A TREATISE ON

PULSATILLA.

Therapy of Pulsatilla.-Rolla L. Thomas,. M.D.

Description of the Herb.-From the Pharmacopeia of the United States.

Common Names, Botanical History and Synonyms; Medical History. From "Drugs and Medicines of North America." J. U. and C. G. Lloyd.

Physiological Action.-Dr. Finley Ellingwood, "New American Materia Medica, Therapeutics and Pharmacognosy."

Therapeutic Uses.-Writings of Dr. E. M. Hale, Dr. John M. Scudder, Dr. Chauncey D. Palmer, Dr. Thomas S. Blair, Dr. John Wm. Fyfe, Dr. Harvey Wickes Felter, Dr. Geo. W. Boskowitz, Dr. Joseph Niederkorn, Dr. Finley Ellingwood, Dr. William Nelson Mundy, Dr. James D. McCann, Dr. Ford Scudder, Dr Albert F. Stephens, Dr. Benj. L. Simmons, Dr. J. C. Ellis, Dr. Lyman Watkins, Dr. J. P. Harvill, and Dr. A.]. Smith.

Characteristics, Constituents, Chemistry, and Pharmaceutical Preparations.-By John Uri Lloyd.

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PULSATILLA.

"The herb of Anemone pulsatilla and Anemone pratensis Linne, and of Anemone patens Linne, var. Nuttalliana Gray (Nat. Ord., Ranunculaceae), collected soon after flowering.

"It should be carefully preserved and not be kept longer than one year."-U. S. P., 1880.

"The herb of. Anemone pulsatilla and of Anemone pratensis Linne (nat. ord. Ranunculaceae), collected soon after flowering.

"It should be carefully preserved, and not kept longer than one year." -U. S. P., 1890. Pulsatilla not included in the Pharmacopeia of 1900.

COMMON NAMES.-In botanical works the plant is known as Pasqueflower, so called from the European species, which flowers about Easter. It is also known as May-flower.* The botanical relationship of the pulsatilla herbs, including those native to America, have tong been the subject of research and discussion by systematic botanists. The following synopsis, by C. G. Lloyd, from DRUGS AND MEDICINES OF NORTH AMERICA, 1884, relates to the American species and varieties: Botanical literature as well as prints illustrating early spring flowers give "May-flowers" marked attention.

"BOTANICAL HISTORY AND SYNONYMS.-The plant was first described as Clematis hirsutissima, by Pursh (1814), from a specimen collected by Lewis and Clark while on their Western expedition. Nuttall, in 1818, transferred it to the genus Anemone, where it properly belongs, and named it Anemone ludoviciana, which name was changed by De Candolle, shortly afterwards, to Anemone Nuttalliana. The plant belongs to the section Pulsatilla of the genus Anemone, distinguished by having the achenes prolonged into hairy tails; and by many botanists this is considered a distinct genus. Sprengel adopted this view of the subject, and called the plant Pulsatilla Nuttalliana (1825).

"Anemone. patens (the typical species) is found in Siberia, and was discovered in British America by Hooker, and included in his Flora BorealiAmericana. For some years the variety (Nuttalliana) was not distinguished from the plant collected by Hooker, and was accordingly called Anemone patens in Torrey and Gray's Flora, and Pulsatilla patens in Gray's Genera.

It is only in late years that the plant has been recognized as a distinct variety, and it was named Anemone patens var. Nuttalliana, by Gray, in his Manual, fifth edition (1867)."

CHARACTERISTICS.-All the pulsatilla species and varieties are, when green, acrid and irritating. The fresh juice inflames the eyes, and even closes them temporarily. Many persons are severely irritated simply from contact with the recent plant. The exhalations from the plant, whilst being dried in quantity, inflame the eyes of manipulators, and with some persons excite violent coughing. The alcoholic tincture of pulsatilla, whether made from the green or the dried drug, seems to carry its therapeutic value, without the irritating qualities of the juice. Possibly the alcohol overcomes its acrid influence, without disturbing its therapeutic action. The aged, dried drug excites tingling of the tongue, but is not as violently irritating as is the juice of the green herb. Drugs and Medicines of North America, J. U. & C. G. Lloyd, 1884.

MEDICAL HISTORY. - (From Drugs and Medicines of North America, 1884).-"The European pulsatillas have been used in medicine from very early times. Galen, Dioscorides, and others, have written about the different species of Anemone, but it seems to have been reserved for Baron Storck to have revived and permanently established the application of pulsatilla.* The medical history of pulsatilla would require a volume, and the reader is referred to the multitude of works on that subject in the Lloyd Library.

CONSTITUENTS.-Possibly no class of plants of energetic natures when fresh, are more susceptible to changes than the anemones, including pulsatilla. Beginning with Storck, I *iii*, (See Footnote, *), a substance called "anemony camphor, or pulsatilla camphor or anemoneum,"** has been recorded. This, as well as other pulsatilla complexities and educts, has been studied by many chemists, beginning with Heyer, 1779. The principal decomposition constituent, named anemonin (See Footnote), is obtained from water distilled from the plant, and is in the form of crystals. These soften at 15°C., and decompose at a higher temperature, a pungent vapor escaping, and charcoal remaining. (Fehling).

Different investigators have given varying characteristics to the different materials produced under the name anemonin. If this has a natural setting in the drug, its structural position is unknown, which is likewise probably true of all the by-products and decomposition materials, fixed and volatile, that have been evolved from pulsatilla by means of heroic chemistry.

In our opinion, the therapeutic value of pulsatilla depends upon. the drug texture itself, or its adsorbed alcoholic representative. The discordant results obtained by chemists are recorded in Gmelin's Handbook of Chemistry, Vol. X, 1864. Subsequent investigations have added to, rather than lessened, the discords existing that date.

