

GROUP VI.
Agents Influencing the Character of the Blood.

CHAPTER 1.
Alteratives with Antiseptic Properties.

ECHINACEA
BAPTISIA
AILANTHUS
BERBERIS
DULCAMARA
SARSAPARILLA
SCROPHULARIA
ANACARDIUM
CASCARA AMARGA

ECHINACEA. ***Echinacea angustifolia.***

Synonym—Black Sampson, cone flower, purple cone flower.

PART EMPLOYED—The root.

This plant grows throughout the central and western portions of the United States, especially on the elevated tablelands, and in the northern portions, where it was known to the Indians as a cure for snake poison.

There is considerable confusion concerning the identity of the active medicinal species of *echinacea*. The *echinacea purpurea* of the Eastern States has been thought to be identical with the *echinacea angustifolia* of the Western States. It is often used for the same purposes, but is universally disappointing. King introduced it into his dispensatory as *rudbeckia purpurea*.

PREPARATIONS—

Fluid Extract of the root, miscible with water without material precipitation. Dose, one-fourth to one-half fluid dram.

Specific Medicine Echinacea. Dose, five to forty or even sixty drops.

Echafolta is a purified, assayed form of Echinacea. The dosage of

both is the same. Externally or for surgical purposes it is advised as superior to the other preparations of *Echinacea*. It is prescribed for the same conditions.

For from twenty to twenty-five years, *Echinacea* has been passing through the stages of critical experimentation under the observation of several thousand physicians, and its remarkable properties are receiving positive confirmation. As yet, but few disparaging statements have been made. All who use it correctly fall quickly into line as enthusiasts in its praise; the experience of the writer is similar to that of the rest, the results in nearly all cases having been satisfactory. The laboratory observations have been extensive but are not yet complete.

Physiological Action—The following laboratory observations of its action upon the blood were made by Victor von Unruh, M.D., of New York City

More than one hundred blood counts were made in cases of infectious diseases, mainly in tuberculosis. The results showed that *echinacea* increases the phagocytic power of the leukocytes; it normalizes the percentage count of the neutrophiles (Arneth count). Hyperleukocytosis and leukopenia are directly improved by *echinacea*; the proportion of white to red cells is rendered normal; and the elimination of waste products is stimulated to a degree which puts this drug in the first rank among all alteratives. The stimulation toward phagocytosis become very evident in cases where it was impossible to find any evidence of phagocytosis before *echinacea* was administered, and where after the use of this drug for a period of only a few days the phagocytes were seen to contain as many as eight bacilli within the cell. In all cases where the percentage count among the neutrophiles (polymorphonuclears) has been such as give an unfavorable prognosis inasmuch as those neutrophiles containing one and two nuclei predominated over those containing three, relatively and absolutely, the administration of *echinacea* for only two weeks has normalized the percentage so as to give to the class containing three nuclei the absolute and relative majority over those containing one and two nuclei. *Echinacea* thus gives to the class normally strongest in phagocytosis the power where it obtains in the normal condition of the leukocytes. "**Subculoid Echinacea**" was used for these experiments.

I have long been assured from the observation of this remedy that it

directly influences the opsonic index. I wrote von Unruh directly, asking him for his opinion from his long experience and from his laboratory observations of the action of this remedy. He replied as follows: "Quoting from McFarland's Pathogenic Bacteria, the opsonic theory teaches that the leukocytes are disinclined to take up bacteria unless they are prepared for phagocytosis by contact with certain substances in the serum, that in some manner modify them. This modifying substance is the opsonin. I have definitely demonstrated and am continuing to observe, that the action of *echinacea* on the leukocytes is such that it will raise phagocytosis to its possible maximum." The logical deduction, therefore, is that the opsonic index is correspondingly raised by this agent.

When a half teaspoonful dose of the tincture is taken into the mouth, a pungent warmth is at once experienced which increases to a tingling, and remains for half an hour after the agent is ejected. It is similar to that of *aconite*, but not so much solely of the nerve-end organs. The sensation is partly of nerve tingling, and more from an apparent mild nerve irritant effect. It much more resembles the action of *zanthoxylum*. If a small quantity be swallowed undiluted, it produces an apparent constriction of the throat, sensation of irritation, and strangulation, much greater in some patients than in others, and always disagreeable. The sensation persists for some minutes, notwithstanding the throat is gargled, water is drunk, and the agent entirely removed.

The toxic effect of this agent is manifested by reduction of temperature, the frequency of the pulse is diminished, the mucous membrane becomes dry and parched, accompanied with a prickly sensation; there is headache of a bursting character, and a tendency to fainting is observed if the patient assumes an erect posture. After poisonous doses, these symptoms are more intensified. The face and upper portion of the trunk are flushed, there is pain throughout the body, which is more marked in the large articulations. There is dimness of vision, intense thirst, gastric pains followed by vomiting and watery diarrhea. No fatal case of poisoning is recorded, to our knowledge, and only when given in extreme doses are any of the above undesirable influences observed.

The physiological effects are manifested by its action upon the blood, and upon the mucous surfaces. The natural secretions are at first augmented, the temperature is then lowered, the pulse is slowed, and

the capillary circulation restored. It exerts a peculiar affinity over local debilitated inflammatory conditions, attended with blood dyscrasias. It has its greatest field in adynamic fevers, reducing the pulse and temperature and subduing delirium.

It promotes the flow of saliva in an active manner. The warmth and tingling extend down the esophagus to the stomach, but no further unpleasant influence is observed. In a short time diaphoresis is observed, and the continuation of the remedy stimulates the kidneys to increased action. All of the glandular organs seem to feel the stimulating influence, and their functional activity is increased. The stomach is improved in its function, the bowels operate better, and absorption, assimilation, and general nutrition are materially improved. It encourages secretion and excretion, preventing further auto-intoxication, and quickly correcting the influence in the system of any that has occurred. It stimulates retrograde metabolism, or tissue waste, more markedly than any other single remedy known. It influences the entire lymphatic system, and the condition of the blood suggests that the patient has been taking stimulants. Its influence upon the capillary circulation is not comparable with that of any other known remedy, for while it is a stimulant to the circulation in these vessels, it also seems to endow them with a certain amount of recuperative power or formative force by which it is constituted, not only a general stimulant and tonic to the circulation, but also peculiarly so, to local inflammations of a debilitating character, as when administering liver and iron remedies in abundance. Sallow, pallid and dingy conditions of the skin of the face quickly disappear, and the rosy hue of health is apparent. Anemic conditions improve with increased nerve tone. There are but few subjective symptoms from large doses of this agent. It is apparently non-toxic, and to any unpleasant extent non-irritant. The agent certainly has a marked effect upon the nervous system, but its specific influence upon the central organs has not yet been determined.

This agent is markedly anesthetic in its local influence. Applied to open wounds and to painful swellings, while the alcohol may at first induce a burning sensation, this is quickly followed by entire relief from pain in many cases. So marked is this influence that it could well be used for an antiseptic local anesthetic.

I am convinced that success in certain cases depends upon the fact

that the patient must have at times, a sufficiently large quantity of this remedy in order to produce full antitoxic effects on the virulent infections. I would therefore emphasize the statement which I have previously made that it is perfectly safe to give *echinacea* in massive doses—from two drams to half an ounce every two or three hours—for a time at least, when the system is overwhelmed with these toxins. This applies to tetanus, anthrax, actinomycosis, pyemia, diphtheria hydrophobia, and meningitis.

Specific Symptomatology—It is the remedy for **blood poisoning**, if there is one in the *Materia Medica*. Its field covers acute auto-infection, slow progressive blood taint, faults of the blood from imperfect elimination of all possible character, and from the development of disease germs within the blood. It acts equally well, whether the profound influence be exerted upon the nervous system, as in puerperal sepsis, and uremia, or whether there is prostration and exhaustion, as in pernicious malarial and septic fevers, or whether its influence is shown by anemia, glandular ulceration or skin disease.

It is especially indicated where there is a tendency to gangrenous states and sloughing of the soft tissues, throat dark and full, tongue full, with dirty, dark-brown or black coat, in all cases where there are sepsis and zymosis.

It undoubtedly exercises a direct sedative influence over all of the fever processes in typhoid, cerebro-spinal meningitis, malarial fevers, asthenic diphtheria, etc., for while it equalizes the circulation, it also acts as a sedative to abnormal vascular excitement and lowers the temperature, if this be elevated, while if this be subnormal, the singular effect upon the vital forces conspires toward a restoration of the normal condition. As a sedative it is comparable in some respects with *baptisia*, *rhus*, and *bryonia*.

I think this sedative influence is largely exercised through its power to destroy the germs of the infection, thus removing the cause.

Therapy—*Echinacea*, is par excellence a corrector of any deprivation of the body fluids. It influences those conditions included under the terms septic, fermentative and zymotic. Those which manifest themselves in a disturbed balance of the fluids, resulting in alterations of the tissues such as are exhibited in **boils, carbuncles, abscesses** and

cellular and glandular inflammations. These same conditions result from the introduction of the venom of serpents and poisonous insects of every character, also from the introduction of disease germs from pus and other putrid and infectious sources.

As an **intestinal antiseptic** the agent is bound to take first rank with all physicians when once known. Experiments with it to determine its immediate influence upon the fevers caused by continued absorption of septic material, such as **typhoid fever**, **puerperal fever**, and the fever of the afterstages of diphtheria, show that its influence upon the pernicious germs begins at once.

In several cases reported, where special sedatives were not given, the temperature has declined from, one-half to two degrees within a few hours after its use was begun, and has not increased until the agent was discontinued.

It has then slowly increased toward the previous high point until the remedy was again taken, when a decline was soon apparent.

It does not produce abrupt drops in the temperature, as often follows the curetting of a septic womb, or as the removal of a quantity of septic material often causes, but it effects an almost immediate stop in germ development, and a steady restoration from its pernicious influence. In the treatment of typhoid fever in the Cook County Hospital, Chicago, it was used in the Eclectic wards for about two years or more, and twenty-one days was the extreme extent of the fever, and the mortality was the lowest known. In many cases taken early, the fever was limited to fourteen days without delirium.

In private practice the reports of many physicians are much more enthusiastic, claiming that when given in the initial stage the fever has disappeared in seven days, and that fourteen days is the extreme limit.

The blood does not become impaired, the assimilation and nutrition are remarkably increased, the nerve force is retained, elimination from all organs is improved, ulceration of Peyer's glands ceases, the enteric symptoms abate, there is but little, if any, tympanites, and there has as yet been no case of **hemorrhage or perforation** reported as having occurred after the agent was begun. It certainly is a valuable acquisition to **typhoid** therapeutics. All recent reports confirm these

statements.

Its influence in **septic fevers** is the same as in typhoid. It seems to act as a nerve stimulant upon the vital forces depressed by the poison. This fact was especially true in a case where extreme septic absorption after a badly conducted abortion caused acute nephritis and suppression of the urine. Uremia supervened, with delirium and mild convulsions. Twenty drops of the fluid extract of *echinacea* were given every two hours continuously. Extreme heat was applied over the kidneys, and a single dose of an antispasmodic was given, the *echinacea* alone being continued. The fever dropped in two days, the mind cleared, the urinary secretion was restored, and the patient made a rapid and uninterrupted recovery.

It is a most important remedy in **uremic poisoning**, and will supersede all other single remedies.

It has been in constant use in **diphtheria** for three years. It is used locally as well as internally. The exudates contract and disappear, the local evidences of septic absorption are gone, the fever declines, the vital forces increase, depression, mental and physical, disappears, and the improvement is continual. In **ulcerated sore throat** of any character, in **ulcerated sore mouth**, in **stomatitismaterni**, in **post-nasal** or **catarrhalulcerations** it is prompt and effectual. It is preferred in these cases by those who use it.

In local inflammation of any portion of the intestinal tract, it has given excellent satisfaction. It quickly overcomes local blood stasis, prevents or cures ulceration, and retards pus formation by determining resolution. Reports of its use in **appendicitis** have been satisfactory, indeed. One writer treated several cases of unmistakable diagnosis, and satisfactory cure resulted. The writer treated one marked case of appendicitis where pus formation and future operation seemed inevitable. The improvement was apparent after the agent had been taken in a few hours, and recovery was complete in twelve days from attack.

Its use in **cholera infantum** has been satisfactory, especially if nervous phenomena are present. The frequent discharges gradually cease, the patient is soothed and the nerve force increases as the fever abates. Extreme nervous phenomena do not appear.

Webster, of San Francisco, in 1892, suggested the use of *echinacea* in **spinal meningitis**. It should be especially valuable if any blood dyscrasia lies at the bottom of the difficulty. Following Webster's suggestions, other physicians, from their personal observations, have been able to ascribe undoubted curative virtues to this agent in this and other convulsive and inflammatory disorders of the brain and cord. It directly antidotes the infection.

As a sedative in cerebro-spinal meningitis, Webster is disposed to believe that it specifically influences the vascular area concerned in the nutrition of the cerebro-spinal meninges.

Since the above was first written the use of *echinacea* for **cerebro-spinal meningitis** has been established among those who have been experimenting with the remedy in this disease. There is no doubt whatever that its influence in destroying the virus is specific, and effectual if given in sufficient doses. Five drops is about the ordinary dose for a child, but even this can be increased to twenty in extreme cases. It may be used in conjunction with hexymethylenamine.

At the same time, it must not be forgotten that in all spasmodic diseases, depending upon infection both conditions must be treated together, and *gelsemium* in full physiologic doses must be given with *echinacea*.

In the treatment of **erysipelas** it has given more than ordinary satisfaction, and has established itself permanently in that disorder. It is especially needed when sloughing and tissue disintegration occur, its external influence being most reliable.

In the pain of **mammarycancer** and in the **chronicinflammation** of the mammary gland, the result of badly treated puerperal mastitis, where the part has become reddened and congested, the remedy has worked satisfactorily.

In **bed sores**, **fever sores**, and in **chroniculcerations** it is exceedingly useful. It is diluted and applied directly, while, it is given internally. It is of much value in **old tibial ulcers**, in **chronic glandular indurations**, and in **scrofulous** and **syphilitic nodules** and other specific skin disorders. The extract or the fluid extract can be combined with an

ointment base such as lanolin in the proportion of one part to one, two, or three parts of the base, and freely applied. It can be injected into the **sinuses** of **carbuncles**, or into the structure of the diseased parts with only good results.

Logan treated ten cases of stubborn skin disease of undoubted syphilitic origin with this remedy alone. It was applied externally and given in full doses internally, with a satisfactory cure in every case.

In the treatment of **syphilis** very many observations have been reported. It has been used entirely alone and also in conjunction with alterative syrups, but in no case yet reported has mercury been used with it. The longest time of all cases yet reported, needed to perfect the cure, was nine months.

The writer's observations, in all cases he has treated, are that the patient begins to feel a general improved condition after taking the remedy a few days. Some of them are enthusiastic concerning the **sense** of **well-being** they experience. It begins by removing all the sensations of discomfort, and the patient's mind becomes hopeful and encouraged. The specific fever in the first stages soon declines, and there is a permanent abatement of the evidences of the disease. There are absolutely no undesirable influences observed, and no after effects, and no undesirable side influences to overcome. I have not, however, depended upon this agent alone, in all cases. There are too many definite conditions present to be met with one remedy. I think results are hastened by correct adjustments of three or four other vegetable alteratives with this.

The influences of *echinacea* are not always enhanced by the use of the iodides. On the other hand, I have had satisfactory results, where the iodides, having previously been given in conjunction with it, were withdrawn, and the *echinacea* continued alone. The rapid amelioration of the disorders of the skin, after the withdrawal of the iodides, was especially remarked if *berberis* was substituted for them.

The following most remarkable case occurred in my practice:

A gentleman, aged about forty-five years, in apparently good health, was vaccinated, and as the result of supposed impure virus a most unusual train of the symptoms supervened. His vitality began to wane,

and he became so weak that he could not sit up. His hair came out, and a skin disease pronounced by experts to be psoriasis, appeared upon his extremities first, and afterward upon his body. In the writer's opinion, the condition had but little resemblance to psoriasis. It seemed more like an acute development of leprosy than any other known condition.

This advanced rapidly, his nails began to fall off, he lost flesh, and a violent iritis of the left eye developed and ulceration of the cornea in the right set in, and for this difficulty he was referred to Prof. H. M. Martin, President of the Chicago Ophthalmic College.

Dr. Martin gave him ten grains of the iodide of potassium three times daily, and fed him freely upon phospho-albumin. The loss of hair was stopped, but no other favorable results were obtained. The condition progressed rapidly towards an apparently fatal termination. At this juncture, Dr. Martin asked the writer to see the case with him. It looked as if there was no possible salvation for the patient, but as a *dernier ressort*, the writer suggested *Echinacea* twenty drops every two hours, and the phospho-albumin to be continued. With this treatment, in from four to six weeks, the patient regained his normal weight of more than one hundred and fifty pounds and enjoyed afterward as good health as ever in his life.

Echinacea has been used with great success in aggravated and prolonged cases of *rhus poisoning*, both locally and internally.

The agent has been long in use among the Indians in the West as a sure cure for **snake bite**. It has created a furor among the practitioners, who have used it in the bites of **poisonous animals**, that has made the reports, apparently, too exaggerated to establish credulity on the part of the inexperienced. Cases that seemed hopeless have rapidly improved after the agent was applied and administered. There is at present no abatement in the enthusiasm. One physician controlled the violent symptoms from the bite of a tarantula, and quickly eliminated all trace of the poison with its use.

Dr. Banta of California treated a man **bitten by a scorpion**, reported in the Eclectic Medical Journal, with *echinacea* with rapid cure.

In a paper read at the Ohio State Eclectic Medical Society in 1895, Dr.

Gregory Smith stated that in 1871 Dr. H. C. F. Meyer commenced the use of this remedy.

