FOREWORD

In presenting the present number of THE GLEANER, devoted to Lobelia and a few preparations in which it is compounded with other drugs, there is no intent of going deeply into the study of pharmacology or history. Even the therapy is not discussed in systematic detail. Such exhaustive studies appear in numerous textbooks, among which none is more complete or dependable than The Eclectic Materia Medica, Pharmacology and Therapeutics of the late Dr. H. W. Felter. From this and other writings of Dr. Felter, as well as other published works, this number of THE GLEANER has freely quoted and takes this opportunity to express grateful acknowledgment.

If these pages are of assistance to the reader by suggesting forgotten or untried uses of valuable medicines, or if they inspire interest in Lobelia and the influence it has exerted on American practice of medicine and medical legislation, they will have accomplished their purpose.
The Name-Lobelia Inflata

The generic name *Lobelia* was given in 1703 by the monk and botanist, Charles Plumier, in his work "Nova Plantarum Americanarum Genera." Plumier was the first botanist to honor living persons by perpetuating their names in the nomenclature.

The name *Lobelia* was given in honor of Matthias de L’obel (or Matthias Lobelius) who lived from 1538 to 1616. Lobelius was born and educated as a physician in France. He later moved to England, where he became physician to William, Prince of Orange. Though a physician of note, Lobelius is better known in history as an early leader in botanical attainment. He was botanist to King James I, and author of several botanical works. In one of these appears the first crude step toward a natural classification of plants.

The specific name *inflata* has reference to the inflated or bladder-like seed pods of the plant. It was given by Linnaeus in 1753.

Far Reaching Effects of Samuel Thomson's Work

Samuel Thomson, according to his account, as a child accidentally discovered the emetic properties of Lobelia by chewing the leaves of the plant. Later he put this discovery to use in his practice of medicine with the claim that it was new and original. In this claim of priority, he was undoubtedly in error, for the plant had already been used in domestic practice, and probably also by the Indians long before the white man reached the shores of America.

Though Thomson may not have been the first to use Lobelia, he did raise it from obscurity through the most sensational and notorious circumstances that ever marked the introduction of an American drug. It was the famous trial of Thomson (1809) for the alleged killing of Ezra Lovett, Jr., by the administration of Lobelia that suddenly threw the drug into prominence.

The jailing of Thomson and his trial for murder seem to have been inspired by professional and political jealousy. The judge in instructing the jury, evidently considering the charges unfounded, stated that "the prisoner had broken no law, common or statute." Following this, after about five minutes' deliberation, the jury gave a verdict of *not guilty*. Thomson was honorably acquitted.

The trial of a country doctor more than a century ago would be of but little interest to our readers were it not that it inspired legislation under which every present-day physician must practice. Following the trial, the learned judge "directed or advised those present to petition the legislature to make a law that would make it penal for all those who should practice without license from some medical college."

"This hint, thus given by the judge, was seized upon first by Massachusetts; from thence it has spread to nearly all States of the Union."

Thus, apparently, Thomson's trial was the start of laws governing the practice of medicine the country over.

Certainly the notoriety of the trial gave impetus to the use of Lobelia as a medicine. Possibly it was thus saved from oblivion. By many it was then regarded as a deadly poison or as the tool of quacks. But from the beginning there were some eminent physicians who believed in Thomson and his medicine. Among those may be mentioned Benjamin Rush, Benjamin Waterhouse, William Tully, and W. C. P. Barton. At the present day there are thousands of physicians who use Lobelia constantly without thought or knowledge of Samuel Thomson and the persecution he suffered because he used the plant in his practice a century and a quarter ago.

Evolution of Lobelia Therapy

Lobelia was first used almost entirely as an emetic. It was introduced during an age that demanded heroic measures, and emesis was then mild medication compared to the usual procedure of lancing and blood letting.

As time passed an ever-increasing number of physicians made new uses of Lobelia, less heroic and more beneficial than vomiting.
Among these men stand the eminent names mentioned on another page of this GLEANER. By them the drug was used not as an emetic but as an expectorant and antispasmodic "useful in the treatment of croup, whooping-cough, asthma and pneumonia." In fevers it became established as a relaxant and to modify the circulation.

Finally a rational system of indications and uses for Lobelia evolved. These, as outlined by Dr. H. W. Felter are reproduced below.

