ECHINACEA.

The dried root of *Brauneriæangustifolia*, Linné (*Echinaceæangustifolia* [DeCandolle], Heller). (Nat. Ord. Compositæae.) In rich prairie soils of western United States, from Illinois westward through Nebraska and southward through Missouri to Texas.

**Common Names:** Narrow-leaved Purple Coneflower, Purple Coneflower, Coneflower.

**Principal Constituents.**—Minute traces of an unimportant alkaloid and an acrid body (1/2 to 1 per cent), probably of a resinous character linked with an organic acid. The latter is the chief active principle of the drug.

**Preparations.**—1. *Specific Medicine Echinacea.* **Dose,** 1 to 60 drops, the smaller doses being preferred. Usual method of administration: Rx. Specific Medicine Echinacea, 1-2 fluidrachms; Water, enough for 4 fluidounces. Mix. Sig.: One teaspoonful every 1 to 3 hours.

2. *Echafolta.* (A preparation of Echinacea freed from extractive and most of the coloring matter. It also contains a small added quantity of tincture of iodine. The label states that it is iodized). **Dose,** 1 to 60 drops. Usually administered the same as the specific medicine; except when iodine is contraindicated, or is undesired.


**Specific Indications.**—"Bad blood"; to correct fluid depravation, with tendency to sepsis and malignancy, best shown in its power in gangrene, carbuncles, boils, sloughing and phagedenic ulcerations, and the various forms of septicemia; tendency to formation of multiple cellular abscesses of a semi-active character and with pronounced asthenia; foul discharges with emaciation and great debility; dirty-brownish tongue; jet-black tongue; dusky, bluish or purplish color of the skin or mucous tissues, with a low form of inflammation. It is of special value in typhoid states, in which it is indicated by the prominent typhoid symptoms—dry tongue, sordes on tongue and teeth, mental disturbances, tympanites and diarrheal discharges—and in malignant carbuncle, pyosalpinx, and thecal abscesses.

**Action.**—The physiological action of echinacea has never been satisfactorily determined. It has been held to increase phagocytosis and to improve both leukopenia and hyperleucocytosis. That it stimulates and hastens the elimination of waste is certain, and that it possesses some antibacterial power seems more than probable. Upon
the mucous tissues echinacea causes a quite persistent disagreeable tingling sensation somewhat allied to, but less severe, than that of prickly ash and aconite. It increases the salivary and the urinary flow, but sometimes under diseased conditions anuria results while it is being administered. In the doses usually given no decided unpleasant symptoms have been produced; and no reliable cases of fatal poisoning in human beings have been recorded from its use. Occasionally bursting headache, joint pains, dry tongue, reduced temperature and gastro-intestinal disturbances with diarrhea are said to have resulted from large doses of the drug.

**Therapy**.- *External.* Echinacea is a local antiseptic, stimulant, deodorant, and anesthetic. Alcoholic preparations applied to denuded surfaces cause considerable burning discomfort, but as soon as the alcohol is evaporated a sense of comfort and lessening of previous pain is experienced. Its deodorant powers are remarkable, especially when applied to foul surfaces, carcinomatous ulcerations, fetid discharges from the ears, and in gangrene. While not wholly masking the odor of cancer and gangrene it reduces it greatly, much to the comfort of the sick and the attendants. Echinacea is useful as an application where decay is imminent or taking place, reparative power is poor, and the discharges saneous and unhealthy. It is especially valuable in sluggish ulcers, bed sores, stinking tibial ulcers, and ulcers of the nasal mucosa, due either to ozaena or to syphilis. The greater the tendency to lifelessness and dissolution of the tissues and the more pronounced the fetid character of the discharges, the more applicable is echinacea. Used by spray it is effective to remove stench and to stimulate repair in tonsillitis, the angina of scarlatina, and though not alone capable of curing diphtheria, either by external or internal use, it stimulates the near-necrosed tissue to activity and overcomes the fetid odor, thus contributing in a large measure to aid more specific agents. A 10 to 50 per cent solution may be used to cleanse abscess cavities, to apply to ragged wounds from barbed wire, tin, and glass, wounds which for some reason are very painful and heal sluggishly. For this purpose we prefer Rx. Echafolta (or Echinacea), 1 fluidounce; Asepsin, 15 grains; Tincture of Myrrh, 2 fluidrachms; Sterile Water, enough to make 4 fluidounces. Mix. Apply upon sterile gauze, renewing at reasonable periods. This also makes a good mouth wash for foul breath and to remove odor and stimulate repair in pyorrhea alveolaris, spongy and bleeding gums, and aphthous and herpetic eruptions. Echinacea is sometimes of value in eczema, with glutinous, sticky exudation, and
general body depravity; to give relief to pain and swelling in erysipelas, mammitis, orchitis, and epididymitis; to allay pain and lessen tumefaction in phlegmonous swellings; and to dress syphilitic phagedena. As a local application to chilblains it has done good service, and in poisoning by Rhus Toxicodendron is relied upon by many as one of the best of local medicines. We have found it especially useful in dermatitis venenata after denudation of the cuticle when ulcers form and the neighboring glands swell. Echinacea has a greater record for success than any single medicine for snake bites and insect bites and stings, and it may be used full strength to relieve the intolerable itching of urticaria. Some have asserted that it will abort boils. For the treatment of carbuncle, after thoroughly incising, a 50 per cent solution to full strength echinacea or echafolta may be freely used, syringing the channels with it. This gives great relief from pain and insures a quicker recovery.

For all the above-named purposes either echinacea or echafolta may be used: the latter is usually preferred where a cleanlier appearance is desired. Moreover, in most of the conditions named repair takes place much sooner and in better form if the remedy is given internally concomitantly with its external use.

*Internal.* Echinacea is stimulant, tonic, depurative, and especially strongly antiseptic; it is in a lesser degree anesthetic and antiputrefactive. The necessity for remedies that possess a *general antiseptic property* and favor the elimination of caco-plastic material is most marked when one is treating diseases which show a depraved condition of the body and its fluids. Such a remedy for "blood depravation," if we may use that term, is echinacea. No explanation of its action has even been satisfactorily given, and that a simple drug should possess such varied and remarkable therapeutic forces and not be a poison itself is an enigma still to be solved, and one that must come as a novelty to those whose therapy is that of heroic medicines only. If there is any meaning in the term alterative it is expressed in the therapy of echinacea. For this very reason has a most excellent medicine been lauded extravagantly and come near to damnation through the extravagant praises of its admirers.

