A TREATISE

ON

MACROTYS.

The Therapeutic Uses of Macrotys are by PROFESSOR R. C. WINTERMUTE, M. D., Cincinnati, Ohio, Professor of Obstetrics, Gynaecology and Pediatrics, and Clinical Diseases of Women and Children, Eclectic Medical Institute, author of "King's Eclectic Obstetrics," (*Revised*), 'etc., and by PROFESSOR CHAUNCEY D. PALMER, M. D., Cincinnati, Ohio, Professor of Obstetrics and Diseases of Women in the Medical College of Ohio, author of "Dysmenorrhoea: Its Essential Nature and Treatment," etc.

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The Description, History, Chemistry, and Pharmaceutical Record are by JOHN URI LLOYD.

Treatise No. I embraces Thuja Occidentalis.

Treatise No. II embraces Cactus Grandiflorus.

Treatise No. III embraces Pilocarpus (Jaborandi.)

Treatise No. IV embraces Veratrum Viride.

Treatise No. V embraces Chionanthus Virginica.

Treatise No. VI embraces Asepsin and Asepsin Soap..

Treatise No. VII embraces Collinsonia Canadensis.

Treatise No. VIII embraces Nux Vomica.

Treatise No. IX embraces Gelsemium.

Treatise No. X embraces Belladonna.

Treatise No. XI embraces Oenanthe Crocata, Vegetable Caustic and Crataegus.

Treatise No. XII embraces Ergot.

Treatise No. XIII embraces Macrotys.

Treatise No. XIV will embrace Dioscorea.

Drug Treatise, No. XIII.
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Macrotys (Cimicifuga.)

(Black Snakeroot.)

Common Names.-Black Snakeroot, because of the color of the root, and its reputed use in snakebite; Black Cohosh *; Rattle Weed, Rattle Root, and Rattle Snakeroot, so named because the dried spikes carrying the seed rattle in the wind. These terms are sometimes corrupted into Rattlesnake Root, and Blacksnake Root. Other common names are Bugwort and Bugbane, (borrowed from the various European species of Cimicifuga, that were used to drive away insects, but misapplied to the American species); Squawroot, a name belonging more properly to Blue Cohosh, because of the medicinal use of the drug by the Indians; and Richweed, given by

Gronovius, 1752, because the plant frequents rich woodlands. The term Richweed is now given by botanists to Pilea pumila, a very different plant.

History.-Macrotys is abundantly distributed in rich woodlands over the greater portion of the United States east of the Mississippi River, except in New England and the extreme South. It is also found in Missouri and Arkansas.

Macrotys was observed by the earliest European travelers in America, being carried to England in 1732, and first described by Plukenet in 1705. All pre-Linnaean writers classed the plant with Actaea, mostly under Tournefort's' name, Christopheriana. Linnaeus gave it the name Actaea racemosa, under which it was classed until Pursh referred it to the genus Cimicifuga. Rafinesque, 1808, by reason of the fact that the fruit of the plant does not accord with that of either Actaea or Cimicifuga, proposed the name Macrotrys actreoides, changing the name in 1828, to Botrophia Serpentaria. Eaton in the fourth edition of his Manual followed Rafinesque, calling the plant Macrotys serpentaria, the latter being Pursh's specific name, but incorrectly spelling the name, which should have been Macrotry's, instead of Macrotys, an error perpetrated by De Candolle, who preceded Eaton. Pharmacopoeial Names.- I820, Cimicifuga; 1830 (Philadelphia edition), C. racemosa and C. serpentaria; 1830 (New York edition), Actrea racemosa and C. serpentaria; 1840 to date, C. racemosa, *Four native American plants were called "Cohosh," *Black Cohosh*, or Macrotys, White Cohosh, or Actaea alba, Red Cohosh, or Actaea spicata, var. rubra, and BIlle Cohosh, or Caulophyllum thalictroides. The term" Cohosh" is an Indian name of unknown meaning.

Plukenet lived when new plants were pouring to England from this country, his publications being rich in descriptions of American plants. He classed Cimicifuga with the Actaea spicata of Europe, using the old

generic name" Christophoriana facie. Herba spicata, ex Provincia Floridana" His inaccurate but yet sufficient drawing establishes the plant's identity. His specimen of the plant is preserved in his herbarium in the British Museum.