**Indications.-**Fullness of tissue, with full veins and full arterial flow; full labored and doughy pulse, the blood current moving with difficulty; short, labored breathing; sense of suffocation; dyspnoea with praecordial oppression; pain in chest of a heavy, sore, or oppressive character; pulmonary apoplexy (full dose); mucous accumulations in the bronchi; dry croupal cough, with scant or oversecretion; asthmatic seizures; short, lancinating pain radiating from heart to left shoulder and arm; spasmodic muscular contraction; muscular rigidity; infantile convulsions from irritation of the bowels, or from respiratory obstruction; hysterical convulsions; rigid os uteri with thick, doughy and unyielding rim; perineal and vaginal rigidity during labor; angina pectoris (full doses).

Lobelia is the drug for angina pectoris, neuralgia of the heart, and pulmonary apoplexy. Though evanescent in its action, large doses of Specific Medicine Lobelia (about 20 drops) may be administered with the expectation of relieving the patient. The dose may be repeated as necessary. Lobelia is a cardiac stimulant, therefore we class it with the sedatives, for all arterial or special sedatives in medicinal (small) doses are heart stimulants. When the circulation exhibits a markedly slow pulse-wave it will be better corrected by Lobelia than by any other drug. In fact, the more prominent indication for Lobelia is the full, oppressed, sluggish, doughy pulse. Associate this with praecordial oppression, thoracic pain, difficult breathing, soreness or bruised feeling within the chest, nausea with tongue heavily coated at the base, fullness of tissue, and we have before us a fair range of the action of the drug. It is a good remedy in cardiac congestion.

**Acute Broncho-Pneumonia**

For the cough use Lobelia, when the dyspnoea is marked, the rales are dry, the heart's action labored, and the pulse small and feeble. It can be combined with Aconite, Veratrum, Bryonia, Asclepias or used in alternation. We would not use it for its emetic action, as we believe it to be dangerous to do so in the graver cases; though when given to nausea, relief is often obtained. Should the cough show abundant secretion, and the rales be moist, and there is weakness or prostration, use *ipecac.*-**Diseases of Children.-**W. N. Mundy, M.D.

**Pneumonia**

I would hardly know how to treat infantile pneumonia without the small dose of this old but valuable remedy. In those cases where the finer bronchioles become choked with the exudate, and the child's breathing is labored, and there is a mucous rattle, I know of no other agent that can take its place. In the adult, there is labored respiration, a sense of fullness and weight and oppression about the heart, while the pulse is oppressed or small and feeble. There is increased secretion of mucus in the respiratory passages, but the patient seems unable to remove it. In these cases Lobelia, five to ten drops, in water four ounces, will give the best results.-**The Eclectic Practice of Medicine. R. L. Thomas, M.D.**

**Croup, Spasmodic**


Sp. Med. Lobelia: In doses requisite to produce nausea but not vomiting.

Stillinger Liniment:* Should be applied over the region of the larynx, and hot cloths laid on the parts. A drop of the liniment on sugar may be given internally every few minutes.

*See page 1357.
When suffocation threatens and asphyxia seems imminent, chloroform or ether by inhalation will relieve the urgency of the symptoms. *Lyman Watkins, M.D.*

**Spasmodic Colic, Croup and Asthma**

In the words of Dr. Felter, "Spasmodic colic in both adults and children is sometimes quickly relieved by Lobelia. In fact, very small doses prove the best treatment in colic of very young infants. For spasmodic croup and spasmodic asthma, Lobelia in nauseant doses is without a peer in drug therapeutics."

**Asthma**

There is no drug in the whole pharmacopoeia which is of so much value in this distressing complaint as Lobelia. The place for it is indicated where there is a copious mucous expectoration; the entire chest sounds as if the patient is being drowned in his own secretion; in fact, the saliva will fairly flow from the mouth. The breathing is of a gasping nature and is, of course, oppressed, and so is the pulse. The latter may be full or thready, but still it has an oppressed feeling. The countenance is bathed in cold perspiration, as is the entire body. The lips are usually cyanotic.

With the above indication Lobelia will be the remedy not alone in asthma, but in pneumonia, broncho-pneumonia and other diseases of the thoracic cavity. *A. S. Tuchler, M.D.*

**Some Winter Cough Medicines**

Lobelia is an old and valued agent in spasmodic cough with lack of secretion. Here larger doses are required. In cases showing abundant secretion with lack of power to expectorate, small doses repeated every half hour are serviceable. The lobelia cough is associated with praecordial oppression, and the pulse is full, labored, and doughy.

