

FOR FARM AND GARDEN.

Ferns as House Plants.

A well grown, thrifty fern makes a beautiful house plant, but delicate and tender kinds are not suited for parlor or sitting room. One great advantage of ferns as house plants is that they do not require—in fact, do not like—much direct sunshine, although they do require plenty of light. The majority of ferns thrive best in a compost of turfy loam, old leaf soil and loam, and some sharp sand. Growing ferns are benefited by a little manure. If succulent drainage is given they can hardly be over-watered; but the most important requirement of ferns is to have them sprayed overhead two or three times a week.

When to Subsoil.

Whether or not subsoiling will improve the ground depends altogether upon the character of the soil and also upon the amount of rainfall during the growing season. In dry sections where the subsoil is very compact, subsoiling is usually profitable. The breaking up of the impervious sub-surface layer lessens evaporation from the surface of the soil and provides a large storage place for moisture in the upper few feet of soil thus loosened. The roots of plants are better able to go downward and secure the necessary plant food and moisture. If the soil is moderately loose, with a sandy, open subsoil, this method of treating the ground is not profitable. Then, too, if there is sufficient moisture always available during the growing season, it is not necessary to subsoil. Try the subsoil plow in a limited way, carefully noting its effects on subsequent crops. You will then soon be able to determine whether or not subsoiling is profitable.—New England Homestead.

Lime in the Garden.

Usually the garden soil is full of humus, and lime may be used on it to good advantage. Lime is one of those elements of the soil which is essential to the growth of plants and trees, and when it is properly used a vast difference in the growth of the vegetation is noticeable. All farmers and horticulturists use it in many ways, but it is probably as often abused as used. The full and direct effects of lime upon plants under all conditions have not yet been fathomed, but enough knowledge concerning its general effect is possessed for one to use it intelligently on many crops. In the vegetable garden lime is invaluable. It is the best preventive and check for mildew on cucumbers and diseases of potatoes. As soon as the cucumber vines show signs of the disease, the powdered lime should be sprinkled over every part of the plants that are affected, and the operation repeated after rain so long as there are any signs of the mildew. If one watches the plants early in the spring, and applies the lime as soon as the disease manifests itself, it will never be allowed to make much progress, but sometimes in the case of plants being nearly dried up with the disease, the lime will give them new life and growth.—Farm, Field and Fireside.

Glanders in Horses.

Glanders in horses and mules are liable to occur at any time, and there have been recent reports of the disease in certain sections. It is ordinarily a fatal disease, only a few cases in man or beast ever having recovered. It is such a dangerous disease that treatment is too full of risk and too uncertain to be warranted. The pronounced symptoms are tubercles on membrane of the nasal passages, and, when these break down, there is a discharge of pus from one nostril and a swelling under the lower jaw. This swelling is usually about the size of a walnut, is tender to the touch, and not very firmly connected.

The disease in some horses does not make rapid progress, but remains stationary, giving no evidence of being dangerous. But such cases are exceedingly dangerous and are often the cause of spreading the disease broadcast. Horses have been known to have glanders in a mild form for a long time, to keep in good order and work right along, the real trouble never being suspected. In advanced stages of the disease sores may appear on the surface of the body. These are stubborn, discharge pus and can not be healed. Farcy, which is caused by the same germ, is indicated by farcy buds—swellings on the skin, usually on the legs—which break and discharge freely. The legs swell and become a mass of sores. Animals that even slightly show any of these symptoms should be immediately isolated until the character of the disease is determined. If it is glanders, kill the animal at once, and wash the stables and everything with which the horse has come in contact with a solution composed of one ounce of corrosive sublimate in two gallons of water. Wash several times at intervals of two or three days.—Agricultural Epitomist.

Importance of Milk Veins.

An examination of the stomach of an average cow that is producing milk will reveal thereon, extending from the udder along each side, a milk vein about one-half inch in diameter. These milk veins, at the point most distant from the udder, pass through what are called the milk wells in the walls of the abdomen. These orifices through which the veins pass should be of good size, thus permitting a strong flow of blood through them.

As a rule, the greater the milk-secreting power of the cow, the larger and more twisted of outline will these veins be. In such a case the cow may

have three large veins, the third being a shorter one between the outer two, and branching over the udder and on the belly immediately in front of the former, may be found quite a number of very pronounced smaller veins. These veins extend in no definite direction, being usually very irregular and somewhat knotted. The development of these blood-vessels becomes most pronounced with age, although there is a noticeable difference in their size and extent in young heifers. The writer has seen cows with remarkably large, long, elastic veins, which extended from the udder and disappeared high in the armpit at the front leg. Such veins may measure an inch in diameter, and on compression with the fingers exhibit great elasticity.