He says: "In malarial troubles it has no superior." He also recommends it as a remedy for **hemorrhoids**; twenty-five drops of the pure tincture injected into the rectum three a day promptly effect a cure. "It is also prompt in stings from insects and in poisoning by contact with certain plants." As an antidote to the venom of the *crotalus horridus* it stands without a peer. He gives the history of 613 cases of rattlesnake bite in men and animals, all successfully treated. With the courage of his convictions upon him he injected the venom of the *crotalus* into the first finger of his left hand; the swelling was rapid and in six hours was up to the elbow. At this time he took a dose of the remedy, bathed the part thoroughly, and laid down to pleasant dreams. On awakening in four hours the pain and swelling were gone.

The fresh root scraped and given freely is the treatment used by the Sioux Indians for snake bite. Recoveries from *crotalus* poisoning are effected in from two to twelve hours.

By far the most difficult reports to credit are those of the individuals bitten by **rabid animals**; there are between twenty and thirty reports at the present time. In no case has **hydrophobia** yet occurred, and this was the only remedy used in many of the cases. In five or six cases, animals bitten at the same time as the patient had developed rabies, and had even conveyed it to other animals, and yet the patient showed no evidence of poisoning, if the remedy was used at once. One case exhibited the developing symptoms of hydrophobia before the agent was begun. They disappeared shortly after treatment. In no case has an opportunity offered to try the remedy after the symptoms were actually developed. One poorly nourished anemic and jaundiced child was badly bitten and the treatment improved the general condition in a marked manner. In the treatment of **hydrophobia**, a case is reported, which was bitten by a rabid animal out of a litter of six halfgrown pups, all of which showed signs of hydrophobia and were killed. A number of parties were bitten by these pups. Two who were bitten died of hydrophobia, three were treated at the Pasteur institute and cured, one was treated with *echinacea* and cured.

The doctor prescribed teaspoonful doses of echafolta, every three hours. The remedy was introduced on saturated gauze into the wounds, and

covered all the injured surfaces. This was secured by a roller bandage. Prior to the administration of the remedy the symptoms of nervous irritation and incipient hydrophobia were strongly marked. These symptoms abated rapidly, and the patient recovered in a satisfactory manner.

A large amount of satisfactory evidence has accumulated confirmatory of our statements concerning the curative action of the remedy in **tetanus**. Dr. John Herring reported one marked cure. Dr. Lewis reports three cases, where the remedy was injected into the wound after tetanic symptoms had shown themselves. All the tissues surrounding the wound were filled with the remedy by hypodermic injection and gauze saturated with a full strength preparation was kept constantly applied. The agent was also administered in half-dram doses internally, every two or three hours.

Another physician has reported the observation of quite a number of cases, where tetanus had either markedly developed, or was anticipated. The use of the remedy satisfactorily overcame all apparent symptoms where present, and where not present, no tetanic phenomena developed. In the diagnosis of this disease the physician may confuse septic phenomena sometimes with those of developing tetanus, and the cure of the septic conditions may have been taken for a cure of tetanus.

In the treatment of **tetanus**, I am confident that no antiseptic alone will cover the entire pathology of this disease. There must be a powerful antispasmodic given in conjunction with the germ destroying agent, and vice versa. *Echinacea* or phenol hypodermically, or both, with *gelsemium*, *lobelia*, or *veratrum* carefully selected and adjusted should meet the indications of all early cases.

These same facts should apply to cases bitten by dogs and wherever convulsions result from infection.

The agent has had a most marvelous influence in overcoming **pyemia**. We have had some extreme cases reported, where it would seem that the patient was positively beyond all help, where amelioration of the symptoms was pronounced, and the restoration satisfactory.

In the treatment of small-pox conclusive proofs are now furnished us

which declare the remedy to be of great efficacy, not only in ameliorating all the phenomena of the disease, but in preventing sequela. When applied to the skin in a form. of a lotion, the pustules are benign in their character, and terminate with a minimum of scar.

In the treatment of erysipelas the remedy has proven itself all we anticipated for it.

Dr. Wilkenloh reports the treatment of at least five cases of **goitre**, three of which had **exophthalmic** complications, and all were cured, with this remedy alone. The doctor gave the remedy internally in full doses, and injected from five to fifteen minims directly into the thyroid gland, and kept gauze, saturated and applied externally. As no other remedy than this was used, there could be no doubt about its positive influence.

Applied to painful surfaces, to local acute and painful inflammations of the integument, or to painful wounds, its anaesthetic influence is soon pronounced, and is of great benefit, in preserving freedom from pain during the active healing processes, which are stimulated and encouraged by this remedy. Prof. Farnum is enthusiastic over the action of the remedy in overcoming the odor of **cancer**, whether in the early stages, or in the latter stage of the development of this serious disease. He advises its persistent administration in all cases where there is a cancerous cachexia, believing that it retards the development of cancer and greatly prolongs the patient's life.

We have already referred to its specific use in the treatment of **phlegmenous swellings, old sores, dissecting and surgical wounds**, and where there are pus cavities of long standing. Also as a very positive remedy, applied to all cases where **gangrene** is anticipated, or has appeared.

Its influence in gangrene of the extremities has been very pronounced. In gangrene of the fingers the curative benefits are observable from the first application. It is useful in **dermatitis venenata**, in **erysipelas** with sloughing phagedena, and in **phlegmasia alba dolens**, or **phlebitis**. In this latter condition its external use will greatly assist the internal medication.

In the treatment of **Anthrax**, echinacea has proven in a number of cases

to be an exceedingly reliable remedy. Dr. Lewis of Canton, Pa., first reported on it in 1907 in Ellingwood's Therapeutist, and Dr. Aylesworth of Collingwood, Canada, confirmed all of his statements, the observations of the two doctors having been made about the same time, each without knowledge of the other. In these cases, very large doses from one to two drams, frequently repeated, are required.

Twenty to forty minims of *echinacea* every two hours with proper local treatment, such as iodine locally, will cure **actinomycosis**.

In the treatment of **catarrh**, it is used internally, and applied locally in the form of a spray, if necessary. It is not only an important remedy in nasal catarrh, but it is important in intestinal catarrh. I used it with excellent advantage in a so-called incurable case of ulcerative colitis with heavy discharge of mucus and pus.

Dr. Fair is emphatic in his statements that patients **exposed to diphtheria** should take *echinacea* in from ten to twenty drop doses every two hours with the positive expectation of preventing the disease. If the first symptoms appear as the usual premonitory evidences, the dose should be increased and other indicated remedies will ward off the disease. I have much confidence in this statement and would suggest that it be carried out fully.

The use of *echinacea* in the treatment of **impetigo contagiosa** is confirmed. One doctor treated several very severe cases and the rational action of the remedy suggests that its use externally and internally in this disease will prove highly satisfactory.

Another physician whose name is not given treated **infection** and a **purulent discharge from the urethra** where there was urinary retention for two days, with this remedy. He passed a catheter as far down as possible, and then combined one part of *echinacea* with six parts of sterilized water. He forced this slowly against the constriction. Relaxation took place probably from the local anesthetic influence of the remedy in a few minutes. The catheter was withdrawn, and the water passed freely. He repeated the treatment once or twice a day to a complete cure.

Dr. Rounseville reported to the Wisconsin State Medical Society that he had used *echinacea* with excellent results in both **diabetes mellitus**,

and diabetes insipidus, and also in some forms of albuminuria, and in each of the cases he obtained results that confirmed his opinion that the agent was one that would be a material assistance combined with other measures.

Stubborn **diabetic ulcers** have been treated by Dr. Thomas Owens very successfully with the internal and external use of *echinacea*.

Dr. Hewitt used *echinacea* in **alopecia**. He made a strong solution and combined with it agents that would assist in stimulating the nutritive functions of the hair follicles. He was well satisfied with the result.

A directly curative influence from this agent alone has been secured, where from vaccination a general infection has been induced. I am confident that no other single medicine will accomplish as much in these cases, immediately and as satisfactorily as this remedy.

Dr. Mill of Clearwater, Neb., obtained the same results from injecting the full strength remedy where there was **renal hemorrhage** with very **painful piles**. The curative effect was pronounced. Others agree with him in the treatment of piles with *echinacea*. I am convinced that it would be good practice to use *collinsonia*, *hamamelis* or *aesculus* in conjunction with this remedy,

Dr. Yates treated an **eruptive disease** with purulent discharge which we call **nettle rash** with *echinacea* internally, and permanganate of potassium solution externally. The results were exceedingly prompt.

Many cases of **tibial ulcer** treated with *echinacea* with curative results, are reported. The agent is used both internally and externally, associated often with other successful measures.

One doctor had an opportunity to observe the action of *echinacea* in some fowl that had taken strychnine which was used to poison animals. Those that received the medicine, lived. All those that did not get it, died.

This is simply a suggestion in favor of trying *echinacea* as an antidote for strychnine poisoning.

BAPTISIA.

Baptisia tinctoria.

Synonym—Wild indigo.

CONSTITUENTS—

Baptisin (a bitter glucoside), baptin (a purgative glucoside), baptitoxin (a poisonous alkaloid), resin, fixed oil.

PREPARATIONS—

Extractum Baptisiae Alcoholicum, Alcoholic Extract of Baptisia.
Dose, from one to four grains.

Specific Medicine Baptisia. Dose, from one-fourth to ten minims.

Physiological Action—When fresh and taken in a sufficiently large dose *Baptisia* causes violent vomiting and purging. In poisonous doses there is an acceleration of respiration and reflex activity followed by death from central paralytic asphyxia.

The agent has a bitter, somewhat acrid and astringent taste. In large doses it is somewhat violent in its influence upon the gastro-intestinal tract, producing increased intestinal secretion of the entire glandular apparatus. It especially influences the liver. In overdoses it is emetic and cathartic, in some cases causing an excessive flow of viscid saliva. It is laxative in small doses, producing soft, unformed stools. It increases the biliary secretion, sometimes most excessively. It exercises its influence more satisfactorily in asthenic fevers than in sthenic fevers.

Specific Symptomatology—It is especially indicated where, with **suppressed secretion** and marked evidence of **sepsis**, there is ulceration of the mucous membranes of the mouth, or **intestinal ulceration**.

In **low fevers** with dark or purplish mucous membranes of the mouth, tongue dry and thin, with a dark coating, face dusky and suffused, circulation feeble.

Fyfe gives as its specific indications those much the same as were given in the previous writing on this remedy—dusky discoloration of the tongue and mucous membranes; full and purplish face, like one who has long been exposed to the cold; protracted **typhoid conditions**,

with continued moist, pasty coating on the tongue; sleek tongue, looking much like raw beef; dark, tar-like fetid discharges from the bowels-prune juice discharges; general putrid secretions.

Dr. Fearn called attention to the indication of a dusky, purplish color often distinctly marked in typhoid patients upon one side of the face. Ten or fifteen drops of *baptisia* in water during twenty-four hours has corrected that condition quickly for him, improving the patient.

The indications for *baptisia* are often present in infectious exanthema such as **smallpox** or **scarlet fever**.

These indications resemble those also which call for acids. Selections should be made between hydrochloric, nitric, hydrobromic, or hydriodic acid, to be given in conjunction as required.

Therapy—With the above indications the agent has been widely used for many years by our practitioners in the treatment of typhoid conditions, and has established its position as an important remedy.

It has an apparent dynamic influence upon the glandular structure of the intestinal canal, directly antagonizing disease influences here, and reenforcing the character of the blood, prevents the destruction of the red corpuscles, and carries off waste material. In malignant tonsillitis and diphtheritic laryngitis it has been long used with excellent results. In **phagedena** with gangrenous tendencies wherever located, it has exercised a markedly curative influence.

It is useful in **dysentery** where there is offensive breath and fetid discharges of a dark prune juice character.

In **scarlet fever**, with its specific indications, it is a useful remedy. Large doses are not necessary, but it should be employed early and the use persisted in.

In the treatment of **low fevers** this agent is said to exercise marked sedative power over the fever. Homeopathic physicians prescribe it to control the fever. There is no doubt that in proportion as the cause of the fever is destroyed, the temperature abates. Any inhibitory influence directly upon the heart and circulation cannot be attributed to it, yet it soothes cerebral excitement to a certain extent, having a beneficial

influence upon delirium.

It is advised in all diseases of the glandular system, and in **hepatic derangements** especially, with symptoms of this character. In the various forms of **stomatitis**, **putrid sore throat** and **scarlatina maligna**; in **inflammation of the bowels**, where there is a tendency to typhoid conditions, especially ulcerative inflammation of any of the internal organs; in **dyspepsia**, with great irritability and offensive decomposition of food; in **scrofula** and in cutaneous infections, the agent should be long continued. In the long protracted and sluggish forms of fevers, with great depression of the vital forces; in **ulceration** of the **nipples** or **mammary glands**, or of the cervix uteri, it is spoken highly of.

There is a dynamic influence exercised by *baptisia* upon the entire glandular structure of the body when adynamia is present, more particularly upon the **intestinal glands**. This influence directly reinforces the blood in its effort to throw off the disease, and restore normal conditions. It is because of this influence that it is of value in typhoid.

Dr. Hainey says that in whatever condition the patient complains of **difficult respiration** where the lungs feel compressed, where the patient cannot lie down because of fear of suffocation, if he sleeps, he has found *baptisia* in small doses every hour positively curative. He got this suggestion from a homeopathist, and he has proven it to be reliable.

Others have found **typhoid cases** with the characteristic symptoms, where the brain seems to be overwhelmed with toxins, where the patient has times where the breathing is rapid or panting, alternated with slow respiration, in which this remedy is very prompt. The condition may also be present in diphtheria, and in the so-called black measles or other highly infectious disorders.

Fyfe advises it in all diseases of the glandular system, and in **hepatic derangements** especially, with symptoms of this- character, in the various forms of **stomatitis**, **putrid sore throat** and **scarlatina maligna**, and in **inflammation of the bowels**, where there is a tendency to typhoid conditions, especially ulcerative inflammation of any of the internal organs. In **dyspepsia**, with great irritability and offensive

materially stimulates waste and repair.

John Aulde in 1911 advised this remedy for its immediate influence upon the digestive apparatus, the blood, and the secretions. He said constipation is relieved and the bowel movements become regular and natural. The **complexion clears**, the muscular strength increases, and **the skin** and urinary organs become more active. I have found it indeed serviceable in **syphilis** and in **scrofula**, the general indications being peculiar to indigestion such as coated tongue, fetid breath, and a. general feeling of malaise from blood disorders. This is strictly in line with our own teachings.

Specific Symptomatology—The specific action of this agent is in scaly, pustular and other skin diseases due to the disordered condition of the blood. It is the most reliable alterative when the influence of the dyscrasia is apparent in the skin. It is given freely during the treatment of skin diseases where an alterative is considered an essential part of the treatment.

Therapy—It has cured persistent acne for the writer, when no local treatment was used. It contributes to the removal of **pimples** and **roughness** and promotes a clear complexion, a soft, smooth and naturally moist skin in sensitive young ladies, when the cause is not a reflex one from **ovarian** or **uterine** irritation, or menstrual irregularity.

It seems of especial value in scaly skin diseases and in disorders of a non-inflammatory type, and yet it works nicely in some cases of the moist variety.

It has cured very many cases of **salt rheum** even when the symptoms were chronic in character and greatly exaggerated.

In moist eczema it has acted most satisfactorily, but has usually been given in conjunction with other treatment. Dr. Soper, in 1884, reported in the Therapeutic Gazette a most intractable case of moist eczema of an acute character covering the entire body. No other alterative was given. The case was cured in four weeks. In **eczema capitis**, **eczema genitalis**, with **pruritus** and in **scaly eczema** of all kinds, it has been given alone and has acted promptly and surely.

It has cured cases of **scald head**, so called, in a few weeks, restoring tone and vigor to the hair.

It has been often used in **acne**, and has worked nicely when local or reflex irritation was not the cause.

In **psoriasis** and in **pityriasis** it has won the praise of many doctors. For **dandruff** it has been given internally and has produced cures in a number of cases,

In many instances various forms of **chronicdermatosis** have yielded to its influence when other treatment has failed.

It should be prescribed in glandular **indurations** and chronic **ulcerations**, both of a scrofulous and syphilitic type, giving excellent results in these cases. It is lauded highly in **syphilis**, though it has seldom been given alone in this condition, but usually with other vegetable alteratives, the value of which, however, it has seemed to greatly enhance. Of this fact, I am positively convinced because of the rapid disappearance of the characteristic eruption, and the marvelously smooth condition of the skin which has followed with my patients when this agent is given in this disease.

When first introduced it was recommended in chronic malarial conditions, in **intermittentfevers**, and in the stomach, liver, intestinal and general glandular disorders of these fevers. It was claimed that its tonic influence was conspicuous in these conditions and that in certain cases it exercised marked antiperiodic properties. It certainly acts as a tonic and corrective to disorders of the liver, an influence that has been often remarked when given for skin diseases.

AILANTHUS AILANTHUS GLANDULOSA

Synonym—Chinese Sumach, Tree of Heaven.

Administration—

The **powder** is of greenish yellow color, strongly narcotic odor, nauseating, strongly bitter taste. The dose is from five to thirty grains.

Specific Medicine ailanthus, is prescribed twenty drops in four ounces of water; a teaspoonful every hour or two hours.

The **extract** is given in doses of from one to five grains.

The **fluid extract** in from five to twenty minims.

Physiological Action—In overdoses *ailanthus* causes vertigo, severe headache, pains in the back and limbs, together with great prostration, tingling and numbness; it reduces the pulse-beat and the respiration and causes great weakness, cold sweats and shivering. If it be given too frequently, or in too large doses, it causes death by paralyzing the respiratory center, its influence resembling that of *tobacco*. It is said that both *quassia* and *gentian* intensify its action, and that it should not be administered with either iron or lead compounds.

The presence of *ailanthus* in a malarial locality, like *eucalyptus*, will correct the malarial influence of that locality.

Specific Symptomatology—Its indications are similar to those of *rhus tox*. It is a valuable agent, but its therapeutic influence is not fully determined. It is yet in the experimental stage to a certain extent.