Stillingia Liniment (see page 1357), distributed in sugar or syrup, is an excellent agent for intractable cough in cases that have lasted for a considerable period. The cough is rasping and strident, resembling the cough of croup. It is also one of the best remedies, as is Lobelia, for croup itself. Both Lobelia and Stillingia Liniment are of especial value in the coughs encountered in elderly persons. *H. W. Felter, M.D.*

**Acute Catarrhal Fever**

There are three agents which we value greatly in these disorders. They are Asclepias, Matricaria, and Lobelia.

Asclepias relieves the hot, burning sensation in the skin, the arterial throbbing and the nervous excitement, tends to re-establish the secretions, soothes the respiratory tract and alleviates the cough.

Lobelia is indicated mostly in those cases in which there is marked tendency toward bronchitis but less gastric irritability. The patient is dull, listless, has a tight, croup-like cough and soreness of the chest and abdominal muscles. Sometimes both Asclepias and Lobelia are indicated at the same time, though all the indications for each may not be present. The dose of Lobelia should be fractional.

The irritable, fretful children will need Matricaria, not alone for its control over the nervous phenomena but for its soothing, stimulant effect upon the respiratory involvement. *H. W. Felter, M.D.*

**A Fall and Winter Remedy**

Lobelia is pre-eminently a fall and winter remedy. According to its use it may prove a valuable respiratory sedative or a stimulating expectorant. The chilling weather often induces colic in infants. Here no remedy surpasses small doses of Lobelia. It is of exceptional value in measles and scarlet fever to bring out the eruption and to restore it after retrogression. It is a remedy in erysipelas and rhus poisoning, but its greatest value lies in the direction of the acute respiratory diseases so common to the cold season. The indications are a full oppressed or a feeble small pulse, with praecordial oppression, dyspnoea, with bronchial accumulations, giving rise to loud moist rales. The chief guides are the doughy feel of the pulse and the difficult breathing. *Editorial, E. M. J.*, 1915.
Convulsions of Children

The best combination of drugs of which we have personal knowledge for the relief of convulsions of childhood caused by errors of diet, such as the ingestion of half-comminuted bananas, nuts, or shredded cocoanut cakes, or of fresh flour dough, is the following:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3j</td>
<td>3j</td>
<td>3j</td>
<td>3j iv</td>
</tr>
</tbody>
</table>

Mix Sig. One teaspoonful every five minutes until complete relaxation is insured; then every two hours for a day.

-H. W. Felter, M.D.

Nerve Irritation

A peculiar manifestation common in nervous prostration is characterized by a sensation of tightness of the muscles across the epigastrium. This is especially severe when the sympathetic nervous system is at fault. The condition may be promptly relieved by administering from eight to ten minims of Lobelia in a little water three times a day.-G. H. Withers, M.D.

Dr. Felter's Treatment

Hay Fever

Readers of THE GLEANER need no introduction to the writings of the late Dr. H. W. Felter. His works on the materia medica and therapeutics of plants have been quoted time after time in these pages. So highly is his work regarded that one frequently hears those who knew him well express the conviction that every use of a medicine endorsed by Dr. Felter is rational and has been proved in bedside practice.

Though his writings are so well known, it is probably not known to all that Dr. Felter was a successful and busy practitioner, who found time for his study and writing during the small hours of the night and during lulls in his practice.

THE GLEANER shares the confidence of Dr. Felter's professional friends, and believes that his treatment of hay fever, reproduced below, will be appreciated.

Treatment of Hay Fever.-our best results have come from the use of a solution of hydrochlorate of quinine and from Subculloyd Lobelia. In both instances these are given internally, commencing before the usual period for the attack to begin, which is generally known to the day by the victim. Occasionally a weak spray of quinine salt gives added relief.

(1) Subculloyd Lobelia* 3ii

<table>
<thead>
<tr>
<th>Aromatic Spirits of Ammonia.</th>
<th>Water q.s. fl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3ii</td>
<td>3j iv</td>
</tr>
</tbody>
</table>

Sig. One teaspoonful every 3 hours.

(2) Quinine Sulphate 3i

<table>
<thead>
<tr>
<th>Water fl.</th>
<th>Hydrochloric Acid, q. s. to make solution.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3j iv</td>
<td></td>
</tr>
</tbody>
</table>

Sig. One teaspoonful every 3 hours alternating with No. 1.

-H. W. Felter, M.D.

Angina Pectoris

Probably there is no remedy in the materia medica that possesses the same power over the sympathetic system of nerves as this. It is true that its effect is evanescent but it very frequently answers the desired end.