Echinacea is a remedy for autoinfection, and where the blood stream becomes slowly infected either from within or without the body. Elimination is imperfect, the body tissues become altered, and there is
developed within the fluids and tissues septic action with adynamia resulting in boils, carbuncles, cellular tissue inflammations, abscesses, and other septicaemic processes. It is, therefore, a drug indicated by the changes manifested in a disturbed balance of the fluids of the body resulting in tissue alteration: be the cause infectious by organisms, or devitalized morbid accumulations, or alterations in the blood itself. It is pre-eminently useful in the typhoid state, and many physicians administer it regardless of any other indication throughout enteric fever as an intercurrent remedy. Echinacea is especially to be thought of when there are gangrenous tendencies and sloughing of the soft tissues, as well as in glandular ulcerations and ulcers of the skin. It is not by any means a cure-all, but so important is its antiseptic action that we are inclined to rely largely on it as an auxiliary remedy in the more serious varieties of disease—even those showing a decided malignancy—hence its frequent selection in diphtheria, small-pox, scarlet fever, typhoid fever and typhoid pneumonia, cerebro-spinal meningitis, la grippe, uremia, and the surgical and serpent and insect infections. Foul smelling discharges are deodorized by it and the odor removed from foul smelling ulcers and carcinomata, processes not alone accomplished by its topical use but aided greatly by its internal exhibition. In puerperal fever, cholera infantum, ulcerated sore throat, nasal and other forms of catarrh and in eczema and erysipelas it fulfills important indications for antisepsis.

Echinacea was introduced as a potent remedy for the bites of the rattlesnake and venomous insects. It was used both externally and internally. Within bounds the remedy has retained its reputation in these accidents, it probably having some power to control the virulence of the venom, or to enable the body to resist depression and pass the ordeal successfully; nevertheless fatalities have occurred in spite of its use. For ordinary stings and bites its internal as well as external use is advisable.

In the acute infectious diseases echinacea has rendered great service. Throughout typhoid fever it may be given without special regard to stated periods, but wherever a drink of water is desired by the patient, from 5 to 10 drops of Specific Medicine Echinacea may be given in it. Having no toxic power, and acting as an intestinal antiseptic, this use of it is both rational and effective. Cases apparently go through an invasion of this disease with less complications and less depression when the drug is so employed. The same is true of it in typhoid,
pneumonia, septicaemia, and other septic fevers. It has the credit of regulating the general circulation, and particularly that of the meninges in the slow forms of cerebrospinal meningitis, with feeble, slow, or at least not accelerated pulse, temperature scarcely above normal, and cold extremities; with this is headache, a peculiar periodic flushing of the face and neck, dizziness, and profound prostration (Webster). It is evidently a capillary stimulant of power in this dreaded disease, in which few remedies have any saving effect. Echinacea has aided in the recovery of some cases of puerperal septicemia. Obviously other measures are also required. In non-malignant diphtheria, echinacea, both locally and internally, has appeared to hasten convalescence, but in the light of present day therapeutics it is folly to expect echinacea to cure the malignant type. A wide experience with the drug in such cases convinces us that we are leaning upon a slender reed when we trust alone to such medicines as echinacea and lobelia in malignant diphtheria. As many non-malignant cases tend to quick recovery, the use of good remedies like echinacea undoubtedly hastens the process. But to assume that it will cure every type of the disease because it succeeds in aiding the milder forms to recover is to bring a good medicine into unmerited discredit. Moreover, when these claims were originally made, and probably in good faith, there was no exact means of establishing the bacterial nature of the disease, hence many tonsillar disorders were called diphtheria. The latter were, of course, benefited by it, for in tonsillitis, particularly the necrotic form with stinking, dirty-looking ulcerations, it is an excellent remedy. Echinacea is said to be a good agent in a malignant form of quinsy known as “black tongue”; and in “mountain fever”, closely allied to and often diagnosed as typhoid fever.

Echinacea is justly valued in catarrhal conditions of the nasal and bronchial tracts, and in leucorrhoea, in all of which there is a run-down condition of the system with fetid discharge, and often associated with cutaneous eruptions, especially of an eczematous and strumous type. Chronic catarrhal bronchitis and fetid bronchitis are disorders in which it has been used with benefit, and it is said to ameliorate some of the unpleasant catarrhal complications of pulmonary tuberculosis, and particularly to render easier expectoration in that form known as “grinder's consumption”. Patients suffering from common nasal and bronchial catarrhs have been greatly improved by echinacea when taking the drug for other disorders. Its stimulating, supporting and antiseptic properties would make echinacea a rational remedy for such
disorders, particularly if debility and general tissue depravity were coexistent with the catarrh.

As a rule echinacea is of little or no value in agues, yet physicians of malarial districts assert it is of benefit in chronic malaria when of an asthenic type. Altogether likely its value, if it has any, lies in the betterment of the asthenia, rather than to any effect it may have upon the protozoal cause of the disease. In so-called typho-malarial fever it does good just in proportion as the typhoid element affects the patient. Both it and quinine would be rational medication.

Echinacea possesses no mean anti fermentative power, and by its local anaesthetic effect obtunds pain. When an offensive breath, due to gaseous eructation, and gastric pain are present, it proves a good medicine in fermentative dyspepsia. The symptoms are aggravated upon taking food. It is also serviceable in intestinal indigestion with pain and debility and unusually foul flatus, and has been recommended in duodenal catarrh. We can see no reason why it should not have some salutary effect in both gastric and duodenal ulcer, for it antagonizes putrefaction, tissue solution, and pain. In ulcerative stomatitis and nursing sore mouth, in both of which it is very effectual, it should be used both internally and locally. When dysentery, diarrhea, and cholera infantum occur in the debilitated and the excretions are more than commonly foul, both in odor and shreds of tissue, echinacea is a serviceable adjunct to other treatment.

The dose of either specific medicine echinacea or echafolta ranges from 1 to 5 drops; larger doses (even 60 drops) may be employed, but small doses are generally most efficient if frequently repeated. They may be given in water or syrup, or a mixture of water and glycerin, as: Rx Specific Medicine Echinacea, 1-2 fluidrachms; Water, to make 4 fluidounces. Mix. Sig.: Teaspoonful every 1/2 or 1 hour in acute cases; every 3 or 4 hours in chronic affections. If these preparations are to be dispensed in hot weather, or are to be used in fermentative gastro-intestinal disorders, the substitution of 1/2 ounce of pure glycerin for 1 fluidounce of the water is advisable.

