

SOME OF THE DRUG CONDITIONS DURING THE WAR BETWEEN THE STATES, 1861-1865.*

BY JOSEPH JACOBS.

Amongst the scarcest articles in a drug store during the war period were paper, twine and corks. Some of the stores obtained old life preservers from abandoned river boats and got a supply, thus, of hand-cut stoppers. Various fabrics were pressed together for small stoppers, and for large bottles, demijohns and jugs, different sized corn-cobs commanded the same price as XXX corks do to-day. In the museums of New York, Washington and Chicago, can be seen some of the specimens of attempts to manufacture glass bottles in Louisiana, Alabama and South Carolina.

In the interior districts and small villages the country doctors returned to first principles and to the use of the plants of the fields and forests; and these agencies were about all they had to rely on, outside of whisky and a little quinine, the latter frequently at \$100.00 an ounce.

Interviewing one of our old Confederate surgeons, he said:

"During the early part of the war I was placed in charge of a railroad hospital in a small town where it was difficult to obtain medicine at almost any cost, and as I had my little hospital crowded nearly all the time, both with employees of the road and wounded and sick soldiers, afflicted with various diseases and all kinds of wounds and injuries, and being also engaged in general practice, it naturally followed that my mind was severely taxed in order to supply remedies and substitutes to meet the demands of such varied practice. I perused my 'Dispensatory' and called into requisition an old 'Botanic Practice' that had been handed down as a relic of the past, but from which I confess to have received valuable aid and very many useful hints in regard to the medical virtues of our native plants. I give you the following facts from a record I kept of the patients treated, and the remedies I used, and the principal substances I resorted to.

"Of that large class of medicines, so useful in surgery and so much in demand in war times, called antiseptics, most of them, I may say, have been discovered and appropriated to surgical use since our war. In fact, I had but little else at my command except the cold-water dressing for wounds. From experiment I learned to improve on the plain old method, as I think, by employing a decoction of red-oak bark added to the water, which acted as a disinfectant, and by its stimulating and astringent properties promoted the healing process. I also used a weak solution of bicarbonate of soda, which I found beneficial in the suppurative stages. When emollients were indicated, I used slippery elm and wahoo root bark, and solution of common salt often helped. In case of great pain I employed poppy heads, nightshade and stramonium.

"I had a number of cases of intermittent fever. I would give strong boneset tea, warm, until free vomiting was produced, and as a substitute for quinine I used, during the intermissions, butterfly roots or pleurisy root tea, which would nearly always cut short the febrile stage.

"Remittent or bilious fevers were treated much the same way, except that I invariably gave good doses of mandrake tea in the beginning. White ash root or prickly ash root were often given in these fevers to advantage, using always the butterfly root tea in the febrile stage. Virginia snakeroot, yellow root, or Sampson's snakeroot acted nearly as well, but I preferred the other. If I could have obtained blue mass or calomel I would have begun treatment with a dose or two of that, but none were to be had.

"Mayapple root or peach-tree leaves made into a strong tea and drunk warm would act on

* Parts of a paper presented to Section on Historical Pharmacy, Buffalo meeting, 1925. The introductory of the article deals with general conditions of the South during the period considered. At the outset of the struggle drugs were third in importance; tinctures were made from native drugs, "moonshine" whisky supplied much of the alcohol; Dr. Jacobs states as far as he was able to learn no tax was placed on whisky. Drugs were obtained, to some extent, by blockade runners, from Mexico, Cuba, etc.

the bowels as certainly as senna; but with children, where too much tea is not desirable, I often gave beef's feet oil, hog's feet oil, or even lard heated with syrup.

"In cases of pneumonia, pleurisy, catarrhal fevers, etc., I made local applications of mustard seed or leaves, stramonium leaves, hickory leaves, pepper, etc., warm, and gave alternately butterfly root and sanguinaria, and continued to slightly nauseate, from day to day (no need of anything else). The two last-named remedies took the place of Dover's powder, quinine and all other diaphoretics, febrifuges and arterial sedatives.

