

Cactus Grandiflorus.

(CEREUS GRANDIFLORUS—Cactus)

This plant, known under the common names Large-flowered Cactus, Sweet Scented Cactus, Vanilla Cactus, Queen of a Single Night, is, however, most familiar under

the name Night-Blooming Cereus. It is a green stemmed climber, indigenous to Jamaica and possibly elsewhere in the West Indies. It is abundant in some parts of Mexico*, and when protected from frost, to which it is very sensitive, is cultivated in temperate regions, where its magnificent flower, from 8 to 10 inches in diameter (Fig. I), opening after sundown and decaying next morning, is an object of interest and delight. It has long been known to botanists, but the first general introduction of the name to the public, about the middle of the last century



No. 1—Cactus Grandiflorus.

Photographed by Mr. Thomas Bell, Cincinnati. Flowers were from 8 to 12 inches in diameter.

was as a trade-mark or fanciful application for a popular perfume. It is needless to state that the only connection of the trade-perfume and this flower is that of name. Both the young and the tender stems of the plant, and the flower, are used in medicine, the flowers being tinctured immediately on opening, the stem being worked fresh. From a letter written us from Mexico by a man who has for 12 years made a specialty of Cactus we extract as follows concerning the flowers:

“My experience is that the blossoms in a wild state are not so fragrant as when cultivated, possibly because the aroma is confined in a closed room. The perfume differs owing to time of year, variation and moisture, rapidity of bud development, etc. I have ridden through canyons laden with flower blooms where the odor was heavy; again on mountain sides I have scarcely noticed it !

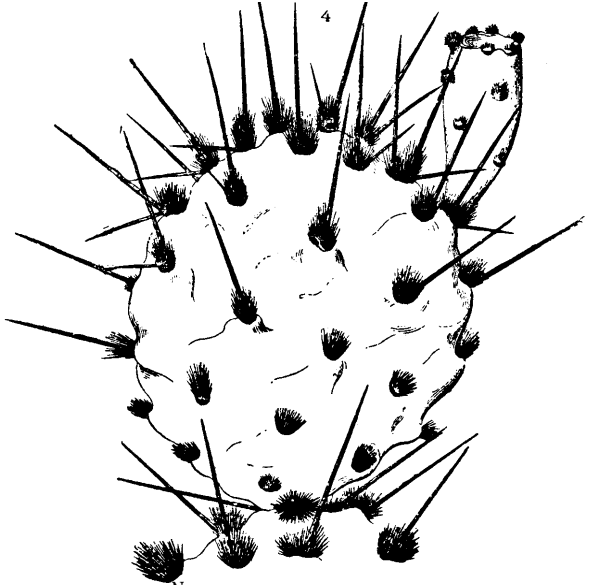
* Englemann does not cite Cactus Grandiflorus as native to Texas or the Southern United States. Dr. Louis Coparelli writes us that he has never seen it growing near Aguascalientes, Mex.

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odor. The flowers differ in color according to soil and surroundings, those climbing trees being often markedly in contrast to the blossoms of mountain plants. I have concluded that flowers taken from such localities might be considered by some as being from distinct varieties of Cactus."

Much needless confusion has existed among collectors of the drug (excluding even the variety *Bonplandi*), and many different species and varieties of Cactus have been inexcusably substituted for it in medicine. Chief among these sophistications is *Opuntia Rafinesquii* of Kentucky, Tennessee and the central southern west (see Fig.2), and the common species and varieties

of Cactus peculiar to the western and southwestern deserts. *Cactus Grandiflorus* is so conspicuous and its characters are so marked as to prevent most substitutions other than by intent or extreme ignorance, although we have seen substitutions of the stems of species somewhat resembling it from the far southwest, which may possibly have been offered in good faith (see Fig. 3). The stem is variable as concerns its angles, the same plant sometimes carrying



No. 2-*Opuntia Rafinesquii*

Reduced from plate XI Trelease and Gray's edition of George Engelmann's Botanical Works.

branches bearing from to 4 to 8 angles. For example, we have known a s-angled stem sprouted in sand to change at the base to 4 angles. The variety known as *Cereus Bonplandi* is said to possess the qualities of the *Grandiflorus*, but our experience leads to the use of the typical species only. Indeed, the so-called "Bonplandi" as offered in commerce is often a variety of the *Grandiflorus*, so near as to even puzzle a botanist. For this reason mainly and also because it is but a variety of the *Grandiflorus* we have ceased to list *Cereus Bonplandi* or to concern ourselves over its relationship.