It is indicated in cases in which all the evidences of sepsis are quite pronounced or prominent, such as a dusky eruption, dirty, dry, cracked tongue malignant sore throat and tonsils, with sordes on the teeth, and excoriating discharges from the nose and mouth, bad respiration, and adynamic persistence of disagreeable symptoms telling of blood-poison; in atonic conditions of the nerves, or of the mucous membranes of the body, or great general weakness and prostration. It should be classed as an antiseptic, and in the same class with *baptisia*., *echinacea*, etc.

Therapy—It is of much service in **scarlet fever**, especially the malignant form, in **typhoid**, and other types of low fever and in low forms of acute inflammation. With special reference to the action of *ailanthus* as a tonic to the nervous system, it is efficient as a remedy in some cases of **asthma** as well as in **epilepsy**, and in many cases of epileptiform contraction of the muscles, etc. Frequently *ailanthus* will relieve nervous palpitations and severe cases of singultus, that for a long time have withstood other remedies.

With the Chinese, a decoction of *ailanthus* is a most, favored remedy in **tapeworm**, **dysentery** and **diarrhoea**. Because of its special tonic effect on mucous membranes it is an excellent remedy in some cases of

leucorrhœa, etc. For the same reason it has been praised as a remedy in many dyspeptic troubles.

DULCAMARA. *Solanum dulcamara.*

Synonyms—Bittersweet, woody nightshade.

CONSTITUENTS—

Dulcamarin, solanine, gum, resin, wax.

PREPARATIONS—

Extractum Dulcamaræ Fluidum, Fluid Extract of Dulcamara.
Dose, from half to one dram.

Specific Medicine Dulcamara. Dose, from one-half to ten minims.

Potatoes and tomatoes belong to this family, and although the fruit is edible, the vines are usually poisonous.

Solanine may be obtained from the new sprouts of the ordinary potato.

Physiological Action—This agent is a powerful poison to all living protoplasm. It coagulates the blood and destroys the integrity of the corpuscles.

Injected into the veins it causes dyspnea, thrombosis in the vessels and arrest of respiration. Toxic doses produce tremors, muscular contractions, central paralysis, collapse, coma, a violent fall of the temperature and death.

It is a narcotic, and in toxic doses causes nausea, vomiting, faintness, pain in the joints, numbness of the limbs, dryness of the mouth, convulsive movements, a small hard pulse, paralysis of the tongue, a purplish color of the face and hands, twitching of the eyelids and lips, trembling of the limbs, erythematous eruption, suppression of venereal desire, though recov. ery has followed after very large doses. Clarus administered six grains of solanine, which produced general cephalic distress, with occipital pain, increase of the frequency and loss of the force of the pulse, followed after some hours by sudden vomiting, diarrhea, great weakness, and marked dyspnea.

Therapy—Dulcamara is a remedy for all conditions resulting from **suppression of secretion**, from **exposure to cold and dampness**. It will restore normal excretion and secretion.

In acute **coryza**, in **bronchial** and **nasal catarrh**, in lung congestion and bronchial cough, with pain in the chest, all from cold, in bronchial **asthma**, and in **acute bronchitis** it is an excellent auxiliary remedy.

In **eruptive fevers** it assists in determining the eruption to the surface, especially if there is retrocession. It has a direct action upon the skin also, being given in **pustular eczemas** and vesicular disorders quite freely. It has produced good results in **psoriasis**, **pityriasis**, **lepra**, and other scaly skin disorders. It acts as an alterative in such cases, and will influence the skin derangements of scrofula and syphilis to a certain extent. It is available in the various skin disorders of childhood from disordered blood and deranged stomach.

It is an excellent alterative, if administered with care, and is therefore valuable in syphilis, scrofula, and other blood disorders. In acute and chronic rheumatism from exposure to dampness and cold, and in gout, it has been advantageously used.

Nervous irritation with depression, with hyperesthesia of the organs, and pruritus pudendi are relieved by it. It may be used in spermatorrhea with undue excitement, priapism, nymphomania, and satyriasis. It should be given first in small doses, increased to full amount if necessary. In suppression of the menses with headache and nausea and acute ovarian congestion, it will work well.

It is advised in the treatment of catarrh of the bladder, and as a stimulant to the urinary secretion.

SARSAPARILLA. *Smilax officinalis.*

Synonyms—Jamaica, Honduras or Spanish Sarsaparilla.

CONSTITUENTS—

Parillin, sarsa-saponin, saponin, volatile oil.

PREPARATIONS—

Extractum Sarsaparillae Fluidum. Fluid Extract of Sarsaparilla. Dose, from one-half to one dram.

Extractum Sarsaparillae Fluidum Compositum, Compound Fluid Extract of Sarsaparilla. Dose, from one-half to one dram.

Therapy—This agent is an active eliminant, possessing diuretic and alterative properties to a marked degree. It has long been a popular remedy for the treatment of blood dyscrasias, but is nearly always given in combination with other well known specific alteratives. In combination with potassium iodide, *stillingia*, *corydalis*, *phytolacca*, *podophyllum*, or other alteratives, it has been given in **scrofula** and **secondary syphilis**, and especially in **cutaneous diseases** depending upon blood dyscrasia, and in **rheumatic** and **gouty** conditions, with inactive kidneys irritated from the presence of large quantities of uric acid and the urates. It is not at present in general use.

SCROPHULARIA. *Scrophularia nodosa.*

Synonyms—Carpenter's square, Scrofula plant, Figwort, Heal-all.

CONSTITUENTS—

According to Prof. Lloyd, there is present an alkaloid, a fixed oil, and a brown amorphous resin. From the alcoholic extract all amorphous, yellow powder has been obtained, which has some of the properties of *digitalis*.

PREPARATIONS—

A **fluid extract** is prepared, and a **tincture**. **Specific scrophularia** may be given in doses of from five to thirty drops.

Specific Symptomatology—Marked evidences of **cachexia**. Depraved blood from any cause: **glandular disorders** of a chronic character, accompanied with disease of the skin. **Ulcerations, eczema, excoriations** from chronic skin disease. Those cases in which there is a peculiar pinkish tint, or pink and white tint to the complexion, with puffiness of the face, with full lips of a pallid character, are benefited by this remedy.

Therapy—The agent is administered in that class of cases, with the indications named, where a pure blood alterative is demanded. Its influence is perhaps more general than that of some of the better known remedies, but demands more time in the accomplishment of its results.

In disease of the glandular organs, resulting in dyscrasia; in general **scrofula**, in some cases of **secondary syphilis**, in depraved conditions of the system, where dropsy follows the remedy is demanded. Gross claimed that it was especially curative where from blood dyscrasia, ulceration would readily follow contusions, or wounds would not heal readily. It has been used to correct **difficult menstruation** and restore the **lochial discharge**. In the form of all ointment, it is applied to glandular inflammations, especially those of the mammary gland, and testicle, to bruises, ring worm, piles and chronic, painful swellings or enlargements. The agent should have more general use.

ANACARDIUM

Anacardium occidentale.

Synonyms—Cashew Nut.

CONSTITUENTS—

It contains gallic acid and an acrid resin, anacardic acid, and cardol.

PREPARATIONS—

A **tincture** is prepared. The commonest form of administration is the **Homeopathic mother tincture**. Dose, from one-fourth of a drop to a drop, four or five times a day.

Physiological Action—The juice of the rind is acrid, corrosive and irritating. Externally it produces blisters, which are apt to be troublesome and difficult of cure. It produces redness, inflammation, swelling and deep ulceration.

Therapy—This remedy was first brought into use, in the treatment of **Senegal fever**, a peculiar fever of the Tropics, where quinine has proved unavailing. Webster suggests that it may be found of value in the treatment of mental disease, the result of nervous debility, especially

that form known as **sexual neurasthenia**, where there is loss of memory, threatened dementia, failure of the will, great anxiety, and solicitation concerning the condition, with general failure of the nervous power.

It has been used in the treatment of some forms of skin disease. There is room for investigation concerning its action.

CASCARA AMARGA.

Cascara Amarga, sometimes known as Honduras Bark, is advised in syphilis as an active alterative. The line of its action is where there is chronic skin affection or where the pustular variety of the syphiloderm prevails, the conditions being induced by debility, thus needing a specific tonic influence. It soothes the stomach, overcomes sensitiveness or ready irritability of this organ, increases the appetite, and improves general tonicity.

GROUP VI.
Agents Influencing the Character of the Blood.

CHAPTER II.
Alteratives Influencing the Glands.

PHYTOLACCA
STILLINGIA
CORYDALIS
CHIMAPHILA
LAPPA
RUMEX
MYRICA
PLANTAGO

PHYTOLACCA. *Phytolacca americana*

Synonym—*Phytolacca decandra*, Poke.

CONSTITUENTS—

Phytolaccic acid, phytolaccine, calcium malate, resin, starch, wax, gum, tannin, mucilage. The ashes contain over fifty per cent of caustic potassa.

PREPARATIONS—

Extractum Phytolaccae Radicis Fluidum. Fluid Extract of Phytolacca Root. Dose, from five to thirty minims.

Unguentum Phytolaccae, Ointment of Phytolacca.

Specific Phytolacca. Dose, from one to ten minims.

Physiological Action—Though the young shoots of *Phytolacca* are used as greens the mature plant is poisonous when taken in large doses. Death has followed an overdose (one-half ounce) of the berries or root, preceded by excessive vomiting and purging drowsiness, prickling and tingling over the whole body; vertigo, dimness of vision, cold skin, feeble pulse, great prostration, convulsions and coma.

While it is specific in its influence upon all glandular structures, of whatever character, it also is a blood-making remedy of great power, and it acts directly also upon the skin. It influences the mammary

glands and the testicles directly. The remedy acts also upon the spinal cord. It inhibits the influence of the medulla, to final paralysis. It slows the action of the heart, reduces the force of the pulse, and lessens respiratory movements. In poisonous doses it will induce convulsions of a tetanic character. It is a drastic cathartic and an emetic producing nausea of an extreme character. Its influence upon the bowels is greatly prolonged, and very irritating. It causes great pain in the bowels, which is slow of relief. It reduces muscular power and coordination. It produces dimness of vision, vertigo and drowsiness, prolonged in some cases to coma.

Specific Symptomatology—The most direct action of this agent is in inflammation of glandular structures, especially of the **lymphatic glands**. Pains of a rheumatic character from deficient catabolism are relieved by it. It is directly indicated in irritation, inflammation and ulceration of mucous membranes in rheumatic subjects, sanious ulcers, scabies, tinea capitis, sycosis, psoriasis, favus, *noli me tangere*, and all skin diseases. It is especially valuable in the squamous variety of skin diseases.

Therapy—This agent must now have especial attention in its influence in the treatment of acute **inflammations of the throat**. It makes but little difference what forms of throat disease we have, from the simplest forms of pharyngitis, through all the variations of tonsillitis, to the extreme **forms of diphtheria**, this remedy may be given in conjunction with other indicated agents. But few of our physicians neglect its administration in these cases, and they are unitedly profuse in their praises of its influence. If there be an infection of the local glands of the neck, from the throat disease, the agent should be applied externally, as well as administered internally.

In the treatment of **goitre** there is a consensus of opinion concerning the value of this remedy, but it is almost universally administered in these cases, with other more direct remedies. Dr. J. V. Stevens is enthusiastic in his opinion that **adenitis** needs no other remedy than *phytolacca americana*. Whatever the cause of the disease or of however long standing, he saturates the system with this remedy, and persists in it, applies it externally and claims to cure his cases. He has used it for many years with success. Others combine other active alteratives as general conditions demand.

Too much cannot be said of its very positive and invariable influence in the treatment of acute **inflammations** of the **breast** during or preceding **lactation**. It should be given every two hours at least in doses of perhaps ten drops in extreme cases, or five drops in the incipiency of the disease, or mild cases. Conjoined with *aconite* and applied also externally, we, will find in many cases no lisp for any other remedy. I have, however, found my results to be more quickly obtained when an active eliminant is given in conjunction with the remedy in mastitis. Two or three fifteen-grain doses of the acetate of potassium will be found efficient.

The writer has, through a long experience, gotten into the habit of adding this remedy to alterative compounds. This is especially true of those prescribed for children's glandular and skin disorders. It is an efficacious remedy in any of the forms of skin disease, common to childhood. Given in the incipiency of eczema and in some forms of chronic eczema, especially that of a dry character, where there are cracks or fissures in the skin, these promptly yield to the internal administration of this remedy.

It should be administered in the treatment of **syphilitic disorders** resulting in ulceration, and in the ulcerations of the outlets of the body. In **varicose** and other long-standing **ulcers**, in **psoriasis**, **dermal abscesses**, **fissures**, **boils** and **carbuncles** it will be often found that a combination of *phytolacca*, *echinacea*, *berberis*, and *stillingia* will prove signally effective.

Ten drops of equal parts of the juice of ripe *poke berries* and alcohol may be given every thirty minutes in **membranous** and **spasmodic croup** with great success, with other remedies as indicated.

In irritation of the urinary tract, even in conditions resembling Bright's disease, with albumin, and abnormal deposits in the urine, it tends to relieve the irritation, and effect a cure.

Dr. Waska, of Chicago is a strong advocate of the use of *phytolacca* and *echinacea* in the treatment of any form of **albuminuria**. He believes with proper auxiliary treatment, these two remedies will be of great service in overcoming the excretion of albumin and in restoring a normal condition of the kidneys. Skin disease of constitutional origin, and scrofulous skin diseases, are cured by it.

Its action in relieving irritation, inflammation and ulceration of mucous membranes in all parts of the body—throat, larynx, lungs, stomach, bowels and rectum—suggests it as a remedy in inflammation of the lining membrane of the heart; and it is said to have cured cases of this kind.

In conjunctivitis, the local and internal use of the remedy is efficient; and also in the treatment of chancre and bubo.

In the treatment of conjunctivitis, a saturated tincture of the fresh root should be given in sufficient quantity to produce fullness of the temples and head, while the eyes should be bathed frequently with the decoction.

In the treatment of ulcers and ulcerating skin diseases, the local application of a concentrated preparation of the root or berries should be made, so as to exert something of a caustic effect, while full doses are given internally at the same time.

The presence in the blood of an infectious irritant, which causes rheumatic pains, as in **sciatic rheumatism**, and irritation of mucous membranes, or inflammation of the throat associated with rheumatic pains, and enlargement and ulceration of lymphatic glands from scrofula or syphilis, is an indication for the remedial action of *phytolacca*.

It has been thought to stimulate the liver, by those who hold the theory that rheumatism, peritonitis, tonsillitis, and the many diseases assigned to the uric acid diathesis depend upon abnormal protoplasmic change in the blood, as it circulates through the liver; but whether this be true or not, there is no doubt that it improves nutrition.

Phytolacca is somewhat narcotic, and also a nerve stimulant in moderate doses, and this will explain its action in curing rheumatism, for those who take the ground that this obscure disease is a neurosis; and also explains its action in neuralgia.

STILLINGIA.

Stillingia sylvatica.

CONSTITUENTS—

An acrid resin, volatile oil, stillingine, tannin, starch, gum.

PREPARATIONS—

Extractum Stillingiae Fluidum. Fluid Extract of Stillingia. Dose, from ten to sixty minims.

Specific Stillingia. Dose, from one to sixty minims.

Linimentum Stillingiae Compositum, A. D.

Syrupus Stillingiae Compositus, A. D.

Oleum Stillingiae, A. D.

Specific Symptomatology—Irritation of the mucous membranes of the bronchial tubes, larynx, throat and both nasal cavities, deficient secretion, membranes red and tumid or glistening, blood dyscrasia with general enfeeblement, skin diseases of a moist character, red and irritable.

Therapy—The application of this substance to the chest with the internal use of small doses of the tincture will be found of great benefit in **bronchialcough** where there is a sensation of tightness in the chest, where the cough is hoarse and croupal without secretion. It has long been used in conjunction with *lobelia* in the treatment of croup.

As an alterative it has taken front rank with Eclectics for fifty years. it is in general use in **syphilis**, in **scrofula**, in blood taint of any character, in **tubercular disease**, and in the **cancerous diathesis**.

CORYDALIS.

Dicentra canadensis

Synonyms—Turkey corn, squirrel corn. (*Corydalis formosa* was the incorrect latin name given by Ellingwood)

CONSTITUENTS—

Corydalin, fumaric acid, bitter -extractive, acrid resin, starch, volatile oil.

PREPARATIONS—

Corydalia (hydro-alcoholic extract). Dose, from one-half to one grain.

Extractum Corydalis Fluidum, Fluid Extract of Corydalis. Dose, from half a dram to one dram.

Specific Medicine Corydalis. Dose, from five to forty minims.

Physiological Action—In overdoses it has produced biliousness, deranged stomach, an excessive secretion of mucus, or catarrh of the stomach and intestinal canal, loss of appetite, indigestion, fetid breath, irregular bowels and colic, with malaise and general indisposition to exertion.

This agent was in great repute among very many of our older physicians as an alterative of special value. Tonic properties are so evident in it that the patient's vitality is increased while the metabolism of the system is influenced. In this particular it will operate in harmony with *echinacea*. In some cases it acts well with *berberis*, *hydrastis*, and *stillingia*. In syphilis, scrofula, and in all glandular derangements with general depravity of the system, marked blood dyscrasia and general impairment of the nutritive functions, this agent is indicated.

Its influences are demanded in these cases more especially if there be tumidity and enlargement or distention of the abdominal structures with general atonicity, or in some cases in which there are persistently coated tongue and fetid breath. This is often the condition in which a patient is found following a protracted attack of intermittent fever—ague, and since the entire glandular system has become sluggish from the disease the tonic effects of this agent are here indicated. Its influence can be greatly heightened by the direct nerve tonics and *calisaya* in such cases as these.

Therapy—When blood **dyscrasia** is present, sluggishness of the digestive apparatus, deficient glandular secretion, impaired secretion of the mucous membranes of the stomach and intestinal canal, this agent is indicated, as, in these cases, its tonic properties are plainly manifested.

