

## GLANDERS (FARCY.)

MR. T. HOLMES.

This surgeon recommends that if any one handling a horse supposed to be glandered, gets any of the matter into a crack in the skin or on the naked hand, the same prompt and decisive measures must be adopted as in serpent bites or those of rabid animals. When the disease breaks out, the indications are, first, to disinfect and deodorize the discharge; and, secondly, to support the patient through the fever. For the former purpose, the following *creosote lotion* may be used:

162. R.	Creosoti,	℥. xxiv.	
	Acidi acetic,	℥. xlvij.	
	Aquæ,	f. ʒ. vj.	M.

Turpentine embrocations are also valuable. The second indication is to be carried out by free and early incisions, and by the judicious use of stimulants and tonics.

MR. ERASMUS WILSON, OF LONDON.

For the eruption accompanying glanders, this author recommends:

163. R.	Argenti nitratis,	gr. xx.	
	Etheris nitrici,	f. ʒ. j.	
	Apply locally.		

When the nostrils are affected, the following may be used:

164. R.	Zinci chloridi,	gr. ii-vj.	
	Aquæ,	f. ʒ. j.	M.
	For nasal injection. Use night and morning, taking care that none of it is swallowed.		

## HYDROPHOBIA.

The current statement in surgical text-books is that in hydrophobia all remedies are unavailing; that as soon as the symptoms declare themselves, hope may as well be given up; and that, practically, a euthanasia is as much as medical art, at its best, can accomplish.

On the other hand, there have been reported by excellent authorities, at various times, cases having all the symptoms of hydrophobia, and

following the bite of a rabid animal, which have recovered under treatment. That all of these were simply manifestations of terror, hysteria or mimetic nerve disease, is a pure assumption by writers who never saw the cases. The opinion, therefore, is allowable and probably correct, that a limited number of cases of hydrophobia have been cured, and that the disease, in a few instances, either has a tendency to recover, or else may be brought to a favorable termination by appropriate remedies.

The correct opinion on this subject is expressed by the learned and eminent Dr. JOHN MASON GOOD, in the following words, quoted in HOLMES' *System of Surgery*:

"It is highly probable that a spontaneous cure may be occasionally effected by the strength of the constitution or the remedial power of nature alone. The fact appears to be that the disease requires about six or seven days to run its course, at the expiration of which period the system seems to be exonerated, by the outlet of the salivary glands, of the poison with which it is infected. And hence, if by any means it be able to carry itself through this period without being totally exhausted, it will obtain a triumph over the disease. Our grand object must therefore be to keep the patient alive, and to prevent a fatal torpidity in the sensorium for a certain number of days, at any expense of stimulants or of subsequent debility." (*Study of Medicine*, Vol. III, p. 303.)

MR. YOUATT.

The preventive treatment recommended by this eminent veterinarian has been strongly endorsed by such surgeons as Dr. J. MASON WARREN, of Boston, and NATHAN R. SMITH, of Baltimore. He says:

"The wound should be thoroughly washed and cleansed as soon as possible after the bite is inflicted; *no sucking* of the parts, as is advised by many for the purpose of extracting the poison, as the presence of a small abrasion on the lips or the interior of the mouth would most assuredly subject the parts to inoculation. If the wound is ragged, the edges may be taken off with a pair of sharp scissors. The wound must then be thoroughly cauterized with *nitrate of silver*, being sure to introduce the caustic into the very depth of the wound, so that it will reach every particle of poison that may have insinuated itself into the flesh. If the wound is too small to admit of the stick

of caustic, it may be enlarged by the knife, taking care, however, not to carry the poison into the flesh cut, which can be avoided by wiping the knife at each incision. Should the wound be made on any of the limbs, a bandage may be placed around it during the application of these remedies, the more effectually to prevent absorption by the veins. Nitrate of silver is a powerful neutralizer of specific poison, and the parts will soon come away with the slough; no dressings being necessary, except, perhaps, olive oil, if there should be much inflammation of the parts. If the above plan be pursued, the patient need be under no apprehension of the result, but make his mind perfectly easy on the subject."