When Eclecticism was founded, Eaton's Manual was the popular textbook on Botany, hence the early Eclectic authorities used the name Macrotys racemosa, which name, owing to the reluctance of this school to change established. terms, has yet the preference, and is still best known in Eclectic literature.*

Medical History.-Macrotys was highly valued by the Indians, who employed decoctions of the drug for diseases of women, for debility, to promote perspiration, as a gargle for sore throat, and especially, for rheumatism. These uses by the Indians introduced the drug to early" Domestic" American medicine, and it was consequently given much attention by the earliest writers, e. g., Schopf,

*'The name Macrotys is so firmly established in Eclectic literature that it is not advisable to attempt to change it, although in botanical works the plant has become generally known as Cimicifuga racemosa, in keepiug with adv'anced views of classification. Botanists change their ideas of nomenclature so often that it is not practicable for the layman to always keep in tenor with it. Johann David Schopf was born March 8, 1752, in Wunsiedel, Bavaria. At the age of eighteen he matriculated in the University of Erlangen, his teacher being Johann Christian Daniel Schreber, "the second Linnaeus," who was Professor of Medicine and Director of the Botanical Garden. He received his degree in 1773. Thence he continued his studies in the University of Berlin, and in 1774 made a lengthy tour throughout Europe, studying in the line of natural sciences. In 1777, the ruler of his country, Christian Friedrich Carl Alexandel, Margrave of Ansbach, being sorely in debt, sold to England 1,285 men, his quota of the 3°,000 Hessians employed to suppress the American Revolution. Schopf volunteered as a surgeon and physician to accompany these unfortunates, and arrived in America, at Staten Island, Juue 4, 1777, serving through the war. At its close, in 1783, he obtained permission to remain in America to travel and study. On foot he struck into the country, through New York to Philadelphia, thence, by way of Bethlehem, into the Alleghanies, thence to Pittsburg, the Ohio River, and Kentucky, returning by way of Sheppardstown, Baltimore and Annapolis to Philadelphia. He next made a Southern tour, through Virginia, North and South Carolina to Charleston, theuce to Florida, and after a stay of several weeks at S1. Augustine, be went to the Bahama Islands, returning by way of Nassau, on the Island of Providence. June 4, 1784, he sailed for Europe, with his treasured collection of plants and products. Landing in England, he traversed England and France, arriving home in 1784, after an absence of almost eight years. 1785, Barton, 1801, Peter Smith, 1812, Bigelow, 1822, Garden, * 1823, Ewell, 1827, Rafinesque, 1828, and Tonga and Durand's addition to Edwards' and Vayasseur's Materia Medica, 1829. None of these authorities, however, added anything not given by the Indian, so far as the field of action of the drug is concerned, excepting, perhaps 'the statement of Howard, 1832, who was an enthusiast in favor of Macrotys in the treatment of smallpox, a claim supported forty years after by Dr. G. H. Norris, 1872, in a paper read before the Alabama State Medical Association. He reported that during an epidemic of smallpox in Huntsville, Alabama, families using Macrotys as a tea were absolutely free from smallpox, and that in those same families vaccination had no effect whatever, so long as the use of Macrotys was continued.

In the early use of Macrotys, the infusion was employed, the following being Howard's (1836) method and statement concerning it:

"Infuse a handful of the roots in a quart of boiling water, and take in doses of a common-sized teacup full, three or four times a day. We are constrained however, to notice one circumstance connected with this subject; that the effect produced upon the system by a large dose of the tincture of the rattle-root, (which is sometimes used instead of the tea), in some instances is very alarming, though we have heard of no case in which any bad consequences have followed its use."

In this connection it is interesting to note that Howard calls attention to the fact that the effect of the infusion is not marked by the alarming action of a large dose, as is the case with the tincture. The reason is evidently because the watery menstruum does not carry the energetic resinous compounds that are present in such large quanti, ties in the alcoholic liquid. This indicates the watchful care of these early investigators of botanic drugs.

He was now appointed court and military physician, and in 1791, when Ansbach-Baireuth was ceded to Prussia, he continued to hold office under the new Government, His death occurred September 10, 1800.