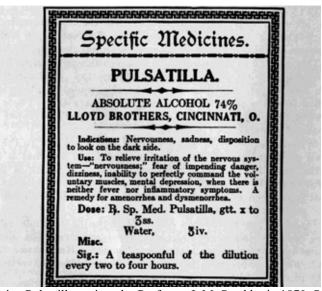
PHARMACEUTICAL PREPARATIONS.-The Pharmacopeia of the United States giv'es neither formula nor process for any pharmaceutical preparation of pulsatilla. The Pharmacopeia of the American Institute of Homeopathy directs a tincture made of the fresh plant when in flower.

^{*}Dr. Anthony Storck (Baron Storck). 1731-1803 may be said to have established in professional use the botanical remedies pulsatilla, hemlock. aconite, stramonium, and hyoscyamus. Other botanical remedies. still employed. owe their early conspicuity to Dr. Storck. The Lloyd Library carries his "Medicinal Virtues of Hemlock." with an illustration of the plant. printed in Vienna in 1761, and also his "Libellus, quo demonstratur Stramonium, Hyosciamum, Aconitum," which also is illustrated with large plates of the plants named.

^{**&}quot;Aenemony-camphor. Pulsatilla-camphor.' Anemoneum." First observed by Storck (Libellus de usu med. Pulsatillae nigric. Wicn. 1771): rediscovered by Heyer in 1779. The volatile acrid principles (xiv. 471) are perhaps related to the body from which anemonin and anemonic acid are formed."-Gmelin, "Organic Chemistry," Vol. XVI, Ip, 266.

The preparation we make, which is used uniformly by practically all authorities mentioned in this publication, is the Specific Medicine, prepared from the recent flowering plant or just following the dropping of the bloom. It has the following qualities:

The color is of a deep green, due to natural chorophyl compounds. On the addition of water it becomes opalescent, and if there be sufficient water added, on standing a flocculent greenish precipitate results. Consequently, dilutions of Specific Medicine pulsatilla with water should be shaken or stirred, when each dose is taken. Specific Medicine pulsatilla has an herby odor, which becomes more pronounced on the addition of water. The taste is first herby and incipient, but if it be in sufficient amount a tingling of. the fauces and an unpleasant irritation results. There is no chemical test for the qualities of pulsatilla, which (see constituents) are so evanescent as to practically disappear when the plant is dried and aged. The manipulation with chemicals, whether the plant be green or dried (see constituents), results in by-products and decomposition products that are not present in the Specific Medicine prepared from the recent herb.



Original label of Specific Medicine Pulsatilla. written by Professor J. M. Scudder in 1870. Still in use as the front label.

No plant known to this writer demands more care in its selection than does pulsatilla. No plant is more readily injured by age. No plant more quickly passes from the proper condition for collecting. Possibly rhus toxicodendron or arisaema triphyllum are as sensitive, but the constituents of even these are not more evanescent than are those of pulsatilla.

PHYSIOLOGICAL ACTION.-The physiological action of pulsatilla is a feature of Dr. Ellingwood's "New American Materia Medica, Therapeutics, and Pharmacognosy," 1916.* From it we reproduce as follows:

"The agent has a direct influence upon the brain and spinal cord. In toxic doses it produces mental hebetude, dilated pupils, coma, and in extreme cases, convulsions. It lessens general sensibility. "It paralyzes to a mild degree both sensation and motion. It increases, in proper doses; the cerebral functions and imparts tone to the sympathetic system.

^{*}Finley Ellingwood, M.D., late Professor of Materia Medica and Therapeutics in Bennett Medical College, Chicago; Professor of Chemistry in Bennett Medical College, 1884-1898; author of Ellingwood's Practice of Medicine; Ellingwood's Prepancy and Labor; editor Ellingwood's Therapeutist; member National Eclectic Medical Association; American Medical Editors' Association.

"In toxic doses it is a heart depressant; it lowers arterial tension, reduces the pulse rate and temperature.

"It exercises an influence upon the heart similar to that of cactus, increasing its power, improving the strength and rate of the pulse and slowing the rapid and feeble pulse of nervous prostration.

"The influence of full doses of pulsatilla, taken into the stomach and intestinal canal. is that of an irritant. In the mouth it acts like aconite or xanthoxylum, producing tingling, burning, and subsequent numbness. It produces a sensation of rawness, and is followed by acid eructations and unpleasant taste. It produces tightness and constriction of the chest, with congestion, chilliness and great weakness. The agent is seldom given in sufficient doses to produce the physiological effects. It operates much more satisfactorily in doses too small to produce such action. It has long been popular with the homeopathists in minute doses."

To the Homeopathic profession is unquestionably due the establishing of pulsatilla in America, in the direction in which it is now generally employed, Professor E. M. Hale, M.D.,* accepting that "the Homeopathic uses were introduced by Hahnemann." Allen** also states that it was introduced into their practice in 1805 by Hahnemann. The Homeopathic materia medicas and journals are prolific in the praise of pulsatilla. Dr. Hale*** gives the following uses of the American variety: "It is useful in chlorosis, with great nervousness, in neuralgia, characterized by its wandering, erratic character. We find it specific in catarrhal affections, especially in mucous diarrhoea and leucorrhoea. It causes venous congestion, and is useful in varicosis. It has cured urticaria, and itching papulae. It is as useful in nervous or gastric sick headache, as is the pulsatilla of Europe. The pain commences in the nape of the neck, ascends to one side of the head and eye, and is attended by chilliness and vomiting. It has proved specific in conjunctivitis catarrhalis, ophthalmia tarsi, hordeolum, opacity of the cornea, pustules and granulations in the eyes. It is useful in otitis and otalgia from. catarrh; in catarrhal angina, when the mucous surfaces are of a livid, purple hue, and covered with mucus. This light purple, or dark violet hue, attends all the local disorders indicating pulsatilla. The indications for its use in gastric troubles are the same as for pulsatilla nig. It has great curative power over disorders of menstruation, regulating irregular menses, restoring suppressed menses, and modifying painful or profuse menses. I have used it successfully in gonorrhoea and orchitis; as well as ovaritis due to suppression of the menses. It is well known that when a catarrhal flux from any organ is suddenly checked, a rheumatic affection of some muscle or joint may result. Here both species of pulsatilla act promptly curative, restoring the discharge and arresting the inflammation. I would advise its use for all the symptoms of pulsatilla nig. It has the advantage of being indigenous, and obtainable pure, and in inexhaustible quantities."