DR. SHINKWIN, M. R. C. S. E., SURGEON TO THE CORK INFIRMARY,  
IRELAND.

This writer, in a recent treatise on the disease, (*Dublin Medical Journal*, Feb., 1876,) reviewing the remedial agents employed in the treatment of hydrophobia, enumerates no less than 228 vegetable substances; and under the heading of "acids, alkalies, salts, bases," etc., 46; besides a host of such nauseous doses as "pounded ants, badger soup, the excrement of a calf, the brains and comb of a cock, the eyes of a crab, coral, tail of a shrew, shells of the male oyster," etc., etc. The preliminary treatment of the wound should be that hereafter given for the bites of venomous serpents.

"In all cases of bites caused by dogs, wolves, cats or foxes," observes Dr. SHINKWIN, "the parts should, if possible, be deeply and completely excised, and the cut surfaces freely, even brutally, cauterized." With regard to the cauterizing agent, he thinks that "a preference should be given to those that are fluid or deliquesce rapidly, as their action is more evenly diffused over the entire surface than when nitrate of silver or the red-hot iron is used." And he is of opinion that "in all cases, anæsthesia should first be produced by chloroform, as the action of the caustic on the recent and often extensive cut surface often produces a prolonged and even dangerous agony." He states that if a person has been bitten by a dog in whom there are good reasons for expecting madness to exist, excision, or even amputation of the part, should be performed, if this can be done "without endangering life or depriving the individual of a member essential to the attainment of his livelihood."

Difference of opinion appears to exist as to the utility of excising

the cicatrix. Some consider that the poison of hydrophobia circulates in the blood, and that it would be as reasonable to suppose we could prevent the effects of syphilis—another form of chronic blood-poisoning—by excising the cicatrix of a Hunterian chancre as destroy the poison of hydrophobia by excising the cicatrix left by the wound.

"When the disease has been developed," says Dr. SHINKWIN, "the treatment by *transfusion of blood* appears to be the most rational and the most likely to succeed." He mentions that this operation was practiced by Dr. EYE, of Suffolk, in 1792, who bled a man aged seventeen until blood no longer flowed, and then transfused into him blood from two lambs, and the patient completely recovered.

MR. G. D. M'REDDIE, OF WANSTEAD, ENGLAND.

This surgeon reports (*Indian Medical Record*, 1876,) the cure of a case of hydrophobia by rapid salivation induced by the fumes of calomel. The fumigation should be conducted as follows: The patient is to be undressed, seated on a cane-chair, and the whole body up to the neck enveloped in blankets. Under the chair a Langston Parker's lamp (Savigny) is placed. In this a spirit-lamp, holding the required amount of spirit, is protected in a cage, on the top of which is a receptacle for the calomel (twenty or thirty grains) and a saucer for water. The flame beneath boils the water and volatilizes the calomel. Moderate salivation, which is all that is required, may be induced in a quarter of an hour, and judiciously repeated if the symptoms seem benefited by the treatment.

DR. GRYMZALA, OF RUSSIA.

Dr. GRYMZALA, of Krivo Ozero, Podolie, (*Journal de Thérapeutique*, 1876,) claims to have successfully treated ninety-nine cases of bites by hydrophobic animals with the leaves of *Xanthium spinosum*. This drug possesses sudorific, sialogogue, and slight diuretic properties. The dose for an adult is 60 c. g. of dry powder of the leaves, repeated three times a day; half the quantity is sufficient for children under twelve years.

A fluid extract of *Xanthium spinosum* is now manufactured, and can be had from leading druggists in the United States.

DR. JOHN IMRAY, DOMINICA, WEST INDIES.

165. R. Chlorali hydrati, gr. xxx.  
Liquoris opii sedativi, (B. Ph.), gtt. x.  
Amyli, q. s. M.

For one injection. Repeat every hour until sleep is produced.

This author says (*Medical Times and Gazette*, May, 1876,) the power of these combined drugs in controlling and repressing spasmodic action is very remarkable. It appears as if a power stronger than that of the disease forcibly represses the morbid action, like a heavy weight placed on a spring, and if the pressure yields, the spring begins to rise; but being constantly maintained, the morbid nervous phenomena gradually give way, and finally the disease is vanquished.