We prefer to use for our preparations the open air plant collected in a sun heated part of the tropics, where frost does not occur, rather than that raised in the greenhouse, and we believe that the long and extensive use of our preparations by physicians fortifies

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our conclusion, which is based on much experience concerning the quality of the tropical grown open-air plant.

In this connection, we will state that because differentiating chemical tests are altogether wanting, at present no possible method of chemical or physical test can determine the authenticity of a preparation of true *Cactus Grandiflorus* or distinguish it from that of an imitation made of any of the hundreds of other common and usually cheaper species and varieties of cactus. For this reason physicians must rely altogether on the intelligence, care and integrity of the manufacturer whose preparations they use and whose record is established in medicine. Our experience has been that for months together we could supply no *Cactus Grandiflorus* under our label owing to difficulty in obtaining the genuine crude drug in prime condition, although substitute species were available by the ton at comparatively little cost.



No. 3—*CEREUS PROCUMBENS*.

Reduced from plate LIX Trelease and Gray's edition of George Engelmann's Botanical Works.

Constituents: *Cactus grandiflorus* is mucilaginous, and yields a sticky juice. The green stems form a viscid pulp when pounded in a mortar. Its qualities are of a resinous nature, and are abstracted by alcohol. No water is admissible. Its active constituents have not been determined other than that they are related to the resinous substance. The inorganic constituent is Oxalate of Calcium and the acid is tartaric acid (Kunze).

Medical History*—*Cactus Grandiflorus* is said to be used by the natives of its habitat (Jamaica) for fevers, difficulty of breath-

* Parties interested in *Cactus* may find the most conspicuous studies of the drug as follows: A monograph by Dr. Rocco Rabini, Naples, 1864, *L'Art Médica*, Vol. XX. Translated for *British Journal of Homoeopathy*, 1864, with clinical note by Dr. J. E. Russell. Pamphlet translation of same by Dr. Ad. Lippe, 1865. An admirable study of many species and varieties, Dr. Richard E. Kunze, New York City (now of Phoenix, Arizona), *Trans. E. M. Society, N. Y.*, 1825-26. A review of the literature and a pessimistic study of the drug by Dr. Gordon Sharp in "*The Practitioner*," 1894. All the Eclectic and Homoeopathic works on *Materia Medica and Therapeutics* since 1870.

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ing and many other affections. It is also employed in Mexico for like purposes. Possibly its reputed virtues in the direction of the respiratory organs led to its consideration as a heart remedy, the first record of its use being by the German Dr. Scheere, whose research, however, passed practically unnoticed until Dr. R. Rubini, a Homœopathic physician of Naples, brought the drug into conspicuity as a heart remedy. *Cactus Grandiflorus* or "Cactus" is thus a remedial agent of Homœopathic introduction, in which school it was exclusively employed for many years. When Dr. J. M. Scudder issued "Specific Medication," 1870, he accorded to *Cactus* an important place. Under his favor its reputation extended so that all Eclectic authorities became familiar with its virtues and commended it without reserve. The most comprehensive and complete early study of the *Cacti* family in medicine is that of Dr. Richard E. Kunze in the Transactions of the New York Eclectic Medical Society, 1875 and 1876. From this we present important excerpts and also abstract the record of its use in the case of Prof. J. Milton Sanders, M.D. Chemist, New York College. Innumerable journal contributions as well as all the books on *materia medica* issued in the Eclectic school have contributed to the praise of *Cactus*. Indeed, it is evident that in America credit for the bulk of *Cactus* now used outside Homœopathy is due either to the influence of Eclectics direct or to their professional affiliations.

Qualities:-Bruised green *Cactus* has a strong, herby odor, an incipid sourish taste, and is mucilaginous to the touch. Its fresh juice turns blue litmus to a bright red, the sliced plant floats on water to which the dissolved mucilage imparts acidity such as to make it capable of effervescing with carbonated alkalies. The stem shrinks to a fragment, losing 19-20 in drying. The sliced stem, exclusive of its water, imparts but little weight to alcohol (10.6728 gm, left residue 0.47 gm), which menstrum, however, abstracts all the color. To water the sliced stem imparts its mucilage, losing much of its weight, but not its color.

Like *Crategus* (See Drug Study No. XI), *Cactus* is not to be classed with poisons, and yet, if given in excessive amount it has been recorded that it may act as an irritant, producing diarrhea and other unpleasant symptoms. Unlike *Digitalis* it is not cumulative in action and in proper dose can be administered for months without disturbing digestion.

PHARMACEUTICAL PREPARATIONS.

