THE WHEAT PLANT.

low and Deep Sowing. "I have always had the impression, and it is general, too, that a wheat plant had two sets of roots. In order to learn the exact mode of the growth of the plant and of its roots, I planted Sept. 26, 1898, two grains of wheat, one (Fig. 1) one-half of an inch deep and the other (Fig. 2) two inches deep.

No. 1 came up three days before the other, and they were dug up Dec. 20 and washed. Notice that the head of

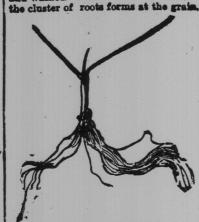


FIG. I-WHEAT PLANT. and in the one-half inch deep plant the roots and the stalk or the lower end of the stalk are formed together. In the two inch deep plant there is a small cts the base or lower end of stalk with the head of the cluster

"If you examine a wheat plant that has been frozen out, you will find that there is no cluster of roots, but simply the stalk cut off, as shown at A in Fig. 2, but in Fig. 1 the cluster of roots and broken. I think the proper way is to cover wheat very shallow, just so it is covered on ground that is inclined to than that grass. be wet and heaves out by freezing, but dry weather the best; consequently drained land is the best and more sure to raise a crop, and shallow sowing is the best on undrained land."

Commenting upon the foregoing communication from a subscriber, the Ohio

Farmer remarks: When the seed is planted deep, two sets of roots are produced, one from the bulb at lower end of stalk and one from the seed grain below. This is really the case whether the seed is planted deep

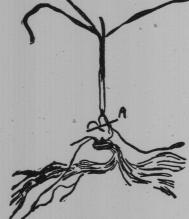


FIG. II-WHEAT PLANT. er shallow, but in the latter case they are close together and form one cluster to all appearance. Hence in land that heaves up, shallow sowing is best, as the heave up with the soil and settle back again when frost goes out. In deep sowing the stem is broken in two between the primary and secondary roots.

Potato Queries In answer to a question as to the best

method of planting potatoes The Farm Journal advises: 1. All things considered, we prefer to plant in drills rather than in hills, the drills being 2½ or 8 feet apart, according to soil and variety, and the seed being dropped 12 to 18 inches apart. 2. We have always been able to grow satisfactory crops by spreading fertilizer in the bottom of drill and mixing it with the soil before putting in the seed. 3. The number of eyes to leave on a seed piece depends a great deal on the variety and on the size of the seed tubers. Heavy setters require fewer eyes than varieties that are less prolific in tubers. When small tubers are used for seed, more eyes must be left on the piece than when the tubers are large. We usually cut early potatoes when large to one or two eyes, but White Stars and similar kinds have done well for us when we have used medium tubers cut in half or planted

Bacterial Rot of Cabbage. As there is no remedy known for bacterial rot of cabbage, prevention must be relied upon. These measures are recommended in The National Stockman and Farmer by Professor Stuart of the

ladians station: Avoid planting in land on which infected plants have been grown. Several years may be necessary to rid the land of the germs.

De not use manure containing de-

ceyed cabbage leaves or stalks either in the seedbed or field.

We land should be avoided, as it fa-ves the development of the disease.

Keep the plants as free from insects

Remove and destroy all discussed plants of portions of the plant as action as discussed condition is noticed.

HAYING TIME.

nray Cutting-How to Cure Glover, About Machines.

All the clover should be cut in June, at the time when it is fully in blossom and a few of the heads begin to turn down. At this stage of growth the clover is richest in nutritive value, and it is not too late to get a good after growth. Clover can be cured even during wet weather, provided it is kept from rain by hay caps after it has partially dried. While it is green as cut, wetting it as it lies spread upon the ground does clover little injury. It always gets wet while standing and is not injured a particle. But after the clover begins to dry it should at once be put into small cocks and covered with hay caps. This keeps out the rain and the clover begins to heat in the small cocks. Then if there is a dry spell even for a few hours put two or three tensions. It is the most favorable month in the year for giving the birds a good start and making of these cocks together, moving each one so that it will be exposed to the air. Then cover the large cock with a hay cap and leave it 24 hours. Then if hay cap and leave it 24 hours. Then it is dry weather draw it to the barn.
This double heating of the clover, first in a small cock and then in a large mites. I discovered long ago that the best time to kill these little perts is just best time to kill these little perts is just bleaching or blackening it to any great extent. With uniformly dry weather it is easy to get clover to the barn almost as green and bright as it was after it. Rerosene applied to the perches once a Kerosene applied to the perches once a