Schopf left a number of prints, principal among which was his description of North American plants and medicines, published in Latin, under the title, "Materia medica americana potissimum regni vegetabilis, Erlangae; sumtibus Joh. Jac. Palmii, 1787." This work of Schopf, which was the first systematic American Materia Medica, is exceedingly rare. So important is it, however, and so complete in the field it occupies, that most medicinal plants mentioned by us date their first authentic mention to Schopf's Materia Medica. Reference to it is frequently made in these Drug Studies. The Lloyd Library, in 1903, reproduced this valuable work in facsimile, Professor Edward Kremers contributing thereto the biographical record of Dr. Schopf, from which this brief note is condensed. (I, Alexander Garden, M. D., was a native of Scotland, educated at Edinburgh, and was for thirty years a resident of Charlestown, South Carolina. He was a correspondent of Ellis, a zealous disciple of Linnaeus, and a critic of the preceding systems of botany. He took sides with the British Government during the Revolution, suffered much loss of property, and about the end of the war, with his wife and two daughters, returned to England, where he died, April 15, 1791, in the sixtysecond year of his age. His son remained in South Carolina. Dr. Garden was. honored by the naming of the shrub, Gardenia Florida, to which genera so many species have since been added. His article on Macrotys was one of the most complete of the early treatises on that drug, and from it, unquestionably, subsequent writers drew much of their inspiration as authoritative reference to his work as late as 1823 illustrates.

For a biographical note concerning Dr. Howard, see Drug Treatise on Dioscorea Villosa.

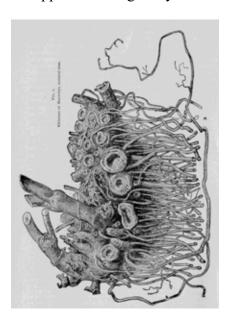
Following the writers above mentioned came the Eclectic fathers, as well as the founders of the Pharmacopoeia, and of the United States Dispensatory, all of whom gave to Macrotys its full credit. Among these may be mentioned Beach, Thomson, Howard (Botanic), Dunglison, Wood, Griffith, Lee and King, to the last of whom is unquestionably due the conspicuous position the drug has occupied in Eclectic medication, as well, probably, as a large share of its popularity in other directions. Professor Dunglison, 1843, placed Macrotys with the special sedatives, stating that "it unites with a tonic power, the property of stimulating secretions, particularly those of the skin, kidneys, and pulmonary mucous membrane." He records its value in rheumatism, and italicizes the statement that" the more acute the disease, the more prompt and decided will be the action of the remedy."

The Committee of the American Medical Association, 1848, Dr. N. S. Davis, Chairman, reported that the committee" uniformly found Macrotys to lessen the frequency and force of the pulse, to soothe pain and allay irritability." In a word, they held it to be "the most purely sedative agent we possess, producing its impression chiefly on the nervous system of organic life." (*Drugs and Medicines of North America.*)

Dr. John M. Scudder, an ardent admirer of Macrotys, writes as follows in his work, "Specific Medication:"

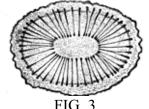
"Like all other direct remedies, Macrotys may be employed in any case, no matter what name the disease may have in our nosological classification, if the condition of the nervous system calls for it. The heavy, tensive, aching pains are sufficiently characteristic and need not be mistaken. So prominent is this indication for the remedy, in some cases, not rheumatic, that I give it with a certainty that the entire series of morbid processes will disappear under its use. For years I have employed Macrotys as a specific in rheumatism, and with excellent success. Not that it cures every case, for it does not; neither would we expect this, for this would be prescribing a remedy for a name.

Macrotys influences the nervous system directly, relieves rheumatic pain when not the result of inflammation, and probablycorrects the diseased condition (formation of lactic acid) which gives origin to the local inflammatory process. Thus in the milder cases, where the disease has not localized itself as an inflammation, Macrotys is very speedy and certain in action. Where rheumatism has localized itself in an inflammatory process, all the benefit we obtain from it is that we remove the cause, and hence the reason for a long continuance of the inflammation. It is a remedy for all pain of a rheumatic character, and for these we prescribe it with the best results. Those cases which go under the name rheumatic neuralgia are very speedily relieved by it. In some cases, the pains of weeks' duration disappear in a single day."



Among the more recent papers on Macrotys may be cited the publications of Dr. Eric E. Sattler, Cincinnati; Dr. Edwin M. Hale, Chicago, and Dr. John King, Cincinnati, who contributed special papers on the subject of Macrotys to the publication, *Drugs and. Medicines of North America*, in which work is to be found the most complete study the drug has ever received.

