

produced, and in four or five cases suppuration ensued. The suppuration was only in the *neighborhood* of the vein, however; the vessel itself remained sound and healthy. The abscesses were as large as a bean, but gave rise to no trouble whatever. In none of Dr. E.'s cases was there any rise of temperature, though he examined carefully with reference to this point.

X. LESIONS OF THE ORGANS OF DIGESTION.

THE MOUTH AND THROAT.—*Caries of the Teeth—Odontalgia—Aphthæ and Stomatitis—Pharyngitis (Sore Throat)—Tonsillitis (Quinsy, Cynanche)—Tonsillar Hypertrophy.*

THE STOMACH AND BOWELS.—*Hernia—Intestinal Obstruction (Occlusion, Intussusception)—Hemorrhoids—Fissures of the Anus—Fistula of the Anus—Prolapse of the Anus—Pruritus of the Anus.*

CARIES OF THE TEETH.

PROF. JAMES E. GARRETSON, M. D., D. D. S., PHILADELPHIA.

Caries is a disease most markedly of congenital association and predisposition. It may be confidently prognosed that the offspring of parents afflicted in this way will be in like manner afflicted; and that, on the other hand, the children of parents possessing good teeth will be in like manner favored. The general dyscrasiæ exert an injurious influence on the teeth, imparting to them a low grade of vitality, and rendering them incapable of resisting the chemical action of the agents with which they are necessarily brought in contact.

Of these agents the following are the most common and injurious:

1. *Mucous Deposits.*—The mucoid fluid is often found to be glairy and tenacious, alkaline to the test, and more or less offensive in odor—a condition universally associated, when a habit, with dental caries and general dyscrasia. The teeth in such a mouth are covered with a film, so persistent that the ordinary use of the brush fails to disperse it, while the common dentifrices exert but a temporary good.

Teeth so diseased find relief alone in *acids*, not only locally employed but also internally administered. As a systematic medicine let the following be prescribed:

310. R.	Acidi hydrochlorici diluti,	gtt. x.	
	Syrupi,	f. ʒ ss.	
	Aquæ,	f. ʒ j.	M.

For one dose, one to three times a day.

Conjoined with this, a grain of quinine may be given once or twice daily. As a mouth wash, the following combination will be found applicable :

- | | | | |
|---------|------------------------------|----------|-----------|
| 311. R. | Tincturæ capsici compositæ, | f. ʒ ij. | |
| | Aquæ coloniæ, | | |
| | Spiritus vini, | āā | f. ʒ ij. |
| | Tincturæ quillai, | | f. ʒ iss. |
| | Tincturæ gentianæ compositæ, | | f. ʒ j. |
| | Acidi acetici diluti, | | f. ʒ ss. |
| | Acidi carbolici fluidi, | | ʒ ij. |
| | | | M. |
- To be used by saturating a tooth-brush which has first been dipped in water.

Where much offensiveness of odor is associated with this inspissated mucus, it may be necessary to use a gargle of the permanganate of potassa, or of the aqua chlorinata.

- | | | | |
|---------|-------------------------|------------|----|
| 312. R. | Potassii permanganatis, | gr. xv. | |
| | Aquæ, | f. ʒ viij. | M. |
- For a mouth-wash ; use as required.

Another most excellent preparation for such disinfection, is the *phenate of soda*. It is used diluted with water, ordinarily one part of the phenate to ten parts of water.

2. *Acid Secretions*.—When excessive acidity of the oral fluids is suspected, they should be tested with litmus paper in the morning on rising. If such test reddens the paper for a series of mornings, an antacid indication may be considered to be fairly established, and a prescription something like the following may be ordered :

- | | | | |
|---------|-------------------------|-----------|----|
| 313. R. | Potassii chloratis, | ʒ ss. | |
| | Aquæ, | f. ʒ iij. | |
| | Tincturæ capsici comp., | f. ʒ ij. | |
| | Aquæ coloniæ, | f. ʒ j. | |
| | Tincturæ quillai, | f. ʒ iss. | |
| | Olei gaultheriæ, | q. s. | M. |
- To be used with a brush.