It is of value in imperfect restoration of these functions after protracted disease, on which it operates with the tonic and restorative stimulants to an excellent advantage.

Amenorrhœa, leucorrhœa and dysmenorrhœa, with relaxed condition of the uterine supports and prolapsus, sometimes occurring from the extreme debility following severe fevers, and common, also, with scrofula and other blood dyscrasias, are all materially benefited by *corydalis formosa*.

In chronic **skin disorders** with marked cachexia, this agent is speedily curative. It will be found superior to other agents in overcoming eczema with great relaxation of tissue and general plethora.

It has been used in all cases of **syphilis** and **scrofula** with marked results. In syphilitic nodules of the bones, in syphilitic and scrofulous ulcerations, its influence is direct, immediate and permanent. If there is persistent ulceration with general breaking down of soft tissue, a strong infusion has been applied externally with good results. This is in part due to its stimulating influence upon the emunctories of the skin, facilitating elimination through the glands of this structure.

It has a marked influence, also, upon the kidney function which, while beneficial in its direct influence upon general elimination, is hardly sufficient to enable it to be depended upon as curative of kidney or bladder troubles to the exclusion of the use of more direct agents.

CHIMAPHILA. *Chimaphila umbellata.*

Synonym—Pipsissewa.

CONSTITUENTS—

Chimaphilin, arbutin, ericalin, ursone, tannin, sugar, gum, resin.

PREPARATIONS—

Extractum Chimaphilæ Fluidum, Fluid Extract of Chimaphila.

Dose, from a half to two drams.

Specific Medicine Chimaphila. Dose, from five to sixty minims.

Syrupus Stillingiæ Compositus, Compound Syrup of Stillingia.

Dose, from one dram to one ounce.

Physiological Action—*Chimaphila* is an alterative, stimulating waste, a tonic giving strength to the body, and a diuretic, removing dropsical

accumulations. While it aids in restoring the excretory functions to a normal condition, it tends to remove irritation of the urinary tract and kidneys, lesions of the skin and lymphatic glands, and deterioration of the blood, caused by the presence of waste products, the result of defective catabolism.

Therapy—Dr. Fox of New York recommended *chimaphila* in the treatment of **glandular disorders**. In 1905 he presented a very interesting paper to the New York Society on the influence of this agent in the treatment of **general bubonic inflammation**. He believes the remedy to be very valuable in **leucorrhoea**, and diseases where there is an excessive outpour of mucus. He gave it also when the abdomen seemed to be filled with nodules, when there was diarrhoea or cholera infantum.

He claimed that it will **reduce** the **mammary glands** if taken too long by females, and in males it will reduce the **size of the testicles**. It does not cause derangement of the stomach nor produce free action of the kidneys.

When the glands are large or inflamed either in the acute or chronic form he believes that this remedy is superior to our other glandular remedies, even to *phytolacca*. With it he can determine whether an enlarged gland is simple, or whether a tumor is developing. He gives it in bubo, ostitis, and mastitis with excellent results; also when the glands of the skin are affected.

It can be correctly adjusted to the uric acid diathesis, in **dropsy**, with debility and loss of appetite. Also in cases where there are inflamed and ulcerated cervical **glands**, enlargement of the parotid glands from retained excrementitious products, dropsy after scarlatina and measles, dropsy with debility from any cause, **chronic rheumatism**, skin diseases with enlarged cervical glands in scrofulous subjects, hectic fever with night sweats, enlargement of the mesenteric glands, also where there is an inflamed and swollen prostate gland, with discharge of prostatic fluid, urine thick, ropy, with bloody sediment, itching and pain in the urethra and bladder, strangury, chronic gonorrhoea, chronic nephritis, urethritis with profuse and purulent discharge, obstinate and ill-conditioned ulcers, in latter stages of typhoid fever with deficient excretion, tumors of the mammae supposed to be cancerous, this agent is used.

the urine containing urea, uric acid, and a full quantity of excrete solids.

RUMEX.

Rumex crispus.

Synonym—Yellow dock.

CONSTITUENTS—

Chrysophanic acid, tannin, gum, starch. The petioles of the leaves contain nearly one per cent of oxalic acid.

PREPARATIONS—

Extractum Rumicis Fluidum. Fluid Extract of Rumex. Dose, from ten to sixty minims.

Specific Rumex. Dose, from five to thirty minims.

Therapy—The alterative properties of this agent are underestimated. It is a renal depurant and general alterative of much value when ulceration of mucous surfaces or disease of the skin results from impure blood. It acts directly in its restorative influence, purifying the blood, removing morbid material, and quickly cures the disease conditions. It is valuable in **ulcerative stomatitis**, in **nursing sore mouth**, and in ulceration of the stomach with great lack of tone, combined with *quercus* or other tonic astringent, it has no equal in these conditions. It has cured exceedingly persistent cases of exhaustive morning diarrhea, the discharges being very frequent between six and twelve o'clock. It has been used also in the treatment of **syphilis** and **scrofula** with good results.

Dr. Vassar of Ohio believes that *Yellow Dock* is the best remedy known to prevent the inroads made by **cancer** on the human system. It is also valuable in **necrosis**, **scrofula**, and **tuberculosis**. I have mentioned the fact that this remedy will absorb iron from the soil very rapidly and carry a much larger proportion than normal, thus rendering the iron organic. Dr. Vassar knew of a blacksmith who raised *Yellow Dock root*, cultivating it in a soil which he kept constantly saturated with the washing from his cooling tubs, and scattered all the iron filings and rust over it. Ellingwood's Therapeutist has often called attention to this property of *yellow dock* and to the positive tonic and alterative influence exercised by it when so saturated with iron.

The above statement of the doctor's is the only one I have been able to find from any but foreign writers that emphasizes the power of *yellow dock* in extracting iron from the soil. It is possible that other inorganic medicines can be made organic in larger quantities by being artificially forced through the growth and development of plants in the natural exercise of their vital powers. The doctor thinks that the preservation of an absolutely normal cell condition of the human body if possible will prevent the development of **cancer**. He uses *Yellow Dock* hypodermically and thinks that there are mild early cases of cancer that can be cured with this remedy alone.

MYRICA.

Myrica cerifera.

Synonyms—Bay Berry, Wax myrtle, Candle Berry, Wax berry.

PREPARATIONS—

The **powdered bark**, from twenty to thirty grains.

Of the **wax**, one dram.

Of the **decoction of leaves or bark**, from two to four ounces.

Tincture, from five to forty drops.

Specific myrica, from two to twenty drops.

Specific Symptomatology—The agent is a stimulating astringent. It is indicated when there is excessive mucous discharge, where catarrhal conditions exist in any locality, especially in the gastro-intestinal tract. Also where **atonic diarrhea**, or persistent diarrhea, accompanies prostrating disease; also where there is feeble capillary circulation of the mucous membranes, accompanied with **phlegmenous ulceration**. Locally and internally in sore mouth, with **spongy, bleeding gums**.

Therapy—It is a remedy for those conditions where the vital powers are at low ebb. It aids the nutrition, stimulating the absorption of food, and promotes the restoration of depraved blood. It is considered a valuable alterative. In any condition where the mucous surfaces have lost tone, and are throwing out a profuse discharge, it may be given with advantage. It has been found valuable in **epidemic dysentery**. In conjunction with *capsicum*, its stimulating and tonic properties are plainly apparent. Combined with *geranium*, it is of superior benefit, where the patients have taken mercury and where ptyalism has been

induced. It assists in the more rapid elimination of the mercury from the system. Combined with *asclepias*, it is of much value in breaking up recent severe colds. Unlike most astringents, it materially improves excretion, secretion and the functional action of the glandular system.

In **chronic stomatitis**, of whatever form, where the breath is bad, and there is slow ulceration, the mucous membranes being dark colored, this remedy in combination with other indicated remedies, will effect a rapid cure. If the stomach is foul, and the breath and fecal discharges are offensive, it should be given with an emetic, until the stomach is thoroughly evacuated. In combination with *saguinaria* it will be found useful in removing abnormal growths from the post-nasal cavity. Sufficiently diluted, and combined with *hydrastis*, it may be applied to the mucous surfaces, in chronic nasal catarrh.

It is valuable in the treatment of very severe forms of **measles** and **scarlet fever**. It is especially useful in the persistent sore throat of scarlet fever when the tissues are swollen and spongy. Given in conjunction with antispasmodics, it will improve the action of that class of remedies, in many forms of **convulsions**.

Scudder claimed that the agent was a stimulant to the essential processes of digestion, blood-making and nutrition. The remedy may be given to advantage to those patients who are afflicted with chronic malarial symptoms and **jaundice**, with imperfect liver action, who are troubled with headaches, which are worse in the morning. The tongue is coated yellow, there is weakness and the patient complains of muscular soreness and aching in the limbs. The pulse is slow, the temperature is inclined to be subnormal. There is dull pain in the right side. No appetite, unrefreshing sleep, or where there are catarrhal conditions of the bile ducts resulting, in jaundice.

PLANTAGO.

Plantago major.

Synonyms—Plantain, Rib wort, Rib grass, Ripple grass.

CONSTITUENTS—

The leaves contain a resin, citric and oxalic acids. There is no alkaloid or glucoside.

PREPARATIONS—

Specific plantago. Dose from one to five drops.

The **juice** of the leaves is used, dissolved in alcohol.

Therapy—The remedy is of value in the internal treatment of all diseases of the blood. **Scrofula**, **syphilis**, specific or non-specific **glandular disease**, and **mercurial poisoning**. It is used in ulcerations of the mucous membrane, due to depraved conditions. It may be given in **diarrhea**, **dysentery**, the diarrhea of consumption, **cholera infantum**, and where there are longstanding **hemorrhoids**. It is also given in **female disorders**, attended with fluent discharges, and in **hematuria**, also in **dysuria** and some forms of passive **hemorrhage**. It would thus seem to possess marked astringent properties, as well as those of an alterative character. The older physicians ascribe an active influence to it, in the cure of the **bites** of **venomous serpents**, spiders, and poisonous insects. A simple but important influence is that exercised in **tooth-ache**. The juice on a piece of cotton applied to a tooth cavity, or to the sensitive pulp, has immediately controlled intractable cases of toothache. It seems to exercise a sedative influence upon pain in the nerves of the face, and relieves many cases of **earache** and **tic-douloureux**. In the **nocturnal incontinence** of **urine**, in young children, accompanied with a large flow of colorless urine, this agent has produced curative results in many cases.

Plantago is of immediate benefit, Dr. Kinnett. says, in the treatment of **snake bites**. It should be made and given freely and a poultice of the leaves applied to the wounds.

Plantago relieves **inflammatory infection of the skin**, especially if accompanied with burning pain or itching. Inflammation of the intestinal tract which involves the mucous membranes and is accompanied with colicky pains will be relieved by *plantago*.

Old Dr. Smith from southern Illinois applied *plantago* in the form of a saturated tincture as a dressing for fresh cuts, wounds, or bruises. He could thus secure healing without the formation of pus. He made his tincture of the entire plant and roots, pounded up in alcohol. He applied one part usually to four of water.

Where the **teeth** have developed sudden **tenderness** and seem to be too long from ulceration of the roots, Dr. Turnbaugh gives *plantago*, ten

drops of a three x dilution every three hours. He gives the late Dr. K M. Hale credit for the formula.

Dr. Wallace dips a teaspoon into hot water, drops into this five drops of the *specific plantago*, and pours this into the ear for earache, filling the ear afterwards with cotton. He claims immediate relief in aggravated cases.

Externally the bruised leaves have been applied in the form of a poultice, to **chronic ulcers**, and **skin disorders**, resulting from depraved blood. The juice may be combined in the form of an ointment. One physician told the writer that he saw an Indian woman pound up a large quantity of *Plantain leaves*, put them into a skillet, and pour on enough lard to cover. This was boiled for some time, then strained. When cool, the product was a smooth, greenish colored ointment. With this a chronic and previously absolutely intractable skin disease, similar to a dry form of eczema, was rapidly and permanently cured. This ointment in appearance and action very closely resembles the proprietary preparation, known as cuticura.

GROUP VI.
Agents Influencing the Character of the Blood.

CHAPTER III.
Special Glandular Remedies.

KALMIA
BLADDERWRACK
COLCHICUM
TRIFOLIUM
SENEGA
MANGIFERA
MANACA
SYMPHYTUM
TELA ARANEA
ICHTHYOL

KALMIA. *Kalmia latifolia.*

Synonym—Mountain laurel.

CONSTITUENTS—
Andrometoxin, arbutin, tannin.

PREPARATION—
Specific Kalmia. Dose, from one-half to five minims.

Physiological Action—In *Kalmia* we have a remedy acting in a manner somewhat like *veratrum viride*, both in controlling fevers and in inflammations, as well as in its influence as an alterative, it having been successfully used both in primary and secondary syphilis. Like *veratrum* it has also been employed hypodermically in the treatment of neuralgia of the face, and sciatica.

Therapy—Professor John King once reported the following case:

“Some time since I treated a case of **syphilis** of five weeks' standing, which had not received any kind of treatment during that period. The patient at the time I saw him had several chancres; the surface of the body and head was covered with small red pimples, elevated above a

jaundiced skin, and he was in a very debilitated condition. I administered a saturated tincture of the leaves of *Kalmia*, and touched the chancre with tincture of muriate of iron, and effected a cure in four weeks, removing the jaundice at the same time.”

Notwithstanding the authority, we accept this statement, *cum grano salis*. If *Kalmia* would relieve other cases of syphilis as it did this one, we may safely say that we have no other alterative in our materia medica equal to it. It has not been extensively used, but it is without doubt beneficial in **glandular disorders**, **scrofula**, and in mild cases of secondary syphilis.

Kalmia exercises a sedative influence over the heart, controls the pulse beat without depression. It is markedly alterative but must not be pushed because of this slowing influence. Homeopaths give it in cardiac hypertrophy, and for painful **rheumatic** affections, for **facial neuralgia**, for **tobacco heart**, and it will probably act well in **rheumatic endocarditis**.

It will be found of service in inflammatory diseases, also in **hypertrophy of the heart** with **palpitation**, **diarrhea** and **dysentery**, **rheumatism**, chronic inflammations, with atonicity, neuralgia, active hemorrhages, threatened abortion from syphilitic taint, active **menorrhagia**, pain in the limbs and back during menstruation, jaundice, and also in scleritis, with pain in turning the eyes, and in ophthalmia.

BLADDER WRACK. *Fucus vesiculosus.*

Synonyms—Sea wrack, Kelp-ware.

PREPARATIONS—

Fluid Extract Bladder Wrack, miscible with water without precipitation. Dose, from one-half to four drams, three times a day.

Powdered Extract Bladder Wrack, of the same strength as the solid extract. Dose, from five to thirty grains.

Solid Extract Bladder Wrack; one part equals five of the plant. Dose, from five to thirty grains.

Therapy—This agent is, used for the specific purpose of **reducing unhealthy fat** in excessive **adiposity**. If given in doses of from one-half to two drams, three or four times daily, it has reduced excessively fat patients in a satisfactory manner without interfering in any way with the normal health functions. Wilhite, in *New Preparations*, 1878, gave his observations as follows: “From our study of the drug we do not believe fucus to be a reducer of the adipose tissue of *healthysubjects*. It is mostly on those cold, torpid individuals with a cold, clammy skin, loose and flabby rolls of fat, with relaxed pendulous abdomen, that *fucus* will display its powers to the best advantage. In this class of cases fat is a morbid condition, a result of vitiated function. With such the remedy acts beneficially by overcoming this torpid and morbid tendency, thus reducing the size by toning up the vascular and sympathetic systems. Possibly it also acts upon the starchy matters of the food in some manner, so as to prevent their easy change into fat when introduced into the human economy.”

It is in the **obesity** of individuals of the lymphatic temperament that the beneficial effects of this drug are the most marked. It has little or no influence in the reduction of the fleshiness of persons of active habits, or of those of the sanguine temperament. In these cases strict regulation of the diet affords the only prospects of relief, but owing to the keenness of the appetite usually present, this regulation is rarely enforced. *Fucus* shows its most decided influence upon women in whom there exist menstrual derangements as menorrhagia and leucorrhœa, owing to a general atonic and flabby condition of the uterine tissues. In such cases an improvement in the local derangements usually precedes the general reduction of fat and the improved tonicity of the general system.

Fucus is advised as a specific remedy in the treatment of both **exophthalmic** and **simple goitre**. It is especially successful in patients not above thirty years of age. It is also suggested in the treatment of fatty **degeneration** of the **heart**. It is of service in **desquamative nephritis**, and in irritation and **inflammation** of the **bladder**. When general muscular relaxation is present, it is of service in the treatment of **menstrual derangements**.

COLCHICUM.

Colchicum autumnale.

Synonym—Meadow saffron.

Dose of the bulb, from. two to eight grains; of the seed, from one to five grains.

CONSTITUENTS—

Colchicine, Colchicortecin, Beta-colchicoresin.

PREPARATIONS—

Specific Colchicum. Dose, from one-fourth minim to three minims.

Extractum Colchici Semini Fluidum. Fluid Extract of Colchicum Seed. Dose, from one to five minims.

Vinum Colchici Radicis. Wine, of Colchicum Root (when made from the fresh bulb). Dose, from one to five minims. It should be discontinued as soon as violent catharsis or any depressing effects are observed.

Physiological Action—Moderate doses cause some gastro-intestinal irritation, with loss of appetite, colic and diarrhea; if the quantity is increased there is bilious vomiting, irritation of the colon with colicky pains, bloody and mucous stools, but without tenderness on pressure over the abdomen; while poisonous doses cause violent gastro-intestinal irritation, griping, purging, vomiting, painful spasms of the limbs and trunk, collapse, delirium, coma and death.

It is a cathartic and depressant of vital action, in large doses, an irritant poison inducing the phenomena of acute cholera, with enfeeblement of the heart's action and of the circulation.