Dr. MAXWELL (*Indian Journal of Medical and Physical Science*) recommends the following plan when premonitory symptoms are first observed 1. That the original cicatrix be freely laid open, and supuration from it speedily and freely produced and maintained for several months. 2. The nerves or nerve leading to the part are to be divided without delay, the more remote from the wound the better. 3. Free perspiration by the hot-air bath. 4. Bleeding from the arm to syncope in robust persons.

#### RÉSUMÉ OF REMEDIES.

*Amyl Nitrite*. The inhalation of this powerful anti-spasmodic was used in a case reported by Dr. CLEEMAN, of Virginia, with much benefit, but was not carried out, owing to the opposition of the patient.

*Cannabis Indica* is asserted by Professor POLLI, of Milan, to be the best palliative, though not curative.

*Chloroformum* is considered by Dr. HENRY HARTSHORNE to be the most satisfactory agent to promote the euthanasia, which he believes to be the extent of our ability in such cases. He administers it freely by inhalation all the time till death ensues.

*Curara*, see *Woorara*.

*Hydrargyrum Chloridum Mite*. Mr. McREDDIE reports a cure by calomel fumigations. (P. 171.) Another cure is reported in the *American Journal of the Medical Sciences*, Vol. XXXIX, p. 96, from drachm doses of calomel. It is reported by Dr. LIGGET. Another cure by the same means is recorded in the *Lancet*, Vol. VI, p. 213, American edition. This combination of authorities gives fair grounds for the belief that in some instances mercurials are really efficacious, and should encourage their further use.

*Jaborandi*. As the poison appears to pass out of the system by the salivary glands, the use of this powerful sialagogue is suggested.

*Oxygen*. Inhalations of oxygen have been found to relieve greatly the cyanosis and spasms. Dr. LASCHKEWITSCH (*Gazette Médicale*, Paris, 1872, No. L,) has administered inhalations of oxygen to a peasant who, ten weeks before, had been bitten by a mad wolf. The tetanic muscular contractions ceased, the cyanosis disappeared, and the exacerbations of violence gave place to a quiet, gentle condition. Notwithstanding the fatal result, (due, probably, to the inattention of the nurses, who discontinued the oxygen inhalations,) the author recommends the use of this agent to the attention of the profession.

*Pepsina*, if applied immediately to the wound, is said to have the power of neutralizing the poison of rabies. (Dr. A. V. FORGEY, *Cinn. Lancet*, June, 1878.)

*Scutellaria* has a popular reputation deserving of some consideration.

*Woorara*. In the *American Journal of the Medical Sciences*, July, 1876, Dr. B. A. WATSON, of Jersey City, N. J., reports a case by hypodermic injections of strychnia and woorara, a method which in other hands has failed. But generally the dose used has been too small. From one-fourth to one-half grain should be exhibited hypodermically every three hours, to have any positive effect. The following formula is proposed by Mr. Moss, as best meeting the requirements of the case:

#### HYPODERMIC INJECTION OF CURARA.

166. R. Curara, gr. j.  
Water, ℥ xij.  
Dissolve; let the solution stand forty-eight hours, and filter.

Using this solution, two-thirds, a half, third or quarter of a grain may be given in a whole number of minims. Of the other strengths likely to suggest themselves, viz., one in ten and one in fifteen, the first would only allow of a tenth, and a half a grain; and the second, of a fifteenth, a third and two-thirds of a grain being given in the same way. The accounts of the use of curara seem to indicate that the dose is from a quarter to half a grain.

*Caution*.—Curara requires to be handled with the utmost care. It should not be allowed to come in contact with a fresh cut or scratch. Two good rules would be: never to powder it in the dry condition, and never to touch it with the naked fingers.

*Xanthium Spinosum* is a recent aspirant for favor. (See page 171.)