Description.-Fresh Macrotys rhizome (Fig. 2) is in. matted clumps, averaging from four to eight ounces in weight, although in exceptional cases we have seen specimens weighing, when fresh, over four pounds. The rhizome is horizontal, with numerous, short, upward curved branches, which give the main rhizome a rough, irregular appearance. These branches are sometimes, the remains of former leaf stems, but are generally latent, undeveloped buds. The main rhizome and all its branches

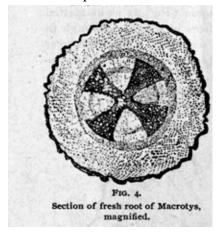


Section of Macrotys rhizome, magnified.

are thickly marked with large annular scars, left by the decayed bud scales. The fresh roots thickly cover the entire under. part of the rhizome clump, and are from six to ten inches long. Green Macrotys is brittle and breaks with a smooth fracture. The freshly broken green root is white, but immediately turns pink when covered with alcohol, tinting the liquid pinkish, which, as well as the drug, finally changes to yellowish brown.

The fresh rhizome, broken and exposed to the air. turns dark, and ultimately black. Owing to this change in composition, the drug should never be broken before it is dried. The odor of Macrotys is peculiar, reminding one of smoke from smouldering twigs and leaves.

The rhizome has a central pith surrounded with a circle of concentric, flat, woody rays, and is covered with a firm bark (Fig. 3), which in the fresh rhizome is very dark brown, excepting at the base of the leaf stem, which is pinkish white, as also are the young buds. The dried root is a shrunken representative of the fresh. It is dark internally, excepting the woody rays, which are

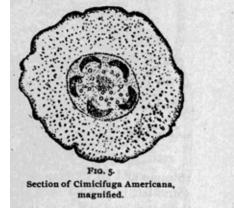


lighter, and therefore prominent in cross section, resembling the spokes of a wagon wheel (Fig. 4), being very different from the cross section of Cimicifuga Americana (Fig. 5.) These firm, woody rays do not shrink in drying like the other tissue, thus giving to the dried root an angular appearance. (Fig. 6.)

Sophistications. No intentional sophisticants or adulterants of the crude drug have been observed by us. Large amounts of earth are often to be found in the root clumps, and occasional admixtures of foreign roots, such as Collinsonia and other species of Cimicifuga. The powdered drug is liable to the usual adulterations found in such products.

Constituents.-Macrotys, like other American drugs, has been persistently and repeatedly attacked by chemists, beginning with

Mears, 1827, passing thence to Tilghman, 1834; King, 1835; Davis, 1861; Conard, 1871; L. S. Beach, 1876; Trimble, 1878; Falck, 1884; Warder, 1884, and others, both contemporary with and following those named above authorities subsequent to King unite in saving that the Section of Cimicifuga Americana. most conspicuous product of Macrotys' disintegration is a compound resinous body, which was first discovered by Dr. John King in 1835. Subsequent studies have been largely devoted to the splitting of this resin into by-products, none of which as nearly represent Macrotys as does the so-called resin, which is, in itself, a complex mixture of bodies. Some of these resinous bodies exist, possibly, in a natural condition in the drug, but the majority are created by drying, chemistry and manipulation. In this connection let us



Section of dried root of

Macrotys, magnified.

say that so delicate is the structure of this drug, Macrotys, that even the touch of the atmosphere, as well as manipulation by means of solvents and subsequent drying, are sufficient to produce great changes, and result in newly constructed products. A proximate crystalline substance was announced by Conard, 1871, but all investigators subsequent to Conard failed to obtain it, owing, possibly, to differences in manipulation. Macrotys yields the usual organic and inorganic constituents of plants, such as gum, coloring matter, earthy salts, etc.

Macrotin.- This "resin" is known in unofficial pharmacy under the names Macrotin, Macrotyn, and Cimicifugin. It is a resinous complexity of a light yellowish color. It imparts a sweet taste to water, and darkens on drying, producing when pulverized, a brownish or yellowish powder.

Upon prolonged chewing it becomes disagreeable, imparting a burning or smarting sensation to the throat. Overdoses occasion severe headache, and at the best, the resin must be cautiously administered, if ill results are to be avoided.

Grover Coe, in 1856, assailed Macrotin "as not representing the plant," his opinion of over fifty years ago being now firmly established in Eclectic therapy, where the Specific Medicine Macrotys is generally employed by recognized authorities. (See" Therapeutics of Macrotys," by Professor Robert C. Wintermute, M. D., p. 10.)

PHARMACEUTICAL PREPARATIONS.