*If Specific Medicine Lobelia is employed in place of Subculloyd Lobelia, use about half this amount.-L. B.
In angina pectoris, one full dose of Lobelia is sufficient to arouse the heart to action. In pulmonary apoplexy, as well as other internal congestions, the most certain and speedy relief is given by this remedy. -Ellingwood's Therapeutist.

I have demonstrated on several occasions the efficiency of a single dose of thirty drops of Specific Medicine Lobelia in arresting the severe pains of angina pectoris. The results are almost invariably accomplished within thirty minutes, with no unpleasant after results whatever. I can certainly recommend the agent for first trial.-L. H. De Marr, M.D.

**Lobelia in Children's Diseases**

LOBELIA.-*Indications:* Full pulse, oppression of the chest, difficult breathing. We must always think of Lobelia when we want to supply a stimulant. I have found it a very valuable remedy in convulsions of children. It is indicated in most cases of croup, when you have a full and heavy feeling in the chest, or taking a fresh cold. Use it in bronchitis in children. It also is of great value in whooping cough, pneumonia with a tendency to congestion, the breathing is short and quick, catarrh, colds, cough—any form of irritation of the respiratory tract, and when there is a lack of power to remove that thick, ropy, stringy mucus, difficult respirations, fullness anywhere in the chest, and a cough with loud mucous rales. Lobelia is a nerve depressant of great power, and should not be used when the pulse is very feeble. It has no equal as a relaxant. Vomiting sometimes is checked with minute doses.-Morse Harrod, M.D.

**Lobelia in Obstetrics**

Prolonged labor if due to slow dilation of the os uteri is often shortened by the relaxing effect of Lobelia on the rigid parts. Through its power to subdue muscular rigidity, Lobelia overcomes a rigid as during parturition, at the same time relaxing the perineal tissues, thus defending the parts against lacerations. For this purpose Lobelia should be used when there is fullness of tissue, with thick, doughy yet unyielding os uteri. When the edge of the os is thin and closely drawn, sharp like the edge of a knife, full doses of Gelsemium are indicated.

The obstetrical use of Lobelia has long been known. It is described in many published works, but nowhere, so far as we know, is it more clearly stated than the following letter from a physician who has put it to constant use.

"In the treatment of prolonged labor, when due to a rigid and unyielding os uteri, I have had such pronounced success with two remedies that I would not think of going to a case of confinement without. These remedies are Specific Medicines Lobelia and Gelsemium. They are not new remedies, nor is my use new, but the period of labor can often be so much relieved and shortened by their use that I feel justified in again bringing Lobelia and Gelsemium before the eyes of the medical profession.

The indications for the two drugs are as follows:

When the os uteri is rigid, but heavy and doughy, Lobelia will usually cause prompt relaxation, followed by an easy delivery. The dose should be to the point of nausea. Usually this is Specific Medicine Lobelia, twenty or thirty drops in four ounces of water, a teaspoonful of the dilution every twenty minutes. Do not push beyond the point of nausea.

When the mouth of the uterus is hard, thin and unyielding, especially when nervous excitability is present, Gelsemium is the indicated remedy. In such cases the dose should be thirty to forty drops in four ounces of water, a teaspoonful of the dilution every thirty minutes until complete relaxation ensues. In my experience this dose has not in any case diminished the strength or force of the uterine contraction."-E. P. Zeumer, M.D.

I have found Lobelia to be a heart remedy in those cases where there is a sensation of a band or a constriction around the chest.-W. M. Lambert, M.D.

**Thomsonian System Still Used**

A party of Cornell University biologists recently spent a summer in the Okefenokee Swamp of Georgia.
This swamp is one most difficult of access, and accordingly one of the most isolated regions of the United States. It has served as a refuge for the hunted since the time of the early Indian persecutions, by Spanish explorers. The few white families who live in the swamp subsist on a meager diet, mostly fish and game. Through generations of isolation, they have developed peculiarities of pronunciation and queer idiomatic expressions that are scarcely intelligible to the outsider, or possibly they have clung to old modes of speech while the remainder of the world moved on.

According to the biologists mentioned, these primitive inhabitants of Okefenokee Swamp possess Samuel Thomson's Materia Medica or Botanic Family Physician. From birth to death its pages have furnished the only medical aid they have known. Probably the ancestors of these people entered the swamp a hundred years or more ago when Thomson's books were printed, edition closely following edition. Why they settled in the swamp, we do not know nor ask.