Homœopathic pharmacopœias direct a tincture of the fresh plant. Scudder first used a tincture made, 4 ounces of the fresh stems to a pint of the tincture, but in his practice he soon replaced this

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rather weak preparation by the concentrated Specific Medicine, which, in our opinion, is the typical and most valuable preparation of the drug. We, therefore, offer under our label, only the Specific Medicine "Cactus" and the tincture of Cactus flowers. The first carries in itself the virtues of as near 16 Troy ounces of the fresh stems to each pint as we can produce in a uniformly permanent form; the latter being a tincture made by covering with pure alcohol the fresh flowers pressed into small compass. In both cases, owing to the moisture in the drug, only the strongest and the purest alcohol is admissible. By proper manipulation it is possible to make each minim of Specific Medicine carry the full medicinal virtues of one grain of the fresh green drug.

Specific Medicine Cactus has a green color, which by time and light sometimes changes to brownish, this change making no perceptible difference in medicinal effect. Its odor is that of alcohol only; its taste, herby. When dropped into water no precipitation results. Heat should not be applied to this preparation, and all attempts to carry its full value into a dry form, such as pill, powder or tablet, have resulted in failures. The residue from evaporation of Specific Medicine Cactus is distinctly acid even to the taste. This residue dissolved in water yields a reaction for glucose and the faintest trace of alkaloid, but has little therapeutic value.

Tincture of Cactus Flowers is of a very light green color, but is not in the least fragrant, its odor and taste being scarcely different from that of alcohol. The fact that even in the most concentrated form no evidence of perfume is present indicates that the term "Extract of Night Blooming Cereus" for a perfume is fanciful only. Tincture of Cactus Flowers is used in the same doses and for the same purposes as the stem preparation, and has no established superiority.

THERAPEUTICS OF CACTUS GRANDIFLORUS.

BY FINLEY ELLINGWOOD, M. D., Chicago, Ill.

Therapeutically considered, we have in Cactus a heart remedy which possesses at once a directness, and yet a diversity, of action which places it in the minds of those who have used it for a long time at the head of the class known as special heart remedies.

Much discredit has been brought on this most valuable remedy by the use of improperly prepared preparations of Cactus Grandiflorus, and by the substitution of preparations made from less expensive inert species of the Cactus family. It is of the utmost impor-

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tance in prescribing Cactus, that the medicine which is used has been prepared from carefully selected specimens of the Cactus Grandiflorus only, and that in its preparation it has been worked pharmaceutically, under those exact conditions which long experience and the most practical observation have proven to be necessary, in order to obtain the full medicinal properties of the plant.

The dose of Specific Medicine Cactus has usually been from the fraction of a drop to two drops, and seldom exceeds five minims. While the agent is not classed as a poisonous remedy, there seems to be a prevailing opinion that it can be given in overdoses. I have never seen any unpleasant effects from overdoses, and I am growing into the belief that we will yet learn that there are cases where we now obtain indifferent results, or where the agent is not now advised, in which good results will be secured by much larger dosage than is now given.

Those who have used all the heart remedies unite in the belief that for breadth of action, for specific directness, for reliability and smoothness of action, and general trustworthiness when indicated, Cactus takes preference over others. Its influence is admirable, and it is invaluable in many cases. Other remedies in some cases will do as much in single lines, but none will do more, and none will exercise all of its desirable influences—will exercise so wide an influence.

In the determination of the physiological action of this remedy laboratory experiments and observations have been of but little value. The results have been negative in many cases, have been widely misleading, and have led noted observers and those of excellent authority in such observations to declare that the remedy is inert, and to draw other false conclusions and make erroneous statements concerning its action. Cactus is one of the non-poisonous remedies, regarding which the only reliable course to depend upon in drawing final conclusions is careful clinical observations, repeatedly made and confirmed by different observers, under similar circumstances, or in cases presenting similar symptoms.

It is well to know, however, that the clinical observation of the remedy shows that in its physiological action Cactus acts upon the cardiac plexus of the sympathetic nervous system, regulating the functional activity of the heart, through its influence in regulating the action and restoring normal tone to the nervous system. At the same time the muscular structure of the heart is built up and improved, and many observers have noticed the entire progressive removal of valvular murmurs, from its influence.

It increases the musculo-motor energy of the heart, elevating

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arterial tension, increasing the height and force of the pulse wave. The agent becomes at once the heart tonic, *par excellence* as it directly and with much positiveness improves the nutrition of the heart, strengthening the muscular power and improving the condition of the valves.

It produces no irritation of the heart muscle as does strophanthus, nor in proper doses does it produce gastric irritation or a cumulative influence as digitalis does. It increases the contractile power and energy of the heart muscle through the cardiac ganglia and accelerator nerves.