Fluid Extract.-The Pharmacopoeia of the United States recognizes the Extract and Fluid Extract of Macrotys under the title *Cimicifuga*. Both these extracts are made by percolating the dry, powdered root with official alcohol, which, in our opinion, is the best menstruum that can be selected for the drug. The preparation has a very dark color, owing both to the presence of destructive tissue-compounds formed in the drug during the process of drying, and to subsequent exposure, as well as' to the black coloring matter ever present in its epidermis.

Extract. The distinction between the Fluid Extract and the Extract is principally that of concentration, the Extract being made by evaporating the Fluid Extract to a pilular consistency. It must be remarked, however, that such changes as occur from the application of heat and atmospheric exposure under different manipulations concern the Extract to its discredit. Specific Medicine Macrotys.- This is the Eclectic preparation that for a generation has been the favorite of all the Macrotys preparations, and, it will be observed, is the one selected as the representative form of the drug by Professors Palmer and Wintermute in their contributions to the therapy of this Drug Study. It represents, minim for grain, the full value of fresh Macrotys, exclusive of its water. In other words, minim for grain, it represents the real tissue of the root. It has a golden yellow color, a slight odor, and a sweet taste, but is free from sugar. If well stoppered, it does not change by age, but preserves its qualities indefinitely. It mixes with alcohol without change, but with water it forms a milky mixture which, when Specific Medicine Macrotys is diluted with water, renders it necessary that the mixture be well shaken before each dose is taken. (See" Dispensing Difficulties.") If a few drops be added to a little alcohol, tincture of iron darkens the mixture, which becomes black if the Specific Medicine Macrotys is in excess. It contains no inert material, no plant dirt, and, in our opinion, is a perfect Macrotys preparation, of uniform and exact value. Dispensing Difficulties.-Specific Medicine Macrotys should be dispensed in water, but yet, when mixed with water, it produces a precipitate that is of therapeutic value. This, adhering to the. bottom of the bottle, renders it necessary that it be well shaken before each dose is taken. * Ten grains of asepsin dissolved in a pint of water, to which the Specific Macrotys is added, will prevent the formation of this crusty sediment, the precipitate, if formed at all, being light and flocculent. Besides, asepsin possesses a marked value in rheumatism, as well as being useful for its antiseptic qualities, thus materially aiding the action of the remedy.

Suggested Prescription for Macrotys.- *Indications*.- Muscular pains; pains increased by muscular contraction; uterine pain with sense of contraction.

Use.-For rheumatism, and for muscular pains; also a remedy for inflammation of fibrous tissues. To relieve after pains, false pains during labor, and ill uterine rheumatism.

Dose.-R. .-Specific Medicine Macrotys, 3s to 3ij., Water, ₹iv., Asepsin, grs. iij. M. Sig.-A teaspoonful of the dilution everyone or two hours. (Usually Aconite or Veratrum is added.)

^{*}Tablets and pills made of Macrotys or other drugs containing resins and such insoluble substances as agglutinate, are liable to either pass unchanged through the alimentary canal, or to produce more or less severe local irritations

THERAPEUTICS OF MACROTYS.

By PROFESSOR ROBERT C. WINTERMUTE, M. D., Cincinnati; Ohio.

Macrotys is one of the best known of our Specific Medicines, and, no doubt, is as generally used with as satisfactory results by Eclectic. physicians as any of the long list of valuable agents peculiar to the school.

It would probably be impossible to find a physician familiar with Specific Medicines who would not include Macrotys as one of the essentials, were he restricted to the use of a half-dozen remedies. Our first knowledge of Macrotys was as a boy at home, going in the fall of the year to the woods, and grubbing up what we then knew as Rattle Root. This was mixed in small quantities with the feed of the, horses for the purpose of preventing distemper and kindred diseases, the belief prevailing that it was a valuable prophylactic and results seemed to justify the presumption.

Later, a short distance from our first location in the practice of medicine, there lived an elderly "country squire" who dispensed a remedy that possessed remarkable virtue in the treatment of rheumatism; he could often relieve, and frequently cure cases, after physicians had apparently failed. His successes attracted chronic sufferers from both far and near, and while he willingly supplied his medicine at reasonable rates to all who applied, and free to those not able to pay, no amount of persuasion could induce him to reveal its composition. He guarded his secret greedily until attacked by what proved to be his last illness. We were called to attend him, and on the occasion of one of our daily visits, he made known his intention of giving the world, through us, his famous medicine. We were not a little surprised to learn it was something we were already using,-Macrotys; for, in his words, it was "a bitters of rattle root and whisky."