A Hypodermic Preparation of Lobelia

When Lobelia first came to the notice of the profession, medicines were administered by mouth, by enema and by inunction. By these methods the uses of Lobelia were ascertained.* Much later, in comparatively recent years, the hypodermic needle came into general use. Physicians found that certain medicines thus administered were more rapid in their action, and they exerted their full effects even though the digestive tract was incapable of absorbing them. For use under these conditions, Subculoyd Lobelia was perfected.

Though originally intended for the limited uses named, Subculoyd Lobelia has proved so successful that many physicians, who prefer hypodermic medication, often employ it by preference when Lobelia is indicated.

Hypodermic Uses of Lobelia

The effect of Lobelia when administered hypodermically is undoubtedly sooner apparent than when the drug is used orally, although Lobelia is rapidly absorbed and quick in its effect from a normal, healthy digestive tract. When the digestive system is impaired so that normal absorption does not take place, there are obvious advantages in the hypodermic use of a good preparation designed for the purpose. It is also claimed that the probabilities of nausea and vomiting are slightly lessened while the relaxive properties seem not to be diminished.

Otherwise, the indications for the hypodermic injection of Subculoyd Lobelia and the oral use of Specific Medicine Lobelia are the same.

Although each preparation is the favorite of many, it is probable that in most cases the full medicinal effect of the drug will be felt in ample time if the Specific Medicine is administered orally, thus relieving the patient of the unpleasantness of the needle. However, there is a proven field of usefulness for each preparation, and the intelligent choice can be made only by the attending physician.

Gelbia
(For Hypodermic Use)

A hypodermic preparation of Lobelia and Gelsemi urn was first suggested by Dr. O. C. Welbourn. Long before the two drugs were available in a single preparation, Dr. Welbourn mixed Subculoyd Lobelia, three parts, and Subculoyd Gelsemium, one part, for use "in treatment of spasm of any part of the urinary tract as in the passage of a renal calculus, or the very acute forms of cystitis and urethritis." He found that the two preparations in this combination "facilitates the passage of a renal calculus and relieves the pain in a remarkable manner."

*Although a diversion from the subject, it is of interest to note the first vegetable preparation for hypodermic use, known to us, was made by John Uri Lloyd about fifty years ago. This was a preparation of Ergot made for Dr. W. H. Taylor. The preparation was marketed under the name "Lloyd's Ergot."
After Gelbia, a pharmaceutical combination of Lobelia and Gelsemium for hypodermic use, was perfected, it soon became known that usefulness of the preparation is not confined to treatment of the urinary tract. In the words of Dr. E. R. Waterhouse: "Whenever there is great pain, with high nerve tension, Gelbia may be used to advantage. In the majority of cases of pain, the physician will be pleased with its action."

"Contra-Indication.- Where there is extreme atony, further relaxation is not desirable. Here we would not use Gelbia."

Gelbia is also successfully employed in treating many other pathological conditions, such as uncomplicated bronchial asthma. Its field may be determined by study of the indications for Lobelia and Gelsemium.*

To Relax the Cervix

"Ten to twenty drops of Specific Medicine Lobelia, given in warm water per rectum, or small doses given repeatedly to nausea, will relax the cervix."—W. P. Best, M.D.

Compound Emetic Powder

Compound Emetic Powder, often known as Compound Lobelia Powder, or by the Latin nomenclature, has been in use for about one hundred years. Although it still clings to its old misleading name, suggesting emesis, this use of the compound has long been almost completely abandoned. In another therapeutic field, possibly undreamed by its originator, it has seen scores of preparations come into prominence, pass their short lives in therapeutic limelight, then without regret for the shortness of human memory, pass quietly to oblivion.

Compound Emetic Powder is composed of Lobelia, Sanguinaria, Dracontium, Ipecacuanha and sometimes Capsicum. Originally, as already mentioned, it was used as an emetic, a purpose which it is said to have admirably filled. Yet if this were its only use it is improbable that it could have survived long after emesis ceased to be routine treatment. But fortunately, soon after it came into use the discovery was made that it is of great service as an external application in treating disorders of the respiratory system. In this field it is still the first outward application thought of by many physicians in the treatment of acute bronchitis, pleurisy, pneumonia, pleurodynia, and soreness of the pectoral walls.

Although Compound Emetic Powder has always been used with the greatest satisfaction from the therapeutic standpoint, its pharmacy leaves much to be desired. The crude powder must be sprinkled on a larded cloth or paper which is applied to the affected part. This procedure, even though of recognized benefit, is frowned upon by some physicians and is not always welcome in every home. This antagonism, directed solely against the mode of applying the powder, was forcefully illustrated in the experience of Dr. Finley Ellingwood which is related on another page. It was this experience that led to the production of Libradol—a fine pharmaceutical preparation that embodies all of the medicinal qualities that prolonged the life of Compound Emetic Powder through more than a century of usefulness.