‡‡Echafolta (now iodized) should be given internally only when iodine is not contraindicated, or is desirable. Formerly, before being iodized, it was used internally in the same manner and for the same purposes as Echinacea. The Echafolta should be reserved for external use.
Echafolta Cream is an admirable form in which to use Echafolta, where an ointment is desired, being a useful unguent in the various skin disorders in which Echafolta or Echinacea is indicated.

ELATERIUM.

The feculence of the juice of the fruit of Ecballium Elaterium (Linné), A. Richard. (Nat. Ord. Cucurbitaceae.) A trailing vine of southern Europe.


Description.—Light, brittle, flat flakes, pale-gray with a greenish or yellowish tinge, a tea-like odor, and an intensely bitter taste.

Principal Constituent.—The neutral purgative principle elaterin (C₂₀H₂₈O₅) present to the extent of 20 to 25 per cent.

Preparation.—Specific Medicine Elaterium. Dose, 1 to 20 drops.

Derivative.—Elaterinum, Elaterin. (Odorless, very bitter, and slightly acrid, white scales or crystals; permanent in the air. Very soluble in chloroform; sparingly in alcohol, and almost insoluble in water.) Dose, 1/40 to 1/8 grain. Of the Trituratio Elaterini (elaterin, 1; sugar of milk, 9), 1/4 to 1/2 grain.

Specific Indications.—Chronic cystitis with pain in the neck of bladder, the urine passes in a torrent, and after micturition there is violent cramplike aching extending from the bladder into the pelvis and thighs; deep soreness or tenderness in the bladder, perineum, or throughout the pelvis, with tenesmic voiding of mucus or muco-pus-laden urine; dropsies of plethora; cerebral congestion; pulmonary edema.

Action and Therapy.—Elaterium is the most powerful and the best of the hydragogue cathartics. As such it is indicated only in individuals strong enough to stand depletion, and is always contraindicated in the weak and feeble. Overdoses—even a few grains—may produce a diffuse gastro-enteritis, with violent vomiting, cramps, and watery purgation. In medium doses only copious watery stools are produced, but with considerable depression. The treatment for excessive action of elaterium is that for gastro-enteritis in general.
In medium doses elaterium has been, and is still to a lesser extent, used as a dehydrating cathartic in chronic dropsies of hepatic or abdominal origin, and in chronic nephritis. When the liver is involved, with congestion or torpor, it may be given with podophyllin; if there are heart complications, with digitalis. It is quite certain to reduce the ascites; but when the latter is dependent on destruction of tissue, it does not, of course, cure the disease, of which the dropsy is but a symptom. It is often useful in dropsy after scarlet fever, if the patient is not greatly exhausted; and it is more especially indicated when uremic convulsions threaten or are present. Elaterium is a useful purgative when a revulsive is needed in cerebral congestion.

The small dose of elaterium is preferred for other specific purposes. Elaterium is the remedy for chronic inflammation of the bladder, as first announced by King. When indicated the urine rushes from the urethra as in a torrent and is accompanied by constant pain radiating from the neck of the bladder to the surrounding tissues, and micturition is followed by violent pelvic and femoral cramps. This condition is frequently associated with general pelvic dragging and tenderness, and the urine is characteristic of chronic subacute inflammation-ropy with mucus or mucopus. The dose should be small enough not to provoke emesis or catharsis. The usual prescription is: Rx Specific Medicine Elaterium, 10-20 drops; Water, enough to make 4 fluidounces. Mix. Sig.: One teaspoonful 3 or 4 times a day.

For hydragogue purposes Elaterin is preferred by some physicians, though elaterium, notwithstanding its impurities, seems to be more generally efficient than its derivative.

**EPIGÆA.**

The leaves of Epigaea repens, Linné (Nat. Ord. Ericaceae). A small, trailing, shrubby plant of the eastern half of the United States. Dose, 5 to 60 grains.

**Common Names:** Trailing Arbutus, Gravel Weed, Gravel Plant, Ground Laurel, Mayflower.

**Principal Constituents.**—The glucosides arbutin (C_{12}H_{16}O_{7}), ursin (C_{20}H_{52}O_{2}), and ericolin (C_{26}H_{30}O_{3}); and tannin.

**Preparation.**—Specific Medicine Epigaea. Dose, 5 to 60 drops.
Specific Indications.—Uric and lithic acid deposits; debilitated and relaxed bladder, with mucus in the urine; irritable vesical membrane; voiding of urine containing blood or muco-pus.

Action and Therapy.—Trailing arbutus is a useful diuretic when the urine is loaded with deposits of red, sandy material, mucus or muco-pus. It renders the urine less irritating, and is valuable to relieve irritation of the mucous membranes, vesical tenesmus, dysuria, and strangury. The urine is of higher than normal gravity and may contain, besides deposited salts, lithic acid gravel and broken down blood. It is especially useful where the bladder wall becomes dense and irritated and the condition easily lapses into a chronic muco-purulent cystitis. The specific medicine or the fluidextract may be given in hot water.

Trailing arbutus is one of the plants fast disappearing from our flora, owing to its reckless gathering by wood-despoiling vandals. Thus a beautiful wild flower, as well as a good medicine, is threatened with extermination.

**EPILOBIUM.**


Principal Constituents.—The plants have not been satisfactorily examined.

Preparations.—1. *InfusumEpilobii*, Infusion of Epilobium (1 ounce to water, 16 fluidounces). Dose, 2 fluidrachms to 1 fluidounce.

2. *Specific Medicine Epilobium*. Dose, 10 to 60 drops.

Specific Indications.—"Diarrhoea with colicky pain; feculent discharges with tenesmus; diarrhoea with contracted abdomen; chronic diarrhoea with harsh, dirty-looking, contracted skin"; diarrhoea of typhoid fever; typhoid dysentery.

Action and Therapy.—Epilobium is a remedy for the diarrhoea of debility and irritability of the intestinal mucosa. It is the most certain and kindly remedy we have ever used to control the diarrhoea of
typhoid fever; and the experience covers a period of years. The diarrhoea does not entirely cease, but becomes reduced to fewer movements and of an increased consistence.