Macrotys is a remedy of great usefulness in three departments of medicine, viz. general practice, gynaecological diseases and obstetrics. The specific' indications are muscular pains', soreness and aching of the muscles, pain increased on motion or contraction of the muscles; in the long muscles a bruised, tired or fatigued sensation in the belly of the same; pain not constant, but intermittent, tensive, and frequently in waves; pain affected but little by pressure or palpatation; temperature increased but slightly, if at all; circulation free; skin hot, but inclined to moisture.

Thus Macrotys is called for in the treatment of numerous diseases, since at some point in their course prominent symptoms are noted, corresponding with the indications for this remedy. Specific Medicine Macrotys may be prescribed in dilution, as follows: Specific Medicine Macrotys, x gtt. to I dr., water iv ozs., teaspoonful everyone to three hours. It is indicated for all pains of a rheumatic character, as well as in those cases so frequently encountered, which are recognized as rheumatic neuralgia. In these, we may be assured of very speedy relief. It possesses no equal i1n the treatment of lumbago, especially if it be associated with bryonia The intensity of the suffering readily yields. Associated with other specifically indicated remedies, it is an important factor in the treatment of a majority of the cases of lagrippe, the sore and aching body and extremities being the immediate indication; likewise the same indication calls for Macrotys in the early development of smallpox, and if given with the first appearance of the characteristic" boneaches," it will' undoubtedly render the disease milder.

In chorea, especially following an attack of rheumatism, or in a rheumatic subject, it is highly extolled, clearly evidencing its marked influence over the nervous system. Cardiac rheumatism, transient rheumatoid pains, stiff neck, eye-strain with pain, dull throbbing or aching in the prostate, in most instances yield quickly and substantially to this agent. In fact, at any and all times where a pathological condition exhibits symptoms corresponding to the foregoing indications, regardless of nosological classification, Macrotys is the remedy,-basing our judgment on specific diagnosis, pathological expression, never on names of diseases. Macrotys has a wide range of usefulness in the practice of gynaecology; its influence in various menstrual disturbances and consequent neuroses is especially marked, relieving irritation, atony of the reproductive tract, irregular enervation, and strengthening normal functional activity.

This is particularly true in dysmenorrhoea of the neuralgic type, in which it is surpassed by no other drug. One or two days before each period, the patient is nervous and irritable, pain in the region of the uterus, radiating to the tubes and the ovaries, tenesmus and weight attended by lumbosacral pain, the suffering being gradually modified as the flow becomes established. Macrotys will likewise bring relief, in some instances, to the sufferer from inflammatory dysmenorrhoea; given the case with scanty flow, heavy, dragging, uneasy sensations in the fundus and subpubic regions; dull aching pains with wave-like recurrence, despondency and evidence of hysteria, best describes the condition.

Macrotys often serves a good purpose in amenorrhoea, other remedies as they are indicated being given in conjunction. Think of Macrotys in those cases of *suppressio mensiullt* resulting from colds, or emotional causes, attended by bearing down, expulsive effort, pain in the back, radiating to the uterus, ovaries and upper thigh; also in Emansio Mensium, where the various symptoms of menstruation (barring the flow) appear at regular intervals, the trouble not depending on so-called tardy menstruation, or anaemia, Macrotys will prove efficient and usually act promptly, imparting tone and overcoming deficient nervous energy. In either event we may prescribe 1/2 to I drachm Specific Medicine Macrotys to 4 ozs. of water, teaspoonful doses of the dilution every three hours, anticipating the usual time for the period by three or four days, and continuing in this manner until the normal function is restored or established. In these, and in cases of scanty or retarded flow, as well as many that are apparently dependent on want of vitality of the uterus and adnexia, Macrotys acts through the hypogastric plexus directly on the great sympathetic, stimulating increased impulses to the ovaries and tubes, and strengthening menstrual rhythm. After the same manner, good results have followed its continued administration in some cases of sterility, as well as in so-called frigidity of the female.

In our observation, no medicine equals Macrotys in reflex or uterine headaches, characterized by a dull aching, sometimes quite severe, on top of the head; this is frequently present during early pregnancy; or may result as a consequence of perverted uterine function. Ovarian pains, the result of exposure to cold, neuralgia, or hyperaemia, as well as sensitiveness and pain along the course of the tubes attendant upon salpyngitis, all yield promptly to Macrotys, either singly or in combination with the specially indicated sedative. Likewise its indications are usually clearly in evidence in the various ills incident to the menopause, and if carefully followed will be found, with other means, a valuable aid in carrying the female over this critical period. Macrotys is one of the agents always included among the half-dozen remedies of the obstetric medicine case.