Writing of the milk vein, nearly twenty-five years ago, Hazard stated that, if large and tortuous, with a considerable opening through the muscles of the belly to admit of its passage outwards, it is frequently connected with a rich udder; but far greater reliance can be placed on the network of veins seen beneath the skin over the forequarters of the udder. This characteristic is little noticed by authors, and dairymen or dealers in cattle rarely speak of it. But both the veins and the udder itself, and those which pass upwards behind towards the tail, when large, are sure tests of a competent milker.

Scientific Farming.

Scientific farming is farming in accordance with nature's immutable laws. That is what farmers have been trying to do since the very first beginnings of the industry. These laws men have measurably learned by experience. Should each depend on his own experience for the knowledge needed to guide him in his industry, he would not learn in his lifetime the alphabet of farming. He has unconsciously benefited from the accumulated experience of ages. Could he not benefit more, now that so much has been learned, by frequent farmers' meetings, discussions of methods and exchange of experiences?

Farmers should learn the objects and appreciate the value of the agricultural experiment stations. The object of the station is to ascertain what crops, and what particular variety of crop in its own state will give the best results, how they can best be cultivated, protected from damage by drought or insects, cared for during and after harvest; how the values in the soil may be maintained at the least cost, and what manures, commercial fertilizers or crops will best maintain fertility; what is the best rotation of crops; what varieties of fruit to plant, when to plant and how to care for them by culture, manuring and pruning; how to feed livestock to obtain the most and the best quality of meat at the least cost and in the shortest time; how to do best all the many necessary things in the care of the dairy herd and the making and care of dairy products. These are only some of the matters which the stations are investigating with a scientific and practical training and with such equipment as can only be had at such public institutions. Each investigation entered upon is followed up persistently until results are obtained that enable the station to say in its bulletin thereon something that has practical value to the farmers, and the officers of these stations are always glad to give freely the information thus obtained to the farmers who will take the trouble to apply for it. The farmers themselves could extend the value of this experimental work by organizing local farmers' associations, undertaking certain experimental crops, methods of culture, etc., under the advice of the station officers, discussing the work at their meetings and reporting results to the stations.—Texas Farm Journal.

THE COTTON BELT.

Where Our Twenty Million Acres of Cotton Are.

The cotton belt covers 24 degrees of longitude and 10 degrees of latitude. Excluding from the count the greater part of Virginia, more than 100,000 square miles in western Texas and the whole of Kentucky, Kansas, Missouri, Utah, California, Arizona and New Mexico, in all of which cotton has been cultivated, and where a larger demand might cause its culture to be extended, the cotton-growing region measures nearly 600,000 square miles, almost one-third of the total area of settlement in 1890 of the United States. The 20,000,000 acres planted in cotton occupies barely five acres in every 100 of this extensive region. Scarcely 50 per cent. of this territory is in farms and not more than one-fifth has at any time been tilled. This section contained in 1890 a population of over 8,000,000 whites and something over 5,000,000 negroes, in all, 13,651,007, every 100 of them producing 53 bales of cotton, an average of 254 pounds of lint per capita.

In 1801 South Carolina led the other states in the production of cotton. In 1850 Alabama stood first. Mississippi led in 1860-80. Texas stood at the head in 1890, and still does. The centre of production was near Montgomery, Ala., in 1850; this centre had moved two miles west by 1860. In 1870 it was near Carthage, Miss., and in 1880 was in Noxubee county, Miss. In 1890 it was 60 miles northwest in Attala county. It is moving west all the time on account of the increasing crops in Arkansas, Texas and the Indian Territory, not to mention Oklahoma.—Ainslie's.

The oldest resident of the town of Emporium, Kan., is J. P. Mather, who is said to be a direct descendant of Cotton Mather. Though 85 years of age he goes daily to a gymnasium and exercises on the bars.

LAWTON'S WIDOW.

CHARMING WOMAN TO WHOM HE WAS DEVOTED.

A Grateful Country Will See That the Object of His Affections Shall Not Want For the Comforts of Life—As Heroes Die.

"I am ready to die a soldier's death at any time. I have no fears for myself. But I am sorely troubled when I think of what would become of my wife and children in such an event."