Or a powder may be preferred, as

- | | | | | |
|---------|-----------------------------|----|-------|----|
| 314. R. | Cretæ præcipitatae, | āā | ʒ ss. | |
| | Iridis Florentinæ pulveris, | | ʒ ij. | |
| | Ossis sepia pulvis, | | ʒ ij. | |
| | Olei limonis, | | q. s. | M. |

Or,

- | | | | |
|---------|--------------------------------|--------|----|
| 315. R. | Cinchonæ rubræ pulveris, | ʒ ij. | |
| | Capsici pulveris, | gr. x. | |
| | Potassii chloratis pulveris, | ʒ j. | |
| | Pulveris aromatici, | ʒ ij. | |
| | Magnesia carbonatis, | ʒ ss. | |
| | Iridis Florentinæ pulveris, | ʒ j. | |
| | Sâponis Castiliensis pulveris, | ʒ j. | M. |

The different kinds of acids detected in the mouth furnish indications for constitutional treatment. If it is uric acid, there will generally be found deficient respiratory and circulatory action ; if lactic acid, existing leukemia may be predicated.

3. *Parasites*.—Animal and vegetable fungi in the mouth are added causes of the deterioration of the teeth. To destroy them, few agents will be found more reliable than what is called the *dental carbohc acid soap*. Powders used as dentifrices, remove them mechanically. Acid washes may also be prescribed. The *sulphite of soda*, ʒ ij, to aquæ, f. ʒ j, has been highly praised. Sometimes an alternation of acid and alkaline washes will produce a quite wonderful change for the better, when either alone has been of little service.

4. *Electro-chemical Relations*.—These have reference to the influence which artificial dentures may exert, and should always be considered.

5. *Medicines and Articles of Food*.—Acids are not best given through glass tubes, but well diluted with water, and thrown into the back part of the mouth and swallowed in a single act. Sugar is not directly deleterious to the teeth, but only indirectly, as it disturbs digestion. Raisins rapidly corrode the teeth and are most tenacious in their lodgment.

6. *Accidental Influences*.—Cracking nuts with the teeth, the improper use of the file, the employment of a variety of metals as fillings, low gold alloys, and neglect of cleanliness, are frequent causes of caries. As an ordinary dentifrice, to be used once a day, the following may be prescribed :

- | | | | |
|---------|-----------------------------|-------|----|
| 316. R. | Cretæ preparatæ, | ʒ ij. | |
| | Ossis sepia pulvis, | ʒ ss. | |
| | Iridis Florentinæ pulveris, | ʒ j. | |
| | Cinchonæ rubræ pulveris, | ʒ j. | |
| | Sâponis albi pulvis, | ʒ ij. | M. |
- For a dentifrice.

ODONTALGIA.

JAMES E. GARRETSON, M. D., D. D. S.

The causes of toothache may be classed under the following heads:

1. Sensitive dentine.
2. Exposure of the pulp to sources of irritation.
3. A diseased state of the periodontem.
4. Confinement of pus and gas in the pulp cavity.
5. Granules of osteo-dentine in the pulp.
6. Sympathy.
7. Recession and absorption of the gum and alveolus.

The treatment of these various conditions is briefly as follows:

1. *Sensitive Dentine*.—The most permanent means of cure is the introduction of filling into the cavity. As a temporary treatment, the excavation and polishing of the surface may be resorted to. Cauterization with the solid nitrate of silver, chloride of zinc, or with equal parts of the tincture of aconite and a saturated solution of iodine, is preferred by some.—A method very satisfactory where the parts are very sensitive consists in introducing into the unexcavated cavity a filling of oxychloride of zinc.

2. *Exposure of the Pulp*. The treatment of an exposed pulp is palliative and radical.

Palliative Treatment.—Foreign bodies are to be removed; the oral fluids, if irritating, changed by appropriate washes; soothing applications are to be applied, as warm tincture of hamamelis, oil of cloves, dilute creasote, equal parts of chloroform, laudanum, and tincture of aconite, persulphate of iron. In the odontalgia of first dentition, it is well that parents be provided with some general prescription. A very good one is as follows, to be applied by saturating a small piece of cotton and laying it loosely in the cavity:

317. R.	Creasoti,	gtt. vj.	
	Tincturæ iodinii,		
	Liquoris plumbi subacetatis,	āā f. ʒj.	
	Chloroformi,		
	Tincturæ opii,	āā f. ʒ ss.	M.