Close following 1868 came its great favor with Eclectic physicians, to whom the loss of pulsatilla in their practice would now (1916) be considered as a therapeutic disaster. The uses of pulsatilla are voiced as follows by Dr. John M. Scudder,**** who first broadly disseminated its virtues in Eclectic literature:

^{*}Fdwin M. Hale, M.D., Professor of Materia Medica and Therapeutics of the New Remedies in Hahnemann Medical College, Chicago, Author of Lectures on "Diseases of the Heart.".

[&]quot;Characteristics of New Remedies," etc.

^{**}Dr. Timothy Field Allen, for many years Professor of Materia Medica and Therapeutics in the New York Homeopathic College; editor of the Homeopathic Encyclopedia of Materia Medica. and other publications.

^{***}Drugs and Medicines of North America, April, 1884.

^{****}John M. Scudder, M.D., Professor of the Principles and Practice of Medicine in the Eclectic Medical Institute; author of "The Principles of Medicine," "The Eclectic Practice 01 Medicine," "The Eclectic Materia Medica and Therapeutics" "A Practical Treatise en the Diseases of Women," etc.

"The principal use of pulsatilla is to relieve certain cerebral symptoms with difficulty relieved by other remedies. In some diseases of ,:women, in spermatorrhoea and prostatorrhoea, in heart disease, and some other chronic affections, we find certain head symptoms playing an important part, and giving a good deal of trouble. The patient is nervous, restless, has an active imagination for disease, a fear of impending danger, etc. These symptoms are very unpleasant, and not unfrequently prevent the curative action of remedies. Pulsatilla reaches them and gives prompt and certain relief. "I would not treat some cases of spermatorrhoea without I could employ this remedy. For with the unnatural excitement of the mind, no remedy would exert a curative influence. So in some cases of heart disease the head symptoms are the most prominent and unpleasant features. Relieve the unpleasant mental sensations and dread of danger, and we have removed a permanent cause of excitement.

"Though pulsatilla is the remedy for nervousness, it must not be given with any expectation of benefit where the excitement depends upon irritation and determination of blood. In this case it will either exert no influence or it will be unfavorable.

"Pulsatilla exerts a marked influence upon the reproductive organs of both male and female. I regard it as decidedly the best emmenagogue, when the suppression is not the result of or attended by irritation and determination of blood; where there is simple suppression from atony or nervous shock, it may be used with confidence. In male or female it lessens sexual excitement. It does not diminish sexual power, but rather strengthens it by lessening morbid excitement.

"There are other uses for the remedy, but those I have named are prominent ones, and readily recognized. I value the remedy very highly, and am satisfied from an experience of twenty years in its use that I do not overestimate it."-Specific Medication, 1870.

Experienced physicians of all schools now employ pulsatilla in all confidence. The fact that it was dropped from the Pharmacopeia of 1900 has not prevented physicians from increasingly prescribing the remedy, the demand for it being now greater than ever before.*

That exceptional authorities in the dominant school of medicine consider pulsatilla of the highest importance, is shown by the booklet (1910) of Professor Chauncey D. Palmer, M.D.,** titled "The Clinical Use of a Selection of Vegetable Remedies." Of pulsatilla he says:

"Pulsatilla is an old remedy, but one that has been much neglected, excepting by the Eclectics and the Homeopaths, with whom it is a great favorite. Why should any physician, regardless of school or source of education, deny himself its usefulness? I wish merely to refer to it here as a most valuable medicine, for not a few cases of painful menstruation, especially that form called neuralgic, and I think properly so. Not a few cases of this disease are essentially neurotic in form.

^{*}In the opinion of this writer, the Pharmacopeia of the United States can neither make, nor unmake, the uses of remedies employed by physicians. Its function is that of a descriptive work, and it is scientific authority for drugs and compounds Introduced to its pages with each revision. The dropping of a drug previously included does not necessarily indicate that physicians using that drug in their practice will stop employing it, nor does the introducing of a drug previously unrecognized compel physicians to employ it in their practice, unless the suggested drug has an advantage over others then In use.-J. U. L.

^{**}Prof. Chauncey D. Palmer, M.D., Emeritus Professor' of Obstetrics, Gynecology, and Clinical Gynecology, in the Medical Department of 'Cincinnati University. Author: "~American System of Gynecology," 1888: "Clinical Gynecology," 1895: "American Text of Obstetrics," 1904: "Jewett's System of Obstetrics," 1905. Member of various professional societies, including the Cincinnati Academy of Medicine, Cincinnati Obstetric Society, Ohio State Medical Society, and the American Gynecological Society, A. M. A.

Most common they are in the unmarried, commencing often at puberty, the attacks becoming, to appearances, more and more severe each additional year of life, until at such times the patients are wholly disabled and incapacitated for any physical or mental exertion, too often becoming confirmed examples of hysteria and neurasthenia.

"Administered to such patients, in moderate doses of the Specific Medicine pulsatilla, three times a day during the menstrual' interval, and every one to more hours, according to the severity of the pain during the menstrual time, permanent c1.ures follow in many cases, and marked beneficial results in most others.'

"It is impossible to lay down rules for specific differentiation between the remedies pulsatilla and cimicifuga. As a rule, for dysmenorrhea of the virgin or the unmarried, I give the choice to pulsatilla; while to the married, before pregnancy or after its occurrence, I have preferred cimicifuga. "Pulsatilla is also a remedy for the reflex neuroses of women, of uterine and ovarian origin, as nervous erethism, sleeplessness, neuralgic pains, and hystero-epileptic attacks."