Therapy—A recent Homeopathic writer, finds the indications for *colchicum* very often present in vomiting and the nausea of pregnancy. His success has been so prompt and gratifying, that he seldom uses other remedies. It is indicated when there is a clear, glairy, stringy fluid vomited, the nausea aggravated by smell of food.

In autumnal diarrhea, with white or bloody mucous discharges, the remedy gives immediate results.

The remedy is seldom used for its cathartic influence but has long been given as a magical eliminative in **chronicrheumatism** and **gout**. It has a specific influence upon muscular pains, acting in harmony with *cimicifuga*, with which it is usually prescribed, and with *gelsemium*. It must be given always short of its cathartic action; even then, when continued for some time, it depresses the heart and the nervous system, producing a feeble pulse and cool skin. It is seldom given in acute rheumatism, although it may be prescribed advantageously in these cases.

In rheumatic carditis or pericarditis in its sthenic stage, its influence is sometimes superior to that of any other agent. Its direct influence on the disease processes is exercised to a most desirable extent.

TRIFOLIUM. *Trifolium pratense.*

Synonym—Red clover.

CONSTITUENTS—Not analyzed.

PREPARATIONS—

Specific Trifolium. Dose, from one to sixty minims.

Therapy—*Trifolium* has been used as a cancer remedy by virtue of specific alterative properties said to exist in it. It was at one time widely advertised. but the profession has failed to observe the effects claimed by the proprietors, and yet it undoubtedly has active alterative properties. It is given where a cancerous diathesis is known to be present, and its use is persisted in for months. Improvement in objective phenomena is reported from a number of excellent observers.

The agent is also prescribed in **irritable conditions of the larynx** and air passages, especially if evidenced by **spasmodic cough**. It has served a good purpose in **whooping cough**, in the **cough of measles**, and in general bronchial or pulmonary irritation. A dry, irritable cough will respond most readily to its influence.

Dr. Lambert is of the opinion that *trifolium* has a direct action in improving the **nutrition of the brain**. He thinks it is demanded when the patient is overworked; when there is general mental failure, with

loss of memory of words, or when there is confusion of ideas of functional causes; also when there is weakness of the lower extremities, or of the feet from deficient capillary circulation.

SENEGA.

Polygala senega.

Synonym—Seneca Snakeroot.

CONSTITUENTS—

Polygalic acid, polygalin, fixed oil, resin, volatile oil, sugar, malates.

PREPARATIONS—

Extractum Senegae Fluidum, Fluid Extract of Senega. Dose, from ten to twenty minims.

Specific Senega. Dose, from one to twenty minims.

Physiological Action—*Senega* has sustained a reputation in the past, as an antidote to the poison of venomous reptiles. It is an alterative of much power, exercising a marked influence upon both the skin and mucous membranes, notably the latter. In large doses it produces nausea, vomiting and catharsis.

It causes a sensation of acidity in the throat when a moderate dose is swallowed, and may be employed in chronic pharyngitis, as a local stimulant, where the mucous membrane is relaxed and the secretion abundant.

Specific Symptomatology—The agent is indicated in **typhoid pneumonitis**, capillary bronchitis, in aged and debilitated subjects, chronic bronchitis with profuse secretion, in the declining stages of pneumonitis, bronchitis and croup, when the inflammatory condition has passed off, chronic bronchitis with pain and soreness in the chest and asthma.

Therapy—The agent is in use in the treatment of **dropsy** from obstruction and glandular enlargement, also in **rheumatism, syphilis, squamous skin diseases** and in **amenorrhea**. In inflammation of the eyelids, and iritis it is beneficial.

Senega has been employed as a stimulating expectorant in **chronic bronchitis**, in aged and debilitated subjects, where a stimulating medicine is demanded and in the later stages of pneumonia and catarrhal inflammations.

In these cases, given in small doses, it improves secretion, removes abnormal deposits and restores the strength.

It is an energetic stimulant to the mucous membranes of the air passages: and, when given before the inflammation has subsided, aggravates the cough and does harm. Given in small doses, it also acts as an alterative, and may thus be given in dropsy from obstruction, in **syphilis**, and in squamous skin diseases.

In the treatment of **chronic asthma** this is an efficient remedy.

MANGIFERA.

Mangifera indica.

Synonyms-Mango.

CONSTITUENTS—

It contains a strong resin, tannin, and an acrid oil, sugar and citric acid.

PREPARATIONS—

There is a **fluid extract**, the dose of which is from fifteen minims to one dram.

Specific Mangifera is also prepared. Dose, from one to two minims.

Specific Symptomatology—*Mangifera* is especially adapted to atonic or greatly **relaxed mucous membranes** with profuse discharge from marked feebleness of the capillary circulation—very **pale membranes** with loss of tone; also when there is **diarrhea** with large **mucous discharges** and **dysentery** with an excessive mucous or mucopurulent discharge. The dose need not exceed fifteen or twenty minims. It seems to have antiseptic properties which are advantageous in malaria in septic trouble. It has distinct tonic properties. It reduces the pain of **dysmenorrhea**, controls **leucorrhoea**, reduces an exhaustive menstrual

flow, and regulates this function. Prof. Howe gave it when there was developing tumor of the uterus, expecting to control the abnormal growth. It is useful also in irregular, passive hemorrhage.

Therapy—This agent has something of the same influence that any active tonic astringent would have combined with capsicum or other stimulant and an antiseptic. It seems to be a stimulating astringent tonic, correcting septic conditions. In **malignant disease** of the **throat** this author has been in the habit of using sulphurous acid, and *pinus canadensis*, or *quercus*. This remedy takes the place of both to an extent. It should be applied to the fauces, should be gargled, and also used internally. It will be found beneficial in **ulceration** of the **mouth** or other mucous surfaces. It has been for some time recommended in the treatment of **nasal catarrh**, and in **vaginal leucorrhoea**, in **bronchial catarrh** also. It is specific to diarrheas where there is a great degree of relaxation and lack of tone, and where a stimulating astringent is needed.

Dr. Harrison gives *mangifera* freely in **diphtheria** and **tonsilitis**, two drams in four ounces of water, a teaspoonful every half hour or hour, treating other indications with *aconite*, *phytolacca*, or *jaborandi* as required. He used it in post-partum hemorrhage also. He says that when the mucous membranes are red, tender, swollen, perhaps inflamed, and have a tendency to throw out a discharge, then this remedy does the best good. It is a mucous membrane remedy.

Dr. Lisk used this remedy in the treatment of hematemesis with much success.

In the uric acid diathesis, Dr. Rew gives *mangifera*, in conjunction with sulphuric acid in small doses every two or three hours with good results.

Dr. Barnes of Illinois reports several cases of severe uterine hemorrhage both post-partum and during the menopause, cured with this remedy.

In syphilitic throat trouble, an advantage is gained by combining *mangifera* with *thuja*. In extreme cases, the **ulceration** should first be touched with persulphate of iron; then *thuja* and *mangifera* used both to the ulcerations, and internally.

Dr. Jennie M. Covert reports extreme **uterine engorgement** and **dysmenorrhea** cured by mangifera and tiger lily. (Ellingwood's Therapeutist for September, 1910.)

Where there is mucopurulent discharge, either from the bowels or from the uterus, Dr. Linquist says he knows no agent equal to it. The dose is small, easily administered, has no disagreeable taste, it is acceptable to the stomach, and more certain in its influence than most of the better known astringents. In some cases where pain is present with these conditions named, the pain seems to be relieved by the remedy. It has relieved the excessive albumen present in some cases of **albuminuria**, but has not seemed to promote a cure on the few cases used. It may be applied directly to **cervical ulceration**, and excessive **vaginal leucorrhea**, either of a specific or nonspecific character, and will be productive of good results.

FRANCISCEA.

Franciscea uniflora.

Synonyms—Manaca; Vegetable Mercury.

Dr. Williams of Bristol, Conn., has used *manaca* for twenty years. He finds it especially valuable in chronic stiffness of the muscles. Where from muscular contractions the joints are stiff. He does not think it curative in actual arthritis. In one case, there was **contraction of muscles** of the shoulders with inability to raise the arms, with severe neuralgic pain, weakness of the nervous system, and violent attacks of the heart. There were **rheumatic pains** in the **feet** and lower part of the legs which prevented the patient from walking except with the aid of a crutch. The patient was anemic; had heavy urine full of **uric acid**. This patient was given *melilotus*, *sticta* and *manaca*. There was gradual improvement, and the patient ultimately made a satisfactory recovery.

Dr. Cowen gives *manaca* in fifteen-drop doses, with salicylate of sodium in **acute rheumatism**.

Manaca is a valuable remedy for **gonorrhoea** and for **gonorrhoeal rheumatism**.

Dr. Hopkins gives *manaca* in muscular rheumatism in four-drop doses every two or three hours. He often combines it with *cimicifuga*. In either case, the results are satisfactory.

SYMPHYTUM

Symphytum officinalis.

Synonym—Comfrey.

CONSTITUENTS—

It contains tannic acid, starch and a small quantity of asparagine.

PREPARATIONS—

A **tincture** and a **fluid extract** are prepared, also **specific symphytum**. Dose of tincture is from one to ten drops.

Therapy—Its direct influence, like other mucilaginous agents, seems to be upon the mucous surfaces when taken internally. It was previously advised in all forms of bronchial irritation, with cough or difficult breathing, especially if there was hemoptisis. It was used in the chronic cases, or where there was protracted convalescence. of severe acute cases. Some writers have been very enthusiastic concerning its specific influence. One physician who has used it for over thirty years, claims to obtain the best results from a strong decoction, made from one ounce of the root, in a pint of water. He gives this almost *ad libitum* as a drink. In **pneumonia**, this decoction relieves the difficult and painful breathing. It aids expectoration, and tends to lower the temperature. In all serious cases, he depends upon this remedy. Its properties he believes to be not only soothing, but demulcent, balsamic and especially pectoral.

Where there is **inflammation** of the **stomach** or bowels, he has obtained signal benefit from this infusion, especially if, as a result from inflammation, there is hemorrhage or passive discharges of any character. He also gives the infusion as a drink in nephritis, in both acute and chronic cases. In inflammation of the bowels, it may be injected, and being retained it exercises a direct soothing influence, which would probably be enhanced by the addition of the proper intestinal antiseptic.

Old European writers called attention to this remedy as a vulnerary. It had a great reputation as an external application in the treatment of wounds, bruises and putrefying sores. They used it for ruptures and applied it where a bone was fractured, believing that it would stimulate the knitting of the bone. These old writers claimed that it was useful in all hurts and bruises, internal and external, in all cases of **hemorrhage, blood spitting, flux, diarrhea, dysentery, menorrhagias, leucorrhea**. It will certainly relieve the swelling and pain of a bruise or sprain as quickly as any other remedy with which we are familiar. One writer, in his zeal and confidence, says: "It acts upon an inflamed surface like a charm, subduing inflammation as water subdues and extinguishes fire." Another writer says: "This agent has marvelous healing and cicatrizing properties. If the tincture be applied to swollen and painful parts, it quickly reduces the pain and swelling. It stimulates granulation in slow healing ulcers, and rapidly promotes healing in bruises of the muscles, ecchymosis, injuries to the tendons, and cartilaginous tissues. It is indeed efficacious. An antiseptic decoction will produce much the same results as the tincture."

TELA ARANEA

The *spider's web* has long been used as an astringent. The freshly spun web free from dust, is macerated in alcohol, and a tincture is prepared, or the *specific tela*, of which from one to ten drops may be given as a dose. The web has been applied directly to fresh wounds to check hemorrhage, but because of the fact that it can seldom be found free from dust, it is not commonly used. Given in **intermittent fevers**, it is said to produce a positive antiperiodic effect. It is also given in **periodical headaches** or neuralgias, for this purpose.

Specific Symptomatology—Felter and Lloyd give the following as its indications: Masked periodical disease in hectic, broken-down patients. In diseases that appear suddenly, with cool, clammy skin, and cool extremities cool perspiration. It has been given in **delirium** of continued fevers and where there is great **irritation** of the **nervous system** or feeble heart under these conditions. It will relieve **restlessness** and morbid wakefulness, when feebleness is present and **muscular cramps**, also **nocturnal orgasm**, whether in male or female.

ICHTHYOL.

Synonym—Ammonium Sulpho-Ichthyolate.

Therapy—The specific influence of the agent has not been determined. It is an alterative agent for both external and internal use.

Hare recommends it highly in the treatment of **acute articular rheumatism**. He applies an ointment to the inflamed area which contains two drams of ichthyol and twenty drops of the *oil of citronella* to an ounce of adeps. This is applicable in severe sprains of the joints, and injuries of that character. The agent is widely used, also, in **chronic rheumatism** and in **gouty conditions**.

This same ointment is applied to **erysipelas** with equally good results in all cases.

In **lymphatic indurations** and chronic **scrofulous enlargements** it is a serviceable application; also in other glandular conditions with chronic enlargement. It is used extensively in the treatment of **skin diseases**,—ulcers of various kinds, urticaria, acne, intertrigo, **eczema** and **psoriasis**. It has been extolled in **lupus**, in **epithelioma** and in **keloid** also.

It is used to good advantage in chilblains, frost bites, burns, contusions, and in slowly healing wounds.

A foreign physician employed ichthyol in eighteen cases of **variola**, only two of which were fatal. From the time the papules appeared until the pustules disappeared, a pomade was applied, made of one part of ichthyol to two parts of lanolin, and six parts of the *oil of sweet almonds*. The results were highly satisfactory.

Dr. Langford depends upon ichthyol to control **suppuration**.

Dr. Courtright of Illinois used ichthyol as a local application in **eczema** and **erysipelas**. One patient with **moist eczema** covering almost the entire body and limbs was finally radically cured by this substance. He used it with good results in **scrotal eczema**. In doses from one to ten minims it may be given for cough and bronchial troubles with throat complications.

GROUP VI.
Agents Influencing the Character of the Blood.

CHAPTER IV.
Astringent and Antiseptic Alteratives.

HAMAMELIS
CALENDULA
AESCULUS
CARDUUS
CEANOETHUS

HAMAMELIS. *Hamamelis virginica.*

Synonym—Witch-hazel.

CONSTITUENTS—

Tannin, volatile oil, a bitter principle.

PREPARATIONS—

Extractum Hamamelis Fluidum, Fluid Extract of Hamamelis.
Dose, from ten to sixty minims.

Distilled Extract of Hamamelis. Dose, from ten to sixty minims.

Specific Medicine Hamamelis. Dose, from five to sixty minims.

Specific Symptomatology—Soreness of muscles, muscular aching, a bruised sensation, soreness from violent muscular exertion, soreness from bruises and strains, soreness and muscular aching from cold and exposure, relaxed mucous membranes, dark blue membranes from venous stasis, veins dilated, relaxed, enlarged, and full—varicosis.

Therapy—Internally it is given with the above indications as a remedy for **sore throat** of whatever kind, with feeling of extreme soreness, and with dark-colored membranes.

It is used in **tonsillitis** and **diphtheria**, in **phlegmonous ulcerations** of the mouth and throat, and in **acute catarrh**. If there is **hemorrhage** from the post-nasal cavity, or from the teeth, or from spongy gums, it is a useful remedy.

It is valuable when there is excessive **catarrhal discharge** from dark, relaxed mucous membranes, and in catarrhal or watery **diarrhea** with a tendency to passive hemorrhage of dark blood.

It has conspicuous virtue in the treatment of **hemorrhoids** with the specific indications. The fluid extract in fifteen drop doses every two hours will quickly effect a cure in recent cases, and will greatly benefit chronic cases, its influence being greatly enhanced if combined with collinsonia. In relaxation of the mucous membranes of the rectum and in **prolapse** of the **bowel**, it is useful. In these cases the distilled extract should be applied externally while the fluid extract is given internally.

It is a good remedy in relaxation of the vaginal walls with **leucorrhea**, and in catarrh of the womb, also in passive hemorrhages from these parts, especially if there be soreness or extreme tenderness. Externally the distilled extract is of first importance in soreness of the muscles, or aching of parts. In bruises, sprains and muscular lameness its application gives prompt relief. If applied hot it is particularly effectual. In the general aching, lameness and muscular soreness, following a **severe confinement**—a source of extreme discomfort, often greatly retarding recovery—this agent applied hot will give immediate relief, a measure it is cruel to neglect to advise, in these cases, as it acts at once. In lame and **sore breasts** it may be applied, to immediately relieve the soreness, but other remedies should be given for acute inflammatory action.

Its indications would suggest it as an excellent remedy in **rheumatism**, being of value externally and in conjunction with other remedies.

Applied to **burns** and **scalds** it gives prompt relief. Ten grains of menthol dissolved in four ounces of the distilled extract applied to a burn will stop the pain at once and will promote the healing. It is best applied by saturating a soft cloth with which the burned surface may be covered.

CALENDULA.

Calendula officinalis

Synonym—Marigold.

CONSTITUENTS—

Calendula, volatile oil, amorphous bitter principle, gum, sugar.

PREPARATIONS—

Tinctura Calendulae, Tincture of Calendula. Dose, from half a dram to one dram.

Specific Calendula. Dose, from one to sixty minims.

Physiological Action—Through the cerebro-spinal vaso-motor nervous system (Burt's fourth edition *Homeopathic Materia Medica*), *calendula* has one specific action. It induces paralysis in the arterial capillary vessels. Through it the vaso-motor nerves become partially paralyzed and the vessels become loaded with blood. From this increased irritation which attracts a large number of white corpuscles, the adhesive quality of these corpuscles induces adhesive inflammation, as is beautifully shown in lacerated wounds and cuts where calendula is used, producing union by first intention. *Calendula* is best applied in a cerate.

Therapy—This agent is used principally for its local influence. Internally it is given to assist its local action, and to prevent suppuration in cases where there is a chronic tendency to such action. It is useful in varicose veins, chronic ulcers, capillary engorgement, and in hepatic and splenic congestion.