In severe inflammation of the pulp, it may be necessary to resort to some more general measures. Blisters upon the nape of the neck will

frequently result in speedy relief; hot pediluvia; saline cathartic medicines; diaphoretics, or diuretics. An inflammation of the dental pulp, if not too far advanced, will almost invariably be broken up by the administration of bromide of potassium, gr. v–xl, the application of a mustard poultice to the back of the neck, and a hot foot-bath continued from twenty minutes to half an hour.

The *atropiæ sulphas* is an invaluable agent in soothing the pain of an irritable pulp. If severe inflammation has not supervened, few instances will not be entirely relieved by the following:

318. R.	Atropiæ sulphatis,	gr. vj.	
	Aquæ destillatæ,	f. ʒj.	M.

Saturate a small piece of cotton, and lay in the cavity, which should be previously well cleaned.

In the odontalgia of gout, *vinum colchici radiceis*, gtt. xx, three or four times a day, may be depended on. In rheumatism no combination seems better than the following. Its administration in the plethoric should be preceded by a free purging with a saline cathartic:

319. R.	Potassii iodidi,	ʒ ss.	
	Tincturæ colchici radiceis,	f. ʒ ss.	
	Extracti belladonnæ,	gr. vj.	
	Tincturæ guaiaci compos.,		
	Aquæ cinnamomi,	āā f. ʒj.	M.

A tablespoonful three times a day in a little water to an adult; if it act too freely on the bowels, add opium, q. s.

Radical Treatment.—This is accomplished by destroying the pulp by means of escharotics. No better formula for a destructive nerve-paste can be given than this:

320. R.	Acidi arseniosi,	āā	gr. x.
	Morphiæ acetatis,		q. s.
	Creasoti,		

To make a thick paste.

In very irritable conditions, it might be advisable to substitute sulphate of atropia for the sulphate of morphia. The effect of this application must be carefully watched. As a rule, the arsenic is not to be left in the adult tooth longer than fifteen hours, when it is to be carefully removed.

3. *Disease of the Periodontem*.—This is generally periodontitis. In all ordinary cases, when seen in its early stages, the following routine treatment will seldom fail: Place the feet of the patient in very hot

water until the patient grows faint or breaks out in a perspiration. Apply just in front of the ear, a fly blister of the size of a silver dime piece, and upon the nape of the neck a second, the size of a silver dollar. Internally, give:

321. R. Potassii bromidi, gr. xxv.
Tinct. veratri viridis, gtt. v. M.
For one dose every four hours.

Lance the gums freely with a very sharp lancet, and afterwards keep cotton applied, saturated with the fluid extract of *Hamamelis Virginica*. In the plethoric, in addition to the above course, half an ounce of the sulphate of magnesia may be given in a tumbler half full of water.

As adjuncts, leeches may be occasionally employed with advantage. They may be applied directly to the gum, or to the outside of the jaw.

A very simple plan of treating incipient periodontitis, and which will frequently be followed by immediate relief, consists in making a minute blister upon the gum overlying the affected root, through an application of the saturated tincture of iodine.

An acute periodontitis resisting the means here suggested, the attack increasing in severity, the surgeon finds himself compelled to abandon antiphlogistics, the indication being to advance the condition to the suppurative point as quickly as possible. To this end, heating and exciting medicaments are to be employed; warm water is to be held in the mouth; or a weak dilution of the tincture of capsicum, about twenty-five drops to a tumbler of warm water, may be used in the same way. The domestic application of a roasted split fig to the gum increases the heat of the parts, and invites suppuration to the surface to which it is used.

4. *Confinement of Pus and Gas in the Pulp Cavity.*—The common treatment in all these cases is to remove the tooth, or else to drill an opening into the pulp cavity.

5. *Granules of Osteo-dentine in the Pulp.*—Drilling into the affected tooth and destruction of the pulp, or else extraction, are the only remedies.