I desire to call particular attention to the tonic, restorative, and nutritional influence of Cactus. This influence is not immediate or plainly apparent on the nervous system, or on the system at large. But the strengthening influence of the agent on the action of the heart occurs very soon, and this is sustained, while the improvement of the function of the system, and through it of the functional organs, may be plainly observed to increase steadily and also permanently.

As stated, the symptoms are our dependence in prescribing Cactus. An irregular pulse; feebleness of the heart's action; dyspnea; weight; oppression in the chest; violence of the heart's action depending upon atonicity or enervation; these are the main symptoms. Wherever there is less than normal power to the heart's action—deficiency, due either to a fault of the heart direct, or to lack of power in the nervous system—this agent is indicated.

The especial symptom of a cord or band, or a grip about the chest, or around the heart, or around the body, is mentioned by most writers as a reliable indication for this remedy. In my observation, while Cactus is indicated where this symptom is present, it must by no means be discarded where the symptom is not present. When pain accompanies this symptom it is usually not a steady, dull sensation, but a lightning like, or sharp, acute, or shooting pain, accompanied with a sensation of suffocation, difficult breathing, faintness, cold, perspiration, and fear of impending danger.

Where from any cause there is an exaggeration of the power of the heart, or a temporary undue increase of nerve force, influencing the heart, causing an exalted condition of the heart's action, the remedy is contra-indicated, and this fact must be kept in mind.

My personal conclusions concerning the action of this remedy are based upon observations made almost continuously over a period of thirty-two years, and I believe they may be said to be fairly reliable. I came to the conclusion a number of years ago, that where correctly indicated, during the course of asthenic fever, the agent had a special sedative influence. My subsequent experience and that of

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others has confirmed that conclusion. While usually given where there is no fever, it must be given for its indications, whatever the temperature.

Excellent homeopathic authorities have made the observation that it is almost a counterpart of aconite, in its influence on fever, differing from that agent, in that it increases the strength and tone of the heart's action by increasing the nerve power, instead of paralyzing the nerves. It is thus indicated in fevers, where there is a rapid and feeble pulse, from feeble heart, with a weak and exhausted nervous system. It would therefore be contra-indicated in the early sthenic stage of these fevers, where there is an exalted action. I have had reports of an increase of the temperature and an exaggeration of the symptoms when given in sthenic cases, especially in the early stage of typhoid.

A number of our prominent writers claim that the remedy is indicated solely for functional heart disorder. It is certainly our best remedy for this class of disorders. When from any reflex cause, with deficient heart action, there is irregularity, irritability, intermittency, and tumultuousness in its action, Cactus is indicated. It is especially valuable in palpitation or other irregularity of action, which is induced by irritation from derangement of the stomach, or of the intestinal tract, because it exercises a soothing influence upon the stomach and digestive organs, in marked contra-distinction to the action of digitalis, which disturbs, disarranges, or irritates the stomach, especially when long continued.*

In addition to its influence in functional disorders, I have found Cactus of much value where the heart muscle is more permanently enfeebled, and where there is progressive valvular insufficiency with dilatation, with irregular or intermittent pulse. I have given it where mitral regurgitation was plainly marked, and have noticed the progressive disappearance of the valvular sounds, with increasing tone, of the heart muscle until the sounds have entirely disappeared. Simple valvular murmurs during the course of an attack of hysteria, or during the early stages of neurasthenia, will quite promptly disappear from its influence.

A foreign writer who has been making some recent observations of the remedy in large doses, gives as much as thirty minims of the tincture three times daily. With this dose he has treated aortic lesions with faulty compensation. He has noticed cardiac dilatation to plainly recede under this large dosage. He has successfully treated

*For a comparison of the action of Cactus in all its influences, with other well-known heart remedies, the reader is referred to the table on page 16 of this pamphlet, which I prepared for and published in the February, 1907, issue of *Ellingwood's Therapeutist* page 51.

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with this remedy patients suffering from dyspnea, arrhythmia, edema of the extremities and ascites.

In angina pectoris, especially of recent origin, the remedy exercises a direct influence. I have given it in endocarditis, which followed other diseases, and I am sure we have no more dependable remedy. I am confident that there are many cases of pericarditis in which it will be found valuable. In one marked case of endocarditis following measles, the result of the influence of this remedy within a few hours was so plainly apparent that it could by no means be mistaken, and the influence was a permanent one.

In the treatment of functional disorders, as well also as the organic changes in the hearts of young men from the use of cigarettes or tobacco, this agent is in every way reliable. It exercises a steady, permanent influence, and will cure many cases as I have proven in my own experience, provided the habit is discontinued. It is also to be depended upon not only in overcoming the heart faults of masturbators, but in materially improving the nervous tone of these patients, and in correcting the sexual faults.