Thus spoke Gen. Henry W. Lawton to a friend last summer. He died as heroes die—at the head of his men in a warm engagement and while aiding a wounded subordinate. He left no fortune. Forty years of his life were given to his country, but his pay was inadequate to do more than support himself and his family. But a grateful country will care for them. The fund which is to be presented to Mrs. Lawton as a testimonial of Americans' admiration for her gallant husband will probably reach \$75,000. It is growing fast.

Mrs. Lawton was Miss Craig, of Redlands, Cal., and the general's happiest days were spent on their fruit farm in California, when the great soldier was stationed at Los Angeles. The orange groves and the residence at Redlands are heavily mortgaged, but the fund will provide for this and for her future comfort. Mrs. Lawton and the children are at Manila.

The marriage of the general and Mrs. Lawton was unusual. At the Craig homestead, near Louisville, Ky., lives a favorite and invalid cousin of Mrs. Lawton, who was anxious to witness the marriage ceremony. A few days before the date set for the wedding the cousin began to fail. It was seen that she was dying. She realized it and asked that Gen. (then major) Lawton and his bride-to-be be summoned to her bedside and there (the day before the appointed date) Miss Craig became Mrs. Lawton.

AFTER THE GOLD BOOMS

Importance of Reactions in Determining Population.

The law that settlers follow the line of least resistance suffers an exception when men are seeking gold. In the natural order of things, population would have worked itself in a continuous progression toward the Rocky Mountains, crossing them only by compulsion, as the Alleghenies were crossed and the Mississippi and the Missouri rivers. But where there is gold in sight there is no law. Humanity goes into Alaska with the same blind avidity that it went into California fifty years ago, with the same fatuousness that it swept to Pike's Peak in 1858. Population forsook all its domiciles, its patronages and its prosperity, in the Argonaut period, and

into the warmer regions of California and Oregon. Where the Comstock and the Consolidated Virginia silver mines once magnetized so many settlers as to beguile congress into making a state of Nevada, there is little left now but the evidence of what has been and the promise of what may be when the immigration of the west begins to move again for less glorious promises than acres of oranges for the mere tilling of the soil and monster timber for the mere hewing of the logs. The mesas of the two southwestern territories, Arizona and New Mexico, seem to have absorbed the hosts of traders and adventurers that went into them as the sandy soil of their great areas drink in the freshets from the mountains.—Ainslie's Magazine.

AN ELOQUENT CLERGYMAN.

One of the most eloquent clergymen in New York city at the present time is Rev. Thos. R. Slicer, pastor of All Souls' church. Although a comparatively newcomer in the metropolis, having removed there from Buffalo three



REV. THOMAS SLICER.

or four years ago, Mr. Slicer has already made a large place for himself in the religious, political and civic life of the city. He is one of our best after dinner speakers, and is in constant demand for functions of this kind. An excellent example of his style and trend of thought is furnished in the following paragraph from his sermon on Thanksgiving day: "The first business of every American," said Mr. Slicer, "is to be fit for America. He may regard it as a good stand for business to enrich himself, but being enriched he is the trustee of those riches, and not their owner. He may regard it as a great opportunity in which to be free, but the only purpose of freedom is to live the higher life. I believe in the sovereignty of the people in the great democracy, which is working out its salvation and the salvation of the



MRS. MARY CRAIG LAWTON.

as if driven by some monstrous wind, surged over the uneven earth to the Pacific and to the Rockies. The whole world knows how it did so, and the suffering that ensued is as common a story as the fortunes that were won. But the thing that is not known, the matter of lasting importance that is most often overlooked, is the migratory reaction, the settling back of the big flood to the places in which, either by necessity or by the choice, it must finally rest. The character of the great west, the transmissouri, with its multiple variations, is determined by this phenomenon. A map and a book of census statistics will tell the story. It is the story of the oil from the pitcher again. Men and women touched the coast of the continent at Leadville, in Colorado, in 1858, but fell back onto the plains again before the '60s were expired. The Mormon emigration filled the valley of the Jordan in 1847, but the general tide of people either went to the lower valleys of the Sacramento and the San Joaquin on the oriental side of the Sierra Nevada or receded on the eastern slope of the Rockies. Successive mining discoveries enticed hordes of prospectors into northern Idaho and British Columbia, but the greater mass of the movers went back

world." Dr. Slicer is actively engaged in aiding the movement in favor of municipal reform, and is one of the closest and most confidential friends of Gov. Roosevelt.

The Twentieth Century.