#### EXTERNAL REMEDIES.

*The Vapor-Bath*. By various authors the use of the vapor-bath has been recommended as an efficient preventive. Dr. BUISSON, of Paris, relates that in his own case he succeeded in aborting the symptoms of an acute hydrophobic attack by a vapor or Russian bath. He recommends that it should be rapidly raised to a temperature of 57° Cent., then gradually to 63° Cent. (*Medical and Surgical Reporter*, April, 1869.) A case has been reported by Dr. HORACE MANLEY, of New York, which both the symptoms and history identify as one of undoubted hydrophobia, which was completely cured by bleeding to 30 ounces and placing for four hours in a vapor-bath heated to 140° Fah. (*Transactions of the American Medical Association*, Vol. IX., p. 335.)

*Tracheotomy* has been very strongly urged in this malady by Dr. WASHINGTON ATLEE, of Philadelphia. (*Trans. Am. Med. Assoc.*, Vol. IX, p. 220.) He believes the spasms of the glottis, the constriction of the chest, the difficulty of deglutition, the sense of suffocation and the intense anxiety and distress would vanish, and the administration of remedies and the taking of drink be rendered comparatively easy. Professor PACCANTI, of Pisa, performed this operation in a case, but the patient died with symptoms of paralysis of the muscles of respiration.

### INSECTS, STINGS OF.

A careful examination of the wound should be made with a pocket lens, and any remnant of the sting be removed with a pair of fine-pointed forceps. An application of some soothing or neutralizing fluid should then be made by dipping in it cotton-wool and applying to the part. Many substances are popular for local use. *Spirits of ammonia, laudanum, vinegar, tincture of camphor, eau de cologne, lime water, ether*, have been employed. If there is prostration, stimulants should be exhibited. When the mouth or throat is the part stung, there is danger of spasms of the rima glottidis. Warm flannels should be applied to the neck, and inhalations of warm ether employed.

The oil of *lobelia* is said to give prompt relief. A solution of acetate of lead is effectual; also dilute carbolic acid, as:

167. R. Acidi carbolici, f. ʒj. M.  
Olei oliivæ, f. ʒj.

### RHUS TOXICODENDRON.

The poison oak, *Rhus toxicodendron*, and the poison ivy, *Rhus toxicodendron, var., radicans*, are so common over the greater portion of the United States, that cases of poisoning from them are exceedingly frequent.

The irritant action of the toxicodendric acid may be prevented by rubbing thoroughly the hands with soft soap or other active alkali before touching specimens. Of local applications, Professor J. C. WHITE, of New York, recommends the following:

168. R. Hydrarg. chlor. mitis, ʒj. M.  
Aquæ calcis, ʒj.

Applying as an evaporating lotion to the affected parts for half an hour or an hour at a time, two or three times a day.

Or use the following in the same manner:

169. R. Hydrarg. chlor. corrosivi, gr. j-ij. M.  
Aquæ, f. ʒj.

Or,

170. R. Plumbi acetatis, ʒj. M.  
Aquæ, ʒj.

Employ as cold lotion to the part.

Dr. FREDERICK HORNER, of Virginia, has found prompt and satisfactory results from the yellow wash:

171. R. Hydrarg. chlor. corrosivi, gr. xx. M.  
Aquæ calcis, f. ʒv.

Shake well, and apply with soft pieces of linen.

(This should not be used on children, the sublimate being liable to absorption; and all sublimate solutions should be applied with the utmost caution, as they often irritate extremely.)

Dr. S. A. BROWN, U. S. N., recommends as a specific the following. (*N. Y. Medical Record*, 1878):

172. R. Brominii, gtt. x-xx. M.  
Olei oliivæ, f. ʒj.

Rub gently on the affected part three or four times a day.

Dr. JAMES S. BAILEY, of New York, has found the following prescription to cure generally at the first trial. (*Medical and Surgical Reporter*, April, 1871):

173. R. Hydrarg. chlor. corrosivi, ʒss. M.  
Aquæ destill., f. ʒij.

Mix and add:

Ammonia muriatis, ʒj. M.  
Potassii nitratis, ʒij.

Apply three times a day with a camel's-hair pencil, then discontinue and use the *Unguentum hydrargyri*.