Through its influence upon the nerve centers it strengthens and adds increased tone to the sexual apparatus, soothing irritation and overcoming functional disorders and impotency, especially if used in conjunction with other directly indicated sexual tonics. Of its influence on the sexual and reproductive organs of women, I will speak later. Heart weakness, induced by excessive athletics and by bicycle riding, which is not now as common as during the early *history of bicycles, is immediately met with Cactus.

A number of writers have mentioned the favorable influence of this remedy in the treatment of Graves' disease. Its influence upon the heart is certainly a good one. It relieves the palpitation and nervousness, and controls the tumultuous and irregular heart action. I believe the dose should be increased in these cases until a full maximum quantity is given. It has been found a serviceable remedy where from the violent heart action, that distressing throbbing of the carotids is so troublesome a symptom. Its restorative influence on the nervous system contributes to the beneficial effects produced. I shall prescribe it with Phytolacca and Echinacea in my next case of this character. and shall push the dosage of each remedy, if no unpleasant symptoms occur, to the extreme limit.

A case is reported where there was a loud, double, aortic bruit, with enormous hypertrophy. It had been under observation for more than a year. The pains of angina were typical, there was most distressing palpitation, and throbbing of the carotids, Cactus gave marked relief in this, case, but did not produce permanent results,

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In those cases classed as pseudo-angina, this agent is mentioned by some writers as a positive specific.

In tinnitus aurium accompanying heart faults in feeble patients, this agent has exercised an immediately beneficial influence. In hemoptysis where the circulatory excitement is great, and where there is much anxiety and nervous perturbation, it may be given in conjunction with *Lycopus*. Where epistaxis, hematemesis, or other hemorrhage occurs, accompanied with fluttering of the heart, syncope, a sense of suffocation, or other form of difficult breathing, with cold perspiration, and fear of impending death, *Cactus* should be given in full doses.

In recent attacks of impotency or in the early stages of the condition, where there is no permanent change, especially among the younger men I have given it in conjunction with saw palmetto and *avena sativa*, with much satisfaction.

We have excellent authority for the use of *Cactus* with which to relieve functional disturbances of the heart in hysterical conditions, present at that time, and to exercise a nerve sedative influence. Where anemia or chlorosis complicates this condition, the combination of this remedy with others plainly indicated facilitates the action of all. The influence of the agent may be not only upon the heart and the central nervous system, but through a certain beneficial power which it seems to exercise on the female reproductive system. The indications for the use of *Cactus* are quite similar to those of *pulsatilla*, in this class of cases, and where irregularity of the reproductive functions seems to be the cause of the nerve irritation, and the two remedies are given in conjunction, with excellent results.

Dr. Lydia Ross has made extended and satisfactory observations concerning the influence of *Cactus* in the disorders of women. The oppressive headache in the top of the head, common to women at the menopause, which results from irritation or congestion within the pelvic organs, especially if accompanied with menorrhagia or other excessive hemorrhages, and present with the various forms of malposition, she believes will be relieved by *Cactus*. She especially advises it where there are hot flashes during the climacteric. It is given at this time in small frequent doses. Dr. Ross gives *Cactus* in conjunction with *Helleborus niger* in these cases, if there is melancholia, nervousness, irritability of temper, hyperesthesia, neuralgia, vague fears and fancies, all of which conditions are influenced both by *Cactus* and *Pulsatilla*, either alone, in conjunction, or in alternation.

It is also indicated where there is irregularity of the menses, consisting of a too-early flow, or a flow too dark and thick, or too abundant, or one which ceases upon lying down, or where there is an

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inability to lie upon the left side. Other symptoms for which it is given in diseases of women, are those in which there is cerebral congestion, with pain and weight in the occiput, or in the vertex; numbness of the limbs, or areas of hyperesthesia, cough which seems to come from the suprasternal notch, or pain immediately behind the sternum.

For five years I have been experimenting with Cactus in the treatment of subnormal temperatures, following the suggestion of Dr. Coffin of Indianapolis. My own observations, with those of Dr. Coffin and others, have confirmed me in the belief that this is an excellent remedy with which to elevate the temperature, especially if, accompanied with the depression of the temperature, there is also depression of the nervous system. The entire train of symptoms which accompanies protracted subnormal temperature I have found to be benefited by Cactus. There are some cases in which it will act, where strychnine and other usually useful remedies are of no avail. In other cases it materially improves the influence of the other remedies. I am anxious to receive reports on this influence of Cactus from other observers.