"Phytolacca or poke was another favorite remedy—the tincture, when alcohol or whisky could be obtained; otherwise, tea of root or berries, I used in all cases of chronic rheumatism or neuralgia, enlarged glands, scrofula, syphilis, and all cases requiring alteratives, often combined with American sarsaparilla root, sassafras, alder and prickly ash.

"Female complaints gave me some trouble, but I soon learned the use of black haw, squaw-weed, partridge berry, etc. I had been taught in the old textbooks that opiates in large doses would control some cases of threatened abortion, when the patient had not lost too much from hemorrhage. I found that the black haw root tea would absolutely stop this tendency, not only in cases where there was but little hemorrhage, but where large quantities had passed, and would relieve the most severe case of dysmenorrhœa, especially when combined with squaw-weed, partridge berry or red shank.

"In stomach and bowel diseases I found but little difficulty in obtaining plenty of substitutes for opiates, astringents and the like; in fact, I believe that an all-wise Providence has especially provided the best antidotes in creation on the hills and dales, and by the vales and streams of our own Southland. In ordinary looseness of bowels or diarrhœa I gave an infusion of raspberry leaves or whortleberry leaves (both of which act finely on the kidneys and bladder). Where there was nausea or sick stomach, a handful of peach-tree leaves steeped in water and drunk will settle it, or what is perhaps better, the kernels of two or three seeds cracked and cold water drunk off them. If stronger astringent is necessary, the inner bark or red oak, blackberry or dew-berry root tea, or red shank root, are sure remedies.

"Agrimony tea, and, as a last resort, the nut-gall or ink-ball made into what, from its color, I called black wash (made by squeezing the juice out and adding a little copperas). This black wash is not only a splendid ink, but is a destroyer of syphilitic sores, warts, corns, ringworm, and old ulcers and excrescences of nearly every kind. Weakened properly, it is good in obstinate bowel diseases, and can be used as an injection in gonorrhœa, gleet, etc. Silk weed root put in whisky and drunk, giving at the same time pills of rosin from the pine tree, with very small pieces of blue vitriol, will cure obstinate cases of gonorrhœa, and is a substitute for copaiba, cubeba, etc.

"I raised lobelia from the seed, and found it to be a reliable emetic, useful in cough medicines, croup and asthma. I have relieved asthma with lobelia and by smoking stramonium leaves. We, of course, used turpentine as an adjunct in all cases where indicated, which is the case in very many diseases, and in many a positive curative agent.

"Onions and garlic were useful as poultices in nearly all glandular enlargements, as are also poke-root, celery, pepper, parsley, sage, thyme, rue and other garden products. Many of the latter were used for diseases of women and children.

"White sumac, red elm, prickly ash, and poke, will in connection with black wash cure recent cases of syphilis. It will also cure many cases of chronic rheumatism. Peach-tree leaves and Samson's snakeroot will cure most cases of incipient dyspepsia. Gargle made of sage and honey will cure most cases of sore throat, tonsillitis, etc.

"For infants, calamus, catnip and soot tea are better than soothing syrup with opiates."

Nearly every old practitioner in the South, to-day, is full of such reminiscences as the foregoing.

Notwithstanding the restrictions on inter-state commerce and the almost exclusive reliance on blockade runners for supplies, many druggists in these southern towns and cities displayed much ingenuity in the disposition of the stocks, bought at auction at the seaports.

The late Mr. H. Metcalf, of Montgomery, Ala., relates that he attended an auction sale at Mobile on one occasion, and, arriving late, found the cargo all sold

except cod liver oil and beeswax, which he succeeded in purchasing. His two barrels of cod liver oil and 600 lbs. of beeswax were immediately reshipped to Montgomery on the Alabama River. Filling every shape and size bottle to be found, and placing a judicious advertisement in the papers, he was enabled to sell the oil, but what to do with the beeswax was a puzzler. Discovering a set of candle-moulds and using cotton yarn as a wick, he ran the entire mass into candles and succeeded in selling the whole stock.