6. *Sympathy.*—Sympathetic toothache may be associated with decay in other teeth, or with lesions in other organs, most commonly the ear, the uterus, or the stomach, in the order named. The erring organ once ascertained must receive the treatment.

7. *Recession and Absorption of the Gum and Alveolus.*—Toothache from this cause is not acute or severe, but rather dull. Little can be done, extraction proving usually necessary. The fluids of the mouth should be tested, and acids or antacids administered as required. One can use lime-water in one direction, and very dilute citric acid in the other. Recession sometimes comes from the employment of non-soluble dentifrices, recognizable from the presence of their particles at the edges of the gums. Turgid gums may be led to contract by free bleeding, secured through occasional scarifications.

J. FOSTER FLAGG, M. D., D. D. S., OF PHILADELPHIA.

As an escharotic paste for destroying the nerve, this practitioner prefers the following formula:

322. R. Acidi arseniosi, gr. v.
Morphiæ acetatis, gr. x.
Olei caryophylli, gtt. x. M.
For an escharotic paste.

For this substitution of oil of cloves for creasote, he argues that the latter was added for the purpose of alleviating the pain which is a frequent concomitant of the arsenical irritation. But this is still better attained by the oil of cloves, as this is but very slightly if at all escharotic, and possesses a very marked power of obtunding the sense of pain. (*The Dental Cosmos*, July, 1877.)

A favorite odontalgic with Philadelphia dental surgeons is:

323. R. Tincturæ iodinii,
Liquoris plumbi subacetatis diluti,
Tincturæ opii,
Chloroformi, āā f. ʒ ij. M.
Apply upon cotton.

Gelsemium rarely fails to give decided and lasting relief in cases of neuralgic pains in the face and jaws, associated with carious teeth, gtt. x-xx of the fluid extract three or four times a day.

324. R. Aluminis, ʒ ij.
Etheris nitrici, f. ʒ viij. M.
Said to be an effective application in toothache.

325. R. Aluminis, ʒj.
 Vini, Oj.
 Tinct. cinchonæ, f.ʒ ss.
 Tinct. myrrhæ, f.ʒ ij.
 Mellis rosæ, f.ʒ ij. M.

As a gargle and mouth wash when the gums are spongy and ill-conditioned, and manifest a tendency to recede from the teeth.

Mr. JAMES MERSON, L. D. S., in the *British Journal of Dental Science*, 1878, states that the following formula will prevent the pain of tooth extraction. Hundreds of patients told him they did not feel the pain:

326. R. Chloroform pur., ʒ iij.
 Tr. aconiti (Fleming's), ʒ ij.
 Tr. capsici, ʒj.
 Tr. pyrethri, ʒ ss.
 Ol. caryoph., ʒ ss.
 Gum camph., ʒ ss. M.

The tooth and surrounding gums are to be previously dried, and then four or five drops of this applied with cotton wool. Then without delay use the forceps, but the instrument *must be warmed*. This is most important. For toothache, a pellet of cotton wool soaked in the above, and introduced into the cavity, will give speedy relief.

The following odontalgics are recommended by various writers:

327. R. Tincturæ aconiti, f.ʒ ss.
 Tincturæ benzoini, f.ʒ ij. M.
 Immerse a piece of cotton in this liquid, and introduce it into the cavity of the aching tooth.

328. R. Chloroformi, ʒ ss.
 Creasoti, āā
 Vini opii, f.ʒ ss.
 Tincturæ benzoini, f.ʒ ijss. M.
 Immerse a piece of cotton in this liquid, and introduce it into the cavity of the aching tooth.

329. R. Chloroformi, f.ʒ iss.
 Vini opii, f.ʒ ss.
 Tincturæ benzoini, f.ʒ ijss. M.
 To be introduced by means of cotton into the cavity of the aching tooth.

330. R. Tincturæ arnicæ, f.ʒ v.
 Vini opii, m̄ xv.
 Aquæ destillatæ, f.ʒ x. M.
 This mixture is to be held in the mouth for several minutes, to relieve the pains occasioned by general toothache.

APHTHÆ AND STOMATITIS.

JAMES E. GARRETSON, M. D., D. D. S.