Dr. Thomas S. Blair,* likewise a recognized authority in the dominant school, in his "Abstracts from a Practitioner's Handbook of Materia Medica and Therapeutics," records as follows:

"PULSATILLA. In Moderate doses it is of value in diseases of the reproductive organs caused by deficient or defective innervation, and also inversely, in hysterical, melancholic, and spasmodic manifestations induced by sexual derangements. Amenorrhea with mental perturbation, spermatorrhea, menstrual disorders with headache; chilliness, languor, nausea, waterbrash, and nervousness, as well as some cases of hysterical convulsions and the urinary irregularities of pregnancy, all respond nicely to this drug if properly pushed, but it is not a remedy for pain except incidentally as it relieves spasm. Homeopathists assert that pulsatilla exercises a greater influence over women than over men, and more particularly women of lax fibre, of mild and yielding disposition. Probably that is true. We know the susceptibility of blonde women to belladonna. At all events, it is probable smaller doses will suffice than with women of the opposite type.

"In small doses (or even the first dilution) it exercises an influence upon the circulation partaking somewhat of the natures of both aconite and cactus, reducing inflammation in 'mucous membranes and equalizing the circulation. It differs from aconite in'that it is more antispasmodic in small doses, and it influences the catarrhal stage of congestions and inflammations rather than the initial stage. For this reason, It frequently should follow aconite and sometimes alternate with it. Pulsatilla, like a great many other remedies, should seldom be used in combination. We get most of our best results from the single drug. This is the single drug directed to 'catarrhal congestions, which is a wide field. The thick, bland, and yellow or yellowish-green discharge is most affected.

"The following will simply suggest its range in this direction: Temporal neuralgia with lachrymation of affected side, otorrhea, catarrhal otitis, styes, agglutinated eyelids, ophthalmia neonatorum, subacute conjunctivitis, effects of 'colds' upon eyes and ears, coryza with yellow discharge, toothache relieved by cold and due to acute congestion, catarrhal states of gastro-intestinal tract, creamy leucorrhea, catarrhal stage of gonorrhea, orchitis, acute prostatitis, greenish expectoration with cough, catarrhal symptoms of measles, and in fevers when patient seeks the open air."

It will be seen that different authorities, regardless of the schools of medicine with which they affiliate, agree on the uses of pulsatilla, probably no drug of the entire materia medica being more cosmopolitan. Dr. Fyfe's* revision of Specific Medication and Diagnosis (Scudder), gives the indications for pulsatilla as follows:

^{*}Thos. S. Blair, M.D., member American Medical Association, Pennsylvania State Medical Society, Harrisburg Academy of Medicine: member visiting staff of Harrisburg City Hospital. etc. Author of "A Practitioner's Handbook, of Materia Medica and Therapeutics."

INDICATIONS.-Irritation of the nervous system, associated with wrongs of the reproductive organs of both men and women; menses scanty or tardy; sense of fullness and weakness in the back and hips of women; nervousness, despondency and fear of. impending danger; conditions in which the patient is frequently moved to tears (even in sleep in extreme cases), and still she is unable to give any sufficient reason for doing so; nervousness with sleeplessness; head symptoms common to functional affections of the reproductive organs of both men and women; nervous conditions caused by mental over-exertion or the excessive use of tobacco."

From the five-page article in Volume 2 of the AMERICAN DISPENSATORY (Felter), we extract as follows:**

"Pulsatilla is a remedy of wide applicability, but more particularly for those conditions in which the mind is a prominent factor. A gloomy mentality, a state of nerve depression and unrest, a disposition to brood over real or imagined trouble, a tendency to look on the dark side of life, sadness, mild restlessness, and a state of mental unrest generally denominated in broad terms 'nervousness,' are factors in the condition of the patient requiring pulsatilla. A pulsatilla patient weeps easily, and the mind is inclined to wander-to be unsettled. The pulse requiring pulsatilla is weak, soft, and open, and the tissues have a tendency to dryness (except when the mucous tissues are discharging a thick, bland material), and, about the orbits the parts appear contracted, sunken, and dark in color. The whole countenance and movements of the body depict sadness, moroseness, despondency, and lack of tone. Hysteria of the mild and weeping form may be a symptom. The whole condition is one of nervous depression, the nutrition of the nerve centers are at fault. With such symptoms, pulsatilla may be confidently prescribed in the conditions and disorders enumerated in this article. Pulsatilla may be given to produce sleep, when there is great exhaustion and opiates are inadmissible. If the insomnia depends upon determination of blood to the brain, pulsatilla will not relieve, but when due to nervous exhaustion it is a prompt remedy to give rest, after which, sleep obtains. Where sleep is disturbed by unpleasant dreams, and the patient awakens sad and languid, pulsatilla should be given. Pulsatilla has a large field in troubles incident to the reproductive organs of both sexes. As an emmenagogue, it serves a useful purpose in amenorrhoea in nervous and anemic subjects, with chilliness a prominent symptom. When menstruation is suppressed, tardy, or scanty from taking cold, or from emotional causes, pulsatilla is the remedy. In dysmenorrhoea, not due to mechanical causes, and with the above-named nervous symptoms, no remedy is more effective. Leucorrhoea, with a free, thick, milky, or yellow, bland discharge and pain in the loins, and particularly in scrofulous individuals, calls for pulsatillaa. It is a remedy for mild forms of hysteria, where the patient is weak and weeps easily, has fears of impending danger, and passes large quantities of clear, limpid urine, and menstruation is suppressed.

"The long-continued use of pulsatilla as an intercurrent remedy, is accredited with curative effects in uterine colic, but it is of no value during an attack. Pulsatilla frequently proves a good remedy in ovaritis and ovaralgia with tensive, tearing pain. Sluggish, ineffectual, and weak labor pains are sometimes remedied by this drug. It is frequently a remedy for pain, when dependent on or associated with debility, and sometimes when due to acute inflammation.