As *arnica* is applied to bruises and sprains, this agent is also applicable; and in addition it is of much service applied to **recent wounds**, cuts and **open sores**. It is antiseptic, preventing the formation of pus. It causes the scar, or **cicatrix**, to form without contraction of tissues, and in the simplest possible manner. It hastens the healing of wounds and materially favors union of co-adapted surfaces by first intention. It relieves the pain in **wounds**, and if there are not bad bruises, it quickly relieves the soreness and favors the healing process.

It is applicable to catarrhal mucous surfaces, to festering sores, local swellings, glandular inflammations and to epithelioma and carcinoma to correct the fetor. It is especially applicable to **severe burns**, to promote healing and to prevent the formation of a contracting scar.

AESCULUS.

Aesculus glabra.

Synonym—Buckeye.

CONSTITUENTS—

A poisonous principle acting like *nux vomica*.

PREPARATIONS—

Specific Aesculus. Dose, from one-tenth of a minim to five minims.

Physiological Action—*Aesculus Glabra* acts on the cerebro-spinal system; and in toxic doses causes vertigo, vomiting, wryneck, opisthotonos, tympanites, stupor, coma and death.

Therapy—*Aesculus Glabra* is a narcotic, but actively stimulates the nervous system somewhat like *nux vomica*. It has a special influence on the capillary circulation of the **rectum**, and on the pelvic and portal circulations and overcomes constipation and congestion associated with **hemorrhoids**, and aids in the absorption of the coagulated blood in hemorrhoidal tumors where a surgical operation is not deemed advisable. It lessens the caliber of the capillary vessels, and removes obstructions to the pelvic circulation, and is applicable whenever congestion results in hemorrhoids, or in enlargement of the uterus.

Concerning the application of this remedy for **piles**, Dr. Bloyer in The Gleaner said the piles are usually large and purple. They rarely bleed. There may be a sense of fullness in the rectum or there may be dryness with stricture of the rectum, causing a proctitis, all of which is relieved by this remedy as well also as the **headache**, **backache** and digestive or **asthmatic disturbances**, which are reflexly induced.

In paralysis it is a stimulant similar to strychnine. As a narcotic it acts similarly to *opium* but has much less narcotic power.

CARDUUS.

Silybum marianum.

Synonyms—*Carduus marianus*, St. Mary's Thistle, Mary Thistle, Milk Thistle.

PREPARATIONS—

A **strong tincture**; dose, from two to twenty drops.

The **Homeopathic mother tincture**, dose from one to twenty drops.

This remedy was spoken highly of by Rademacher, in hemorrhages, where there was congestion of the liver or spleen. Where there was periodical biliary lithiasis. He employed the tincture of the seeds, in **dysuria**, where there were **caruncular growths**, in the female urethra. He claimed it to be of value in hemorrhoids, and in venis stasis. *Carduus* has been frequently advised in the treatment of **varicose veins**. Its influence in this line must be studied. This condition has been neglected by internists, they having been taught that it was a surgical condition only.

Tripiier used in it pelvic congestions, with quick and permanent results. Its action has seemed to be similar to that of *hamamelis* and *collinsonia*. A case of **chronic hematuria**, with sensation of weight and tension in the pelvis depending upon varicose conditions of the rectal veins, was quickly relieved by it.

Specific Symptomatology—Felter and Lloyd say that its indications are found in dull aching pain over the spleen, which passes up to the left scapula, associated with pronounced debility and despondency, splenic pain, with no enlargement or with enlargement, when there are no evidences of malaria. Congestion of the liver, spleen and kidneys. General bilious conditions accompanied with stitches in the right side, with hard and tender spots, in this locality, gall stone, jaundice, hepatic pain and swelling. Also in the vomiting of pregnancy when these organs are complicated.

As it overcomes congestion within the pelvis, it is useful in certain forms of **dysmenorrhea**, **amenorrhea**, or irregular passive uterine hemorrhages.

Therapy—Harvey, in the California Medical Journal, says the indications are so plain that a tyro can prescribe it with certainty. It is

He has further employed the remedy in the treatment of **subinvolution**, and evaporating it on a water bath, has made an ointment which is applied to **ulcers** of the **os uteri**. It gives good results as a wash in the treatment of **gonorrhoea**, **gleet**, **leucorrhoea**, and ulcers and old sores. He believes the berries should be gathered just before they are ripe, to obtain the best action.

GROUP VI.
Agents Influencing the Character of the Blood.

CHAPTER V.
Alteratives with Special Selective Properties.

LEMON
CITRIC ACID
THUJA
VERBASCUM
SAXIFRAGE
MELILOTUS
SARRACENIA
CALCIUM SULPHIDE
SOLANUM

LEMON. ***Lemonis succus.***

Synonym—Lemon Juice.

Therapy—Because of the citric acid present in this substance it is exceedingly useful in therapeutics. The preservation of this juice from decomposition is easily accomplished by boiling, and pouring it while hot in bottles with narrow necks. The neck of the bottle above the hot juice is filled with sweet oil to the cork, which must fit tightly.

In Italy *lemon juice* is extensively used in malarial localities as an active **anti-malarial** remedy. It has produced cures in many stubborn cases.

It is an active **anti-scorbutic** and is in common use on shipboard for the prevention or cure of **scurvy**, for which it is of more service than citric acid.

It has been used in some, cases of **chronicrheumatism** and gout with good results.

Diluted and sweetened it makes a most refreshing drink in fevers, especially if an acid is indicated, the mouth being dry and parched and the membranes of a dark color. It is useful in the **hoarseness** of

singers and speakers to temporarily clear the voice. It will serve a good purpose in irritably dry coughs, added to cough syrups.

The pure juice has been injected into the cavity of the womb to control **intractable** post-partum **hemorrhage**. It is also useful in other hemorrhages.

ACIDUM CITRIC

Synonym—Citric acid.

Therapy—This organic acid has a narrow but important field in therapeutics. It is specifically a remedy for scurvy. It is freely used by those who are forced to subsist upon a salt meat diet, or are deprived to a great extent of vegetable food. Much the same effects can be accomplished by the free use of **lemon juice**, but it cannot be transported often in bulk and is sometimes difficult of preservation. In general scorbutic conditions, the use of citric acid in small quantity extended over considerable time is of much service.

This agent is useful in **rheumatism**. It influences the secretion, excretion, and general elimination of uric acid to a limited extent. It is also useful as a drink in **fevers** in the manner described for mineral acids and tartaric acid. It is cooling, refreshing, allays thirst and stimulates the secretions of the mucous and salivary glands, and temporarily promotes the normal function of the stomach. It is an efficient organic acid with which to supply the demand for acids in conditions where these are deficient.

There is a form of **difficult breathing** which is difficult to specify with exactness, where a small crystal of citric acid placed directly on the tongue and dissolved will give immediate relief. I have excellent authority for this statement.

THUJA. *Thuja occidentalis.*

Synonyms-Arbor vitae, white cedar.

CONSTITUENTS—

Colorless volatile oil, soluble in alcohol, with a sp. gr. 0.92, and a
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yellow, crystallizable, bitter principle called thujin, punitannic (Kowalier) and thujetic acid.

PREPARATIONS—

Extract non-alcoholic, Fluid Extract Arbor Vitae, not miscible with water. Dose, from one-fourth to one dram.

Specific Medicine Thuja. Dose, from one to ten drops.

Administration—In the treatment of local conditions involving blood changes, the beginning dosage should be small, and administered two or three times per day. If, however, the condition does not show improvement, especially where there is a **cancerous cachexia**, the dose may be increased, if necessary, to one dram every two or three hours. In non-malignant cases the dose may be much smaller. In warts and excrescences, two small doses per day will often remove them in a few days, especially if external use of the agent be made also. In conditions of a syphilitic character the cure in all cases will be more protracted.

Physiological Action—No extended systematic study of the physiological action or specific therapeutic application of this agent has been made. It exercises a peculiar influence over abnormal growths and tissue degenerations, especially those of an epithelial character. It was originally advised as a remedy for epithelioma, to be administered both internally and externally. It has been widely used in the treatment of cacoplastic growths, and glandular indurations of a scrofulous character, also of warts, small tumors, and incipient cancers of different varieties, and goitre. It is a remedy for perverted glandular action and certain blood dyscrasias.

Therapy—It has been used extensively by all physicians in the treatment of **cancer**. It is claimed to exercise an abortive influence over incipient cancer, and to retard the progress of more advanced cases. In extreme cases it will remove the fetor, retard the growth, and materially prolong the life of the patient. It should be given internally and the dosage increased to the extreme limit. It should also be kept in contact with the parts externally or injected into the structures. **Epithelioma, condylomata**, and all simple cancerous growths should be treated with it.

I had an interesting report from Dr. Caple who injected *thuja* into a **giant-celled sarcoma** of the hip joint. He used a teaspoonful in the

structure at once, giving the remedy internally, in fifteen-drop doses, with the same quantity of *echinacea*. The results were more than he had anticipated.

Dr. Jones injected from twenty to sixty drops of *thuja* into a **rectal cancer** every second day, and also where there was a cauliflower variety of cancer of the uterus. He believes in this remedy if enough is used. It must be used very freely.

Thuja is given internally for cancer, and for the pains of cancer it is applied externally, when possible, occasionally with good results.

Thuja certainly exercises a direct influence upon the glandular structures and function. In what manner this influence is exercised is unknown, but in any disease that involves the gland, this remedy must be considered, and if there are no contraindications it can be tried, and in many cases as with the ductless glands, it seems to act in a direct manner.

Thuja is directly indicated, first, as a peculiar alterative, in improving diathetic conditions of the blood. Again, it acts directly upon abnormal growths-perversions, such as peculiar conditions of the cell structure of the skin, and other external structures. It is thus indicated in all abnormal growths of the skin or mucous membranes. It exercises a specific influence upon **catarrhal discharges**, correcting the **glandular faults** that are to blame for such a condition wherever they may be. It is specific to **urinary irritation** in aged people especially; also in childhood. It strengthens the sphincter of the bladder.

Dr. Andrews uses *thuja* in **chronic diarrheas**, and in the treatment of ulceration of the bowels. In colonic ulceration, he uses it as a high enema once or twice a day.

In a bad case of **polyuria** with great sensation of debility and weakness of the entire sexual apparatus and some loss of sexual strength, a man of 65 was given five drops of *thuja* every two hours with complete success.

Thuja is an important remedy in the treatment of **spermatorrhea**, especially if from exhaustion from over-indulgence, or from **masturbation**. The patient must avoid alcoholic stimulants. Dr H. C.

Noble reported twenty-nine cures out of thirty consecutive cases. In these there was nervous irritation and usually **sexualneurasthenia**. In those cases in which the mind is seriously depressed by the physical condition, it is of especial service, as it stimulates the nerve forces and delays the discharge until, by general improvement of the entire nervous system, the condition is restored. The influence of the agent will be enhanced by a combination with *avenasativa*, *sawpalmetto*, or *staphysagria*, in cases of this character, when *Thuja* should be given in doses of from two to ten drops, four or five times daily.

As an external application *Thuja* produces at first a sensation of smarting or tingling when applied to **open sores** or **wounds** and it is usually best to dilute it with one, two or four parts of water, or to combine the non-alcoholic extract with an ointment base in the above proportion. This constitutes an excellent mildly antiseptic and actively stimulating dressing to indolent, phagedenic or gangrenous ulcers. It is of much service in bed sores and in other open ulcers dependent upon local or general nerve exhaustion.

In **chronic skin diseases** of either a non-specific or specific character, it is a useful remedy. Vegetations of all kinds, especially those upon mucous surfaces, will yield to it readily. It is a useful agent in the treatment of **post-nasal catarrh**, and **nasal polypi**. A small dose internally four or five times daily, with the application of fluid *hydrastis* in a spray, will quickly retard or remove such abnormal growths. It is also applicable to **sloughing wounds**, and to **phagedena** of the venereal organs. It is a positive remedy in the treatment of **senile gangrene**. It causes gangrenous surfaces to dry without hemorrhage or other discharge, destroys offensive odors and influences granulation.

Recent reports have been made concerning the very beneficial action of *thuja* on **papilloma of the larynx** and affections of that character in the post nasal region. J. Moreau Brown has reported a number of cases satisfactorily treated with this remedy. The agent is applied locally and small doses are given internally. One cases of multiple papilloma was quickly cured.

The same writer uses this agent in the treatment of **growths** in the **posterior nares**. He reports the cure of several small **tumors polypi** and **papillomatous growths**. He treats chronic **enlargement of the tonsils** with this remedy and has succeeded in reducing many severe cases to

the normal size. He has treated some cases of **disease of the turbinated bones** with the same remedy. He believes that in all cases of normal hypertrophy, where there is no diathesis, underlying the difficulty, in the post nasal region, this remedy is of inestimable value.

The treatment of **adenoids** is greatly simplified by making an application first of Monsell's solution to the diseased structures, and then applying *thuja*. The use of *thuja* persistently in these cases is as effectual as it is when used in the same manner for **syphilitic** ulcerations. It may also be given internally.

Professor A. J. Howe cured **hydrocele** almost exclusively with this agent. The following is the course he adopted as described in his own words: "In an ounce of warm sterilized water pour a dram of Lloyd's *Thuja*. Mix thoroughly by drawing a quantity into the syringe, and forcing it back repeatedly for a few times, then draw up about two drams of the dilute mixture in the barrel of the syringe to be ready for use. Introduce a large exploring needle into the sac of the tunica vaginalis testis and allow the fluid to escape. Before withdrawing the needle, place the nozzle of the loaded syringe into the needle's open mouth and with a plunge of the piston force the diluted *Thuja* into the cavity recently distended with serum. Then in order to cause the liquid to enter every crevice of the sac of the hydrocele, pinch and knead the scrotum with the fingers quite vigorously. The needle is then withdrawn. The pain induced is quite considerable for at least half an hour, then the patient goes about his business and usually no additional treatment is required." The above method, with some unimportant variations, has been in general use among our physicians since suggested by Professor Howe, and the result as reported by very many has been satisfactory.

This agent has been used successfully in the treatment of trachoma. The non-alcoholic preparation is combined with vaseline or other unctuous substance and applied once or twice daily.

Dr. Barber uses *thuja* in **conjunctivitis**. However severe the case, he had no case especially where there was severe **granulation of the lids** that was so stubborn but that he could benefit it with a mild solution of *thuja*. He occasionally used Long's *thuja* with vaseline with equally good results. The use of *thuja* in **pterygium**, is spoken of by a number of our writers. It is applied directly to the growth as often as possible

without inducing inflammation. Cures have been effected in many cases.

Dr. Walker for many years has **injected** small **tumors** with *thuja* full strength, twenty drops for the first injection, increasing the subsequent injection every day or two until in some cases he has used as high as half an ounce. An abscess forms and the tumor slowly disappears.

The agent is especially advised in the treatment of urinary disorders of the aged and young. It gives satisfaction in the treatment of **nocturnal enuresis** when the difficulty is of functional origin. It is also valuable when there is dribbling of urine, loss of control from paralysis of the sphincter, perhaps, in the aged, where **urinary incontinence** is present, with severe coughs, lack of control when coughing or sneezing. Sometimes in severe cases of nocturnal enuresis, it is accompanied with *belladonna* or *rhus aromatica* with good results. In old men with chronic **prostatitis**, with constant dribbling of the urine, this agent is valuable. It relieves the weakness at the neck of the bladder. It tones the muscular structure of the bladder and exercises a desirable influence over the mucous structures of the entire urinary apparatus. It also stimulates secretion within the tubules of the kidneys by its direct influence. upon the epithelial cells.

Where there is **irritability** of the **bladder** from the presence of uric acid, or other precipitates in the urine, or where there is chronic rheumatism or gout, the agent is serviceable. It is not advised where there is acute inflammation.

The agent is useful in **urethral caruncle**, and as a remedy for gleet, when granular urethritis is present. The remedy is valuable in the treatment of disorders of the mucous lining of the bronchial tubes. It is beneficial in ulcerative forms of **sore throat**, where the secretions are fetid in character. It may be inhaled in **chronic bronchitis**, **bronchorrhoea**; **bronchitis**, with offensive discharge; **chronic nasal catarrh**. Hemorrhage from these. organs is beneficially influenced by its use. A number of cases of **spermatorrhea** have been cured since our previous report on this remedy.

The **balanitis** from cystitis with frequent urination, indicates this remedy. It is beneficial when the urine seems to burn or scald in the passing, when there is local soreness in the urethra or neck of the

bladder, when the bladder tolerates but little urine at a time, and the patient must rise frequently during the night.

Homeopaths give *thuja* where the **rectum** is diseased; where there is a slimy discharge streaked with blood with dark blotches on the adjoining tissues; where there is itching and constant inclination without power to expel feces; sharp sticking pains in the rectum. It will act with *collinsonia* or *hamamelis* in this.

In cases of **verruca** on the genitalia or rectum, this agent is advantageously used, especially if preceded by a mild escharotic. In **prolapsus of the rectum**, especially in cases depending upon paralysis, this agent, may be diluted and injected. It has stimulating properties, which restore the vitality of the part. It is good for fissure of the rectum with piles.

The injection of *thuja* into nevi that are of a **non-pulsating** character, or those not too venous in structure, has been recently practiced.

In **bulging nevus** the remedy has been used advantageously. One case was cured in three weeks, where the nevus looked like a ring worm, and was of a fiery red color. One physician cured a case of **ulcerated stomach** with *thuja* in four-drop doses, alternated with sub-nitrate of bismuth every two hours. This patient had pain extending through the stomach to the back. No physician gave him ease. Anything warm produced great distress. The case was cured in a few weeks.

Another physician advised the agent in **pruritus**, whether of the anus or vulva, especially when accompanied by fissures. He uses it in warts, tumors and excrescences. He uses it for chapped and rough hands, so troublesome in the spring and fall.

Another physician reports a case of extreme **prolapsus of the bowel** in a child which he cured with a five per cent solution of *thuja*. A wet dressing was applied and a small quantity of the remedy was injected into the bowel. A greatly enlarged and **relaxed uterus** in a woman of fifty with severe metrorrhagia was treated with injections of *thuja*. The remedy should be diluted in these cases.