Nashville fell early in the action, and there was but little suffering there on account of failure to obtain medical supplies. One incident is related there showing the shrewdness of a druggist at Nashville. When it became known that all the manufacturing enterprises would be blown up on the evacuation of the town, a shrewd druggist went around and succeeded in buying all the window glass in town. Three days later the explosions, on the retreat of the Confederates, broke one-half the window glass in the city, and Mr. S. reaped a rich harvest in his corner in window glass.

Various small attempts were made to manufacture chemicals at Knoxville, Tenn., Greenville, S. C., Columbia, S. C., and Milledgeville and Macon, Georgia, but outside of producing a few gun-caps and nitre for making gunpowder and a few carboys of sulphuric acid and charging the torpedoes in Charleston harbour, very little was accomplished. Later on some small manufacturing was done at Richmond and Charlotte, but, owing to the want of machinery and proper apparatus, little was achieved. A blockade runner brought into Wilmington, N. C., a supply of apparatus for making sulphuric acid, which arrived only a few days before the city fell. Much might have been accomplished with this but for the fall of Wilmington, as the plant was said to be first-class.

The excessively high price of quinine made its handling a profitable employment. Almost every means known to human ingenuity was employed to smuggle it through the lines. Small packages were placed in letters, which the Adams Express Company would guarantee for the sum of \$2.00 to deliver to the post-office authorities at some point in the Confederacy. Officers speculated in it, buying and selling until this created a scandal almost equal to that of speculating in cotton, and it was finally stopped by a strong proclamation.

A large contraband trade was carried on by an almost continuous line of house-boats floating on the Mississippi River. When opposite Memphis the goods were either sent in at night or into the interior of Arkansas, where trusty parties soon disposed of the stock. The great bulk of this trade was sent out by traders and speculators in Paducah, Ky., and Cairo, Ill., and their main points of operation were Memphis, Tenn., Helena, Ark., Napoleon, Ark., and Greenville, Miss. In regard to Napoleon, very few of this generation ever heard of the town nor can it be found on the maps of the present day; yet in war time Napoleon, Arkansas, was a town of nearly 3000 people, well built with brick business houses, and contained a large U. S. Marine Hospital, built of brick; and situated as it was on the Mississippi, at the mouth of the Arkansas River, it was at one time a rival of Memphis for trade. This village was entirely destroyed by flood in 1869 or 1870; the last vestige of the large Marine Hospital was carried into the Mississippi River in 1874, and to-day there is not a human habitation left to show where Napoleon once flourished.

In such conditions as these, it is not to be wondered at that every kind of makeshift and substitution had to be resorted to in the field, in the drug store, and upon the farms and in the household.***

The following will give an idea of the economy that was enjoined in the matter of supplying general and post hospitals, the amounts stated being quantities for one year for one thousand troops:

Acetic acid, 5 lbs., arsenic, 5 ozs.; muriatic acid, 8 lbs.; sulphuric acid, 8 lbs.; tartaric acid, 16 lbs.; sulphuric ether, 16 lbs.; alcohol, 192 pint bottles; ammonia, 5 lbs.; nitrate of silver, 8 ozs.; assafoetida, 32 ozs.; camphor, 16 lbs.; catechu, 5 lbs.; white wax, 16 lbs.; chloroform, 8 lbs.; copai-ba, 40 lbs.; creosote, 16 ozs.; adhesive plaster, 40 yds.; extract belladonna, 16 ozs.; buchu, 8 lbs.; columba, 8 lbs.; gentian, 8 lbs.; glycyrrhiza, 48 lbs.; hyoscyamus 16 ozs.; rhubarb, 8 lbs.; sarsaparilla, 16 lbs.; senna, 8 lbs.; valerian, 64 ozs.; mercuric chloride, 5 ozs.; iodine, 16 ozs.; ammonia, 32 lbs.; carbonate magnesia, 5 lbs.; sulphate morphia, 16 drs.; myrrh, 5 lbs.; opium, 5 lbs.; ether, 5 lbs.; jalap, 32 ozs.; cantharides, 16 ozs.; aloes, 32 ozs.; sulphate quinine, 80 to 160 ozs.; sugar, 160 lbs.; strychnia, 8 drs.; digitalis, 32 ozs.; mercurial ointment, 8 lbs.