It is quite time that every body who is disposed to be eloquent over the new century should realize that it does not begin on Jan. 1, 1900. The first century began with the year 1 and ended with the year 100. Unless there has been a year inserted somewhere, there is, therefore, no escape from the conclusion that the nineteenth century does not end at the close of the year 1900. A curious act in reference to the new century is that it will have twenty-four leap years, the greatest number that can possibly occur in a century. The same yearly calendar that did service in 1895 can be used again in 1901, and may be used again at successive intervals of six, eleven and every eleven years throughout the century.

Some Weakness.

Visitor (at prison)—Why are you here, my man? Convict—Same reason you are mum. I'm a poor, sloppy, morbid, neurotic, half-baked degenerate.—Judge.

FOR WOMAN'S BENEFIT.

"Petticoat Squad's" Uniform.

The question of dress is at present causing much agitation among police matrons in New York City. Opinions differ as to the proper cut for the new uniforms which were ordered some time since for the "petticoat squad," but till the moot question is settled the dark blue serges will remain uncut.

Popularity of the Finger Purse.

The many "snatch" thieves who infest the streets have driven the pocketless woman to various expedients for protecting her purse. The English "finger purse," with a strap through which the hand passes, has proved its right to popularity by successfully resisting a number of attempts to snatch it during the holidays. A newer idea is the bracelet purse, which consists of a padded bracelet, with strong chain firmly attached to the purse.

County Treasurer Miss Tulley.

San Juan county, Col., has for its treasurer a young woman, Miss Nellie Tulley, sister of Thomas H. Tulley, private secretary to Governor Thomas. Miss Tulley was born in Tonawanda, N. Y., and went to Silverton, Col., in 1895. She was appointed deputy postmaster in that town, a position which she held until her election as county treasurer. Miss Tulley was a candidate on the Democratic ticket, and after an unusually lively campaign was elected by a majority of 325.

The Queen's Laundry.

Queen Victoria's laundry occupies a most picturesque site on the borders of Richmond park, which, despite its nearness to London, is still one of the most beautiful sylvan scenes in England. "White Lodge," the home of the Tecks, is also located in Richmond park. An ivy covered cottage guards the entrance to the drive. A fine drive, lined on both sides with lawns and flower beds, sweeps up to the entrance of the house attached to the laundry, where the superintendent, Mr. Wilson, lives. The laundry is a large square building, with a small wing at one side, and herein her majesty's personal linen is laundered. Huge cupboards line the stone passageway. They are filled with soap, which is purchased by the ton. The entrance hall is stacked with big baskets, in which the linen is packed. The "sacred wing" contains three rooms, sorting, washing and ironing. The majority of the linen is worked in red cotton—V. R. L., with the palace underneath; O. H. means Osborne House, B. P. Buckingham Palace, W. C., Windsor Castle, and so on. Most of the laundering is done by machinery. It requires a large army of persons, who in themselves would form a little colony, to attend to this laundry.

Signs of Spring.

Signs of spring are upon us just as the coldest weather has come. The florists are displaying sweet peas, hyacinths and azaleas, which usually appear at Easter. The dry goods stores are exhibiting the thinnest of muslin and lace underwear, summer organdies and the new shirt waists. A pretty sight is the filmy ribbon trimmed lingerie now on view in the high class shops. One exquisite corset cover is a dainty lattice work of narrow lace insertion and fine linen lawn. Narrow pink ribbons form the shoulder straps. The next thing will probably be all over lace underwear. Extravagance cannot go much further. The new shirt waists show scarcely any change from last season's style, although there is a growing tendency to elaborateness, especially in the white waists. Some beautiful models in white are composed entirely of lace and embroidery insertion in alternate lengthwise strips. Others are tucked all over, even the sleeves. Hem-stitching is used a great deal. There are several waists in solid colors, such as pink, pale blue and lavender, with a dainty, vine like pattern in white on either side of the pleat. Tucked yokes will be worn again, often a white yoke with colored waist. Stripes will be almost as popular as last summer, when everything was criss-crossed. It is going to be another white year, without doubt.

A Brice-a-Brac Surgeon.

The art of mending precious pottery and statuary has long been an interesting one, and one that has been followed with more or less success, but it was not until recently that it attracted particular attention, through the work of a Boston girl, who makes a specialty of repairing all sorts of porcelain, statuary, fine cut glass and precious pottery. In one year she patched up \$300,000 worth of fragile ware, and as she got nearly ten per cent. on the value of the goods repaired, it can be figured out what her income for a year amounted to. The girl began by inducing a large department house to allow her to repair, not only their own fine pottery and glassware, but to take orders from the customers of the house who brought their broken ware there in the hope that there was some one in the establishment who could fix it. She was an artist, to begin with, and in addition she had a good deal of mechanical ingenuity.