A Long Pharmaceutical Step

Emetic Powder to Libradol

The composition and uses of Compound Emetic Powder are mentioned under another heading in this GLEANER. In that article it is noted that, solely on its own merits, sponsored and pushed by no one, the powder has seen a century of useful service. It would be hard to name many other medicinal compounds with such a long record, or to think of a more substantial endorsement of usefulness. Yet Emetic Powder must be regarded as a step, a long step, in the evolution of a finer product Libradol.

This step as previously noted was first contemplated because as time passed the antiquated method of applying Emetic Powder, sprinkled on a larded cloth, became distasteful to many. This was emphasized in the experience of Dr. Finley Ellingwood which led to the production of Libradol. In the words of Doctor Ellingwood:
"A child in a very conspicuous and worthy Jewish family, was attacked with broncho-pneumonia. The attending regular physician, of the same nationality, and now one of the well known physicians of Chicago, called in on the second day a prominent consultant. On the third day, one or two others were called in; on the fourth day I was called for one purpose alone, which was, to tell the total consultant faculty what powder it was that I used in a similar case, on a little cousin of the patient, which powder had immediately aborted the entire group of symptoms.

"When I named the powder to the celebrated faculty, and described its constitution and method of application, the disgust with which they received the information so impressed my mind, as to suggest to me the necessity of putting these constituents into a more cleanly, a more scientific and a more accessible form, for ready, sanitary and convenient applicability. *I felt as if the Pharmacy of an effective remedy was in disgrace.* I knew that the remedy would be of immense benefit to the patient under consideration, but the idea of a crude brown powder, mixed with lard, or hog fat, was in no way acceptable or justifiable, to either the Jewish patrons, or to the professional gentlemen in consultation.

"I gave the matter a great deal of thought, and finally concluded that it should be possible to combine the energetic structural constituents of the separate remedies of which the powder was composed, with some easily absorbable, clean animal or vegetable oil, and this with some base which would give the preparation about the constituency of an ordinary plastic dressing."

With this thought in mind, Dr. Ellingwood applied to Lloyd Brothers to devise his ideal preparation.

After a long period of experimentation, they succeeded, again quoting from Dr. Ellingwood-"not only in producing a sanitary combination which accomplished all that the original powder accomplished, but in increasing the known virtues of the compound and in adding to the virtues of that powder, the power of controlling pain, wherever located, and of materially abating the processes of inflammation and of assisting in the restoration of the normal condition of diseased parts. This, too, without using any form of grease or oil whatever, to become rancid and foul and to gaum the patient."

**Indications for Libradol**

By FINLEY ELLINGWOOD, M.D.

**Indications.**- Acute localized pain is the most conspicuous indication for Libradol. Acute pain in the chest; general soreness in the bronchial tubes; cough, with soreness; dry, persistent cough; tightness of breathing, without pain or soreness; dry asthmatic breathing; stenic dyspnea; acute inflammation in the chest; acute localized congestion or inflammation in any part; persistent local pain; neuralgias; lumbago; sciatica; articular rheumatism; acute joint injuries, etc. Pain of local origin which induces reflex conditions, or which results in remote pain, is relieved by applying the remedy to the area in which the pain originates. It may at the same time be applied over the course of the nerve which conveys the painful sensation.

**Contra Indications.**- Extreme feebleness with depression; small, feeble and rapid pulse; shock; persistent depression, with nausea or vomiting; general relaxation; depression of the circulation, with subnormal temperature.

**Therapy.**- Many of the specific conditions named for which Libradol may be used with good results, will be found as a part of the phenomena, often, of acute inflammatory disorders. This is especially true of such disorders as pneumonia, pleurisy, bronchitis and croup, -disorders affecting the respiratory apparatus, -also glandular inflammations, such as tonsillitis, parotitis, mastitis, ovaritis, orchitis, hepatitis, nephritis, and local intestinal inflammation. To these may be added the various neuralgias, with cardiac neuralgia, and angina pectoris.

**An Observation**

For generations, Lobelia, as the outstanding ingredient of Compound Emetic Powder (see page 1353) has been used with reliance in the treatment of certain pathological conditions, especially of the thoracic region. It is interesting to note that this use of Lobelia powder is described in the monumental
"PharmacoTherapeutics" by Solis-Cohen and Githens. The authors direct that the powdered Lobelia be made into a paste with lard or lanolin and applied to the chest to relieve the pain of pleurisy or pleurodynia, and to give comfort in pneumonia and acute bronchitis as well as in sciatica and other neuralgic pains and in neuritis.