Other applications which have been commended are:

174. R. Spiritus ætheris nitrici dulcis, q. s.  
Apply freely to the parts after breaking the vesicles.

175. R. Aluminis,  $\mathfrak{z}\text{ij-iv}$  M.  
Aque,  $\text{f.}\mathfrak{z}\text{vj}$ .  
Use freely as a lotion.
176. R. Cupri sulphatis,  $\mathfrak{z}\text{i}$  M.  
Aque,  $\text{f.}\mathfrak{z}\text{vj}$ .  
Use as a lotion.
177. R. Sodii bicarbonatis, q. s.  
Powder thoroughly and rub well the parts, or use it in strong solution. An excellent application.
178. R. Boracis,  $\mathfrak{z}\text{i}$  M.  
Glycerinae,  $\text{f.}\mathfrak{z}\text{j}$ .  
Apply to the parts.
179. R. Aque ammoniæ,  $\text{f.}\mathfrak{z}\text{ij}$  M.  
Olei olivæ,  $\text{f.}\mathfrak{z}\text{j}$ .  
Use locally.

DR. EDWARD HARTSHORNE, OF PA.

180. R. Extracti fluidi serpentariæ, q. s.  
To be painted upon the eruption. It appears to kill it at once.

Dr. TYDINGS, of Maryland, has found the following very efficacious. (*Maryland Medical Journal*, Dec., 1878):

181. R. Extracti belladonnæ alcoholici,  $\mathfrak{z}\text{i}$  M.  
Aque,  $\text{f.}\mathfrak{z}\text{ij}$ .  
Apply to the parts with a brush or feather.

Internal remedies are not very generally exhibited. Prof. L. P. YANDELL, JR., of Louisville, Ky., states (*Louisville Medical News*, July, 1876, his opinion that *quinine*, given as it is given for intermittent fever, is infallible in eradicating the malady, and its influence is visible within twenty-four hours. He prescribes:

182. R. Quiniæ sulphatis,  $\mathfrak{z}\text{j}$ .  
To be divided into twelve pills. Two to four pills daily until the disease fades.

When the leaves of the rhus have been eaten by mistake, a strong infusion of the bark of the root of *sassafras* has relieved; and the oil of *sassafras* may be applied locally. (*Druggists' Circular*, Aug., 1879.)

Local applications he does not deem essential to the treatment. The best he considers to be corrosive sublimate in two or four-grain solutions.

In Louisiana, according to Dr. W. W. Dunn, (*Medical and Surgi-*

*cal Reporter*, March, 1871,) a decoction of the leaves of the cottonwood, *Populus Angulata*, is esteemed to be a specific in rhus poisoning. It may be taken internally *ad libitum*.

### SNAKE BITES.

The immediate treatment of the bites of venomous serpents and other dangerous poisoned bites, embraces the following steps, to be attended to in the order given:

1. *Ligation* of the part or limb as tightly as possible, a short distance above the wound. Drs. BRUNTON and FAYRER recommend that the bandage, after the wound is dressed, should be loosened only an instant or two at a time, so that the poison thus absorbed into the general circulation may be excreted by the kidneys before another quantity enters the blood.

2. *Washing* the part thoroughly with water, or soap and water.

3. *Excision* of the tissues in the immediate vicinity of the bite; or, if this is not practicable, enlargement of the wound and scarification.

4. *Suction*, either by the mouth or a cupping-glass. This should be continued as long as any blood can be obtained, say twenty minutes to half an hour.

5. *Cauterization* with nitrate of silver, chloride of zinc, carbolic acid, the mineral acids or the actual cautery, the most convenient form of which is often a live coal or the incandescent end of a dry stick.

The subsequent dressing may be of warm water, medicated with laudanum and acetate of lead; cloths dipped in olive oil; a light cataplasm medicated with ammonia; cold compresses or ice.

The general constitutional treatment should pursue the following course:

1. *Stimulation* must be resorted to early and freely. In rattlesnake bites, for example, two ounces of whisky should be given every ten minutes until signs of inebriation appear. A powerful diffusible stimulant is the spiritus ammoniæ aromaticus; it may advantageously be combined with the alcohol, the amount given being a full dose,  $\text{f.}\mathfrak{z}\text{j}$ , every twenty minutes. Anodynes may be added, or given by the rectum, to allay pain and fear.