The same sparse quantities were applicable in hospital stores' regulation and in the matter of surgical instruments, books, bedding, furniture, dressings, etc., and on the blanks furnished was printed the following: "It is urged that medical officers make requisition for such medicines only in the following table as are deemed indispensable."

Dr. J. Julian Chisholm, professor of surgery in the Medical College of South Carolina, published in 1861 his "Manual of Military Surgery for the Use of the Surgeons in the Confederate Army." This book was widely used, and was a most valuable contribution to war surgery, containing, as it does, a most exhaustive collection of hints and instructions relative to the treatment of sick or wounded men in camp, on the field of battle and in the hospital. In his preface he says (in part), as follows:

"As our entire army is made up of volunteers from every walk of life, so we find the surgical staff of the army composed of physicians without surgical experience. Most of those who compose the staff were general practitioners, whose country circuit gave them but little surgery and seldom presented a gun-shot wound. Moreover, as our country had been enjoying an uninterrupted state of peace, the collecting of large bodies of men and retaining them in health, or the hygiene of armies, had been a study without object and therefore of little interest."

From my friend, the late J. F. B. Lillard, of New York, I learn the following names of some druggists who were in business in the South during those trying times; Benjamin Ward, of Mobile; H. Metcalf at Montgomery, Ala.; J. A. Lee, New Iberia, La.; N. O. Mior, Columbia, S. C.; Jno. Ingalls, Macon, Ga.; J. J. Schott,¹ Galveston, Texas; F. S. Duffy, Newbern, S. C.; G. W. Aymar, Charleston, S. C.; S. T. DeMerville and A. H. Roscoe, Nashville, Tenn.; Robert Carter, Columbus, Ga.; A. Solomons, Savannah, Ga.; C. W. & H. R. J. Long, of Athens, Ga.

To afford an idea of the prices ruling in Richmond, June 1863, I append the articles in some original invoices purchased by R. W. Powers from Kent, Paine & Co. Same are as follows:

Three boxes ext. logwood, 47 lbs. at \$4.00 per lb.; 1 keg bicarb. soda, 112 lbs. at \$2.75; 1 case brown windsor soap, \$12.75 doz.; 1 bbl. camphor, 86 lbs. at \$20.00 a lb.; 112 lbs. of blue galls at \$4.00 a lb.; 100 lbs. tartaric acid, \$2.25 per lb.; salt, 44c lb.; hops \$2.50 lb.; 1 cask French brandy, \$52.00 gallon; India ink, 75c bottle; 9 doz. assorted pencils, \$4.00 doz.; phosphorus

¹ Still living and in business.—EDITOR.

\$14.00 lb.; citric acid, \$4.50 a lb.; oil peppermint, \$16.50 a lb.; Epsom salt, \$3.87 $\frac{1}{2}$ a lb.; 6 bottles capsules, \$6.50 each; 12 pewter syringes, \$1.25 each; 2 boxes blue pills, \$6.00 each; 1 bottle syrup of Ipecac, \$10.00; 15 ozs. quinine, \$22.25 oz.; 60 dr. morphine \$28.00 dr.; blacking \$1.40 per box, tallow candles, \$2.37 lb.