Occurring in connection with acute diseases, apthæ usually disappear with the condition which excited them; but appearing in connection with dyscrasic diseases, (see chap. XV.,) they often give the practitioner the greatest anxiety and trouble.

Acute apthæ, as manifested in *cancrum oris*, *gangræna oris*, and follicular inflammation, demand the most attentive local treatment. Alterative and soothing applications are what are required, as:

331. R. Cupri sulphatis, gr. v-xxx.
 Aquæ, f.ʒj. M.
 For a lotion; an excellent application.

Or:

332. R. Tincturæ ferri chloridi, f.ʒj.
 Quinæ sulphatis, gr. xxv. M.
 To apply to the parts.

Or:

333. R. Pulv. cinchonæ rubræ,
 Cretæ precipitatæ,
 Acidi tannici, āā q. s. M.
 For a powder to be dusted over the parts.

Hydrochloric acid, applied by means of a feather or small brush, causes less pain than might be supposed, and is thought by many to be the very best local application that can be employed.

Combined with these applications are to be employed the more soothing means. Starch, gum and slippery-elm water are very serviceable. Tincture of *hamamelis*, much diluted, is a good preparation. Another is the *phenate of soda*.

The bowels should be kept laxative by oil, the saline cathartics or aloes. The neutral mixture of lemonade is useful in inflammatory conditions. For the diarrhœa frequently seen, a combination like the following is suitable.

334. R. Hydrargyri cum creta, gr. ij.
 Pulveris opii,
 Pulveris ipecacuanhæ, āā gr. j.
 Magnesiæ carbonatis, f.ʒ x. gr. xij. M.
 Make twelve powders. One of these, for an infant, every two hours.

Professor PENROSE uses the following very palatable and efficient combination in this and in the ordinary diarrhoea of summer, both in the infant and adult:

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|---------|------------------------|----|----------|----|
| 335. R. | Bismuthi subnitrat̄is, | āā | ʒij. | |
| | Myristicæ pulveris, | | ʒij. | |
| | Cretæ perparatæ, | | ʒij. | |
| | Syrupi zingiberis, | | f.ʒijss. | M. |

From twenty-five drops to a teaspoonful, according to age, repeated every two hours.

In treating *gangrena oris* we must endeavor to circumscribe the action by sloughing out the affected part by means of caustic; and this accomplished, we must stimulate the general system, correct functional disturbance, and use for the relief of the local sore such soothing means as seem indicated.

DR. ROBERTS BARTHOLOW.

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|---------|--------------------|--|------|----|
| 336. R. | Potassæ chloratis, | | ʒj. | |
| | Acidi carbonici, | | ʒss. | |
| | Aquæ destillatæ, | | ʒiv. | M. |

For a lotion. Apply directly to the affected part.

"There is no more effective remedy for *ulcerative stomatitis*, the stomatitis of nursing women, and *apthæ*."

J. COPELAND, M. D., LONDON.

This experienced practitioner recommends the following combinations:

- | | | | | |
|---------|-------------------------|--|---------|----|
| 337. R. | Acidi muriatici diluti, | | f.ʒss. | |
| | Tincturæ capsici, | | f.ʒiss. | |
| | Mellis, | | f.ʒv. | |
| | Infusi rosæ, | | f.ʒv. | M. |

To be used in stomatitis when the ulcers are slow in healing.

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|---------|--------------------------------|----|----------|----|
| 338. R. | Magnesi carbonatis, | | ʒj. | |
| | Ferri carbonatis, | | ʒiss. | |
| | Potassii iodidi, | | ʒij. | |
| | Tincturæ gentianæ compositæ, | | | |
| | Syrupi sarsaparillæ compositi, | āā | f.ʒijss. | M. |

Two teaspoonfuls a day in ulcerous stomatitis.

The French surgeons offer a variety of applications, which are the more useful, as it is unfortunately true that these ulcerations are frequently obstinate, and recur again and again, in spite of the most careful attention.

DR. MAURICE JEANNEL, OF PARIS.

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|---------|------------------|----|---------|----|
| 339. R. | Tincturæ myrrhæ, | | | |
| | Mellis rosæ, | āā | f.ʒij. | |
| | Liquoris calcis, | | f.ʒiss. | M. |

Touch several times a day the superficial ulcerations of the mouth.