2. *Antidotes* are called for, when any such are known. The

formulæ of a number of compounds alleged to be of this character will be given below.

3. *Enforced Exercise* is of the utmost importance when there is threatening stupor and numbness. It should be violent and prolonged, as running, vigorous rowing, etc.

4. *Artificial Respiration*, by any of the approved mechanical methods, or by employing galvanism or electricity, should be resorted to when the lethargic action of the poison threatens the respiratory movements. The patient may thus be kept alive until stimulants and antidotes overcome the venom. Sinapisms to the epigastrium, and the cold douche, poured from a height of six or eight feet upon the head, are also efficient means to this end. Dr. FAYRER recommends artificial respiration to be kept up for hours, and even days, believing that if this is done the system may combat and throw off the poison by excretion.

PROF. HALFORD, M. D., OF AUSTRALIA.

The treatment recommended by this surgeon in poisonous bites from venomous serpents, spiders, etc., is the injection of the liquor ammoniæ fortior, diluted with two or three times its bulk of water. Of this mixture, 20 to 30 drops are to be injected into one of the large veins, as near to the bite as possible. If the symptoms are relieved, but the patient seems still in danger, the injection may be repeated as soon as the operator deems it prudent.

Although this method of treatment seemed to fail in Professor FAYRER's hands, in India, there can be no doubt it has repeatedly succeeded in Australia and America. Mr. T. HOLMES says on this subject: "I must say that to my mind it is quite clear that Professor HALFORD's treatment, whether sufficiently energetic or not to combat the virus of the most deadly serpents, has acted beneficially and has saved life in many of the bites of Australian serpents, and deserves to be fully tested in those of other countries." (*System of Surgery*, 1876.) The more recent reports from Australia do not fully bear out those previously sent, but there is no reasonable doubt that ammonia in this form would act as a powerful revulsive, and no hesitation should be had in resorting to this measure when called for.

As used by Dr. A. S. TODD, of Virginia, (*Trans. Va. State Med. Soc.*, 1872,) the liquor ammoniæ is mixed with flaxseed meal or slippery elm bark, to make a cataplasm, and applied to the part;

while internally the patient was given liquor ammoniæ aromaticus f. ʒj, in a wineglass of water, every three hours.

Professor BRAINARD, of Chicago, made a series of experiments with the following:

183. R.	Iodinii,	gr. v.	
	Potassii iodidi,	gr. xv.	
	Aquæ destillatæ,	f. ʒj.	M.

Use as hypodermic injection.

His directions are to place a cupping-class over the wound, and pass the nozzle of the syringe beneath the skin under the edges of the cup, throwing in sufficient of the above to "infiltrate the tissues."

#### BIBRON'S ANTIDOTE.

184. R.	Brominii,	f. ʒ ijss.	
	Potassii iodidi,	gr. ij.	
	Hydrargyri chloridi corrosivi,	gr. j.	
	Alcoholis diluti,	f. ʒ xxx.	M.

A teaspoonful in wine or brandy, repeated p. r. n. after the bite of a rattlesnake. This had at one time considerable fame, but has of late years fallen out of confidence. Various observers on the western plains have testified to its value.

#### RÉSUMÉ OF REMEDIES.

*Alcohol* in some form ranks among the most important antidotes in the bites of venomous serpents. (P. 177.) It should be given freely until the patient shows decided symptoms of intoxication. Distilled spirits, whisky, gin or brandy is the best form.

*Ammonia*. Both as a local and internal remedy, the spirits of ammonia are constantly used in poisonous bites and stings. (See above, p. 178.) The celebrated *Eau de Luce*, named from the island Santa Lucia, is the *spiritus ammoniæ succinatus*.

185. R.	Mastich,	f. ʒ iij.	
	Alcoholis,	f. ʒ j.	
	Ol. lavand.,	gtt. xiv.	
	Ol. succin.,	gtt. iv.	
	Spiritus ammoniæ,	f. ʒ xx.	M.