Many readers of THE GLEANER could add that in their practice, Lobelia in the form of Emetic Powder or Libradol (also mentioned by Solis-Cohen and Githens) has for many years been used with the greatest satisfaction for just the conditions mentioned.

A Misleading Name Compound Stillingia Liniment

Like the old name, Emetic Powder, for a preparation that is no longer used to produce emesis the name Stillingia Liniment is misleading. The name dates back to the use for which the preparation was originally designed-external application to the throat and chest to relieve colds, spasmodic asthma and other respiratory disorders.

In the case of Stillingia Liniment the old use which suggested the term "liniment," is retained, often very beneficially, but is enhanced and fortified by the internal use of the preparation. Stillingia Liniment, says Felter, "locally applied to the throat and chest and given internally on sugar or in syrup is one of the most perfect remedies for spasmodic and catarrhal croup of young children."

Many Medicinal Preparations of Lobelia

In studying the history of Lobelia, one can but feel surprised at the large number of medicinal compounds in which the drug has figured as an important, or more often the principal ingredient. These old preparations were, for the most part, used internally as emetics, expectorants or antispasmodics. A few were used externally as liniments in treating asthma, croup and spasmodic conditions of the throat and lungs, and to relax rigid muscles.

Most of these compounds came into existence more than a hundred years ago, when the sensational trials of Thomson and Frost suddenly raised Lobelia to the most conspicuous place occupied by any drug of the period. For the most part, their old medicinal uses were logical and consistent with present-day practice, but their pharmacy was crude and left much to be desired.

Necessarily among so many preparations based principally upon the medicinal qualities of a single drug, there was great duplication. But as time passed those that did not fill a distinct place of usefulness in medicine were dropped, while a comparatively few, by their own merits, lived to the present day. In many cases these compounds, endorsed by a century of service, therapeutically the same as when originated, are now offered as splendid pharmaceutical preparations.

These, and a few of more recent introduction, as listed by Lloyd Brothers, follow:

Specific Medicine Lobelia.- This is a comparatively recent preparation, replacing the tincture and fluid extract. It is devoid of the greasiness and nauseating taste of the preparations it replaces. It mixes clear with water in prescriptions, and carries the full desirable therapeutic qualities of the drug. The indications and uses for Specific Medicine Lobelia are described on preceding pages.

Subculoyd Lobelia, designed for hypodermic use, is the newest Lobelia preparation. It is practically colorless and is devoid of vegetable fat and inorganic matter. Its uses are given on page 1350.

Gelbia represents Subculoyds Lobelia and Gelsemium. It is a hypodermic preparation originally designed for treatment of spasms of any part of the urinary tract-as in the passage of renal calculus, or the very acute forms of cystitis and urethritis.

Gelbia is now successfully employed in the treatment of a number of pathological conditions. These are described in a booklet which will be sent to physicians on request.

Compound Emetic Powder. Description and uses on pages 1353 and 1354.

Libradol. Described on pages 1354 to 1356.

Stillingia Liniment. Described on page 1357.
Antispasmodic Tincture or Compound Tincture of Lobelia and Capsicum, is compounded of Lobelia, Capsicum and Dracontium. It is used as an antispasmodic in cramp, spasms, convulsions, etc.

Oil of Lobelia contains the characteristic medicinal properties of Lobelia. These are described on preceding pages. The oil is an important constituent of Stillingia liniment.

Acetous Emetic Tincture (Compound Tincture of Blood Root) contains Lobelia, Sanguinaria, Dracontium in an acetous alcoholic menstruum. It is used in disorders of the respiratory tract of a spasmodic or congestive type.

King's Expectorant (Compound Tincture of Lobelia) contains Lobelia, Sanguinaria, Asarum and Asclepias. It is an expectorant or nauseant used in the treatment of many disorders of the respiratory system, especially croup.

Lobeline belongs to the small group of volatile alkaloids.

Cigarettes of Lobelia leaves were at one time commonly smoked for asthma.

In Gelbia the desirable hypodermic qualities of the well established drugs, Gelsemium and Lobelia, are combined in balanced proportion.

A Prescription that Was Easy to Take

The editor and compiler of this one issue of THE GLEANER does not make a practice of self-diagnosing and prescribing. Last summer was the exception. He diagnosed his own case and took his own prescription with such wonderfully good results that he feels inclined to take some more of the same medicine.