^{*}John William Fyfe, M.D., formerly Professor of Specific Medication In the Eclectic Medical College of the city of New York: author of "Essentials of Modern Materia Medica and Therapeutics;" President of the Connecticut Eclectic Medical Association; President of the Connecticut Eclectic Medical Examining Board.

^{**}Harvey Wickes Felter, M.D., Adjunct Professor of Chemistry, Pharmacy, and Toxicology, and Professor of Anatomy in the Eclectic Medical Institute. Cincinnati. Ohio; editor of Locke's Syllabus of Materia Medica and Therapeutics: ex-President of the Ohio State Eclectic Medical Association. etc.

It is a leading remedy in epididymitis and orchitis, whether due to gonorrhoeal infection or to metastasis from mumps. The dark-red, congested, enlarged, and sensitive testicle indicates it. It relieves the pains of orchialgia, and subdues mammary swelling from the metastasis of mumps. Pulsatilla increases sexual power, but lessens morbid sexual excitement. It is especially valuable in relieving urethral irritation and consequent spermatorrhoea and prostatorrhoea. In these troubles it overcomes the nervous apprehension so frequently a troublesome feature. It also alleviates the nervous irritability accompanying or produced by varicocele. In gonorrhoea, particularly of the chronic type, pulsatilla is of value, when the urethral membrane is swollen."

In the application of botanical remedies to diseases of children, there is perhaps no better authority than Professor W. N. Mundy, M.D.,* a specialist in children's diseases, who has an enviable record, both as a teacher and as an author. In his Diseases of Children, he thus records the uses of pulsatilla:

"PULSATILLA.-Specific Indications.- The child is restless, weary, cries frequently, sobbing even in sleep, face pale and expressionless, pulse small and feeble.

"Dose.-R. Pulsatilla gtt. x. to 3ss., water 3iv.; a teaspoonful every three or four hours.

"Though pulsatilla has a more direct action upon the reproductive organs, and is especially useful in diseases of the female, it still has its place in diseases of children.

"In pale neurasthenic children, who are restless, with active imaginations and a fear of impending danger, pulsatilla excels.

"In nervous heart troubles and headaches, where little patients are pale, nervous and restless.

"Though useful in nervous troubles, pulsatilla is not the remedy where there are irritation and determination of blood."

The veteran New York author and teacher, Professor Geo. W. Boskowitz, M.D.,** made pulsatilla a feature in his lectures. From the compilation of Dr. Victor von Unruh we present as follows:

"PULSATILLA, Anemone Pulsatilla, Meadow Anemone,-Ranunculaceae,-Europe "SPECIFIC SYMPTOMATOLOGY.-Feeling of impending danger, apprehension of trouble."

"PHYSIOLOGICAL ACTION.-It has a special action on the brain and cord. The toxic dose produces a dilatation of the pupils, coma, and convulsions. A sudden large dose acts upon the heart as a depressant. It lessens general sensibility. Small and frequent doses are better than large doses; gtt. V-VIII in whatever other mixture is indicated.

*William Nelson Mundy, M.D.. formerly Professor of Physical Diagnosis. HYgiene, and Clinical Diseases of Children in the Eclectic Medical Institute, Cincinnati, Ohio_ Member of the National Eclectic Medical Association, ex-President of the Ohio State Eclectic Medical Association, etc. Author of "Diseases of Children."

****"Extracts from Lectures on Therapeutics," by Geo. W. Boskowitz. A.M.. M.D., delivered at the Eclectic Medical College of the City of New York, session 1909-10. Compiled by Victor von Unruh. M.D.

"Dedicated to George Washington Boskowitz, A.M., M.D.. President of the Eclectic Medical College of the City of New York. In warm appreciation of his untiring labors in the class-room and his zealous interest in the welfare of his students. who. with those that have gone this way before, wish to see perpetuated and commemorated what he baa. accomplished in the cause of Eclecticism."

- "ADMINISTRATION.-In female irregularities.
- "In functional derangements of male and female reproductive organs.
- "In hysterical convulsions due to uterine troubles.
- "During pregnancy where mental state is depressed.
- "In spermatorrhea.
- "In orchitis, specific or otherwise; combined with phytolacca, 'gelsemium, or aconite. (For cases of orchitis the 'Miliani' suspensory is recommended.)"
- Dr. J. S. Niederkorn,* in his "Handy Reference Book," mentions pulsatilla very prominently as indicated in many different disease expressions, when administered under the qualifications specified in his introduction. The following quotations from this work of Dr. Niederkorn, (A Handy Reference Book), show the scope of pulsatilla's usefulness, as established in his practice, regardless of the name the disease, or the location of the organ affected. It may be said in passing that the Specific Medicine is the only pulsatilla preparation employed byDr. Niederkorn.

"There are no specifics in medicine" is a phrase pretty nearly correct when it is intended to mean that no remedy is a specific for any named disease, such as typhoid fever, pneumonia, etc.; but that we have specific medicines prescribed with the intention of overcoming or opposing well-defined pathological conditions is a fact positively established.

"A remedy should not be employed because it proved curative in any given named disease, or because some one recommended its employment in this or that disease; but its use in any case should be governed by the condition existing; the remedy should be exhibited to meet definite pathological conditions, irrespective of any disease name."~

The following quotations show the scope of pulsatilla's usefulness as established in Dr. Niederkorn's practice, regardless of the name of the disease, or the location of the organ affected:

SPECIFIC MEDICINE PULSATILLA.-This pulsatilla preparation is used exclusively in Dr. Niederkorn's practice.

Mental depression, nervousness, dizziness, restless, has an active imagination for disease, fear of impending danger, sadness, tendency to weep. Dose: Twenty to 30 drops to 4 ounces water, mix; teaspoonful every 2 to 3 hours.