It has long been recognized as a valuable agent in “camp or army diarrhoea”; and in domestic practice it is in common use in some parts of the country to check the summer diarrheas of young children—mucoenteritis, enterocolitis, gastro-enteritis, and cholera infantum. The experience of physicians justifies these claims. The indication is greenish discharges of half-digested food and mucus. It is equally useful in chronic dysentery and in that of a typhoid type. In most cases of intestinal irritation it acts well, and is indicated by a slick, contracted tongue with nearly effaced papillae and pinched emaciated features. It is also of service in impaired digestion with uneasy sensations in the abdomen, sometimes amounting to pain and even colic, and accompanied by a persistent diarrhea. The infusion is the best preparation. It may be prepared in the usual way, and aromatized with essence of peppermint and preserved with a small quantity of glycerin.

**EQUISETUM.**


**Common Names**: Scouring Rush, Horse Tail, Shave Grass.

**Principal Constituents**.—A large amount of silica, a soft green resin, and *equisetac acid* (aconitic acid).


**Specific Indications**.—Cystic irritation; tenesmic urging to urinate; nocturnal urinal incontinence; renal calculi.

**Action and Therapy**.—Equisetum is diuretic and astringent. It is asserted to greatly relieve irritation due to the presence of gravel and the tenesmic urging to urinate in acute inflammations of the genito-renal tract. When the bladder becomes so irritable that the patient, upon dropping to sleep, loses control over the urine it is said to be
specially serviceable. It has restrained hematuria and is of service in acute prostatitis and in the prostatorrhea which follows it. The infusion (1 ounce to Water, 16 fluidounces) is the preferred preparation.

**ERECHTITES.**

The entire plant and oil of *Erechites hieracifolia*, Rafinesque (Nat. Ord. Compositae.) A rank weed throughout the United States.

**Common Name:** Fireweed.

**Principal Constituent.**—A volatile oil (*Oleum Erechitis*).

**Preparation.**—*Oleum Erechitis*, Oil of Fireweed. *Dose,* 5 to 10 drops.

**Specific Indications.**—Catarrhal states and passive hemorrhages; “albuminurea, dropsy, pale waxy skin, swelling of the feet, scanty urine” (Watkins).

**Action and Therapy.**—True oil of fireweed (much that is sold is oil of fleabane) improves the appetite and digestion, stimulates the functions of the gastro-intestinal glands and pancreas, and causes free and full alvine evacuations, rendering it useful in chronic constipation, especially when acid fermentation and flatulence are present. Its ultimate effect upon the circulation is to raise vascular tension. It is eliminated most largely by the lungs, and to a lesser extent by the kidneys and skin. The class of disorders it benefits are those attacking the bronchial and renal mucosa, it being effective in relieving chronic bronchitis, pulmonic catarrhs with cough, and genito-urinary catarrh, pyelitis, and cystitis. It has been suggested in chronic nephritis, with pale, waxy skin and pedal edema. For this purpose the dose should not be over one drop of the oil, in emulsion, well diluted. Usually the oil is administered on sugar.

**ERIGERON.**

The whole plant of *Erigeroncanadense*, Linné (Nat. Ord. Compositae). A common and troublesome weed through the northern and central parts of the United States.

**Common Names:** Canada Fleabane, Colt’s Tail, Pride Weed, Scabious.
**Principal Constituents.**—A volatile oil (*Oleum Erigerontis*), and tannic and gallic acids.

**Preparations.**—1. *Specific Medicine Erigeron*. Dose, 1 to 60 drops.
   2. *Oleum Erigerontis*, Oil of Erigeron. Dose, 5 to 30 minims, on sugar.

**Specific Indications.**—(Oil) capillary or passive hemorrhages, hematuria, hemoptysis, epistaxis, hematemeses, and metrorrhagia; “painful diseases of the kidneys and bladder, and in diseases of the mucous membranes attended by free discharges” (Scudder). Infusion, choleraic discharges, sudden, gushing, and watery, attended with thirst and cramping pain, and sometimes streaked with blood.

**Action and Therapy.**—Erigeron restrains excessive bowel and kidney discharges. An infusion is a deservedly popular remedy for profuse summer diarrheas of infants, especially that of cholera infantum and gastroenteritis. It is indicated by the suddenly gushing and copious evacuations, with cramps, or with but little pain, but often with the presence of slight amounts of blood. The infusion is better than alcoholic preparations for these purposes; besides it supplies water to take the place of the natural fluids so greatly depleted by the discharges. It is also useful in dysentery with passages of mucus and blood. As a remedy for slight hemorrhages, as from the bowels and kidneys, it is rather weak, but sometimes effectual; the oil is a much surer acting hemostatic. Both may be used as a diuretic in gravelly conditions as well as in chronic nephritis, when the urine is tinged with blood, or even where passive hemorrhage is present. It has restrained the pathologic flow of urine in polyuria, or so-called diabetes insipidus.

The oil of erigeron is a good internal hemostatic. It sometimes checks quite severe uterine hemorrhages, and for very small oozings of blood it is one of the very best agents to control the flow. It is also indicated in epistaxis and moderate bleeding from the stomach, bowels, and kidneys. Given in syrup it is useful as a cough medicine when there is bloody expectoration.

**ERIODICTYON.**

The dried leaves of *Eriodictyon californicum* (Hooker and Arnott), Greene (Nat. Ord. Hydrophyllaceae). A shrubby plant of California and northern Mexico. Dose, 5 to 30 grains.
Common Names: Yerba Santa, Mountain Balm.

Principal Constituents.—Resin, volatile oil, the glucoside ericolin, and eriodictyonic acid.

Preparation.—Specific Medicine Yerba Santa. Dose, 5 to 30 drops.

Specific Indications.—"Cough with abundant and easy expectoration" (Scudder). “Chronic asthma with cough, profuse expectoration, thickening of the bronchial membrane, loss of appetite, impaired digestion, emaciation” (Watkins).

Action and Therapy.—A stimulating expectorant having a kindly and beneficial action upon digestion. It is to be employed where there are excessive catarrhal discharges of the bronchial and renal tracts. It may be used where there is chronic cough with free secretions, as in chronic bronchitis, bronchorrhea, humid asthma, and the cough of phthisis. Some cases of chronic catarrh of the stomach and catarrhal cystitis have been successfully treated with it.

ERYNGIUM.

The rhizome of Eryngium yuccifolium, Michaux (Nat. Ord. Umbelliferae). A swamp and wet prairie plant found from Virginia to Texas. Dose, 10 to 40 grains.