The cause of his symptoms was too much noise of automobile and airplane and too much burned gasoline in the air. There were too many people about him and too many conventions to observe. In short—he wanted to go fishing.

So he pored over his atlas until he found more than a dozen regions where mountains are high and population sparse. Then he wrote to a GLEANER subscriber in each region asking if in his locality one could find good trout and plenty of solitude. THE GLEANER cannot know all of its readers personally, and most of these men we have never met. So the letters were sent rather reluctantly and with the feeling that they might be regarded somewhat as impositions. Such feeling proved entirely unfounded. A most cordial reply, written not as a formal letter giving the information requested, but more as a personal invitation addressed to an old friend, came to every letter written. This writer wishes he could have visited each locality and learned to know each correspondent better. Their letters do more than tell where there is good fishing. They show the good will entertained by our readers. And we, in turn, take this opportunity to express our appreciation and give our assurance that we shall do, all possible to deserve such confidence and friendship.

It is difficult to tell why the invitation of Dr. L. R. Booth to visit his locality was chosen from the many alluring prospects. Possibly the choice was influenced by the claim of his town that it is "farther from a railroad than any other town in the United States." Whatever the cause, the choice brought no regrets, though probably the same satisfaction would have been experienced in most of the other regions. Where we went (Dr. Charles Amidon was companion) there were trout in limitless numbers. We caught them and put them back until we wearied. The difficulty was not to catch trout that were big enough to keep, but to catch them small enough for the pan. And this, while friends at home endured unprecedented heat, was in an atmosphere of delightful coolness.

Again next summer, or possibly the next, the editor of this GLEANER may leave his desk. Next time he will feel no hesitancy in writing to his readers. But if you who read these lines live in a region where there are clear, cold, un fished lakes and streams; where the hot dog stand has not appeared and the tourist has not yet found his way, will you not whisper the information? The name is

- John Thomas Lloyd.

Note. If your fish are too big for our pan, possibly we can cut them in pieces that will fit.

Gleanings

Used in medicinal doses Lobelia "softens the pulse, slows the respiration, quiets the nervous system and produces a freedom of the respiration and circulation."-ELLINGWOOD.

Lobelia, like tobacco, was smoked by the Indians. Sometimes it was mixed with tobacco, willow bark or other plants. The writer has tried it but will continue to smoke tobacco.

In writing prescriptions think of Glyconda as a vehicle. An interesting pamphlet on Glyconda will be sent if you request it.

Lobelia was first used almost entirely as an emetic. It is now seldom, if ever, employed to produce emesis.

When the circulation exhibits a markedly slow pulse wave, it will be better corrected by Lobelia than by any other drug. FELTER.

Lobelia at the right time and in sufficient quantity will save cervix and perineum from laceration.-W. B. WOOD, M.D.

A seed of Lobelia inflata is 1/240 inch in diameter. It is estimated that there are 17,500,000 seeds in a pound.

The 1820 edition of the U. S. Pharmacopoeia gave a process for making tincture of Lobelia.

There are more than thirty medicinal preparations in which Lobelia is a prominent constituent.

Lobeline, the principal alkaloid of Lobelia inflata, is said to inhibit the action of muscarine, the poisonous principle of the fly agaric (Amanita muscaria).

There are about 240 recorded species of Lobelia from many parts of the world. Of these only one, so far as we know, contains the alkaloid, lobeline, or possesses the medicinal qualities of Lobelia inflata. Possibly in the future this plant will not be regarded as generically related to the other species.

Concerning Iron

Though constituting such a small part of the weight of living things (only about one seven-thousandth part of the weight of a man) iron is of vital importance to all organisms. Without it there could probably be no life upon the earth; certainly, the higher plants and animals could not exist.

When iron becomes deficient in man's body, its replenishing is not so simple as the natural abundance of the element might suggest. He cannot replace it by drinking iron-laden water nor by consuming iron filings or rust. Perhaps the only natural source of the iron that becomes a part of the human body is vegetation. But even the richest vegetable foods contain it in such small amounts that they scarcely more than meet the body's daily demand. There is little if any surplus. If a deficiency is to be restored, it must be done by a pharmaceutical preparation that, like the iron of plants, can be absorbed by the human system.

We know of no other preparation that has as much in common with the natural iron of vegetation as Lloyd's Iron.

A booklet giving detailed account of Libradol and its uses will be sent in response to your request.