deferred until July, but it believes in June grass cutting, and all the more in a season when the grass is short and cannot make much bulk. What is lost in amount is gained in quality, and if cut the last of June and July proves to be the rainy month of the year the early cut grass will make a splendid after growth that will be larger sometimes growth that will be larger sometimes than the first crop. It is a mistake to wait for grasses to run up into stem and blossom fully. If cut just as the stems of timothy begin to show over the field, the grass will be much less in quantity than if left a week or a month base of the plant are together and are nearer to the top of the ground, and they draw up with the plant as the frost heaves the ground up and are not which should also be cut before it fully

be wet and heaves out by freezing, but on ground that is well drained and that is not inclined to freeze out the plant is not inclined to freeze out the plant Fig. 2 is all right and will stand the secured in advance. There should be entire sets of knives on the bars, and fully protected by full sets of thing to have around the poultry house. guards, to replace any that may be broken. It is better to have all these in stock, as men and teams have often been delayed several hours when a bar broke or some other part of the machinery got out of order, while some one was sent to the city to procure a new one. The repairs cost heavily if bought separately from the machines. There is so much competition among dealers in implements to sell machines that the manufacturers have given up trying to make much on them, but they tuck it on when the buyer goes to buy

> Cultivating Dew Into the Soil. Any one who gets out at work on the fields early in summer will find the spring is much colder than the air, says the spring before you are ready for it.
>
> The American Cultivator. This dew is If you do, you won't have a brooder fit condensed moisture in the form of steam, which has taken from the air some ammonia and some carbonic acid gas. It is therefore softer than rain wa-They do a forenoon's work by 10 or 11 during the heat of the day. This is beteating hurriedly and sating the princiadvantages of this plan is that it turns some dry soil over the dew, thus saving its fertilizing properties from waste.

Killing Weeds. It does not pay to make any false either cut off the leaves of a weed or allow others to do so before uprooting it if you want to kill it. We had a hired man once who persisted in spite of all we could tell him in striking twice little things as you should, you will with his hoe to destroy a weed. With his first blow he struck the weed, just at the surface of the ground, cutting off all the top. Then he struck deeper and turned up the root. Invariably if a rain or cloudy weather came that weed grew. It was simply transplanted under the best conditions for growing, much root and little top. We let the man go after a few days' trial to reform him, but without effect. He was too stupid to know how to handle a hoe, savs an exchange.

When to Water Plants The best time for watering is thought to be at evening, but Bellair says: "In the spring in the middle of the day, because the morning and evening are too sool; in the summer at evening, because the days are so hot that a great part of the water given during the day would be evaporated immediately; in autumn in the morning, because the nights are

IN WARM WEATHER.

After Your Hens and Young Stock. Look sharper than ever for lice. The cold weather this spring has kept lice and mites somewhat shady, but they are not dead by any means, and every effort should be made to prevent them from becoming too numerous to men-

Take more pains in keeping everything about the place clean and in perfect sanitary condition. Warm weather is approaching, and the time for various summer complaints is at ways gets wet while standing and is hand. Most of these come from dirt or

Don't let the young stuff stop grew-ing for a minute. June is the most fa-vorable month in the year for giving the birds a good start and making

week will usually hold them in eheck. The American Cultivator, in expressing the foregoing opinions, remarks that what it has to say about grasses should, according to many farmers, be deferred until July, but it believes in the continuous and all the more in the continuous cultivations are continuous continuo this confines the mites to the perches, where they can easily be got at. For the big lice I have found nothing superior to fresh Persian insect powder. Go into the house after the fowls are asleep and dust them well with the powder, or if they are very bad take latest touch of elegance your embroidthe birds separately and, holding them up by the legs, dust down into the feathers with a common powder gun.

> bright sunshine. Open the poultry house during the day as much as possiand kills off odors and is a pretty good If you cannot get dust, use dry garden soil, sprinkling it over the floor every day, and when it is an inch or so deep haul it out to the garden with the drop-pings that are in it, and it will be worth all the work you have done to get it into and out of the poultry house. Hens do not care whether their house is clean or not, but the owner will consult his own interests by keeping the premises as clean as possible, especially during the hot months of the year.— Miller Purvis in American Poultry Journal.