Common Names: Eryngo, Water Eryngo, Button Snakeroot, Rattlesnake’s Master, Corn Snakeroot.

Principal Constituents.—(Has not been analyzed.)

Preparation.—Specific Medicine Eryngium. Dose, 5 to 40 drops.

Specific Indications.—Burning pain, with renal, vesical or urethral irritability; painful micturition, with frequent urging to urinate; frequent, scanty and scalding urination; scanty urine, with frequent and ineffectual attempts to urinate; deep-seated pain in bladder extending into the loins; profuse mucous discharges.

Action and Therapy.—The root of eryngium, when chewed, causes a profuse flow of saliva; in large doses it is emetic. Its chief properties are those of a diuretic and expectorant. While of considerable value in chronic laryngitis and bronchitis with free and abundant secretion of
muco-pus, it is of most service in irritation of the bladder and urethra, with itching, burning, and constant urging to urinate. It is also useful in dysuria with tenesmus. For that condition in women during or following menstruation, or during the menopause, when sudden chilling throws the burden of excretion upon the kidneys, it is invaluable to control the bladder symptoms—as fullness, burning, itching, frequent attempts at urination, or when every movement of the body is accompanied by the involuntary passing of urine. We know of no remedy that acts so promptly and satisfactorily in such conditions. In the male it relieves uneasy sensations, with burning and itching throughout the vesical, prostatic, and urethral tracts, especially when following gonorrhea or gleet. It is not contraindicated by inflammation and is of great value in acute cystitis, with deep-seated, burning pain, and where normal secretion is scanty and pathologic catarrh is more abundant. It acts well with apis or gelsemium, with the latter especially when there is a hyperaemic state of the bladder. It relieves the burning pain of urination in gonorrhea. It is indicated to relieve the difficulties of voiding urine from the presence of gravel and of chronic nephritis; and it restrains the excessive discharges of chronic cystitis. When spermatorrhea is provoked by urethral irritation, eryngium serves to limit the frequency of losses.

Sometimes eryngium will be found useful in digestive disorders, with persistent gastric irritation and mucous diarrhoea. In these cases the tongue is red and tender, nausea is marked, and there is a strong for food.

**EUCALYPTUS.**

The leaves of *Eucalyptus Globulus*, Labillardiere. Collected from the older parts of the tree. (Nat. Ord. Myrtaceae.) A native tree of Australia; cultivated elsewhere.

**Common Name:** Blue Gum Leaves.

**Principal Constituents.**—A volatile oil (*Oleum Eucalypti*) composed largely of *eucalyptol* (cineol) (C$_{10}$H$_{18}$O), and a resin.

**Preparations.**—1. *OleumEucalypti*, Oil of Eucalyptus (contains a large proportion, not less than 70 per cent, of eucalyptol). it is colorless or pale yellow, aromatic and pungent, and has a spicy, cooling taste. *Dose*, 1 to 10 drops.

2. *Eucalyptol*, a neutral body derived from the oil. It is a colorless, spicy, aromatic fluid, with a cooling taste. *Dose*, 1 to 10 drops.
Specific Indications.—Cold extremities and cold perspiration; perspiration during chill; sense of coldness and weight in the intestines; chronic mucous or muco-purulent discharges; pus in the urine; pasty, bad-smelling tongue; fetid excretions; fetid sore throat; fetid catarrhal states of the broncho-pulmonary tract; chronic ague with exhaustive discharges.

Action.—Eucalyptus, and its oil and derivative, are gentle stimulants when given in small doses. Large doses are irritant and may cause gastrointestinal inflammation and renal congestion. Muscular prostration occurs from overdoses. Blood pressure is lowered by full doses. All the secretions are stimulated when these agents are given in medicinal amounts. All preparations of Eucalyptus are considered antiperiodic and the planting of groves and trees in miasmatic swamps and low grounds is thought to render the air free from malarial miasm. The probabilities are that the enormous quantities of water absorbed by these trees does good by drying the swamps and thus making them poor breeding places for malaria-bearing insects. It is said that a part of the deadly Roman Campagna has been rendered habitable by the introduction of Eucalyptus groves.

Therapy.—External. Eucalyptus preparations are antiseptic and disinfectant. They may be sprinkled or sprayed upon offensive material and used to disinfect and deodorize the sick room. They also may form an ingredient of antiseptic poultices and ointments. Dropped upon hot water, or used in suitable oil dilution in sprays, they are useful as throat and pulmonary antiseptics and stimulants. Eucalyptol is especially much employed in subacute inflammations and chronic diseases of the bronchopulmonic tract, with fetor, relaxation and abundant secretions. Used upon cancerous surfaces they mask the fetid odor and give some relief from pain. The following is an ideal vaginal wash for offensive leucorrhea: Rx. Sea Salt, 1 lb.; Fluidextract of Eucalyptus or Specific Medicine Eucalyptus, 1/2 fluidounce. Mix in a glass or tin container. Sig.: One tablespoonful to 1 pint of hot water, and inject with a glass syringe. All preparations of eucalyptus may be used from full strength to any desired dilution upon old ulcers, wounds, gonorrhoeal discharges, ozoena, septicemia, and gangrene; all with free but fetid discharges. Inhalations of them are especially useful in pulmonary gangrene.
**Internal.** Eucalyptus is a fine stimulating expectorant for bronchopulmonary catarrhal disorders, when no very active inflammation is present. It restrains discharges, facilitates expectoration, and deodorizes and antisepticizes the sputum. Chronic bronchitis, bronchorrhea, and the debility, with difficult expectoration, lingering in the wake of bronchopneumonia and lobar pneumonia are conditions in which it is of very great value.

Agents of this type, which may be compared to the turpentines, and which influence the respiratory membranes, usually are valuable for similar uses in the urino-genital tract. Thus we find eucalyptus an alterative and antipyic in pyelitis and in catarrhal and purulent cystitis, particularly in the aged. Being eliminated by all the mucous surfaces, it exerts its antiseptic influence upon them in all parts of the body. While the oil and eucalyptol are popular with many, we prefer the specific medicine or the fluidextract for most purposes.