The late H. B. Metcalf, of Montgomery, wrote in 1898 in part as follows:

"I find that all my old books and papers were destroyed in the fire of last July. We were able to secure some drugs and chemicals during the war by attending the blockade sales at Charleston and Mobile. We did not have to substitute to a great extent in putting up prescriptions—those of us who were fortunate enough to be supplied at the sales. We found great difficulty in securing vials and corks, and were compelled to use second-hand vials, and corks made from the tupelo tree answered very well. Prices were, of course, high, for instance, during the last year of the war all tinctures were sold at \$1.00 an oz.; quinine, \$25.00 per oz.; morphine, \$10.00 per dr.; quinine pills \$1.00 each, and other pills \$5.00 a dozen. Prescriptions ranged usually from \$5.00 to \$15.00. Whisky sold at \$150.00 a bottle. You must recollect that greenbacks were worth about twenty times our money, gold 100 times. I imported a great many goods through Evans' Sons, Liverpool, and regret exceedingly I now have none of the invoices."

It was quite an industry, I am told by an Atlanta lady, Mrs. Marcus A. Bell, for the country people to raise castor oil beans. The crushed beans were boiled and the oil skimmed off. She said that the grandmothers of those days revived the traditions of Colonial times. They made their own dyes and coloring matters from the roots and barks of native woods. Dogwood, sumac and the roots of pine trees were largely used, and indigo was cultivated in the gardens. Instead of paregoric, fennel seed tea was given to the babies. For rash they used red oak bark and alum. Goose grease and sorghum, or honey, was a standard remedy for croup, backed up with turpentine and brown sugar. Sassafras tea was given in the spring and fall as a blood medicine. Adults' colds were doctored with horse-mint tea and tea from the roots of broom sedge. For eruptions and impure blood, spice-wood tea was given. Wine was made from the berries of the elder bush. For diarrhoea, roots of blackberry and blackberry cordial; and so, also, was a tea made from the leaves of the rose geranium. Mutton suet, sweet gum and the buds of the balm of Gilead was a standard salve for all cuts and sores. Balsam cucumber was widely used as a tonic, and was considered and used abundantly as a specific remedy in burns. Catnip, elecampane, and comfrey root and penny-royal were in every good housewife's pantry, in which, also, was the indispensable string of red peppers, a bag of sage leaves and of balm. Calamus root for colic in babies was a common dose. The best known standard Georgia tonic was dogwood, poplar and wild-cherry barks, equal proportions chipped fine and put in whisky and taken wineglassful at meal times; it is still used in large quantities from "Yamacraw to Nickajack." In hemorrhages, black haw root was commonly used; all the mustard we had was raised in our gardens.

She learned from these experiences that barks were best gathered while the sap was running, and when gathered the outer and rougher portion should be shaved off and the bark cut thinly and placed in a good position in the shade to dry; that roots ought to be gathered after the leaves are dead in the fall, or better, before the sap rises; that seeds and flowers must be gathered only when fully ripe, and put in a nice dry place, and that medicinal plants to be secured in the greatest perfection should be obtained when in bloom and carefully dried in the shade.

I here append a list of substitutes that were used by druggists and physicians

during the war in large quantities, in most of the instances being the only medicines of the kind to be had:

