

Gardening Under Glass.

LETTUCE MANURES AND SOILS.

There are almost as many formulas for mixing soils and fertilizers for forcing lettuce as there are growers. Each successful grower has his theory of what constitutes an ideal soil. The N. Y. exp. sta. at Geneva has been trying to find out what influence, if any, different mixtures and kinds of soil had upon lettuce, only head lettuce being used in the trials. It was found that rather compact soils gave the most satisfactory results. A good, stiff clay loam, containing some sand and lightened with about 15 per cent of well rotted manure, was the best. Soils of loose texture produced heads which were larger and looser, later in maturing and more subject to tip burn.

The fertilizer tests showed no gain in using phosphates or chemicals where plenty of manure was mixed with the soil. On sandy loams the manure lightened it up too much and the commercial fertilizer proved most efficient, but on the clay loams the opposite results were obtained. The experiments seemed to indicate that lettuce cares less for the form or source of plant food than about the texture of the soil in which it grows.

Forcing Rhubarb—This is very easy to force in an ordinary cellar. The roots need to be frozen before being brought in, when they will soon start to grow and give a crop in a few weeks. The little heat necessary may be supplied with an ordinary kerosene lamp or lantern. While the stalks will grow in light, yet the growth is poor, and absolute darkness is best. The brief article on this subject in the issue of Jan 1 should have read "no light and a little watering," etc. A dozen roots brought in at intervals will give enough for a family.

Early Celery can be obtained by sowing the seed in the greenhouse in Feb and pricking the plants out into flats when they reach suitable size. They need to be grown cool and should be put out into cold frames as soon as the weather permits. Then by early setting in moist, rich soil some nice heads may be obtained for the table by Aug and Sept. The earliest varieties like White Plume and Golden Self-Blanching are best for this purpose.

Forcing Lettuce may be divided into four groups, viz, forcing and outdoor head lettuce, cutting and cos or celery varieties. The only difference between the first two is that the forcing varieties are the very earliest kinds which will head up except in a cool temperature, while the others will head up during more or less hot weather. With the exception of Grand Rapids, all other kinds used for forcing are varieties which head up. Of these the white-seeded T. is the best or Boston Market is the variety which has been most generally planted, although it is now being superseded by Hittinger's Bel-

mont and Rawson's Hothouse, which are merely improved strains. They form large, solid heads and grow quickly and closely. The black and the yellow-seeded Butter make larger heads, which are yellow, crisp and tender. The Mignonette and Tom Thumb form dainty, small heads which are of superb quality. All of these may be grown in the open ground during the early spring.

Propagating Summer Flowering Plants takes up much room from now on in the greenhouses of amateurs. A bed of pure sand over the pipes is best for striking most cuttings of soft wooded plants. A bed the width of the bench and 3 to 6 ft long will hold many hundred cuttings, which should be put as close as possible in rows about 2 in apart and correctly named and labeled. After they are well rooted they may be put into small pots.

The Manufacture of the American pianos and organs by Messrs Cornish at their immense factories at Washington, N. J. is one of the most interesting exhibitions possible. The magnitude of their business has made it necessary for them to still further increase their factory space and they have just finished an addition to their main building, which will give 20,000 cubic feet more room; they have also enlarged their office facilities so that they are now in better shape than ever to handle orders and can now build and ship at the rate of 60 pianos and organs per day or 18,000 per annum. Nearly 400 skilled workmen are employed (many of them have held their positions for over 20 years). The monthly pay roll often averages \$30,000. Messrs Cornish & Co have a splendid reputation personally, and this firm holds the unique and remarkable position of being the only manufacturing concern building high grade pianos and organs who sell them direct to the general public exclusively at first cost. We advise everybody to write for the Jubilee illustrated catalog issued by this enterprising and entirely reliable firm; the frontispiece is printed in colors and is a unique reproduction of a celebrated painting representing St Cecilia and the Heavenly Choir. It will be sent free to anyone addressing Messrs Cornish & Co at Washington, N. J., and mentioning this paper.

CHAT WITH THE EDITOR.

Celery for Profit, by T. Grenier, price 20c; prepaid, will give E. D. J. full details on the culture of this crop. The book is sold by the Orange Judd company of New York.—R. R.: Apple seedlings are sold by all the nurserymen who advertise in F & H.—Mrs E. J. H.: A dressing of sawdust is often beneficial to heavy soils to lighten and open them up, but I would not advise you to use it on light, especially very light, soils.—J. H.: I would advise you to plant Bohemian oats in Oct; the Ont. exp. farm at Ottawa, after testing 67 varieties last year, recommends as among the best: American Beauty, Banner, Mononite, Juliette, Improved Ligowo.—S. L. K.: We have been unable to learn anything definitely about the standing of the Distributing League of New York city.—T. A.: For a list of the best varieties of fruit to plant for home use in Ill. write to the director, Ill. exp. sta., Urbana, Ill.

HARD TIMES—A Michigan friend (W. R. M. of Oceana Co) writes: "I have learned to love to peruse the columns of F & H. There is much good advice and counsel for the farmer. In the Nov 1 issue you say, 'Times are not hard in Colorado.' I have the October report of the U. S. department of agriculture. Colorado is quoted: Oats 22.6 bu per acre, barley 22.2 bu, rye 13.5, corn 68; corn the only full crop reported. Farmers (with few exceptions) are hard up. They must pay \$1 per day for help. Is this agricultural prosperity? With our great shortage when we say anything about prices, they say 'because of overproduction, and lots of farmers are fools enough to believe it. The farmer is oppressed above all other classes. Even legislation is against us. Is there a balm in Gilead?' Fresh testimony is always welcome. The indications as they come to F & H from all parts of the country have pointed uniformly toward prosperity among farmers of all classes. Is there balm in Gilead for oppressed farmers? My friend in Michigan is referred to an editorial paragraph in the issue of Jan 15, explaining exactly why farmers are sometimes overlooked by legislators. Other industries and interests make so much noise that congress dares not neglect them; farmers are not sufficiently organized, nor do they make enough noise.