Eucalyptus is a stimulating antiseptic for the angina of scarlatina, for which by some it is administered internally. This should be done with great care, however, for the drug is liable to produce congestion of the kidneys, one of the dreaded complications which is easily provoked in the acute exanthemata. If acute desquamative nephritis is present it should not be employed; in the advanced stage of chronic nephritis with very marked fetor in the urine, and scanty secretion of urine, very small doses of eucalyptus may be cautiously tried. Eucalyptus and its preparations are distinctly contraindicated when acute inflammation of any part exists.

The antimalarial properties of eucalyptus are taken advantage of in cases of malarial infection that do not respond to quinine or in which the quinine has an otherwise undesired effect. The more chronic the cases—without distinct cycles—the better the drug seems to act. It is also naturally used for many of the complications or results of chronic malarial cachexia, as periodic headache and neuralgia. It is only in occasional cases of malarial fever that it does a great deal of good, especially acting best if there are exhaustive discharges, but it is never without some beneficial power. It is not to be compared to cinchona medication in the ordinary run of malarial fevers. Used according to indications as given above, eucalyptus is a very satisfactory and pleasant medicine. It is best given in syrup or glycerin.
EUONYMUS.

The bark of the root of *Euonymus atropurpureus*, Jacquin (Nat. Ord. Celastraceae.). A small shrub or bush of the United States. *Dose*, 5 to 60 grains.

**Common Names**: Wahoo, Indian Arrow-wood, Burning Bush, Spindle Tree.

**Principal Constituents**.—A bitter glucoside *euonymin*, closely resembling digitalin; *asparagin*, and euonic acid. (Euonymin should not be confounded with the resinoid of the same name employed by the early Eclectics.)

**Preparation**.—*Specific Medicine Euonymus*. *Dose*, 5 to 60 drops.

**Specific Indications**.—Yellow-coated tongue; anorexia; indigestion and constipation, due to hepatic torpor; prostration with irritation of the nerve centers; periodic diseases, to supplement the action of quinine.

**Action and Therapy**.—Wahoo sharpens the appetite, improves digestion, stimulates the hepatic function, and increases nutrition. It has decided laxative properties and is to some extent antiperiodic. Locke declared it one of the few good stomach tonics. Its antimalarial influence is best displayed after the chill has been broken by quinine. It may then be given as a tonic, and it materially assists in preventing a recurrence of the paroxysms. However, it is not a major remedy in intermittents, and general tonic effects are chiefly to be expected. It acts much better in the gastric debility following intermittent fevers than during the active attacks. Euonymus is a good stomachic bitter in atonic dyspepsia with malarial cachexia, or when due to faulty and torpid action of the liver. Many value it in so-called chronic ague, and in the constipation and gastric debility associated with or following it. Euonymus is a neglected bitter.

EUPATORIUM PERFOLIATUM.


**Common Names**: Boneset, Thoroughwort, Indian Sage, Ague Weed, Through-Stem, Thorough-Wax, Crosswort, Vegetable Antimony.
**Principal Constituents.**—Volatile oil, tannin, and a soluble, bitter glucoside—*eupatorin*.

**Preparations.**—1. *Specific Medicine Eupatorium*. Dose, 5 to 60 drops.
   2. *Infusum Eupatorii*, Infusion of Boneset. Dose, 1 to 4 fluidrachms.

**Specific Indications** .—Large full pulse, the current showing little waves; skin hot and full, with a tendency to become moist, even during the progress of fever; deep-seated aching pain (so-called “bone pains”) in muscles and periosteum; cough, embarrassed breathing, and pain in the chest; urine turbid and urination frequent; influenzal cough and aching pain.

**Action.**—Eupatorium, in small doses, acts as a simple bitter; in large doses it is emetic. Given in hot infusion it causes both emesis and profuse diaphoresis; sometimes catharsis also results. In cold infusion, or small doses of the alcoholic preparations, it is tonic and aperient. It also has marked but unexplainable antimalarial properties.

**Therapy.**—Eupatorium is an old American drug that has found its way into general medicine through aboriginal and domestic usage. Formerly it was a favorite emetic and was successfully used at the outset of fevers of the bilious remittent and intermittent types. Its antiperiodic properties were well known and used to advantage in ague districts many years ago. Its property of relieving deep-seated pain was also early recognized, obtaining for it the vulgar name of “Boneset”. It is now seldom, or never, used as an emetic chiefly because emetics are not often employed, and also on account of the bitterness of the drug and the quantity of infusion required. Its thoroughness as such, however, cannot be questioned, and it has no poisonous or depressing qualities. Eupatorium is now used in malarial affections of the irregular and masked types, and particularly those not benefited by quinine. The chill and succeeding fever are slight, the skin dry, and not, as a rule, followed by perspiration; there is deep-seated, aching pain, as if “in the bones”, praecordial oppression, and great thirst. If, however, the fever lasts all day, slight sweating may occur at night. An added indication in ague is vomiting, especially of much bile. Formerly the hot infusion was given to emeto-catharsis, and followed during the intermission with tonic doses of the cold infusion. This is now known to be unnecessary, full doses, short of nausea, of
the alcoholic preparations being fully as efficient. Malarial headache, with irregular intermittence, is also relieved by small doses of the drug.

Eupatorium is an admirable remedy “to break up a common cold,” especially when accompanied by deep-seated, aching pain and slight or no fever. If there are pleuritic pain and hoarseness, it is also valuable. In every epidemic of influenza it has been used with great advantage. During the severe pandemic of 1918-19 it was one of the safest and most successful remedies employed and contributed much to the successful management of the disease under Eclectic treatment. By many it came to be used as a prophylactic, persons taking it freely apparently escaping attack. Notwithstanding this, its prophylactic power, if it has any, is as yet unexplained and should not be seriously relied upon. That cases were rendered milder, deep-seated pain promptly relieved, cough and respiratory irritation lessened, and recovery expedited under the liberal administration of eupatorium is a matter of record. It is especially valuable to relieve the intolerable backache and pain in the limbs. Eupatorium often relieves periosteal pain of a neuralgic type, particularly if associated with malarial infection, but it renders no service in that caused by inflammation or by syphilitic or other organic changes in the periosteum.

In respiratory affections boneset is efficient to relieve cough, acting best in that occurring in the aged and debilitated, where there is an abundance of secretion, but lack of power to expel it. It also relieves hoarseness, and sometimes benefits in humid asthma. It is one of the best of medicines to relieve the irritable cough of measles, but care must be taken not to push its effects to nausea and vomiting. For children it is best administered in an aromatized syrup. In pneumonia it relieves chest pains and cough, and for these purposes may be employed in the early stage of acute lobar, but more effectually in broncho-pneumonia. After the active stages have passed it again becomes useful to allay the irritable after-cough and to assist in expectoration when bronchorrhea occurs. Being tonic and stomachic, when given in small doses it improves the appetite and digestion and thus favors a more rapid and perfect convalescence.