I have stated that this remedy is a true nerve tonic and restorative. I believe that it improves the nutrition of the nervous system by inducing a material improvement in the circulation of the brain and cord. It will be found of advantage in the treatment of quite a large number of cases of nervous exhaustion, and incidentally it may be mentioned that I have observed the band or cord-like sensation around the body to be more often present in these cases, especially if there is also present a greater or less degree of spinal irritation, with hysteria and erratic symptoms of disorder of sensation, more than disorder of motility. Some simple forms of paralysis, with other correct indications for this remedy, have been benefited by it.

In the heart faults of neurasthenics, this agent has an especial place. It acts as a general nerve tonic, while it improves permanently the action of the heart. This I have found especially true in aged persons. I have recently had an interesting experience where general decrepitude, with functional disorder of the stomach and heart both sharply pronounced, had been creeping on with an old lady, about eighty-five years of age, for the past three or four years. The point had arrived where death seemed likely to occur at almost any time from immediate failure of the heart, to which condition all interested had become resigned. Two drops of Specific Medicine Cactus every three hours seemed to gradually change these conditions so conspicuously, that it now looks as if at least five years had been added to the life of the patient, who is enjoying unusually good health.

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In the treatment of multiple neuritis, Cactus has been given where the heart disorders occur early, but as a result of the general disorder. If the remedy be persisted in, especially if tachycardia be present with low arterial tension, and deficient nerve force, Cactus is the indicated remedy.

In the last volume of the Transactions of our National Association, Dr. H. W. Felter, of Cincinnati, reports an unmistakable case of Reynaud's disease, of nearly forty years standing. Two years ago the case came into his hands. "Without much hope, I confess," he says, "I recommended Specific Medicine Cactus, in six-drop doses once a day. Faithful adherence to this medicine has worked a marvelous transformation in this case, absolute control of the paroxysms having been obtained as long as the medicine has been taken. On two occasions the patient has dropped the medicine for a period of two months, but with the return of the symptoms, but in a milder degree. A return to the medicine has given prompt relief, and while she still continues with her 'pleasant medicine' as she styles it, she considers herself practically cured. She has now taken the Cactus for nearly two years and has had the only comfort she has ever had from medicinal treatment since her young womanhood. She is now sixty-two years of age." *

There are occasional cases of chronic dyspepsia where from mal-assimilation the patient has become greatly emaciated and enfeebled, with a consequent enfeeblement of the various organs and functions of body, in which Cactus, given in conjunction or alternation with the agents commonly used for that purpose, will be found to be a most important addition to the treatment.

Cactus in Angina Pectoris.- J. Milton Sanders, M. D., LL. D., Professor of Chemistry in the Eclectic Medical College of New York, states his own case, under date of April 12, 1875 :

"At the request of Dr. R. E. Kunze, I shall attempt to write out a plain statement of my symptoms and of the medicinal effects of Cactus. It is necessary to say that I am of the encephalic temperament, and for two years past have been subject to unpleasant attacks of nervous irritability and apprehensive feelings regarding the state of my health. In all other respects I have enjoyed good health, with the exception of an occasional attack of dyspepsia. It was in the early days of November, 1874, that those symptoms made their appearance-at least in an aggravated form-without a note of premonition. Soon after I had taken a short promenade, the weather being cold and disagreeable, I was suddenly taken with a severe pain in the region of the heart and extending across the sternum. This pain was not so acute as it was heavy and strong. If I could

*This case had run the gauntlet of remedies used by Old School physicians through exceptionally talented authorities.

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compare it to electricity (and it would be an apt one), it might be likened to, not an *intensity* one, but one of *quantity* for it appeared to be heavy, strong and full, and not acute. Each paroxysm was accompanied with great mental depression, which appeared to be a concomitant of the disease. The dyspnea shortly after became so intense that my case resembled one of congestion of the lungs. Under various kinds of treatment life was barely kept in me, so great was my suffering, mentally and physically, coupled with the fact that nothing more could be done for me, it was not calculated to relieve in any way the depression of spirits. Inhalations of chloric ether and tar was the last remedy resorted to. Could not take the least exercise without bringing on paroxysms of intense cardiac pains, accompanied with mental anxiety and dyspnea. Surface generally cold. In going around the block of houses to the Eclectic Medical College I usually had to stop and rest several times on the way and again after entering and before lecturing to the class. Even during the delivery of my lecture it often proved too much of an exertion for me, so that I had to desist sufficiently in order to let a paroxysm pass off, before I could conclude my remarks. Finally I thought that I should have to give up lecturing altogether. It was on the 12th day of November, having just delivered a lecture under very aggravating circumstances, that Dr. Kunze met me in the lecture room and proposed an examination into my case immediately, for the purpose of testing the effects of *Cactus* on me, if the circumstances connected with it warranted the application. As I had previously been subjected to many examinations made by my colleagues, who managed to agree as doctors often do, without concurring as to the real facts of the case, I could not very well refuse. Having already been told that I was affected with an aneurism of the aorta, thereby corroborating a previous opinion given by an eminent physician of Macon, Georgia, nearly a year ago, I was desirous of having every one's opinion on the subject.