Nervous cough, cough of nervous origin; patient generally nervous. Dose: One drop, or less, every 2 hours.

Severe neuralgic pains in ear; nervous deafness; pain from exposure to winds. Dose: One-half to I drop every I to 3 hours.

Visual disturbances due to hysterical conditions or sexual derangement;, styes. Dose: One-half to 1 drop every 2 hours.

Palpitation, nervousness, fear of impending danger, restlessness, possibly some sexual disturbance exists. Dose: One-half to 2 drops in water every 2 to 3 hours.

Patient can not command functions of his brain, headache, nervous, is fearful; sexual excitement. Dose: One to 2 drops in water every 2 hours.

Delayed and scanty menstruation, with mental distress; nervousness, restlessness. fearful of imaginary danger; sense of weakness in back and hips at menstrual period, dark lines under eyes. Dose: Thirty drops to 4 ounces water, mix; teaspoonful every 2 hours.

Nervous dysphagia, with the usual pulsatilla symptoms. Dose: One drop every 3 hours.

^{*&}quot;A Handy Reference Book. Giving Briefly the Specific Indication for Remedies. Paying Particular Attention to 'Each Organ of the Body Distinctively." By Joseph S. Niederkorn, M.D., Versailles, Ohio.

The nervous, restless, despondent, apprehensive patient, down in spirits, cries easily-and there is usually some sexual wrong present. Dose: Thirty to 60 drops to 4 ounces water, mix; teaspoonful every 2 to 4 hours.

Pulse soft and easily compressed, nervousness. Dose: Twenty drops to 4 ounces water, mix; teaspoonful every 2 hours.

Simple testicular inflammation; nervous and despondent, fearful of imaginary troubles, apprehensive, sexual excess with spermatorrhoea, nervous debility. Dose: Thirty to 40 drops to 4 ounces water, mix; teaspoonful every 2 to 3 hours.

Ptyalism of nervous origin, the usual pulsatilla indications.

Dr. R. L. Thomas.* Professor of the Principles and Practice of Medicine in the Eclectic Medical Institute, Cincinnati, is an earnest believer in pulsatilla properly prescribed according to the indications demanding the remedy, as is shown throughout the pages of his "Practice of Medicine." We quote from his condensed indications for remedies, as follows:

"PULSATILLA.-Patient is nervous, despondent, restless, sleepless, pulse soft, easily compressed; eyes dull, dark line under them; reproductive excitement; fear of impending danger; menses arrested, tardy, scanty-gtt. x. to gtt. xxx., water 3iv."

Dr. Ellingwood (see page 5) most elaborately records the uses of pulsatilla as established in his practice. From that we extract as follows:

SPECIFIC MEDICINE PULSATILLA.-Dose: From 5 to 20 drops in 4 ounces of water; teaspoonful every 2 hours.

"In studying its medicinal influence on the circulation, pulsatilla is said to act in much the same manner as aconite during fevers, where there are high nervous manifestations. It equalizes the circulation somewhat like belladonna it is thought. Where catarrhal disorders are present, subacute in character, with congestion and a free discharge of thick, bland, yellow, or yellowish green mucus, it seems to act directly, except in chronic catarrhal conditions. This remedy will act satisfactorily only when the precise indications for which it should be prescribed, are present.

"SPECIFIC SYMPTOMATOLOGY.-Homeopathic physicians declare fearfulness as an indication, anticipation and dread of calamity, fear of trouble or death; in male patients suffering from sexual excesses, with spermatorrhoea, threatened impotency, prostatorrhoea, with fear of approaching imbecility. We find it indicated in amenorrhoea, with mental perturbation, great apprehension of trouble. Spermatorrhoea, with fear of dire results., The remedy is especially efficacious when existing disorders of the reproductive organs are a cause of extreme anxiety.

"In addition to the well known indication, I might say that it is of value in disorders of the reproductive organs which depend upon defective innervation, and which are usually accompanied with manifestations of hysteria or melancholia, or which depend upon sexual derangements and menstrual disorders which are accompanied with loss of strength. chilliness, more or less headache, and gastric derangements, such as nausea. eructation of sour water, and other nervous manifestations.

"Its best influence is exercised in women of blonde temperament, particularly of lax muscular fiber, and of mild and yielding disposition, and smaller doses with these patients will produce better results than larger doses with other patients. Some writers claim that it may be given during the progress of inflammation of the mucous membranes, prescribed in much the same manner as aconite would be prescribed, or as cactus is given.

*Rolla L. Thomas. M.S.. M.D.. Professor of the Principles and Practice of Medicine in' the Eclectic Medical Institute. Cincinnati; ex-President of the National Eclectic Medical Association; Consulting Physician to the Seton Hospital; Member City, State, and National Eclectic Medical Associations. etc. Author or "Practice of Medicine."

"It acts best in the catarrhal stage of inflammation rather than in the initial stage, and in thisit differs somewhat from aconite.

"THERAPY.-Its influence is especially directed to that portion or'the sympathetic nervous system influencing the reproductive organs. It increases the tone and functional power of these organs, and overcomes irregular, imperfect, or deficient action.

"It is prescribed in uterine disorders which induce melancholia and hysteria.

"It has an apparent antispasmodic or nerve-soothing influence, which renders it valuable in hysteria and general nervous irritation with convulsive phenomena, in the absence of acute inflammation, blood determination or fever. A few physicians laud it highly in hysterical convulsions and in convulsive conditions due to uterine disorders.

"In general nervousness due to chronic uterine disorder, with or without hysteria, with despondency and nervous irritation, pulsatilla is an excellent remedy. It may be given in doses of one drop, frequently repeated. In deficient, suppressed, and irregular menstruation, with the above symptoms, it is of rare value. It will quickly promote a normal and regular flow.