**EUPATORIUM PURPUREUM.**

**Common Names:** Queen of the Meadow, Gravel Weed, Gravel Root, Joe Pye Weed.

**Principal Constituents.**—Volatile oil and a resin (*eupatorine*).

**Preparations.**—1. Specific Medicine Gravel-Root. *Dose*, 1 to 60 drops.


**Specific Indications.**—Vesical irritation; incontinence of urine, painful and frequent urination; pain and weight in loins extending to the bladder; scant and milky urine with admixture of blood and mucus.

**Action and Therapy.**—While of some value in chronic gastro-intestinal irritation, with catarrhal secretion, and in some forms of cough, with free expectoration, the chief use of gravel-root is to relieve chronic irritation of the urinary passages. For this purpose it is one of the most satisfactory of medicines. It is adapted to cases in which there is constant urging to pass urine, accompanied by a sense of obstruction, and the excretion is mixed with mucus and blood. Though not curative, it is often invaluable in chronic nephritis, to meet many of the unpleasant urinary symptoms. For the uric acid diathesis gravel-root is one of the best of drugs. It will not, as has been claimed, dissolve gravel, but by its diuretic action it eliminates those particles which may form the nuclei of larger concretions. Besides, its effects upon irritated or inflamed parts due to such deposits when present is to soothe and heal them. It especially relieves the deep-seated pelvic perineal aching common to sufferers from cystitis and subacute prostatitis, For passive hematuria it is one of the best drugs we possess. When hydragogues have been used to deplete the body in ascites, gravel-root, by stimulating diuresis, greatly retards the reestablishment of the effusion.

Gravel-root relieves the urinary disturbances of pregnancy so far as difficulty in voiding urine is concerned. It is also very useful in prostatitis, acting best after the acute inflammatory condition has been subdued.

Gravel-root is a neglected drug and often should be employed in urinary disorders where less efficient and more harmful agents are
displayed. High-colored urine, with blood and solids and voided with pain, and milky-looking urine, should lead one to hope for good results from its use. If the specific medicine is administered it should be given in hot water. The decoction is often the best form of administration. It acts well with the special sedatives, and if fever is present or the skin is hot, dry, and constricted it may be given with aconite or gelsemium.

**EUPHORBIA COROLLATA.**


**Common Names:** Large Flowering Spurge, Blooming Spurge, Milk Purslane, Snake Milk.

**Principal Constituents.**—Resin, caoutchouc, and probably euphorbon.

**Preparation.**—*Specific Medicine Euphorbia*. Dose, 1/10 to 10 drops.

**Specific Indications.**—Persistent gastric irritation; irritative diarrhea of catarrhal discharges, with debility; long-pointed tongue, with prominent papillae; uneasy sensation in the stomach; cholera infantum, with hot, tumid abdomen and constant desire to defecate, the stools being greenish and irritating; irritation of the respiratory tract, especially the glottis, with persistent cough and tough and tenacious secretion.

**Action and Therapy.**—In full doses euphorbia is a comparatively mild emetic; in overdoses it causes drastic emeto-catharsis. It was formerly used to fulfill the purposes of an emetic and purgative in dropsical conditions. It is now used chiefly in small doses for irritation of the gastrointestinal and respiratory tracts. It often relieves diarrhea and dysentery, with full and tenesmic passages. It is especially useful in cholera infantum, with hot, tender abdomen and constant desire to go to stool, the discharges being greenish and irritating. Euphorbia is a good gastrointestinal sedative and tonic, and is most effective when the tongue is red, long and pointed, and there is persistent vomiting. In moderate doses it may be used in obstinate constipation, with evidence of gastric irritation. Euphorbia is contraindicated by active inflammation.
Bowles (Eclectic Medical Journal, 1921, page 459) praises Euphorbia as an excellent sedative for persistent, irritative cough following influenza, and that due to chronic catarrhal inflammation of the larynx and pharynx. The glottis seems especially irritable and the cough is exasperating—worse from riding or walking in the cold air, or is aggravated by exertion after a full meal. There is but little secretion, and that is tough, tenacious, and glutinous, and requires persistent hawking to aid in its expectoration. One or two drops may be taken upon the tongue and slowly swallowed; or 40 drops of Specific Medicine Euphorbia may be added to 4 ounces of water, and of this a teaspoonful may be taken every 2 hours. Bowles also used it, with phytolacca and phosphate of hydrastin, to reduce enlarged tonsils following tonsillitis.

The American species of Euphorbia furnish a rich field for restudy. Formerly some of them were quiet extensively used as medicines, but seem to have been crowded out by similarly-acting foreign drugs.

The chief indications for Euphorbia are: profuse mucous discharges, whether from the pulmonic, gastro-intestinal, or urino-genital mucosa; or the tough, glutinous tracheo-broncho-pulmonic secretions, with irritation.

**EUPHORBIA HYPERICIFOLIA**


**Common Names:** Large Spotted Spurge, Garden Spurge.

**Principal Constituents.**—Tannin, gallic acid, and a caoutchouc-like body.

**Preparation.**—*Specific Medicine Spotted Spurge*. Dose, 1 to 10 drops.

**Specific Indications.**—Gastro-intestinal irritation with greenish and irritant passages.

**Action and Therapy.**—True, testing this plant upon himself, found the infusion to produce a full frontal headache, similar to but less severe than that caused by macrotys, with an unpleasant fullness with oppression at the epigastrium, and a sense of languor and drowsiness.
Intense constipation followed. He concluded that it is a cerebral stimulant, and secondarily a sedative to the brain and sympathetic nervous system.

The drug is valuable in gastro-intestinal irritation with watery and mucoid discharges, having been used most successfully in cholera infantum, cholera morbus, muco-enteritis and dysentery, after the acute inflammation has subsided. For the first-named child’s disorder it is one of the most certain of sedative-astringents.

**EUPHORBIA IPECACUANHA.**

The bark of the root of *Euphorbidpecacuanha*, Linné (Nat. Ord. Euphorbiaceae) A perennial found in dry sandy soils on the Atlantic seaboard from Long Island south and west to the Middle States.