" Submitting to a hasty examination by the doctor in another room without any fire, where I dared not remove sufficient of my clothing to make it a critical one, I was told that my case was apparently one of *Angina Pectoris*. Pulse 96, regular but very feeble. Marked dyspnea ascending a stair. A feeling of apprehension and an incubus in the præcordia. The doctor prescribed: *Cactus*, $\frac{3}{4}$ ss. Sig: Take ten minims in water, three times a day, till relieved.

"In twenty-four hours afterward I felt less nervous, and in a few days was enabled to take more exercise with less dyspnea following. Cardiac pain not so severe. Pulse reduced to 84, with a better rhythm. Could walk to and from the college with less fatigue, and lecture with but little inconvenience. I could also lie down and sleep on my left side again, a thing I had not been able to do for two years past. Improving so very encouragingly I got somewhat careless again in taking the medicine regularly, and therefore when I perceived myself getting worse imagined that the remedy had lost its effect on me and finally ceased taking it altogether. The fact was I had lost all faith in any medicine until Prof. Newton, assured me that I ought to continue it. This was about the middle of January, 1875. Pain returning with renewed strength I then suspected that the *Cactus* had done me some good. I then commenced to take this remedy again with more confidence ; I took it regularly three times a day in doses of twenty minims. I now felt a slow but assured sense of relief, and after taking the same for three months I ceased to take it any more, as I had got relieved of the pain. The throbbing of the heart had entirely subsided; its rhythmic beating was reinstated and synchronously with the steady pulsations of the heart came back the more joyous pulsations of health."-*Trans. N. Y. State Eclectic Med. Soc. 1876,*

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Specific Indications and Uses.- By Prof. John M. Scudder, M. D., and others.-The common idea is that Cactus is the remedy for heart disease, and so it is if there is *irritability with feebleness*, the quick movement without strength. But I do not restrict its administration to cases of heart disease; given the, quick movement without strength, and I would prescribe it in a case of fever, inflammation or functional disease. The influence of Cactus seems to be wholly exerted on the sympathetic nervous system, and especially upon and through the cardiac plexus. It does not seem to increase or depress innervation (neither stimulant nor sedative), but rather to influence a regular performance of function. I am satisfied, however, that its continued use improves the nutrition of the heart, thus permanently strengthening the organ.

The direct indication for Cactus is pain of a constrictive character-as if the parts were bound with an iron band.-whether it be in spasm of the heart muscle or in menstrual nervous headache.

“ Impaired heart-action, whether feeble, violent, or irregular; cardiac disorder with nervousness; præcordial oppression, anxiety, apprehension of danger, or death; hysteria; tobacco heart; nervous disorders with heart complications.”- (*American Dispensatory Third Revised Edition*) “ Intermittent pulse; shortness of breath on slight exertion.”-Fyfe. *Essentials of Modern Materia Medica and Therapeutics.*

Dose .

℞ Specific Medicine Cactus, - gtts. v to 3 i.
Water, - - - - $\frac{z}{3}$ iv.

Mix. Sig. One teaspoonful of the dilution every two or four hours.

PRICES OF CACTUS PREPARATIONS.

Specific Medicine Cactus.

$\frac{1}{4}$ -lb. Package	\$1.25 each.	By mail, \$1.47 each
$\frac{1}{2}$ -lb. “	2.40 “	Not mailable.
1-lb. “	4.75 “	Not mailable.

For sale by Pharmacists generally and by all Wholesale Druggists of America

LLOYD BROTHERS, Cincinnati, O.

JUNE 1, 1908

A COMPARISON OF THE ACTION OF CACTUS WITH OTHER COMMON HEART REMEDIES.-Ellingwood.