Later she took a contract from an art museum in Boston to do such work of this kind as the museum could supply. This included many rare vases and other articles which are dug up in the old world fields, and which reach the museum a mass of a thousand fragments. The little pieces are taken to the studio of the brice-a-brac surgeon, and there the artist mechanic spends hours and days and weeks in

assembling the fragments and putting them together.

She uses a particularly fine kind of cement, which is made from the albumen of eggs, mixed with evaporated whey. This cement will endure heat and moisture, and is everlasting.

One of the last triumphs of this girl is a built up glass urn from the valley of the Nile. This precious relic is exhibited in a museum. It is apparently flawless, and through it the beautiful hues of the rainbow shimmer like the dancing colors of a soap bubble in the sunlight. Yet this urn came to the museum in thousands of little bits. So carefully have these fragments been put together that scarcely a trace of the mending can be seen even by the keenest eyes.—Baltimore Herald.

Strong College Girls.

In reopening the regular gymnasium work for the year at Smith college, President Seelye took occasion to emphasize his well known position with respect to the value of such work in college life and placing it upon an equality with intellectual training, says the Boston Transcript.

To it also he attributed much of the improved health of American women in the last twenty-five years. This is no optimistic fancy, but a demonstrable fact.

The gymnasium work alone would hardly account for the improved physical condition of college women, but taken in connection with the system of rational athletics which prevails at almost all these institutions it has made a noble record.

The time may come, if in fact it is not already here, when instead of fearing that the daughter of the family will be broken down by overstudy and graduate with a mental equipment gained at the expense of a weakened body, she will be sent to one of these institutions as much to strengthen her physique as to improve her mind.

Bicycling, swimming, skating, tennis, golf, basketball, boating and other forms of healthful out of door exercise that keep the muscles firm and the nerves well braced are working wonders for the present generation of young women, and this influence is extending out from the colleges and having its influence upon the less pretentious educational institutions and upon the social life generally.

Novelties Seen in the Shops.

Black silk stockings with real lace fronts.

Lorgnette and fan chains in heavy rope designs.

Extra heavy muff chains with enameled slides.

Chinchilla and mink turbans adorned with flowers and lace.

Many venetians and broadcloths in various shades of violet.

Embroideries of colored silk showing gold or silver traceries.

Mane aigrettes and paillette-encrusted fancy feathers in millinery.

French flannel wrappers in a variety of soft colors trimmed with lace.

Eton jackets made of velvet or velour edged with sable or other fur.

Nets and transparencies covered with filter in ennis arrangement.

Fur muffs and collars trimmed with chiffon pleatings or rich cream lace.

Jack tar reefers of kersey, chinchilla and frieze for small boys' wear.

A great variety of small artificial flowers for decorating evening costumes.

Oriental jeweled belts, buckles, purses and boxes in elaborate assortments.

Novelties in pocketbooks, upon which are embossed various figures in copper tints.

Silk undervests in light colors elaborately embroidered in addition to appliques of cream lace.

Ruched boas of white silk edged with loops of black chenille having long stoles of chenille fringe.

New designs in white cotton shirt waists, many of which are elaborately trimmed with lightly patterned lace.

Dainty dimities, Swiss and corded muslins, cotton mousselines and piques in a full line of exquisite new designs.

A broad range of entirely new ideas in sheer applique muslins for separate waists and general trimming purposes.

Cream lace allovers and shaped pieces showing rich appliques made of chiffon in different tints and hand paintings in floral designs.—Dry Goods Economist.

A Man of Iron.

"So General Lawton has at last fallen a victim of his own reckless daring," said Robert B. King of St. Paul, who served in the Philippine campaign with the Thirtieth Minnesota. "I am not really surprised, nor do I think any one will be who was familiar with the general's utter and conspicuous fearlessness. He outwardly better fitted the descriptive phrase 'A man of iron' than any one else I have ever seen. His great height and powerful figure, without an ounce of superfluous flesh; his skin tanned a dark brown by exposure in all sorts of climates, and his gray hair and mustache gave him a look of absolutely tireless strength, while his piercing, yet kindly, eyes lighted and lightened the dogged look of his face, which might otherwise have seemed almost sunken.

"Personally, of course, I never came in contact with him, but his men absolutely idolized him, and would go anywhere he sent or led them. The insurgents feared him more than they did any, and perhaps all, the other American commanders. Think of his standing there in front of his men, clad in a Cape Cod tarpaulin, and of what a conspicuous mark that six-foot form of oakum made! How sad that his death should come with the war all but ended.