| Imported article. | Substitute. | Imported article. | Substitute. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------|------------------------|
| Columbo, Quassia—Yellow Root. | | Gum Arabic—Low mallows, apple, pear and quince gum. | Balm, Watermelon seed. |
| Spanish Flies—Potato bugs. | Powdered leaves of butternut. | Ergot—Cotton root. | |
| Jalap—Wild jalap, Wild potato vine, Fever root. | | Guaiacum—Box-wood, Poke, Prickly ash. | |
| Aloes—Wild jalap, Mulberry bark, Butternut, Dock, Wild potato vine, Amer. columbo. | | Ipecac—Wild jalap, Carolina hipps. | |
| Quinine and Peruvian Bark—Tulip tree bark, Dogwood, Cotton-seed tea, Chestnut root and bark, Chinquepin root and bark, Thoroughwort, Spanish oak bark, Knob grass, Willow bark. | | Mezereon—Prickly ash. | |
| Digitalis—Blood-root, Wild cherry, Pipsissewa, Bugle weed, Jasmine. | | Kino and Catechu—Cranesbill. | |
| Conium—American hemlock. | | Senna—Wild Senna. | |
| Opium—American hemlock, Motherwort. | | Colocynth—Alum-root. | |
| Sarsaparilla—Wild sarsaparilla, Soapwort, Yellow parilla, China briar, Queens's delight. | | Tannin—Smooth sumac. | |
| Chamomile—Dogwood. | | Olive Oil—Peanut oil, Beech-nut oil, Cotton-seed oil. | |
| Flaxseed—Watermelon seed. | | Laudanum—Hops, Motherwort. | |
| | | Bougies—Slippery elm bark. | |
| | | Corks—Black gum roots, Tupelo wood, Corn-cobs. | |
| | | Allspice—Spice-bush. | |
| | | Pink root—Cardinal flower. | |
| | | Asafetida—Wild chamomile. | |
| | | Calomel—Dandelion, Pleurisy root, Butterfly weed. | |
| | | Belladonna and Hyoscyamus—Jamestown weed. | |
| | | Valerian—Lady's Slipper. | |
| | | Colchicum—Indian Poke. | |

From various physicians, my mother and other observing women who went through the struggle, and from old Confederate magazines and books and newspapers, I have gathered the following data in reference to peculiar and unusual uses of articles that are incident to our trade, that seemed to be of more or less general employment in the South by physicians, druggists and in the Confederate households.

Wood anemone was employed as a vesicatory in removing corns from the feet. Powdered may-apple mixed with resin was used as a caustic in treating horses, the farriers using it for escharotic purposes.

On the farms the juice of the pulp of the maypop seeds was made into a summer drink in place of lemonade. Powdered bloodroot, snuffed up the nose, made a powerful sternutatory and was applied as an escharotic to fungous flesh. Pond-lily poultice was extensively applied to ulcers. Button snakeroot, or globe flower, was used largely as an expectorant and diuretic. Toothache bark (*aralia spinosa*) was used to allay pain caused by carious teeth, and in South Carolina the negroes relied on it almost exclusively for rattlesnake bites. Side-saddle or flycatcher was used in the various forms of dyspepsia. Ink was made from the rind of the pomegranate fruit and from poke berries. Where during convalescence an astringent tonic was indicated, dogwood supplied the need. This, with the black-berry and gentians and pipsissewa as tonics and diuretics, and sweet gum, and sassafras for mucilaginous and aromatic properties, and wild jalap as a cathartic, supplied the surgeons in camp with easily procurable medicinal plants, which proved sufficient in many times of need.

The bark of the dogwood and swamp willow was mixed with tobacco for smoking. Watermelon juice was made into a syrup, and the rind into preserves. The seed of the watermelon and those of the gourd were used as a diuretic. Gourd rind was used as mould for buttons. The ladies of St. John's Parish, S. C. used prickly pear for hardening tallow in candle-making, one pound to four pounds of tallow taking the place of wax. The hand-leaved violet formed an emollient application. Red maple made an astringent wash.

Buckeye lotion was used for gangrenous ulcers, and by some for the toothache.

Among the substitutes for coffee, at home and in camp, the following were a part: Rye, parched okra seeds, cotton seeds, parched sweet corn hominy, parched sweet potatoes, peanuts.

Cotton seed decoction was used for inflammation in mucous passages. The roots of the cotton plant were employed in asthma, and by the negroes as an abortant. Soap was made from cotton-seed by treating them direct with lye.

Among the substitutes for tea were *Ceanothus Americanus*, known as red shank, or New Jersey tea, and holly leaves and blackberry and raspberry leaves and rose leaves.