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|---------|-------------------------|--|---------|----|
| 340. R. | Potassii chloratis, | | ʒijss. | |
| | Acidi muriatici diluti, | | f.ʒss. | |
| | Mellis rosæ, | | f.ʒvij. | |
| | Aquæ, | | f.ʒiss. | M. |

A useful gargle in ulceration and gangrenous stomatitis.

- | | | | | |
|---------|-------------------------|----|---------|----|
| 341. R. | Tincturæ myrrhæ, | | f.ʒij. | |
| | Acidi muriatici diluti, | | gtl. x. | |
| | Infusi rosæ, | | | |
| | Decocti cinchonæ, | āā | f.ʒij. | M. |

Use as an astringent and alterative gargle in inflammation of the mouth and throat.

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|---------|---------------------------|--|---------|----|
| 342. R. | Liquoris calcii chloridi, | | f.ʒij. | |
| | Mellis rosæ, | | f.ʒvij. | |
| | Aquæ destillatæ, | | f.ʒv. | M. |

Useful in ulcerous stomatitis and in fetid breath.

DR. N. GALLOIS, OF PARIS.

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|---------|-------------------|--|--------|----|
| 343. R. | Sodii boratis, | | ʒss. | |
| | Glycerinæ, | | f.ʒss. | |
| | Mellis despumatæ, | | f.ʒij. | M. |

Touch lightly with the solution, by means of a camel's-hair pencil, several times a day, the apthous ulcerations of the mouth. In case of the insufficiency of this remedy, resort to the nitrate of silver.

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|---------|--------------------------------|--|---------|----|
| 344. R. | Alumini et potassii sulphatis, | | ʒj. | |
| | Tincturæ opii camphoratæ, | | f.ʒiss. | |
| | Aquæ destillatæ, | | f.ʒiv. | M. |

A useful gargle in apthous stomatitis.

Or:

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|---------|---------------------------|--|---------|----|
| 345. R. | Tincturæ myrrhæ, | | f.ʒv. | |
| | Tincturæ opii camphoratæ, | | f.ʒiss. | |
| | Mellis rosæ, | | f.ʒj. | |
| | Decocti hordei, | | f.ʒv. | M. |

A useful gargle and wash in apthous inflammation of the mouth and throat.

RÉSUMÉ OF REMEDIES.

Acidum Carbolicum, gtt x.-xv, is used as an antiseptic mouth wash and gargle, especially when the fetor is marked. In ulcerous stomatitis its concentrated solution in glycerine may be employed, applied by means of a camel's-hair brush, as a mild caustic.

Acidum Hydrochloricum Dilutum. A useful application in aphthous ulcerations and in mild cases of cancrum oris, is:

346. R. Acidi hydrochlorici diluti, f. ℥j.
 Mellis, f. ℥j. M.
For local use.

Acidum Nitricum. In ulcerative stomatitis and aphthæ this acid may be administered in small medicinal doses with conspicuous benefit. It is also used as a caustic in severe cases of cancrum oris.

Alumen. Aphthous ulcers, showing but little disposition to heal, or a tendency to spread, may be touched with dried alum a few times a day with the best effect. In simple ulcerative stomatitis it should be applied with the finger a number of times a day.

Argenti Nitras applied in substance to the ulcers is spoken of by Dr. SYMONDS as an efficient and most decisive remedy in the severe forms of aphthous ulcerations of the mouth; but since chlorate of potash, in four or six or more grain doses, has very properly attained the reputation of a specific in aphthæ, the nitrate of silver and muriatic acid are only resorted to when this fails. NIEMEYER says the application of nitrate of silver is very painful, but it acts surely and quickly.

Calx. DEWEES found great advantage from lime-water and milk, in doses of one-quarter or one-half a teaspoonful four or five times a day in infantile aphthæ when there were green, but not liquid stools. When the diarrhœa is profuse, prepared chalk is preferable, or the chalk mixture may be used.