A doctor reports the cure of a **urinary fistula** by giving two drops of *thuja* internally every four hours.

The use of the *oil of thuja* in **confluent smallpox** given internally and applied externally was advised by Dr. Busbee who had an extensive and successful experience with it in these cases.

Thuja applied to the tonsils and crowded into the crypts is an excellent remedy. I am using it in **syphilitic throat ulcerations** and if I precede it once or twice with an application of Monsel's solution it has proved invariably satisfactory so far.

Thuja will prove an excellent remedy for all forms of **sore mouth**, especially if combined with *echinacea* and a mild antiseptic astringent.

Dr. Gibbs reports a case where a number of **varicose enlargements** about the ankle of an old washer woman broke down. He made a 50 per cent solution of *thuja* and applied it freely with bandages, covering the whole with roller bandages, and produced a cure.

VERBASCUM. *Verbascum thapsus.*

Synonym—Mullein.

CONSTITUENTS—

Mucilage, volatile oil, fat, sugar.

PREPARATIONS—

Specific Verbascum. Dose, from five to sixty minims.

A preparation may be prepared extemporaneously by breaking off the upper portion of the blossoms of the *mullein* and putting them into a glass jar and allowing them to stand in the sun for a few days. The mass is then strained through muslin. The juice extracted by the above or other process is called an oil or **mulleined oil**, but does not possess all the properties of an oil.

Therapy—The most direct use of this agent is in the treatment of simple uncomplicated cases of **deafness**, or in the early stages of progressive deafness where the cause is not apparent. In these cases, from, two to five drops in the ear, three or four times each day, will stop the progress of the disease, and will cure many simple cases. In its local influence, it softens and facilitates the removal of hardened

secretions, stimulating the nerve structures at the same time. It has positive anodyne properties, and is curative in a large number of the ordinary cases of **earache** in children, acting often more quickly than other and better 'known' agents, and is used with perfect safety, as it has no irritating or toxic properties.

Used in the treatment of **ulcerations** of the ear, where there are fetid discharges, it is of much value in allaying pain and promoting the action of other antiseptic and healing remedies. In the treatment of the simple ear troubles of childhood, it accomplishes alone that for which complex formulae are otherwise necessary.

Mulleined oil has a wider influence, however, than its use in the **disease of the ear**. It has been used in **rheumatic** conditions to an extent, and I am of the opinion that properly developed in this line, it will be found a serviceable remedy. Internally, the specific medicine or the infusion exercises a diaphoretic and diuretic influence, and is soothing to the nervous system.

This agent is often used in **irritation** and **inflammation** of the **urinary apparatus**, acting in harmony with *hydrangea*, *gelsemium* or other antispasmodics in **stricture** from irritation. It is useful also in acute catarrh, either of a specific or non-specific origin, in catarrhal cystitis, and in some cases of pyelitis and catarrhal nephritis. It has been used also in bronchial irritation and in asthmatic **bronchitis**. In uncomplicated **asthma**, especially the paroxysmal form, *mullein leaves*, mixed with *stramonium* and potassium nitrate and smoked through a pipe, will often give prompt relief. The smoking must be suspended if vertigo supervenes.

The agent has long been a domestic remedy in the treatment of **rheumatism**. A fomentation is prepared from the leaves or the steam from a decoction is confined to the part, or compresses are wrung from a strong infusion of the leaves, and applied.

One-half drop doses of the *mulleined oil* four times a day has overcome some **dribbling** of the urine. This remedy seems to be serviceable as an external application to inflamed glands.

Dr. Mathews says that this is an excellent agent in the treatment of conditions where there is **persistent acidity** of the urine, especially if

it produces pain or strangury.

Verbascum is useful for the treatment of orchitis. It can be used internally and externally.

SAXIFRAGE. *Saxifraga pennsylvanica.*

Synonyms—Tall Saxifrage, kings' evil root, scrofula bush.

Specific Symptomatology—It is specific as an alterative in **syphilitic affections** of the **eyes**. In glaucoma, in iritis, in ophthalmia, in cataract from syphilitic causes, our doctors have had the most marked results from the use of this remedy. Dose, F. V. Ext., from 20 drops to one dram.

The agent is an active diuretic and an excellent tonic, as well as possessing active alterative or antiscorbutic properties.

MELILOTUS. *Melilotus officinalis alba.*

Synonym—Sweet clover.

CONSTITUENTS—Coumarin, melilotic acid, coumaric acid.

PREPARATION—

Emplastrum Meliloti, Melilot plaster.

Specific Melilotus. Dose, from one to ten drops.

Specific Symptomatology—Spasms, colic, dysuria, dysmenorrhea; in painful cough, spasms from dentition, pain in the stomach, rectum, or uterus, neuralgic rheumatism.

Dr. Reed gives *melilotus* in cases where *ergot* would seem to be indicated; where there is **fullness of circulation of the brain**; a tendency to nose bleed, often followed by sick headache; where the action of the heart is oppressed with occasional palpitation. He believes that in all three cases it is an excellent remedy.

Therapy—*Melilotus* is a stimulant to the local circulation, and is adapted to those cases where **debility** or a **feeble vital power**, as in delicate females and **poorly nourished infants**, is associated with

congestion, as in atonic neuralgias and spasms occurring during the period of **dentition**, and in congestion of the uterus, ovaries, rectum, bowels, stomach, or bladder in feeble subjects. It is also a remedy for pain from determination of blood as in headache with throbbing.

An ointment made from the leaves is an efficacious application to all kinds of ulcers.

A fomentation of the leaves and flowering tops may be applied with good effect in inflammation of joints, and local pain in the abdomen.

Engorged conditions of the uterus are treated very successfully by four or five-drop doses every two hours of *melilotus*.

SARRACENIA *Sarracenia purpurea.*

Synonyms-Pitcher Plant, Sidesaddle Plant, Fly Trap, Water Cup.

CONSTITUENTS—

Sarracenin, a resin, sarracenic acid.

PREPARATIONS—

Specific Sarracenia. Dose, from two to twenty drops.

Tincture Sarracenia. Dose, one dram.

Physiological Action—The agent is laxative, stimulating the action of the intestinal glands and the liver and overcoming torpidity. It stimulates the kidneys, inducing an abundant flow of limpid urine. It is an active eliminating agent, exercising a special influence upon the glands of the skin.

Therapy—As a remedy in the treatment of **zymotic disease** this agent has been used with good results. It is given freely during the course of **scarlet fever**, **measles** and **small-pox**, and it is claimed that in every case it modifies the character of these diseases, shortens their course, and prevents sequelae. It has, as yet, no established place in therapeutics.

CALCIUM SULPHIDE.

Synonyms—Calx Sulphurata, Sulphurated Lime, Sulphuret of Calcium.

Administration—It should be thoroughly triturated with sugar of milk, one grain of the salt with a dram of sugar of milk, being a good combination for this trituration. From one to ten grains may be given at a dose, four times daily, but good results will occur from the use of from one-twentieth to one-fourth of a grain of the sulphide, every three hours.

Specific Symptomatology—The agent is specific to glandular, nodular and pustular suppurative inflammations, especially those of the skin. **Carbuncles, acne** and crops of boils and small pustules are cured by its internal use. It has been most widely used in overcoming the tendency to the formation of **crops** of **boils**, and is generally relied upon for this purpose. One-twentieth of a grain, four or five times daily, is effectual.

Therapy—It is also given in **scrofulous conditions** for the glandular indurations, or local ulcerations of this dyscrasia, to most excellent advantage.

In **syphilitic diseases**, with persistent bubos or nodular or ulcerative skin eruptions, it is directly indicated. It has been used by excellent authorities in the treatment of tubercular conditions wherever existing.

Shields claimed remarkable results in inflammatory diseases of the air passages. In fetid **bronchitis**, and in fifty cases of pneumonia in which he used the drug (in conjunction with quinine and nitroglycerine), the mortality was extremely small. In tonsillitis and quinsy its action was almost specific. In only four cases out of one hundred and fifty did it fail to effect a complete cure in from two to six days.

A French writer gave a grain of the sulphide every hour to patients with **pulmonary consumption** until gastric irritation occurred. This is an extreme measure, but the author claimed satisfactory improvement. It will certainly relieve the cough of this disease.

It is praised in **tubercular diseases** of the **joints**, as well as those of the skin. If the tubercular conditions are complicated by syphilis, its benefits are especially marked. It is administered in small doses in **bronchial** and **laryngeal** troubles, in **croup** to produce immediate relief, and in persistent and **suffocative coughs**.

This powder is a successful **depilatory**, and will remove hair in a few moments. Applied moist, to the locality to be deprived of hair, it is allowed to remain fifteen minutes, and is then removed with warm water and a sponge.

It may be applied as sulphur, or dilute sulphuric acid, is applied to kill the itch insect and destroy its eggs. This is effectually accomplished in a short time, and the powder should then be washed off.

A writer, some years ago, advised this agent in **small-pox** claiming that its internal use greatly modified the severity of the disease, and prevented severe pitting. Its physiological influence would suggest its use as rational treatment in this condition.

SOLANUM.

“JATROPHA.”

For several years the physicians of the south, stimulated by the writings of the late Dr. Burgess of Chattanooga, have used *Jatropha*, commonly called in that locality, “Bull Nettle,” in the treatment of syphilis, with rather remarkable results. The identity of the plant is not thoroughly established, but recent investigators claim that it is the *Solanum Carolinense*, or Horse Nettle of the north. Investigations made by the state of Tennessee identify it as *Solanum Rostratum*.

Prof. Lloyd (writing the author) says, “under the common names 'Horse Nettle' and 'Bull Nettle,' both *Solanum Rostratum* and *Solanum Carolinense*, are gathered. They are botanically so nearly related as to make it difficult for a collector to distinguish between them. Probably varieties of each wedge into each other so that where they so commingle, that the collector would be unable to distinguish between them. Possibly the variety of *Solanum* classified by Dr. Burgess as Bull Nettle is really the *Solanum* known in the north as Horse Nettle, with radical differences from location that have caused him to classify it as a different species.

Dr. Burgess prepared an infusion, or decoction rather, as he believed that alcohol in the tincture would destroy its active properties. The root, leaves, stem, and fruit supply medicinal properties, but the tea is best made from the green root or from the whole green plant. A precise formula for the decoction is not given. It readily decomposes unless

combined with glycerine in sufficient quantity to preserve it. The strong infusion is given in doses of from one-half to two ounces, every three or four hours.

It is claimed that this remedy will stop the stench of severe cases of syphilis in a few days, and will produce a sense of well being and a general improvement in a very reasonable time. Dr. A. C. Cook of Georgetown, Kentucky, believes this to be the *Solanum Rostratum*. He confirms the statements of Dr. Burgess. He gives the strong infusion in wineglassful doses every four hours. If there be constipation, he gives it more freely until the bowels move two or three times a day, and then as before, for seven days. For the next three days the medicine is discontinued entirely, to be again resumed for another seven days. Dr. Cook agrees with Dr. Burgess that intoxicating liquors, tobacco, and all animal fats must be avoided, and in the early part of the treatment, acids are incompatible. In the early stages, all observers claim excellent results. In the latter stages of the disease, it requires considerable time, but the benefits are secured in a satisfactory way, and leave the patient in excellent health.

The remedy is useful also in **scrofula, necrosis of the bones, ulcers, tumors**, and various skin affections. One writer believes that it will prolong life, health, and activity in the very old, promoting a sense of well being and warding off senility.

I introduce this remedy here, because of the very many expressions of approval I have received throughout the south. The future will determine its place and value. The Field Laboratory, Chattanooga, Tennessee, conducted by Dr. Burgess' daughters, supplies an infusion for trial, which is prepared according to the Doctor's method, or with glycerine, as may be desired.

(Editor's note: *Jatropha* species are not found in Tennessee, and their spiny Euphorbaceae relative *Cnidoscolus*—sometimes called Horse Nettle or Mala Mujer, could not grow so far north...so, despite the references by Dr. Burgess to "Jatropha", the plant discussed is most likely, as Lloyd averred, *S. carolinense* and/or *S. rostratum*)

GROUP VI.
Agents Influencing the Character of the Blood.

CHAPTER VI.
Alteratives with Anti-Rheumatic Properties.

GAULTHERIA
SALICIN
SALICYLIC ACID
SALICYLATE OF SODIUM
SALOL
ASPIRIN
SALICYLATE OF STRONTIUM
POTASSIUM ACETATE
POTASSIUM CHLORATE
SALOPHEN
CHROMIUM SULPHATE

GAULTHERIA. *Gaultheria procumbens.*

Synonym—Wintergreen.

CONSTITUENTS—

 Volatile oil, tannin, gallic acid, arbutin, urson, ericolin, sugar, gum.

Oil of Gaultheria (*Oleum Gaultheriae*)—This oil is prepared by distilling *wintergreen leaves* while fresh with water or steam. It is transparent and colorless when recent, but soon becomes reddish from exposure. It has an aromatic odor and a strong, spicy, agreeable taste. Pure *oil of wintergreen* contains about 90 per cent of methylsalicylic acid. The dose of the oil is five or ten drops, repeated every two or three hours, till some effect is produced, favorable or otherwise. If ringing in the ears is caused by the medicine, it should be discontinued or repeated in smaller doses when this effect has passed off. The remedy in full doses is apt to cause dangerous depression in debilitated constitutions.

Salicylic acid, made from *oil of wintergreen*, is the only preparation of the acid suitable for internal use.

A pure salicylate of soda is made from the salicylic acid of *oil of wintergreen*, which is preferred in the treatment of acute **articular rheumatism**; while in neuralgia of the fifth cerebral nerve **tic douloureux**, and **gonorrhoeal rheumatism**, the *oil of wintergreen*, in as large doses as can be borne, is the better treatment. In other cases, a tincture of the fresh plant should be employed.

It may be employed as a spray to the throat in diphtheria; and suitably diluted, as a dressing for wounds; while it may be used internally for the general purposes of an antiseptic.

PREPARATIONS—

Specific Gaultheria. Dose, from five to thirty minims.

Specific Symptomatology—The agent is given successfully in the treatment of **hemorrhoids** from congestion of the pelvic circulation, hemorrhoids with very painful external tumors, of a dark-purple color, with constipation, with pain across the sacrum, and congestion of the portal circulation.

Therapy—It is of benefit in **neuralgia**, **tic douloureux**, **gonorrhoeal rheumatism**, **inflammation** of the **bladder**, **irritation** of the prostate gland, **dysuria**, sexual excitement in male or female, **spermatorrhea** without impotency, **acute articular rheumatism**, **migraine**, **sciatica**, diabetes, **diphtheria**, chronic mucous discharges and toothache (locally). A liniment of the oil is useful in allaying the pain of rheumatism.

Asthmatic breathing of a non-paroxysmal character is relieved by this remedy, as is **asthmatic cough**, and cough characterized by constriction or tightness at the supra-sternal notch. In the cough of asthmatic bronchitis, or in dry, harsh, persistent bronchial or phthisical cough, this agent acts nicely.

It is a serviceable remedy in **hepatic congestion**, and in congestion of the glandular structures of the entire gastro-intestinal tract. Its influence over the portal circulation is most pronounced.

In ovarian conditions inducing too frequent menstruation, with congestion of the pelvic circulation, in addition to the conditions

above named, as in enlargement of the uterus, with a swollen, engorged condition of the cervix, it is directly useful.

The oil is now freely used externally in the treatment of articular **rheumatism** and also in **chorea** with excellent results. In the latter disorder it is applied, if necessary, over the upper and lower limbs, alternately, and over the spine. It may be given internally at the same time. The application may be confined with oiled silk.

An ointment made of ichthyol and the *oil of gaultheria* in a proper vehicle, rubbed together thoroughly, makes an excellent application to the joints in acute, and in gonorrhoeal rheumatism. It acts equally well on the original disease. Six drops of the oil is given three times a day, and this will cure many cases. If given in conjunction with *gelsemium* and *cimicifuga* in the first stages, it will probably shorten or even abort the disease.

ACIDUM SALICYLICUM.

Synonym—Salicylic Acid. Dose, from three to fifteen grains.

Physiological Action—Taken into the system, salicylic acid produces a roaring in the head similar to that produced by quinine, an uncomfortable fullness of the head, a sensation of distention with deafness and impaired vision. There is trembling or muscular uncertainty, and reduction of reflex action.

From over-doses, Bartholow says strabismus or ptosis may occur, and complete amaurosis has been temporarily induced. It has induced delirium, restlessness, difficult breathing, feeble pulse, loss of control of the natural evacuations. It induces general depression of the functions of the central nervous system. It depresses the action of the heart, and the temperature in large doses, to the extent in health of more than one and one-half degrees. In elevated temperatures its influence is more conspicuous, but if the synthetic agent is used its influence is irregular and not to be relied upon. It is destructive of the red blood corpuscles, destroying their oxygen carrying power. It produces flushing of the face in its first influence, a suffusion of the eyes and sweating which continues even if the temperature falls. Its protracted use produces pallor and prostration with lowering of the

vital forces.

The agent is eliminated by all the natural emunctories, the natural form much more freely than the synthetic acid. It has appeared in the urine in fifteen minutes after its ingestion. It is usually, however, slow of absorption and its elimination is correspondingly protracted.

The influence of the agent upon the kidneys must be watched, as it sometimes acts as an irritant, producing congestion and hematuria, with partial suppression, or slight albuminuria.

In examining the urine of patients taking salicylic acid or its salts, it must be borne in mind that a reaction occurs from their presence with tests for sugar, similar to that of sugar itself, and is often misleading.

Chemical changes occur in the intestinal canal by the action of the digestive and intestinal juices upon it, and the effete products of large doses produce an alteration in the character of the urine.

Salicylic acid is used in medicine largely in combination with the alkaline bases, through its action on the neutral salts of these substances, because of their superior solubility. It was advised when the acid first came into general use to dissolve it, by the addition of the phosphate, acetate, carbonate, or other salt of sodium. This, of course, resulted in the formation of the salicylate of sodium with phosphoric, acetic or carbonic acids as the products. The sodium salt is now more universally used than any other compound of the acid.