The Amelia azedarach (China berry) furnished some valuable uses. The ripe berries were employed in making whisky; the bark of the root was used as an anthelmintic. The leaves were said to prevent "botts" in horses, and were used to pack with dried fruits to preserve them from ravages of insects. A soap was made from the berries, called "Poor Man's Soap."

The ox-eyed daisy was used in place of Persian insect powder and insecticide used as far back as 1857. In the country, fresh elderberry leaves were laid near the head of a bed-ridden person to keep away flies.

In the households and on the farms many interesting expedients were resorted to. The newspapers were full of directions about soap-making and for preparing and obtaining the materials. The *Richmond Dispatch* and *Wilmington Journal* published minute directions for making soda from seaweed and corn-cobs, and recipes for making soaps.

Blackberry and elderberry wines were used almost exclusively as a substitute for foreign wines. All the newspapers published recipes for making these wines, and there is scarcely a housewife in the South who does not know how to make them.

In the *Mobile Register* I find the following:

"To alleviate the suffering and perhaps save the lives of many of our soldiers, when sickness may be traced to the use of unwholesome water in limestone regions, blackberry cordial is recommended. The following is a good receipt: Bruise the berries and strain through a bag; to each quart of juice add half a pound of loaf sugar, a heaped teaspoonful of powdered cinnamon, the same of cloves, and a grated nutmeg; boil these twenty minutes, skimming well. When cool, add half pint of brandy for each quart, or add good whisky."

A decoction of the blackberry root and the rind of the pomegranate fruit boiled in milk was a common remedy in diarrhoea.

The roots and leaves of the cocklebur were considered serviceable in passive hemorrhages, diarrhoea, gonorrhoea, and as a deobstruent in obstructions of the spleen and diseases arising from torpid liver.

One or two ounces of a decoction of Indian physic root was given as one emetic,

the dose of the powdered root being thirty grains, persisted in until vomiting occurred.

Engravers found that the different woods were of hardness as follows: First, the wild currant or service tree and the apple and pear; next, the dogwood, red-berry (*azalea nudiflora*), and *kalmia latifolia*; then the holly, when well dried; but of all, the boxwood was preferred.

The peach tree furnished a number of uses: The gum was used instead of gum arabic; a tea of the leaves given in whooping cough; the leaves used to season creams instead of vanilla; the leaves used in dyeing.

Beer was made from maize, the persimmon and the sweet locust.

Calycanthus (sweet shrub) was employed as an antispasmodic tonic in case of chronic agues, a strong decoction of the bark of the root or of the seed being given. It was noticed that the root was strongly camphorated.

As an antidote for poison oak the bruised leaves of the *Collinsonia canadensis* (stone root) were employed; as also the *Verbena urticifolia*.

Rhus glabra (smooth sumac) was used as a gargle for cleansing the mouth in putrid fevers; and a decoction of the root employed in gonorrhœa and gleet. A vinegar was made from the berries.

Beech-tree leaves, collected in the autumn in dry weather, were used for filling beds, the odor being grateful and they being very elastic.

Black oak was considered efficacious in leucorrhœa, amenorrhœa, chronic hysteria, diarrhœa, rheumatism, and asthma. The powder of the bark, mixed with lard, was a remedy in painful hemorrhoids, and used as a fomentation in prolapsus uteri and ani, and for deflections in these parts.

As substitutes for hemp the following were used: The sunflower stalk, *Asclepias syriaca*; *Urtica dioica*, and *Yucca filamentosa* or bear grass. The juice of the skin of the blue fig made a red ink. Fig twigs were used as pipe stems. Rope was made of wahoo (*ulmus alata*), and used in baling cotton. Wax myrtle (*Myrica cerifera*) was employed in making candles, and as a basis for fine soap. The soap was obtained from the berries by boiling and skimming. Four pounds of the wax made forty pounds of the soap, with the other ingredients counted. Candles made by the addition of grease are of a green color.