Macerate the mastich in the alcohol, pour off the clear tincture and add the rest. The dose is from gtt. x to f. ʒj.

The *Spiritus Ammoniæ Aromaticus* should be given in f. ʒj doses frequently repeated; or the *Liquor Ammoniæ* in ʒss, well diluted, every ten or fifteen minutes.

*Antimonii et Potassii Tartras*. The cobra bite has been successfully treated in India by ligation and scarification, followed by:

186. R. Antimonii et potassii tartratis, gr. ij.  
Aquaë, f.  $\frac{3}{4}$  viij. M.  
A wineglassful every fifteen minutes till free vomiting is induced.

The convalescence is aided by quinine.

*Arsenicum.* In various forms, arsenic has enjoyed a high repute in serpent bites in India. It is given as Fowler's solution, or as the *Tanjore pill*:

187. R. Acidi arseniosi, gr. iv.  
Piperis nigri, ℥ij.  
Acaciæ, q. s. M.  
Make sixty pills.

These are given up to the limit of tolerance.

*Baptisia Tinctoria.* The wild indigo plant is a popular remedy for rattlesnake bite among the mountains of the Middle Atlantic States. The leaves are applied as a poultice to the part.

*Ipecacuanha.* The following is a favorite treatment for rattlesnake bite in Guiana:

188. R. Pulveris ipecac., gr. xx-xxx.  
Pulveris capsici, gr. v. M.  
Make one dose.

Aid the vomiting and diaphoresis by abundance of warm water. After the emesis ceases, alcohol should be given to the extent of slight inebriation. Local means are not employed.

*Pareira.* In Brazil, the root of *Pareira brava* is used in the bites of poisonous serpents. A vinous infusion is taken internally, while the bruised leaves of the plant are applied to the wound.

*Simaba Cedron.* This plant, indigenous to Central America, has a considerable reputation as a specific antidote for venomous bites. The fruit, a sort of bean, is the part used. Sufficient has been said of it to justify further and more ample trials than have yet been made of its merits.

*Tabacum* is an antidote to many poisonous bites, and is popularly used in the South and West for this purpose. A poultice of tobacco is applied to the bitten part, and sufficient is swallowed to nauseate the patient. It is considered that the sufferer is safe, so long as he can be kept nauseated.

## VI. LESIONS FROM HEAT AND COLD.

*Burns and Scalds (Scalds of the Glottis and Larynx)—Lightning Stroke—Sun Stroke—Frost Bite and Frozen Limbs.*

### BURNS AND SCALDS.

MR. T. HOLMES, ENGLAND.

The treatment of burns and scalds is directed, first, to the immediate lesion; and, second, to its after consequences. At the time of the accidents, the main indications are: 1. To exclude the air from the burn and surface by some local application. 2. To allay pain. 3. To bring about reaction by the judicious use of stimulants.

The exclusion of air can be accomplished in a variety of ways. Common flour dredged on the part is a very good and handy application in superficial scorches. Carron oil and oil of turpentine are valuable when the surface of the skin is quite destroyed. Probably nothing is better than swathing the part in thick layers of cotton-wool, which is prevented from sticking to the burnt surface by covering this with folds of soft linen, anointed with ceratum calaminæ or other simple ointment. After a few days, when the discharge becomes foul, this should be renewed and the wound dressed with carbolized oil, beginning with a weak solution, as:

189. R. Acid. carbolic., ℥j.  
Olei olivæ, f.  $\frac{3}{4}$  iij. M.

This may be increased in strength as required. As the sloughs separate, they should be removed at once, so that the fetor be diminished.

At the time of the accident, opium should be liberally given, and brandy to the extent of bringing about a gradual reaction. Diarrhœa must be checked by opiates, and vomiting by creosote and prussic acid. Burns ought not to be dressed frequently; at the same time, the surgeon must guard against fetor and the accumulation of pus.

DR. JOHN MORRIS, OF BALTIMORE.

Various judicious suggestions are given by this writer in reference  
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