Calx Chlorinata is recommended in scorbutic and other ulcerations of the mouth, as a gargle, made of chloride of lime, grains 120 to 240, water one pint, and honey one ounce. It corrects the fetor, and stimulates the parts to healthy action. It should be filtered before the honey is added. The *liquor sodæ chlorinata* is more convenient, and perhaps as useful.

Cascarilla is recommended even in the gangrenous thrush of children, by UNDERWOOD, as an aromatic bitter and tonic, for the relief of the atonic dyspepsia and debility from which the disorder often arises, and for the diarrhœa which often attends it. By its aromatic properties, it even renders Peruvian bark more agreeable to the stomach, and increases its powers.

Chlorinii Liquor, or chlorine gas, dissolved in half its volume of water, when largely diluted, is a tonic, stimulant and disinfectant; one part of the gas to eight parts of water is the average strength for a gargle or lotion, and has been used successfully in aphthæ, stomatitis and cancrum oris.

Cupri Sulphas is an excellent old-fashioned application in the severer forms of cancrum oris, aphthous ulceration and gangrenous affections of the mouth.

SYMONDS used five grains finely powdered and thoroughly incorporated in half an ounce of honey. It has also often been applied in substance.

Cydoniæ Decoctio, or infusion of quince seeds, (120 grains of the seed to one pint of boiling water,) is a demulcent often used in aphthous affection and excoriations of the mouth. It is of but little value in itself, but is a good vehicle for other remedies.

Geranium Maculatum. The virtues of this plant depend upon the quantity of tannic and gallic acid contained in it. In aphthous affections, ulcerations of the mouth and throat, and relaxed states of the mucous membranes, it is often used as a wash or gargle, and a decoction in milk is often relied upon against the attendant bowel complaints. But it is better and more convenient to use small doses of tannin, both locally and internally.

Hydrargyrum Chloridum Corrosivum, gr. i-ij to aquæ Oj, is recommended by NIEMEYER.

Magnesia is used as an antacid and absorbent in aphthæ and aphthous ulcerations, especially when acid diarrhœa is present.

Mel, or honey, was employed by HIPPOCRATES to clean foul ulcers, and by DIOSCORIDES in fistulous ulcers and wounds, which were slow to heal. The Arabian writers dwell particularly on its advantages in affections of the mouth and fauces, and especially of the gums, particularly when mixed with vinegar. STILLÉ advises it in all cases in which a mild stimulant is required to change the character of ulcerated surfaces. In all ages it has been applied to the gums and buccal mucous membrane to remove aphthæ and slight pseudo-membranous deposits; but it is now usual to associate it with the borate of soda, or chlorate of potash, both of which materially increase its efficacy. The honey of roses and oxymel are said to be superior to honey alone. But in thrush or muguet, NIEMEYER says the domestic remedies, such as sprinkling the mouth with sugar, or painting it with borax and mel rosæ, are to be avoided, as they render the mouth sticky, and furnish new materials for decomposition, and do not at all prevent the re-development of thrush. VON MAACK advises it strongly in the aphthæ of chlorotic females, as, according to him, chlorosis depends upon an imperfect conversion of the products of digestion into sugar in the liver. (PETERS.)

Potassii Chloras is used in aphthous inflammation and ulceration of the tongue arising from anything which irritates the alimentary canal; also in diphtheria, cancrum oris, and gangrenous stomatitis. HUNT gives from 5 to 20 grains for children, and 30 to 60 grains for adults, daily, and uses a lotion of ℥j-ij in aq., Oj, as a wash; but these doses are too small in severe cases. It is the principal remedy in follicular stomatitis and aphthæ. Dr. HANNER was successful in seventy cases, with doses of 30 to 60 grains in twenty-four hours, in expediting the cure. It is particularly useful in ulcerative stomatitis, which commences by small ulcers on the inside of the cheeks or lips, or at the junction of the mucous membrane of the gums with the cheeks, or with the gums themselves, separating them from the teeth. These ulcers may become large and covered with a pultaceous pseudo-membranous deposit, assuming an almost gangrenous appearance and exhaling a fetid smell. Drs. HUNT and HAWKINS first found it a