ACTION.	CACTUS.	DIGITALIS.	STROPHANTHUS.	CONVALLARIA.	APOCYNUM.
On the Nervous System.	Is a true nerve tonic, especially to the sympathetic nervous system; acts on the cardiac plexus; materially improves nutrition.	Acts on the inhibitory nerves; does not impart nerve tone, or increase nerve force.	Does not act upon or through the nervous system.	Influence upon the nerve centers not determined; acts through the vagi.	Action on nervous system not marked. It seems to increase nerve force to a degree.
On the Heart.	Through the inter-cardiac ganglia, it gives actual nourishment to the heart muscle. Raises blood pressure through increase of musculo-motor energy. In feebleness, slows the heart, but is never depressant; relieves irritability.	Acts directly on the heart muscle as a stimulant, increasing heart action. Is neither nutritional, nor a tonic; overdoses decrease nutrition; continued too long during heart strain, causes collapse.	Acts on the heart muscle by irritation of the fibrillæ by direct contact. Imparts no strength; increases force and raises blood pressure, sometimes excessively.	Acts permanently but mildly as a cardiac tonic. Increases heart power and raises blood pressure.	A mild heart tonic; increases muscular power permanently. It acts on the walls of the arteries. It raises blood pressure and increases arterial tension.
On the Pulse.	Increases the size of the pulse beat, and reduces the number, especially when rapid and feeble.	Changes, at once, the character and frequency of the pulse beat. Influence not always uniform.	Lessens the number of beats but increases their strength; overcomes irregularity. Its influence may be immediate.	Increases the size and strength of the pulse, and slows a rapid, feeble pulse.	Increases the size, strength and force of the beat; regulates the rhythm, slows a feeble pulse in fevers accompanied with dropsy.
On the Respiration.	It relieves cardiac dyspnea especially if from endocarditis, or from pulmonary congestion, from weak heart.	It relieves dyspnea by increasing heart action and overcoming capillary stasis in the lungs.	Increases respiratory power, restores normal respiration. In overdoses the respiration is the last disturbed.	Removes oppression in the chest; causes deep, regular breathing. Overcomes dyspnea from mitral insufficiency.	It gives freedom to the breathing when oppressed from effusions. It facilitates the oxidation of the blood.
On the Stomach and Bowels.	Exercises a soothing influence on the stomach; relieves palpitation from gastric irritation; induces no gastric nor intestinal disturbance; imparts functional tonicity to all organs.	Is a gastric irritant; it is rare that overdoses nauseate or induce diarrhea.	But little influence on the gastro-intestinal tract; rarely overdoses induce vomiting and diarrhea.	A mild gastric tonic, increasing the appetite and digestion; induces no irritation.	In active doses, it is a violent prostrating emeto-cathartic, inducing extreme hydragog action, and persistent gastro-intestinal irritation.
On the Kidneys.	Action not marked only as the heart's action is improved.	Increases the flow of water actively, in proper doses; secretion of solids not greatly improved. Overdoses may cause suppression of urine.	Acts directly on both secretion and excretion, causing at times marked diuresis. Action not always uniform.	Is secondarily diuretic, stimulates excretion and secretion to a degree; quite active in dropsy, inducing no depression.	Acts directly, most freely; acts indirectly through influence on the heart. Induces large quantities of limp urine; solids not greatly increased.
Therapeutic Uses.	Is not so much an emergency remedy, as it requires some time for its action. Used in prolonged or progressive heart weakness; in overstrained heart; in bicycle and cigarette heart; in masturbators' palpitation; in sexual and general neurasthenia. Acts best in functional derangements.	Acts at once in shock, and in sudden heart failure, increasing heart action promptly. Used in surgical shock, or shock from injury; in asphyxia and in poisoning; in heart failure from prostrating disease, as in the latter stage of pneumonia. Is of much value in selected cases of valvular incompetency.	Is an emergency remedy in heart failure, but inferior to digitalis. Indicated where heart lacks contractile power. Acts well in cardiac asthma, atheroma, and fatty degeneration; in goitre; in the weak heart of Bright's; and in functional derangements. Its influence continues long after the agent is stopped.	Relieves irritable heart action; restores strength to the heart after failure from shock, or protracting disease; used in cardiac dropsy and in functional derangements.	Is not an emergency heart remedy, except in failure during extreme dropsy and in hydropericardium. Its influence on the heart is slowly induced; is valuable in progressive heart weakness, especially in protracted fevers. It is a most reliable remedy for dropsy.
Synergists.	Action improved by tonics which improve nutrition, by general upbuilding remedies, and by avena sativa.	Action enhanced by strychnine, byglonoin, and occasionally byatropine and brandy. In chronic heart disease, by general tonics.	Acts well with carefully selected tonics; facilitates the appropriation of iron, in anemia accompanied with heart weakness.	Nuxvomica, hydrastis, col- linsonia, and iron increase its influence, as well as the usual gastric tonics in gastric derangements.	Action enhanced by cactus, by ordinary tonics and from Strychnine arsenate assist materially in some cases, for its influence on dropsy, it is given usually alone.