"It is an excellent agent in small, frequent doses when the mental conditions above named are present during pregnancy, with a general relaxed and atonic condition. Its influence in these cases is enhanced by combination or alternation with macrotys. It certainly improves the general condition and conduces to a normal and easy labor.

"It is needed during the pregnant state to correct hysterical manifestations and urinary irregularities. It acts better in the catarrhal stage of inflammation, rather than in the initial stage.

"In nervous exhaustion, with feeble pulse and deficient capillary circulation, cold extremities and a generally relaxed physical condition, it will serve an excellent purpose combined with other nerve tonics, or in conjunction with the directly indicated remedies."

It will be seen from the foregoing botanical and therapeutic histories that pulsatilla, from the date of medieval medication, has been esteemed as a valued remedy. It is also established that, beginning with the days of Storck (1761), "Chief physician to Her Most Sacred Majesty the Empress Queen, and physician to the Pazmarian Hospital of the City of Vienna," pulsatilla has been valued by physicians of every prominent section in legalized medicine, European as well as American.* The reproductions we have made from American publications of the three principal schools in medicine, establish its value with American therapeutic authorities. To this we will add that every authority named has been a user of pulsatilla, and not alone a compiler of what others have recorded. This is remarkable because, as a rule, medical authors are privileged to accept statements of authorities, past as well as contemporary, regarding drugs not personally used by the . compiling author.

In recent years, an impression has been gaining in certain directions, that practicing physicians should be recognized as being the final authority as concerns the clinical value of remedies. In order that the American physician's view of the uses of pulsatilla in actual practice be fully comprehended, we extract from current medical literature of recent years a few of the many reports that have been presented by American physicians. Some of these are abstracts from long articles on general subjects:

"PULSATILLA.-This is a very frequently prescribed remedy. It is our remedy for nervous females and children. The patient has gloomy forebodings, cries easily, is pale and anemic. We do not believe there is a more efficient remedy for nervousness, especially when associated with menstrual derangements. We have seen in such cases a pulse of 120 fall to 78 in a week, under the influence of Specific Medicine pulsatilla. We have already spoken of its use in suppressed menstruation, in combination with Specific Medicine gelsemium, and it will be unnecessary to repeat what has been said.

^{*}Probably Storck gained his introduction to Pulsatilla through physicians of repute.

We value this remedy highly, and probably prescribe it as frequently as any other we use. Dose, 3ss to 3i in half a glass of water, teaspoonful of the mixture every one to four hours."-W. N. Mundy, M.D.

"Specific Medicine pulsatilla and bromide of potassium, where the hot flashes and pains pass rapidly from pelvic cavity to the back, from back to head, then downward again."-J. D. McCann, M.D.

"Pulsatilla is a remedy for 'nervousness,' especially when associated with disease of the reproductive organs or functions. Fear of impending danger, dizziness, nervous dysphagia, unrest, and tendency to look on the dark side, are among the indications. It exerts a special influence upon the reproductive organs of both male and female, controlling sexual excitement in both, and is a prominent remedy to restore normal menstrual function, and to relieve some unpleasantness during gestation.

"Pulsatilla should not be overlooked as a remedy for gonorrheal orchitis and gonorrheal epididymitis, especially if the patient be melancholic. In acute inflammation of the middle ear, due to cold, it is often prompt in allaying pain and hastening a cure. A very efficient remedy in catarrhal conditions, especially the second stage of acute nasal catarrh."-(From Descriptive Label) Ford Scudder, M.D.

"SPECIFIC MEDICINE PULSATILLA, though a medicine for certain nervous conditions in both sexes, is par excellence, the woman's remedy. In diseases of the female genito-urinary organs, accompanied by extreme nervousness, wherein the patient is despondent, fearful of danger, fears to go out alone, weeps without cause, is troubled with insomnia, is irritable and fault-finding, pulsatilla is the remedy. Many reflex neuroses, associated with menstrual derangement, are relieved by its use.

"Pulsatilla may be relied upon in the treatment of amenorrhea and dysmenorrhea when the specific indications are present. It is often combined with Specific Medicine black haw, Specific Medicine macrotys, and Specific Medicine gelsemium, with excellent advantage in the treatment of diseases of women. In sexual excitement of both sexes, when the indications are present, it exerts a positive action. It is a valuable remedy in spermatorrhea and prostatorrhea under like conditions. It should not be overlooked in the treatment of orchitis and epididymitis when the patient is nervous and apprehensive.

"In melancholia, when the female patient is gloomy and foreboding, pulsatilla will cheer her up.

"Pulsatilla is one of our best remedies for functional diseases of the heart, and we possess no better remedy for purely nervous headache and asthma of nervous origin. In acute otitis media, pulsatilla will often allay promptly the pain and hasten the cure.

"INDICATIONS.-Nervousness, sadness, disposition to look on the dark side.

"SPECIFIC USE.-To relieve irritation of the nervous system-'nerv ousness;' fear of impending danger, dizziness, inability to command perfectly the voluntary muscles; mental depression, when there is neither fever nor inflammatory symptoms. A remedy for amenorrhea and dysmenorrhea."-A. F. Stephens, M.D.

"PULSATILLA-Dose: Specific Medicine, gtt. x. to 3i. in 3iv. of water; one teaspoonful of the mixture everyone to four hours. Some of its indications are fear of impending danger, restlessness, sleeplessness, and the patient is anemic. The heart often palpitates, and frequent sighing and even crying are often observed. Following these indications I use it in the suppression of the menses, scanty or tardy menstruation, leucorrhea, hysteria, and spermatorrhea. I find it a most useful remedy in labor of nervous women, when the pains are inefficient and the patient believes she is going, to die. This remedy has other valuable indications."-Benj. L. Simmons, M.D.

"PULSATILLA is useful in any disease where the patient has a fear of impending danger; in functional heart disease and in dyspepsia where there is an inability to digest fats, with eructation of greasy matter. It is a valuable remedy in a great many diseases of women; in nervous headache where the pain is 'in the top of the head with a sense of heat and burning of the scalp. It is useful also in some forms of leucorrhea."-J. C. Ellis, M.D.