Care of Brooders. As soon as the chicks are out of the brooders and you are through using them for the season clean them up and leaves of plants and even the surface get them into winter quarters out of soil wet with dew which has been de the way. Don't put the brooder away posited during the night, as the soil in dirty and think you will clean it up is

ter and also richer in manufial ele- hot soapsuds to which a little kerosene ments. If this dew is left uncultivated, it evaporates when the sun gets up high enough to shine on it, and all this fertility vanishes into thin air. We know off with a cloth, wiping the boards dry. tility vanishes into thin air. We know off with a cloth, wiping the boards dry. farmers who get their teams out to cul- Wash the hover felts if they are dirty tivating corn and potatoes while both and make the whole clean. If it is a the soil and plants are wet with dew. clean out the hot air chamber. You o'clock, and then take for themselves will be surprised to see what a lot of and teams three to four hours' nooning filth has found its way in there. Turn the brooder upside down and brush the ter than beginning work late and then sheet iron free of soot. To keep it from rusting apply a thin coat of raw linseed pal meal of the day without any rest oil to the iron. Leave the brooder open in which to digest it. One of the main in the sun, and let it thoroughly dry before you put it away. Have all the parts in place and everything where you can lay your hands on it when wanted. Clean up the lamp, and do not put it away with oil in it. Wrap it up in newspaper to keep it free from dust. If it is a tin lamp, scrape the motions in hoeing, especially if killing dust. If it is a tin lamp, scrape the weeds is the object. Above all do not blistered paint out of the water pan, make it clean and dry, and then give the pan a fresh coat of some good water proof paint; in a week put on a sechave a good, clean brooder to use when needed, and you will also save money.

> simply a form of acute indigestion, the result of a monotonous and never varied grain diet and a lack of grit and

exercise.-Indiana Farmer. The struggle for the leadership in Maine promises to be between the Barred Plymouth Rocks and White Wyandottes. Go ahead, boys. You cannot have too many of either of these deservedly popular breeds .- Maine Farm-

Mrs. Kirby of Bridgeport, N. J. cracked the shell of one of the eggs she was putting to hatch under a hen, but she patched it with adhesive plaster and let it go with the others. It hatched out the biggest chick in the

SUMMER COSTUMES.

THEY ARE AIRY AND UNSUBSTANTIAL BUT FASCINATING.

Dotted Muslins, Tucked and Lace Trimmed, Meet Popular Favor. White Silk the Chic Dress Lining. Smart Etons and Other Small Coats.

"Summery" is the one word which best describes present fashions. The in-tense heat early in the season has successfully launched all manner of airy, gauzy gowns upon the summer sea of popularity. Filmy, transparent fabrics for full dress quite overshadow silks Dotted muslins, lace trimmed and

tucked up, down, across or "as you like it," are extremely fashionable. The really swell lining of the



kinds is white taffeta. To achieve the ered muslin, organdie or chiffon must be made up over this. But muslins, etc., are also worn over colored glace There is no better disinfectant than silk or fine sateen, the slip made quite

distinct from the gown.
Organdie muslins in delicate pinks, ble and get all the direct sunshine into blues and greens make up prettily with round and tight at the top, is a favored fashion, or several very narrow flounces quite at the edge.

Next to pure white in the scheme of dress and underslip, harmonies of color prevail, violent contrasts being for the

time unpopular.

The dainty gown of the first cut in cludes one of these charming color arrangements. It is of heliotrope silk muslin, the skirt long and full and decorated with narrow flounces of the muslin and with simulated panels formed by narrow ruches, also of muslin. The slip or foundation is of heliotrope taffeta and the bodice is made on a tight

lining of the same color.

Dotted muslins are also worn over pale colored slips, and as gowns of this type are best sent to the chemical cleaner both make and trimming can be as elaborate as desired. The model in the second cut is very smart and is simply



TWO CHIC GOWNS. trimmed with quantities of insertion lace. The skirt is cut in the full fluted style and is quite distinct from the

skirt of cream taffeta. There is immense variety in little open coats which are just the thing for smart costume for the summer holiday. One of the most chic styles is the new Eton, with spade or tabbed front, which is most becoming to a small figure and sufficiently uncommon to look smart. A costume with this coat, shown in the second cut, is of gray cloth, trimmed with dark gray and white braid. The Eton coat fits closely into the waist at the back, and two lines of Many cases of so called cholera are the braid simulate curved seams and imply a form of acute indigestion, the cross the shoulders and outline the fronts. The collar and revers of white silk are closely covered with lines of the braid, and the fronts are also faced with the same white silk.

The Chie Thing of the Season. "The chic thing of the season is the black silk coat of tucked taffeta, bordered all around with a stitched band of plain taffeta. These form decidedly one of the most fashionable features of the season's fashions," says the New

York Sun.

Both black and white silk taffeta coats will be worn with cotton, silk, wool and lace gowns this season. They are made of the soft, thin and consequently expensive taffeta, finely tucked and lined with white. Some of them Mr. Saunders says: Water at any time when the plants need it, and water thoroughly. When I am told that watering in the sanshine at noon will burn up my plants, I answer that the plants will certainly burn up if I do hot water them.

YACHTING GOWNS.