The bromides or hydrobromic acid in small doses will correct the unpleasant roaring in the head induced by this acid or by the salicylates, and will permit their protracted use in cases where, when indicated, the patient is susceptible to this influence.

Therapy—The therapeutic influence of salicylic acid in internal use is largely comprehended in the therapeutics of the salicylate of sodium and the other salicylates.

Salicylic acid is specifically a remedy for **rheumatism**. It is used to best advantage in the acute and sub-acute forms, but will serve an excellent purpose in the chronic forms of whatever character. It is now given in the form of its soluble salts. Relapses are, however, more liable

to occur after this agent than after almost any other remedy.

It is advised by Ringer as of especial value in **sciatica** and **lumbago**, and in some cases of **migraine**. It will serve a good purpose in many of these cases.

The antiseptic, deodorant, stimulating and healing properties of the agent are promptly and satisfactorily exhibited. It may be dissolved in hot water and used as a mouth-wash in all conditions of ulceration of the mucous membranes of the mouth or throat. It was commonly used in **diphtheria** at one time, and. was superior to other then known remedies.

In **tonsilitis** it seems to exercise a specific influence, operating efficiently in small doses of one or two grains every two hours. It can be applied directly to the tonsils if there is an exudate.

In the form of a spray it is useful in **ozoena** and fetid catarrh. It can be finely pulverized, combined with a non-irritating powder and used as an insufflation, or with a powder blower.

Internally the unaltered acid has been given in the treatment of **ulcerations** and **cancerous** conditions of the **stomach** and of the lungs, in all conditions wherein there was persistent foul breath or offensive expectoration. From two to five grains are given as a dose in these cases. It corrects the bad breath and quiets much of the discomfort present in ulcerative disease of these organs.

It is of value in old indolent **ulcers**, in chronic tibial ulcers, in unhealthy -granulating sores, and in **cold abscesses**. It is either dusted directly on these sores or incorporated into an ointment, with a healing base.

It is used in **pruritus**, especially if accompanied with a moist discharge from the part, similar to eczema. It is useful in a large number of skin diseases and has been especially advised in some **tubercular** and **epitheliomatous** conditions of the skin.

It is in universal use as a constituent of corn salves and other bunion and **corn** cure remedies, and is useful in the treatment of **chilblains** and frost bites.

Salicylic acid is an efficient agent in preventing fermentation. It is used to prevent this process in canned fruits, in cider and grape juice, and in other liquids subject to rapid decomposition. It is useful in preventing decomposition in urine preserved for future observation or analysis.

SODIUM SALICYLATE.

Formula— $\text{NaC}_7\text{H}_5\text{O}_3$.

Synonym—Salicylate of sodium.

Physiological Action—The agent acts upon the economy similarly to salicylic acid. Its ready solubility renders it much more valuable. It is irritating to the stomach to a limited extent. Although the salicylate of sodium may be given with impunity in the conditions in which it is indicated, there are certain undesirable, and in certain cases serious results, that follow its use, which must be anticipated. The best known of these is the suppression of the gastric fluids and interference with the digestion.

A writer in the *Journal of Cutaneous Diseases* mentions severe cases of erythema and urticaria from its use. In another case twenty grains were ordered to a man three times daily. After taking only three doses (one dram) of the drug an urticarial eruption, quickly becoming petechial, appeared on the body and extremities. The hemorrhagic extravasation was so great at certain points, as to cause subsequent sloughs and ulcers. Almost every part of the surface of the body except the palms of the hands and soles of the feet, were attacked during the course of the disease; accompanied by myalgic and arthritic pains. The tongue, larynx and pharynx were affected by the eruption and were so swollen as to threaten suffocation. No blood or pus was found in the urine and there was no disturbance of the bowels.

Therapy—In the larger part of the conditions named as benefited by the use of salicylic acid this agent may be prescribed, often with better results than occur from the use of the acid.

It is perhaps the best of our remedies for **rheumatism** wherever located and whatever the cause or duration. Both this agent and the acid may be given internally and applied freely externally. They may be applied in solution, or the powders may be sprinkled upon cotton and applied dry and kept warm. There is authority for the statement that occasional large, full doses of this sodium salt in rheumatism will act more rapidly, and produce less gastric irritation, than if given in frequently repeated small doses.

Sodium salicylate has a specific influence in the treatment of **acute coryza**, when there is fullness of the head across the eyes, with watery secretion, sneezing, chilliness, malaise and general depression. Two or three fifteen-grain doses of this salt, taken two hours apart, have often dissipated every symptom for the writer. **Supra-orbital pain** from the above cause, or of a neuralgic or rheumatic character, is most quickly dissipated by it.

This agent has a specific influence upon the schneiderian membrane. It relieves irritation, reduces chronic thickness, regulates the secretion from the mucous follicles and restores tone to relaxed membranes. In acute cases it relieves pain. Knapp, of New York, has used the remedy in small doses for many years, in the treatment of **progressive deafness**, resulting from chronic catarrh. He gives five grains three or four times a day. The same dose will be found beneficial in the treatment of uncomplicated **chronic catarrh**. A slow, progressive improvement will be noticed, if the agent be persisted in.

Having confidence in the action of the remedy, in the treatment of **acute colds** in adults—coryza—I was induced to prescribe it in the **snuffles** of very young infants I dissolved five grains in one-third of a glass of water, perhaps an ounce and a half, and gave half teaspoonful doses every half hour. The results were surprising, and from my experience I can urge the use of this simple method in the cure of this condition.

The agent has been used to relieve **eye strain**, accompanied with **ptosis**. The cases where its influence was marked were accompanied with a **rheumatic diathesis**. Fifteen grains of the remedy three times a day was the curative dose.

Sodium Salicylate is of benefit in **whooping-cough**. Two or three grains

may be given twice or three times each day and excellent results obtained.

This remedy relieved a most severe case of **universal cutaneous pruritus** of nervous origin. Fifteen grains, three times daily, controlled the entire phenomena in three days.

In the treatment of **inflammatory diseases** of the mucous structures of the **kidneys** and **bladder**, this agent is of much service, its influence being largely due to its antiseptic and soothing properties. Upon the secretory function of the kidneys in lithemia and rheumatism the **salicylate of lithium**, however, is the **preferable salt**.

SALOL.

Synonyms—Phenyl Salicylate, Salicylate of Phenol.

Administration—It is prescribed in capsules of from three to six grains every two or three hours. It is safest to discontinue for a few doses, after a number of doses has been given, and to begin again subsequently, if indicated.

Physiological Action—In its physiological action it closely resembles its constituents, salicylic and carbolic acids, as it is clearly proven that the compound is broken up by the action of the pancreatic juice, and these two agents are released in the intestinal canal. This is determined by the presence of the carbolic acid products in the urine, and the evidences of salicylic acid poisoning in the system. A dram of salol will release twenty-four grains of carbolic acid in the system, as forty per cent of the substance is of that acid, and the toxic effects of the agents are the phenomena of salicylic or carbolic acid poisoning.

It is stated by Huselbach, that if the kidneys are diseased, the elimination of the constituents of salol is retarded, and serious poisoning is much more apt to occur. It interferes with the excretory functions of the kidneys, especially if their power is at all impaired. Its use must be avoided entirely if these organs are diseased, and must be administered with careful discrimination in all diseases of the urinary apparatus. In small doses, it is beneficial, if the mucous lining only of the pelvis of the kidney is involved, as in pyelitis, but it must not be

given in pyelonephritis.

Therapy—Because of the antiseptic character of both the acids, salol is prescribed freely as an **intestinal antiseptic** in all cases, whether of a febrile or non-febrile character, where that influence is desired. It is given in catarrhal and fermentive **diarrheas**, in **cholera morbus**, and also in **cholera**. It is prescribed in **rheumatism**, where the salicylic acid is indicated, and the effects are identical with the influences of that agent. The liberation of the acid in the intestinal canal in a form easily absorbed, may facilitate its action.

In **catarrhal cystitis**, with alkaline urine, it is directly serviceable, neutralizing the alkalinity and destroying disease germs.

Its use in **specific urethritis** is quite common, its curative influence depending largely upon its antiseptic properties in all these conditions.

It is prescribed by many physicians as an anodyne and pain-relieving agent. It has but little influence other than in allaying irritation by destroying disease ferments, and other causes of painful disorder.

ASPIRIN.

Synonym—Acetylsalicylic Acid.

Aspirin is an intestinal antiseptic which by virtue of the salicylic acid which it contains is used more for its influence upon the blood and metabolic conditions.

The dose is from five to fifteen grains; the larger dose to be given three times a day, the smaller dose more frequently.

It is crystalline needle-shaped in character, white and somewhat unpleasant to taste.

Therapy—It is used as a remedy for **headaches** and also as a sedative in **excitable** and **mild febrile conditions**, but it is found that its best influences are exercised through the action of its salicylic derivative upon the urates and uric acid—**lithemic conditions**.

This is one of the **safer of the synthetics**, and is proving to be quite useful for the purposes above mentioned.

The **Salicylate of Strontium** is advised in the treatment of **rheumatism** as sometimes a superior agent. It may be combined with *bryonia*, *phytolacca*, or *rhus*, according to the indications. Dr. Bliss claims to get better results from this than from other agents. He dissolves about six drams in a quart of distilled water, adding to this two grains of the hyposulphate of iron, and gives one or two teaspoonfuls three or four times a day.

SALICIN.

Formula— $C_{13}H_{18}O_7$.

Description—A crystalline body, occurring in white or colorless, shiny, silky needles, or in crystalline powder having a bitter taste but odorless. It is soluble in water which contains an equal part of alcohol, at sixty degrees Fahrenheit. Dose, from two to ten grains.

Specific Symptomatology—Periodicity, when general debility is present, accompanied with severe pain. **Periodicity** in **fevers**, with prostration. **Intermittent** or **remittent fevers**, accompanied by rheumatic manifestations. It is a sedative to fevers, where intermittency or **rheumatism** are **present**. Some physicians use it indiscriminately in fevers.

Therapy—Physicians who are in the habit of prescribing this remedy and have had experience with it, claim for it a wider field than is exercised by other remedies of this class. They claim that it will control fever, even when malaria is not present. While some class it with quinine, they claim that it has a much milder, and less irritating effect than quinine, which is exercised with equal positiveness. It is especially advantageous where there is periodical neuralgia with feebleness, cold skin, and feebleness of the circulation. In **sciatica**, **lumbago** and in the various forms of **rheumatic neuralgia**, or **myalgia**, it is a valuable remedy. As a restorative tonic, during **convalescence** from prostrating disease, it has been favorably used, and is highly spoken of.

There is no doubt that the remedy better known will be found to be an important one. It should have more extended investigation. While not in common use, this agent is a reliable one, and important and deserves further investigation.

POTASSIUM ACETATE.

Formula— $KC_2H_3O_2$.

Synonym—Acetate of Potassium.

Physiological Action—It is directly a renal depurant, increasing the amount of solids in the urine, by stimulating both the excretion and secretion it has but little influence upon the excretion of the watery portion of the urine. In large doses it produces aching and even pains in the kidneys. It promotes retrograde metabolism throughout the system and increases waste, thus acting as a direct alterative. This is plainly apparent when the sudoriparous glands are inactive and the skin becomes rough and coarse, or **pimples, pustules** and other skin disease is present. It stimulates excretion by the kidneys and relieves the irritation of the skin, and thus facilitates the cure of these conditions.

Therapy—This agent may be used instead of the iodide of potassium, as an alterative in eczema and other skin diseases of childhood, and will be found a valuable remedy.

In glandular diseases of childhood, where an iodide is usually prescribed, this simple remedy, combined with vegetable alteratives, will often produce all of the good effects, with none of the unpleasant results, of the iodide. In **glandular inflammations**, acute and chronic, it is a valuable agent. If given in full doses of from ten to fifteen grains with aconite, every two hours, in the first stages of **mastitis, ovaritis** or **orchitis**, it will often abate the disease within eighteen hours. It is most reliable.

If the kidneys are normal it will hasten the removal of morbid products in all acute inflammations, but its administration must be conducted with discretion, and the kidneys must not be over-taxed. It

is best given with an abundance of water, that the solid waste stimulated in the kidneys, may be fully diluted.

It neutralizes excessive acidity probably to a limited extent by decomposition and liberation of the alkaline potassium carbonate.

It has been much used in **rheumatism**, but is now largely replaced by the salicylates, which accomplish the same and often increased results. It is, however, the best remedy of the two where the stomach refuses to tolerate the salicylic acid salts as it often does.

Cloths wet in a hot solution of acetate potassium are most valuable as an application to **acute rheumatic inflammation** of the joints.

In **lithemia** its influence is most direct. The dosage prescribed in these cases is usually too large. It works more satisfactorily if given in doses of one or two grains, five or six times daily, quickly relieving the aching in the back, so common to this condition, and promoting a clear and normal urine, reducing, instead of increasing, the specific gravity.

It acts upon the liver promptly, stimulating a flow of bile, and overcoming **hepatic congestion**. It has long been used in jaundice, and exercises a desirable influence upon the glands of the entire intestinal tract.

It is a remedy for **boils** and other persistent **skin eruptions**, and will be found valuable in **carbuncle** as an active eliminative.

POTASSIUM CHLORATE.

Formula-- KClO_3 .

Synonym—Chlorate of Potassium.

Physiological Action—The physiological action of this agent is that of an irritant poison. It depresses the action of the heart, lowers arterial tension, disorganizes the red blood corpuscles, converting the hemoglobin into methemoglobin. The product of the disorganization is excreted by the, urine. It produces enlargement of the liver, kidneys

and spleen, inducing inflammation of the entire gastro-intestinal tract. When death occurs from its use there is delirium and coma or convulsions. Continued use of the agent even in medicinal doses may produce irritation and congestion of the kidneys with albuminous urine and difficult renal action. It is apt to produce cutaneous eruptions, papular, vesicular, or erythematous in character.

Therapy—The agent is an active antiseptic, although not usually so classed. In the early treatment of **diphtheria** it first came into prominent use as a remedy for that disease, for which it was used in conjunction with the chloride of iron. Given after exposure, before the development of the symptoms, it is said to ward off an attack of the disease. Its solution is useful in all cases of **ulceration** of the **mouth** or of the **stomach**. It is given in frequent doses, and is used freely as a mouth wash, especially valuable if the gums are spongy and tend to bleed readily, and there is fetid breath. It is specific in **mercurial stomatitis** and was long advised in conjunction with mercurial treatment, to prevent the salivating influence of mercury. It prevents the formation of false membrane and hastens its detachment in **membranous croup**. It is useful in the sore throat of **scarlatina**, but it must be given with caution in this disease, because of its irritating influence upon the kidneys.

Its solution is useful in specific or non-specific **urethritis**, **vaginitis** and **cystitis**, in which mild solutions are more efficacious than saturated ones. It is useful also in **hemorrhoids** and in **rectal ulcers** and fissures.

It has been used in **phthisis pulmonalis**, in **syphilis**, **scrofula** and in **scurvy**, but its use in these conditions is now obsolete as we have many superior remedies. Local ulcerations of the mouth or throat, or ulcerations of any mucous surface occurring in the course of these constitutional diseases may be well treated with this salt in solution, but its continued internal use is not advised.

This agent is useful in the treatment of **leucorrhoea**, and in **ulcerations** of the **os uteri** or of the walls of the **vagina**, in solution in a douche.

SALOPHEN.

Synonym—Acetylparamidophenyl Salicylate.

Therapy—It is a safer remedy than salol, and quite as sure in the same conditions where the effect of salicylic acid in the blood is desired, and it will probably act with much less irritation upon the kidneys. Its influence upon the **bladder** and **mucous membranes** of the **genito-urinary tract** is probably much less active than that of salol. Dose 5 to 20 grains.

CHROMIUM.

CHROMIUM SULPHATE.

Chromium was discovered by Vaquelin in 1797, and its salts had been used in the arts, but it is only within a little more than a decade that it has been suggested in medicine. The leading materia medicas do not mention **chromium sulphate**. Kolipinski, in 1902, presented this remedy to the American Therapeutic Society. He stated that he had been using it with results that would justify its general adoption. He gave it in doses of four grains, three times a day. Since that time, familiarity with it, and an absence of toxic symptoms have caused the dosage to be increased to more than double this amount in certain cases, and occasionally thirty or forty grains have been given with only mild vertigo and some uncertainty of muscular action. It has been continued over long periods without unpleasant results.

It is used first for its influence upon the **prostate gland**; also in **neurasthenia**, **exophthalmic goiter**, and **locomotorataxia**. It has cured these conditions, especially the second, without the usual auxiliaries of rest and travel. Its effect upon exophthalmic goiter has been a pleasing one, in some cases, and in many it has exercised a beneficial effect. It has been used in uterine fibroid, in interstitial fibroid, in all forms of prostatic trouble, and in **senile pruritus**.

It has been given for **impotency** and **faults with the menopause** and **growths** in the **female breast**. It has been prescribed for **nervous vomiting** or the **vomiting of pregnancy**, and for various forms of **headache**. The conditions for which it is now **preferred** are **enlargement** of the **prostate**, **enlargement** of the **thyroid gland** or

exophthalmicgoiter, and the several nervous conditions named above. In the **tachycardia** of exophthalmic goiter, the irregular action of the heart is controlled usually and a normal action is induced. The latter symptoms with trembling, slowly ceasing. The remedy acts more promptly in early cases than in later ones, and this same holds true in **locomotor ataxia**.

In my own cases of enlarged prostate, while I thought I had good results from its action, I found that I got better results by combining it with *thuja*, and later with *thuja* and *saw palmetto*. I would certainly advise its further observation.

Two cases of **lateral sclerosis** of the spinal cord were cured with this remedy. Another physician used it in **heartburn** of long standing, five grains three times a day, and cured his patients.