No other medicine will compare with Macrotys as a *partus prep_arator*. Given either alone and direct, or in the form of Parturient Balm (Mother's Cordial), of which it is an essential ingredient, during the last six or seven weeks of gestation, it relieves many of the unpleasant features, and, at the time of parturition, facilitates relaxation and dilatation; strengthens the contractions, and under ordinary circumstances shortens labor. It is also equally valuable as a *partus accelerator*, and may be used, when indicated, to increase the force and frequency of the pains. It is efficient and satisfactory in the relief of false pains, that frequently occur during the late weeks of pregnancy, to the great discomfort of the patient. After-pains are quite unusual following alabor in which Macrotys has been used, since the reduction and contraction of the uterus is so uniform and complete, that all secundal fragments are removed.

In suppression of the lochia from cold, or, in fact, from any cause, Specific Macrotys will prove most salutary. Macrotys will be found the most excellent agent at our command to combat the various complications and annoying symptoms that frequently follow paturition, and harass the lying-in patient, and it may be prescribed when indicated, with the most positive assurance of satisfactory results, aiding an uneventful and natural puerperium, as well as sustaining and favoring the process of normal involution.

[The foregoing elaborate presentation by Professor Wintermute, of the field of action and influence of Macrotys, in a therapeutical sense is admirably instructive and comprehensive, as the readers of this drug study will appreciatingly testify. We take pleasure in following it with the succinct uses of the Specific Medicine in the hands of Professor Chauncey D. Palmer, M. D., a great admirer of this preparation of the drug. As is well known, Professor Palmer has extended opportunities in the field Macrotys occupies.]

THERAPEUTICS OF MACROTYS (Cimicifuga). By PROFESSOR CHAUNCEY D. PALMIER, M. D., Cincinnati, Ohio.

Cimicifuga (*Macrotys*) is a most valuable remedy in gynaecological practice. Especially do I think well of it in the management of dysmenorrhoea. I give ten drops of the Specific Medicine, undiluted, three times a day, during the whole of the menstrual interval, and the same dose everyone, two, or three hours, during the menstrual time, according to severity of pain. It does best when the menstrual flow is scant and insufficient, and probably, also, in cases more or less rheumatic in tendency. For the neuralgic or rheumatic form, and for the congestive form, it is quite reliable.

Therapeutic uses of Macrotys from the writings of physicians who employ it. Specific Medicine Macrotys (Black Cohosh). This is the remedy for muscular rheumatism, not the result of local inflammation. It is also one of our most reliable female remedies. Scudder says, associated with pulsatilla, it is a specific in many cases of dysmenorrhoea. It should be given three or four days before the expected period, and, continued until the flow is free. In amenorrhoea it is also one of our most efficient agents. In rheumatism of the uterus, to relieve false pains, or the many unpleasant sensations attending pregnancy, it has no equal in the *materia medica*, and becomes a true *partus preparator*.

Bartholow says there is little doubt that it increases the contractility of unstriped muscular fiber in a manner similar to ergot, but much feebler. It stimulates the venereal appetite in man, and promotes the menstrual flow in woman.

In a practice of more than twenty years, following the indications for the use of Macrotys, I have never been disappointed. In treating cases of threatened abortion, before the membranes are ruptured, alternated with specific viburnum, I have not had a failure. I have used Macrotys in cases of false pains that sometimes come on a few weeks before the time for true labor with unvariable success.

For the pains and unpleasant sensations that occur during the last months of gestation, give five drops, three or four times daily. It will give great relief, and your patient will bless you when she comes to her confinement. I would say to the young doctor, give this remedy a thorough study, and a fair trial, and it may be that a wider range of usefulness may be found for it than we now have any knowledge of -Wm. A. Iles, M. D., Urbana, Kan., Medical Brief, June, 1905.

Macrotys.-This is the remedy for rheumatism, muscular pains, and also as a parturient and uterine tonic. In rheumatism it is used when the pains are mostly muscular; the flesh is sore and feels as though it were bruised. In lumbago, in combination with specific hydrangea and acetate of potash, it can not be excelled. In rheumatism and muscular pains we prescribe Specific Macrotys, dr. 2; water, f 3 4, teaspoonful every four hours. As a parturient or emmenagogue, it is used when the patient complains of pain and tenderness in the uterus and backache.