"SPECIFIC MEDICINE PULSATILLA.-Nervous patients, full of imaginings, gloomy forebodings, mental depression, all this in any case, and particularly so if some sexual derangement exists. The patient is always fearful of some unknown danger, and cannot sleep. Cardiac difficulties, accompanied by some of these nervous manifestations. With leontin, or hyoscyamus, pulsatilla is my favorite in amenorrhea and dysmenorrhea, if not due to anemia."-J. S. Niederkorn, M.D.

"PULSATILLA is indicated in all cases of irritation of the nervous system, associated with wrongs of the reproductive organs of both men and women. In the treatment of abnormal conditions peculiar to females, it occupies a place which cannot be filled by any other drug. Some patients are frequently moved to tears without being able to give sufficient reason for their grief. Pulsatilla will remove this condition. Add ten to thirty drops of the specific medicine to four ounces of water, and give one teaspoonful of the mixture every one to three hours."-John W. Fyfe, M.D.

"PULSATILLA.-Specific Indications.-The patient is nervous and despondent; cried easily; the pulse is small and frequent, but soft; cold extremities; menses tardy and scanty; uneasiness with depression; a sense of fullness and weakness in the back and hips at the menstrual period; nervous headache and dizziness; hysterical excitement.

"Dose: The dose of the Specific Medicine is from a fraction of a minim to two minims. The small dose is best."-A. F. Stephens, M.D.

"PULSATILLA, SPECIFIC MEDICINE.-Despondency, nervousness, tendency to look on the dark side, pain in the top of head, amenorrhea, dizziness."~Lyman Watkins, M.D.

"PULSATILLA in large doses will lessen general sensibility and will produce hebetude, dilated pupils and coma in toxic doses. Taken in the mouth it produces a similar effect to aconite. It should never be used in large doses. In medicinal doses it increases the celebral function and gives tone to the sympathetic nervous system.

"This remedy has a specific effect upon patients who are inclined to look on the dark side, when not caused by financial or social discord. We think of it in the mild, gentle, discouraged patient, one that weeps while trying to relate her symptoms. The patient will often present a confusion of symptoms, often contradicting herself. She will magnify this symptom now. Again she will magnify another. Finally she, in her confusion, begins to weep, and says, 'Doctor, I suffer so much and everything seems to go wrong; I don't believe I will ever be any better.' Persons with light and sandy hair, blue eyes, inclined to silent grief, with submissiveness are cured by this remedy as if by magic.

"Pains, whether rheumatic or neuralgic" shifting from one part of the body to another, or a changeable disposition, should be considered an indication for pulsatilla..

"The patient weeps; is now irritable, now pleasant. In these conditions pulsatilla may be given with confidence. In metrorrhagia, where the flow comes and goes at short intervals, it is a most excellent remedy. Miss H., several years ago, told the following story. 'I have been unwell for several years with short intermissions, and I have tried many physicians in hope of effecting a cure. My old family physician has treated me locally for several months, but without relief. I have despaired of ever regaining my health.' Here she began to weep. Upon questioning her, I found that despondency had been a constant symptom from the beginning.

"The indication for pulsatilla was so pronounced in her case that I gave it alone, in one drop doses, every four hours.

"Within three months she was so much improved I felt sure the treatment would result in a complete cure. The pulsatilla was continued, and at the end of the fifth month she had her natural menstruation, and she has been regular ever since, for seven years at least.

"I have had good results from this remedy in hysteria. It has a beautiful effect in orchitis and spermatorrhea. It allays irritation of the prostate gland. During pregnancy, if the patient be despondent, with a general atonic condition, pulsatilla should be given.

"Urinary disturbances of the pregnant state are often promptly relieved by pulsatilla. As a partus preparator, together with macrotys, it is indispensable. It not only facilitates labor, but its after effect is wonderful. In stomach troubles I use pulsatilla and nux vomica combined with splendid results. There is no remedy that braces the action of nux vom. more than pulsatilla.

"Dr. Curryer gives the following as choice symptoms for pulsatilla:

'In diseases following badly managed measles, in metastasis of gonorrhea, or mumps, to mammae or testicles, cystitis, periodical headaches in which pressure relieves, chilliness with pains, yet where coolness is more agreeable than warmth, one-sided sweats, and pulsations over the body.'

"In any complaint, either local or' systemic, where the pulsatilla mind and modality is present, we expect to relieve or cure."-J. P. Harvill, M.D.

"PULSATILLA.- This is especially indicated in all cases of dizziness, if not caused by constipation. In uterine reflex; in fact, in all reflex conditions emanating from the womb the Specific Medicine pulsatilla will cure. Speaking more carefully, let us illustrate by a typical case.

"Mrs. A. is suffering from a condition of extreme nervous fear, a sense of impending danger, looks on the dark side of the picture, is easily provoked to anger, has fits of weeping, walks unsteadily, is inclined to bear to the right in walking, has dark semi-circles under the eyes, and complains of pain in the top of the head; in all or any of these symptoms pulsatilla will cure. If any of these symptoms appear in the male, they are indicative of prostatic reflex, that will be relieved by the administration of pulsatilla.

"Pulsatilla enters into a beautiful combination with macrotys and viburnum as an efficient emmenagogue in cases of dysmenorrhea or amenorrhea -in fact, in all functional deviations of the uterus. It quells inordinate sexual desire, and increases sexual vigor if lacking; it also arrests a hypersecretion of semen.

"I have often thought that nine-tenths of the cases of insanity are caused by reflex diseases of the sexual organs in both male and female, and that many of those cases of insanity might be cut short in their incipiency by the use of pulsatilla.

"I have on several occasions arrested an attack of insanity, when it was clearly indicated, by the use of pulsatilla."-A. J. Smith, M.D.