of enlargement of the papillary structure, is sometimes seen in the form of a mass of warty excrescences covering the whole body of the tongue; at other times it is confined to some portions more or less limited in extent.

The treatment of hypertrophied tongue is to be governed by the circumstances and character of each particular case. In epithelial hypertrophy the best results seem to have been secured through the use of arsenic,—from the thirtieth to the twentieth of a grain administered three times a day, its effect being carefully noted. Donovan's solution, the liquor arsenici et hydrargyri hydriodatis, given in five-drop doses, has been highly commended; also the solution of Lugol. These doses are for adults.

In a true hypertrophy of the organ—prolapsus, as it is frequently miscalled—that is, where the body has enlarged as a result of congenital impressions, medicinal appliances are of little service. This disease is markedly one of young life, commencing generally very soon after birth, and progressing tardily but surely until death or an operation gives relief. Unaccountable though it may seem, hypertrophy is confined almost exclusively to female children,—this sex being affected in the proportion of five to one of the other.

As may be inferred, hypertrophy of the tongue presents various degrees of enlargement; cases are on record where the organ has hung from the mouth, resting upon the breast. In the instance of elephantiasis, the mucous membrane looks more like the bark of a tree than anything else, being rough, dry, and crusted.

In the treatment of hypertrophy we consider the character of the trouble from the aspects of activity and chronicity. Where the first of these exists, most is to be hoped for from medication; where the latter obtains, little is to be expected except from operation.

Compression, recommended by Lasser and indorsed by Professor Syme, it may not be amiss to try before proceeding to excision or ablation; but the treatment will certainly be found to have much more of failure than of success in it. The author lately had at his clinic a boy in whom congenital hypertrophy had enlarged one side of the tongue to a bulk fully double that of the other; compression had no effect whatever. Ablation of redundancy is accomplished by cutting away a V-shaped piece, as shown in Fig. 4, Plate II. The manner of relating the parts after the section is explained in Fig. 5 of same plate.

Atrophy.—As the opposite to hypertrophy, reference is to be made to a condition sometimes, though infrequently, met with, of atrophy. A case described by Dupuytren found its explanation in a post-mortem, which revealed the presence of hydatids at the base of the cerebellum; one of these parasites, wedging itself into the anterior condyloid foramen, had compressed the lingual nerve and thus obliterated its function. Paget has reported a case arising out of pressure, by a piece of dead bone near the anterior condyloid foramen, on the hypoglossal nerve. Allan refers to a third instance where a physician in opening an abscess, which had formed beneath the jaw, is sup-

posed to have severed the nerve, as from the time of operation deflection and atrophy of the corresponding half of the tongue were observed; these were found to continue twenty-five years later. A case reported by W. Fairlie Clark details the particulars of atrophy of the organ, confined to its anterior two-thirds, where the lesion seemed to lie in carcinoma of the breast.

Errors of nutrition being the cause of asymmetrical conditions, it is to be appreciated that deficiency may be to such extent as insures loss of the organ. A case quoted by Dr. Allan refers to a male aged seventy-eight, who suffered from neuralgia of the occiput. The patient complained at the same time of dysphagia and excessive flow of saliva. By the eighteenth day the tongue became flabby, insensible, and began to mortify. By the thirty-first day a line of demarkation had formed, which included the right half of the tongue and the tip of the left half. The patient recovered.

Papilloma.—A papilloma of the tongue, as commonly met with, bears close resemblance to a common seed wart. A very simple and easily practised method of removing such a growth consists in drying the parts by means of napkin or rubber dam, and making an application of the London paste. A second means is found in transfixing the base by means of a curved needle and strangulating the pedicle. Papillomata, if unduly vascular, are to be looked on with concern; a common seat is the side of the organ well back.

Venous Tumors.—A case treated by the writer showed a bulbous vein not much less in size than an ordinary hickory-nut; cure was effected through strangulation.

Arterial Nævi.—Growths of this nature are most frequently met with about the tip; treatment is by ligature. (See *Nævi*.)

Cartilaginous Tumors.—Cases of enchondroma are reported as being met with. These growths must be very rare; the author has never seen one. Treatment would be by excision.

Immobile Tongue.—Immobility arises out of inflammatory changes attended with plastic deposits. The condition is uncommon except in connection with carcinoma, and, to a degree, with syphilis. The cure employs sorbifacients, aided, as the second of the causes is concerned, by a specific.

Operations practised upon the Tongue.—From medical necessity, or from accident, it sometimes becomes necessary to amputate a part or even the whole of the tongue. Surprising as it may seem, such amputations, even when of the complete organ, interfere very little with speech, and do not entirely obliterate the sense of taste. Mr. Nunneley, an English surgeon, lately exhibited to the Pathological Society of London a patient from whom he had removed the whole of the organ, this being effected by a submental opening, the patient, a man aged thirty-five, recovering without a bad symptom. The disease, which had existed sixteen or eighteen months, became worse eight weeks before the operation, and, from the pain and difficulty of speaking, the impossibility of mastication, and the difficulty of deglutition, was fast wearing the patient out. When shown to the society, the man had regained

strength and flesh; indeed, said that he felt as well as ever: he talked with distinctness, and swallowed with facility.

A second interesting case is reported by the late James Syme, F.R.S.E., Surgeon-in-Ordinary to the Queen in Scotland, and Professor of Clinical Surgery in the University of Edinburgh.

About twelve months ago, says Mr. Syme, I communicated a case in which the tongue had been completely removed by excision, on account of extensive disease that threatened to prove fatal by preventing the admission of nourishment. This account was necessarily limited to the operation and its immediate effects, as sufficient time had not elapsed for determining whether or not the relief afforded would prove permanent, or how far the powers of deglutition, articulation, and taste would be restored. After his return home to Manchester, the patient sent me favorable reports of his progress, but certainly not such as to convey any adequate idea of the improvement that had taken place since he came under my care. He was then emaciated and bent down by long-continued suffering, unable to articulate, so as to require a slate and pencil for expressing his wishes, and swallowing even fluids with such extreme difficulty as to feel on the point of starvation. My surprise may, therefore, be imagined when, on the 10th of September last, he unexpectedly made his appearance, erect and vigorous, and, seeing that I did not recognize him, announced his name in a loud, clear voice. The feeling thus excited was not lessened by learning that, while travelling in the Highlands, he had dined at *tables-d'hôte* and entered into conversation without betraying the deficiency under which he labored. Very much astonished by a result so much better than could have been anticipated, I requested a number of my medical friends to join me in examining the state of matters. Professor Goodsir and Mr. Nasmyth having satisfied themselves that no vestige of the tongue remained, various observations were made with regard to articulation and other functions of the absent organ; and Mr. Annandale afterward instituted a more particular inquiry, of which he has given me the following report:

“The lips and jaw-bone, where divided, were soundly united without any deformity. The opening between the mouth and pharynx was much diminished in size and irregular in shape from contraction of the fauces and soft palate, which were drawn downward and forward more to the right than the left side, from the mucous membrane at that part having participated in the disease and been removed along with the tongue. Mr. W. says that he can swallow as well as ever, provided that the food is either finely divided or fluid. He is also able to masticate solid substances, although difficulty is sometimes experienced from their getting into awkward parts of the mouth. In ordinary speech his words are wonderfully clear and distinct, and he can sing without any difficulty. All the vowels and words composed of them are articulated perfectly, and also the following consonants: B, C, F, H, K, L, M, N, P, Q, R, V, W. D is pronounced ‘dthe,’ J ‘the,’ G like ‘sjee,’ S is