It is also used to excite uterine contractions and is often prescribed as a tonic, preparatory to labor. The dose in this case is smaller, 20 or 30 drops of Specific Macrotys, water f 4 **3**. We have found that if given in larger doses, or given too frequently, in some patients it produces *headache*.- *Edectic Medical Journal. Vol. XI*, *No. 4*, *W. N. Mundy*, *M. D*.

Specific Macrotys-Indications.-Muscular soreness, especially in fleshy part of the muscle, severe pain in the scalp, severe pain in the forehead, a sensation as if the top of the head would fly off, brain feels oppressed, pain at the base of the skull as if it were being pierced, stinging pains in the eyeballs and eyelids; Macrotys pains are generally in waves, patient sad and gloomy, feels as if he would go crazy, sleeplessness, nervousness, fluent watery discharge from nostrils, increased secretion of tears, frequent sneezing, soreness and roughness in the throat, cough caused by tickling in the throat, difficult swallowing. The dose of Specific Macrotys is from twenty to thirty drops in four ounces of water. A teaspoonful every hour or two hours.-C.W. Eckermeyer, M.D., Montgomery, Ohio, National Eclectic Medical Association, 1902.

Indications for Macrotys.-This remedy has a wide range as a pain reliever. It is indicated by muscular aching, local and general; aching pain as from overwork, overstrained muscles, great muscular aching, with chilliness 'and rapidly increasing temperature. The indications for its use are present in the forming stages of many acute fevers. Macrotys is indicated in acute muscular rheumatism, rheumatic fever, acute cardiac rheumatism. In chronic cases of cardiac rheumatism, it does not appear to have much influence. In congestive conditions of the uterus and appendages, with pain resembling rheumatism, it is one of the best remedies in the *materia medica*. There are many more painful conditions in which the indications for it are present, and where good results are obtained from its use.-*T. D. Hollingsworth, Mf. D., Chicago Medical Times, Vol. xxxiv, No.5*.

Macrotys.-A physician in a neighboring town consulted me in regard to treatment of his wife, who was in the second month of pregnancy, and suffered from a severe and almost unbearable headache, which affected only the top of her head and was constant. My friend had tried everything he could think of to relieve it, from chloral hydrate to morphine, and only succeeded in giving temporary relief by giving antikamnia. I wrote a prescription containing:

R Specific Medicine Macrotys, 3ij.

Simple syr., 3i.

Aq. Menth. P., 3ss.

Aqua q. s., 3iv.

Sig.-3i every two hours.

After taking the second dose the headache left and did not return, though I had been particular to instruct that the whole prescription be taken, regardless of the result obtained.

In the cases of headache accompanying menstruation I have given Macrotys with success.-Chicago Medical Times, March, 1898, B. B. Masten, M. D.

SPECIFIC INDICATIONS AND USES.

Specific Medicine Macrotys is the remedy first thought of in rheumatism and rheumatic neuralgia. It is the remedy for unpleasant sensations in the pregnant uterus; for false pains, and to aid true ones. It is undoubtedly a *partus preparator* whenever the woman is troubled with unpleasant sensations in the last months of pregnancy. It is also a valuable remedy to correct the wrongs of menstruation, relieving pain, and looking toward normal functional activity.

Macrotys influences directly the reproductive organs. This influence seems to be wholly upon the nervous system, relieving irritation, irregular innervation, and strengthening normal functional activity. For this purpose it is unsurpassed by any agent of our *materia medica*, and is very largely used

It is the most prominent remedy for painful conditions with muscular soreness and tension.

Dosage. - R. Macrotys, 3s to 3ij.

Water, 3iv.

M.-A teaspoonful of the dilution every one or two hours. (Usually Aconite or Veratrum is added.)

SPECIAL.

The accompanying Treatise is a part of a series that, when completed, will give physicians preserving same, a convenient fund of comprehensive and useful information concerning the subjects embodied therein. The fascicles will appear at intervals, each being complete in itself, and will be mailed, with our compliments, to physicians desiring them. We are led to this work by the many and increasing requests we receive from physicians who either wish to review the qualities of old remedies, or to study new ones. The fascicles will consequently embrace both new and old drugs, the aim being to present those concerning which, as manufacturers of representative pharmaceutical preparations, we are continually solicited for the latest information. They will carry such related phases of Materia Medica, history, description, therapy, etc., as are necessary to a comprehensive view. of each drug, its therapy, and its best preparations.

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