**Common Names:** American Ipecac, American Ipecacuanha, Wild Ipecac, Ipecac Spurge.

**Principal Constituents.**—An active resin and *euphorbon*.

**Preparations.**—1. *Fluidextractum Euphorbiae lpecacuanhae* Fluidextract of Euphorbia Ipecacuanha. *Dose*, 1 to 10 drops.

2. *Tinctura Euphorbiae Ipecacuanhae*, Tincture of Euphorbia Ipecacuanha (8 ounces to Alcohol, 76 percent 16 fluidounces). *Dose*, 1 to 10 drops. ( *Usual form of Administration.*—Tincture of Euphorbia Ipecacuanha, 20 drops, Water to make 4 fluidounces. *Mix. Sig.*: One teaspoonful every 2 or 3 hours.)

**Action and Therapy.**—This is an old American medicine that was formerly employed as a substitute for ipecac. It is less active than Euphorbia corollata, but like it produces emeto-catharsis. In small doses it quiets irritation of the mucous membranes, proving useful in both gastrointestinal and bronchial disorders. The indications and uses are practically the same as those given for Euphorbia corollata, which see. Besides, it has been advised in irritative dyspepsia, and jaundice with obstinate hepatic torpor. For the latter purposes the larger doses are to be employed.

**EUPHORBIA PILULIFERA.**

The whole plant *Euphorbia pilulifera* (*Chamaesyce hirta*), Linné (Nat. Ord. Euphorbiaceae). A plant of tropical climes and throughout the gulf states of the
Common Names: Pill-bearing Spurge, Cat’s Hair, Queensland Asthma Weed.

Principal Constituents.—Resins of a glucosidal character, tannin, and salts of potassium, sodium, magnesium, and silica.

Preparation.—Specific Medicine Asthma Weed. Dose, 1 to 30 drops.

Specific Indications.—Spasmodic and dyspneic breathing with bronchial irritation.

Action and Therapy.—A remedy for spasmodic asthma and coughs of a convulsive character due to recent colds. It is somewhat anodyne as well as antispasmodic and expectorant, and is asserted useful in the irritative, teasing, and paroxysmal coughs of the chronic bronchitis of old persons and consumptives. It is also said to relieve dyspnea of cardiac origin and to be of some use in emphysema. It may be administered in syrup, if desired.

EUPHRASIA.


Common Name: Eyebright.

Principal Constituents.—An acrid, bitter principle and a volatile oil.

Preparation.—Specific Medicine Euphrasia. Dose, 1 to 60 drops.

Specific Indications.—Acute catarrhal diseases of the eyes, nose, and ears; fluent coryza with copious discharge of watery mucus. “Secretion of acrid mucus from the eyes and nose with heat and pain in the frontal sinus” (Scudder).

Action and Therapy.—An admirable remedy for acute catarrhal inflammations of the nasal and ocular membranes, with profuse, watery secretion or abundant flow of acrid mucus, and attended with heat, pain, burning, and sneezing. It is one of the most certain agents in acute coryza and in mucous ophthalmia, with abundant lacrimation. It is equally effective when acute catarrhs extend to the ears through the Eustachian passages, and are attended by earache.
headache, sneezing, and coughing. Euphrasia is useful both to prevent and to relieve, in the early stages, acute frontal sinusitis. During or following measles it controls the distressing catarrhal symptoms. In all disorders its most direct indication is profuse watery discharge with acute inflammation or irritation. It is less valuable in the catarrhal disorders of the gastro-intestinal tract.

Euphrasia is a striking example of a simple drug that has acquired a great and exaggerated reputation in folk-medicine. Euphrasia means “good cheer, or delight,” and refers to its reputed “effects upon the spirits through its benefits to the sight” (Millspaugh). It once enjoyed a great but unsustained reputation as a cure for all diseases of the eye, even becoming the theme of the poet’s pen—Milton referring to it in Paradise Lost, as purging “the visual nerve.” It came into Eclectic medication from Homeopathic sources, but with some modifications of symptomatology. The characteristic symptom calling for it is acridity of the discharges, and this is emphasized by Homeopathic writers. It matters little whether the discharges be thin and watery, or thick and yellow—they are free, biting and excoriating, making the lids red and sore. It is essentially a remedy for catarrhal states and for superficial, not deep, eye disorders. Accumulation upon the cornea of sticky mucus befoaging vision is a euphrasia indication. With such ocular disorders is usually more or less coryza, which may be far less hot and biting, or may be bland. The drug has proved especially useful in the epidemics of la grippe in recent years to control the profuse lachrimation. Euphrasia sometimes proves serviceable in hay fever, having the characteristic discharges above mentioned.
NOTE: Throughout these monographs are references to “Specific Medicines”. In some respects Specific Medicines are the single reason that Eclecticism survived so long in the face of “Organized Medicine” and were still being manufactured for the surviving Eclectic M.D.s as late as the early 1960s. Using up to eight organic solvents and the Lloyd Extractor, Specific Medicines represented the strongest possible concentration of the bioactive aspects of botanicals that would stay in a colloidal solution.

Perfected over four decades by John Uri Lloyd, each Specific Medicine was prepared according to the nature of THAT specific plant. You cannot translate a Specific Medicine into “tincture” or “fluidextract”. The latter are GENERIC or standard strengths applied across the board to ALL botanicals. A Specific Medicine represented the greatest strength, without degradation, for a PARTICULAR plant, using anywhere from several to all of the solvents to achieve this. The Eclectic physician was trained to use botanicals in an oftentimes rural setting, and these medicines had to resist breakdown in the deepest winter and the hottest summer. Since they needed to contain even the most ephemeral constituents of a plant remedy, Lloyd approached each plant separately.

The amazing quality of these preparations assuredly maintained the Eclectic Movement long after others had faded. Lloyd’s recipes were Patent Medicines, were not “official”, and when relatives finally closed down the Lloyd Brother’s Pharmacy in Cincinnati, these formulae disappeared. One of the hottest topics for many years amongst professional herbalists in North America and Europe has been “So who has the Lloyd Formulas, already?” Since we cannot access them, the best approach is the use of well made tinctures, capsules or tea. I might suggest the preparations and doses recommended in my Herbal Materia Medica 5.0 as a starting place...in many respects I am perhaps a “Neo-Eclectic” at heart, and have tended to follow the later Eclectics in my approach to plants and dosages.

Michael Moore
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