In making gunpowder the lighter woods, such as willow, dogwood and alder charcoal were recommended. I append an advertisement taken from the Augusta, Ga., Chronicle of 1862:

"To Contractors—Willow wood wanted: 500 cords will be contracted for, to be delivered on the line of the canal at the government powder factory at Augusta, Ga., at the rate of not less than 100 cords a month, commencing 1st December next."***

The following was published concerning the sassafras tree:

"The sassafras wood stripped of its bark is very durable and strong, resists worms, etc. It forms an excellent post for gates. Bedsteads made of it are never infested with bugs. The pith of the young shoots and the leaves contain much mucilage and are used extensively in New Orleans to thicken pottage in making the celebrated 'gumbo' soup."

W. Gilmore Sims wrote a friend that "the persimmon beer made in Orangeburg Dist., S. C., by Hon. J. M. Felder, equalled the best sparkling 'Jersey champagne,' or a carbonated cider. The old Southern song ran: 'Christmas comes

but once a year, Eggnog and 'simmon beer.' " It was customary to mash the fruit, strain through a coarse sieve, knead with wheat bran, and bake in an oven. This persimmon bread could be put away for winter use in making beer when wanted.***

I enumerate a few more medicinal uses that were made of some of the products of our southern fields and forests by our physicians and housewives, and will close.

Phytolacca decandra, or poke, was largely used in diseases affecting the scalp, and in ulcers, eruptions, itch and hemorrhoids. Knot grass was considered a powerful astringent in diarrhoea and uterine hemorrhages. Water pepper, says a writer at Manchester, S. C., was used in his family in 1862 in dysentery, and every case was improved and cured. Mountain laurel was employed with claimed success in rheumatism, gout and glandular enlargements; black alder as wash in cutaneous troubles; holly leaves used as an emetic, and birdlime made from the middle bark. Love vine was used as a laxative tea; *Pinckneya pubens*, Georgia bark, as useful in intermittent fevers.

Woodbine or honeysuckle was given in asthma, and a decoction of the flowers administered to calm the pain of colic following childbirth. A decoction made by pouring boiling water over the leaves, flowers or berries of the elder bush was used as a wash for wounds to prevent injuries from flies. Sea myrtle was used in popular practice in South Carolina as a palliative and demulcent in consumption and coughs, a strong decoction being given several times a day. Rag-weed was used in whisky in place of quinine in Maryland; cat weed was employed in popular practices in diseases of chest and bowels; hound's tongue in domestic practice as a mucilaginous drink, and the roots made into a poultice in case of bruises, sprains, etc. Gravel root was given as an emetic; horse nettle was used as an aphrodisiac among the negroes; Virginian silk as a diuretic decoction in gonorrhoea. The buds and inside bark of the long-leaved pine and bits of pine steeped in gin were favorite domestic remedies in coughs and colds, and as a diuretic.

In designing this paper, I had hoped to make it more complete by using contributions from surgeons of the Confederate army and navy, and druggists engaged in business during the period, so far as they were living and from papers to be loaned me by them. Out of scores of letters addressed to living men of this character, I received but few replies. In obtaining some of the matter, railway trips had to be taken, and much of it was collected at considerate expense and labor. When it is remembered that the conditions that are suggested here lasted for a period of nearly four years, then the sufferings and the achievements and the heroism of seven millions of people are in a measure made manifest.

If I have succeeded in recalling by way of suggestion some facts that in the present may be of use, or in the future may be evolved into utility, I will have been rewarded for my outlay and my efforts.

SEEKING A DISTEMPER CURE.

Rhodes Farm, Middlesex County, England, is known for the research work carried on there, whereby it is hoped to cure distemper,

or prevent it. The work was started in 1923 through the efforts of Sir Theodore Cook, editor of the *Field*. Contributions for carrying on the work have come from dog fanciers in all sections of the world.