prompt and certain remedy in doses of 20 to 60 grains a day. WEST regarded it as almost specific; MEIGS seldom found it necessary to resort to any other means, and authorities innumerable may be cited to the same effect. WOOD says it almost always operates like a charm in the follicular and aphthous stomatitis of children. It acts both locally and constitutionally, for it can be detected in ten minutes after its administration in the urine, in which fluid it continues to be present for fifteen to forty-eight hours after each dose. RINGER says it is of signal service in various affections of the mouth, but particularly so in ulceration of the edges of the gums, which is generally limited to one side of the mouth, but then affects both the upper and lower jaws, and also that part of the tongue and cheeks coming in contact with the ulcerated gums. The influence of the chlorate is almost magical. In one or two days it cleans the dirty-looking ulceration, and heals it in a few days more. The chlorate of soda is more soluble than the chlorate of potash, and is at least equally serviceable.

Quinia proves highly serviceable in aphthous ulcerations when the patient is much debilitated; but the muriate tincture of iron may surpass it. Pulv. rhei and magnes. carb., āā gr. x to xv; spts. ammon. aromat., ℥xx, and aq. cinnamomi, ℥ss, is useful in the aphthæ of children when given in small doses.

Sodii Bicarbonas proves effectual when given with a few grains of rhubarb or chalk.

Sodii Biborax, or borax, is a popular and efficient remedy. WATSON gave mel boracis (℥j to ℥j of honey) with syrup of poppies equal parts, in the aphthous ulceration which attends the advanced stages of phthisis, and in cracked tongue. STILLÉ says that one of the most ordinary uses of borax is to remove the aphthæ which affects the mouth, fauces and anus of nursing children, apparently dependent upon an undue generation of acid in the primæ viæ. It should be given internally, in doses of 3 to 10 grains a day, and associated with magnesia in some aromatic water; while a weak solution, or the glycerole of borax, is applied frequently to the mouth. RINGER advises the glycerine of borax, 1 to 8, in aphthæ and the curdy exudation of thrush, or muguet.

PHARYNGITIS (SORE THROAT.)

J. SOLIS COHEN, M. D., OF PHILADELPHIA.

The treatment of the more usual varieties of sore throat is given as follows by this writer. (*Medical and Surgical Reporter*, October, 1874.)

For *simple inflammatory sore throat*, he would confine the patient to the bed or lounge, lightly covered so as to equalize the heat of the

body. At the outset, an emetic is often of great service, especially if a meal has been recently taken. Mustard in water usually serves the purpose better than anything else. A gentle laxative should follow, to remove the accumulations in the intestinal canal. The free use of demulcent drinks should be allowed, and bits of ice in the mouth, when cold is agreeable, will soothe the pain in the throat. Sponging the entire surface of the body with acidulated or alcoholized tepid water will allay the heat of the skin, if excessive. In more severe inflammatory cases, *tincture of aconite*, gtt. i-iiij, every one, two or three hours, will be advantageous.

Locally, sprays of dilute solutions of alum, carbolic acid, tannin, or sulphate of copper, relieve the uneasiness in a few hours. Compresses wrung out in cold or tepid water may be bound round the neck. When the uvula is elongated or œdematous it should be punctured; excision is never necessary.

Phlegmonous sore throat, tonsillitis or quinsy, requires to be treated on antiphlogistic principles. An emetic of mustard, a saline laxative, one or two-drop doses of aconite, and the inhalation of steam from water impregnated with hops, chamomile flowers, the watery extract of opium, belladonna or conium, or with compound tincture of benzoin, will be the earlier measures. Warm and moist external applications generally give great relief. Gargles are not often of value, because their proper use entails too great pain. Medicated sprays, however, are very efficient local applications. Rather strong aqueous solutions are preferable, as:

347. R. Aluminis,
Acidi tannici
Zinci sulphatis,
Cupri sulphatis,
Aquæ,
For atomization.

āā gr. xx-xxx.
f. ℥j. M.

The sulphate of copper seems the most generally efficient. The topical application of the nitrate of silver can very rarely be done in a satisfactory manner.

Powders of alum, tannin, krameria, etc., in various dilutions, may be blown upon the parts with a tube.

If the tonsils are very much inflamed, great relief will follow scarification or incision, the bleeding being encouraged by mouthfuls of warm water.