WONDERFUL CURES BY SWAMP-ROOT.

To Prove What This Famous New Discovery will do for YOU, Every Reader of "Farm and Home" May Have a Sample Bottle Sent Absolutely Free By Mail.



65th Police Precinct, Greater New York, Nov. 11th, 1899.

Dr. Kilmer & Co., Binghamton, N. Y.:

Gentlemen—In justice to you, I feel as if it was my duty to send you an acknowledgment of the receipt of the sample bottle of Swamp-Root you so kindly sent me. I had been troubled for the past five years with kidney and bladder trouble. I had our best physicians prescribe for me. They would relieve me for the time being, but the old complaint would in a short time return again. I sent for a sample bottle of Swamp-Root and I found it did me a world of good. Since then I have taken eight small bottles and I consider myself perfectly cured. I do not have to get up during the night to urinate as I formerly did, three and four times a night, but now sleep the sleep of peace. My back is all right again, and in every way I am a new man. Two of my brother officers have used, and are still using, Swamp-Root. They, like myself, cannot say too much in praise of it. It is a boon to mankind. We recommend it to all of our friends, and we recommend it to all humanity who are suffering from kidney and bladder diseases.

My brother officers (whose signatures accompany this letter) as well as myself, thank you for the blessing you have brought to the human race in the compounding of Swamp-Root. We remain, yours very truly,

JAMES COOK.
HUGH E. BOYLE.
JOHN J. BODKIN.

Officers of the 65th Police Precinct, Greater New York.

What a Woman Says of Swamp-Root.

Mrs. H. N. Wheeler of 268 Boston St., Lynn, Mass., writes on Dec. 11th, '99: "About 18 months ago I had a very severe attack of grip. I was extremely sick for three weeks, and when I finally was able to leave my bed I was left with excruciating pains in my back. My water at times looked very like coffee. I could pass but little at a time, and then only after suffering great pain. My physical condition was such that I had no strength and was all run down. My sister, Mrs. C. E. Littlefield of Lynn, advised me to give Dr. Kilmer's Swamp-Root a trial. I procured a bottle, and inside of three days commenced to get relief. I followed up that bottle with another, and at the completion of this one found I was completely cured. My strength returned, and to-day I am as well as ever. My business is that of canvasser, I am on my feet a great deal of the time, and have to use much energy in getting around. My cure is therefore all the more remarkable, and is exceedingly gratifying to me."

MRS. H. N. WHEELER.

Among the many famous cures of Swamp-Root investigated by Farm and Home, the ones which we publish this month for the benefit of our readers speak in the highest terms of the wonderful curative properties of this great kidney remedy.

It used to be considered that only urinary and bladder troubles were to be traced to the kidneys, but now modern science proves that nearly all diseases have their beginning in the disorder of these most important organs.

The kidneys filter and purify the blood—that is their work.

So when your kidneys are sick you can understand how quickly your entire body is affected and how every organ seems to fall to its duty.

If you are sick or "feel badly," begin taking Dr. Kilmer's Swamp-Root, because as soon as your kidneys are well they will help all the other organs to health. A trial bottle will convince you—and you may have a sample bottle free for the asking.

When your kidneys are not doing their work, some of the symptoms which prove it to you are pain or dull ache in the back, excess of uric acid, gravel, rheumatic pains, sediment in the urine, scanty supply, scalding irritation in passing it, obliged to go often during the day and to get up many times during the night to empty the bladder; sleeplessness, nervous irrita-

bility, dizziness, irregular heart, breathlessness, sallow, unhealthy complexion, puffy or dark circles under the eyes, sometimes the feet, limbs or body bloat, loss of ambition, general weakness and debility.

Swamp-Root is used in the leading hospitals, recommended by skillful physicians in their private practice; and is taken by doctors themselves who have kidney ailments, because they recognize in it the greatest and most successful remedy that science has ever been able to compound.

To prove its wonderful curative properties, send your name and address to Dr. Kilmer & Co., Binghamton, N. Y., when you will receive, free of all charge, a sample bottle of Swamp-Root and a valuable book by mail postpaid. This book contains many of the thousands upon thousands of testimonial letters received from men and women who owe their good health, in fact their very lives, to the wonderful curative properties of this world-famous kidney remedy. Swamp-Root is so remarkably successful that our readers are advised to write for a free sample bottle and to be sure and mention reading this generous offer in the Farm and Home.

If you are already convinced that Swamp-Root is what you need, you can purchase the regular fifty-cent and one-dollar size bottles at the drug stores everywhere.

...OUR NEW...

Premium List.

Our Complete Premium List for 1899-'00 is now ready and will be sent free to any address in the United States or Canada, on application.

It is handsomely illustrated and contains upwards of 200 useful and valuable premiums, and some of the prettiest and most astonishing offers ever made by responsible publishers.

Now is the time to get up clubs, and by doing a little work for Farm and Home you may secure one or more of the many good things offered, free of cost.

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