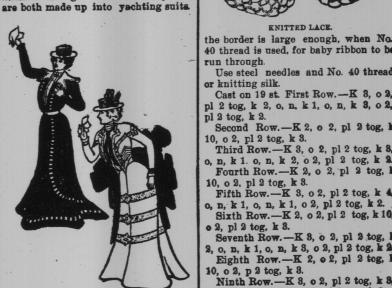
Truly Feminine In Style-White the

There must be all kinds of gowne in the summer outfit of a fashionable woman-something for morning, afternoon and evening, and special gowns for outdoor sports, without which life at the summer watering places would lose half its charm. But the yachting suit is as truly feminine as any dress this season with its long akirt, shaped founce and festooned bands of satin, edged with fine silk gimp. White seems to be the prevailing choice for this sort of dress, and cloth, serge, flannel, plain linen and duck are the favorite ma-

terials. All kinds of gowns are affected by the fashion for long skirts, without very much regard for the purpose for which they are intended. To be sure, there are degrees of length, but the yachting skirt is long enough more than to touch the floor all around.

The circular flounce in varied widths is the feature of many of the yachting skirts, but others are cut with the long flaring gores and trimmed with wide stitched bands. Many rows of stitching in colored silk make a pretty finish on the white cloth gowns, which in some instances are made with a blouse waist, finished with a deep sailor collar, a white chemisette and stock of tucked silk, and a sailor tie of white banded across the ends with blue silk.

Cloth and fine flannel with a cloth finish in the light colors and navy blue



SUMMER AND YACHTING DRESSES. One very striking model in dark blue has three scant shapped flounces around the skirt piped on the edges with white. These are fully six inches wide, overlapping each other a little, a white piping finishing the upper flounce. The overdress is spotted all over with small embroidered rings of white linen such as are used in the renaissance lace work. They are also sewed on the blouse bodice, which is completed with

white pipings and a white pique vest. Yachting suits of linen and pique are very much the fashion, and checked linens in the natural flax color are worn by the English women for what they call river suits, as the stuff will not fade in the sun. Tailor made yachting suits of white duck, finished with stitched bands of the same, are extremely elegant this season, made with the short scalloped coats so much seen in cloth and worn with a pretty colored taffeta silk waist all fine hand run tucks

and open lines of hemstitching.

Pale blue linen, decorated with bands of white linen set in and strapped across with narrow stitched bands of blue, makes a charming summer gown. A very chic yachting suit of white cloth is trimmed with stitched bands of pale blue cloth, and pretty linen batiste waists to wear with these gowns show innumerable fine tucks, says the New York Sun in concluding an illustrated resume of summer dress, from which these items are reproduced.

The Frenchwoman's Slim Effect. The tight lacing of Frenchwomer has passed into a proverb. But makers of fine lingerie will explain to any one who has the curiosity to investigate that the slim effects for which the Parisian is famous are obtained quite as much by the manner of wearing the undergarments as by their cut or by any straining of the corset strings, says the New Orleans Times-Democrat.

Here, for example, is a point to be noted: Whereas, skirts in America have had a habit of coming to the waist line, no French girl would so far mis-shape herself as to let the skirtband come higher than the second clasp of the corset. An inverted hook catches all skirtbands in her toilet and holds them well down in front, though the strings tie at the waist behind. When a short waisted Eton or bolero corset is donned with such a skirt arrangement, French art accomplishes a result to parallel which an American girl, with her accumulation of garments at the waist, would have to pinch and get red in the face drawing up her lacings.

Fashion's Echoes. Even the bicycle skirt has added inches in this season of street sweeping and trailing robes, and wash skirts are made so long that at the sides and in the back they lie on the ground several

Innumerable yards of puckered black elvet ribbon are used in trimming white organdies.

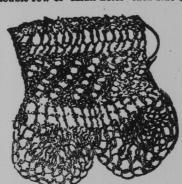
Silk percaline is a new lining fabric, nexpensive and light, combining silk with cotton. Fashions were never more becoming

to the short girl. In a trailing princess gown she attains a dignity unknown in he day of sensible short skirts. Madras, fine gingham, duck and pique all figure in serviceable summer

SUMMER FANCY WORK.

Knitting Furnishes Fashionable and Pleasant Occupation. Knitting is becoming once more a popular accomplishment. It will proba bly be in greater favor than ever this summer as convenient "pick up" work when lounging on piazza or lawn. A bit of delicate lace making is congenial occupation, and the practical woman knows also that she can in this way accomplish yards upon yards without conscious effort.

The accompanying design is given by The Designer, which says:
Knitted in fine thread this lace is very pretty to trim cambric underwear, while in knitting silk or saxony yarn it makes a good edging for flannel skirts. Without the scallops the directions would make pretty insertion to use with lace. If a heavier edge is desired for the scallops, a row of thay crocheted shells may be added. The double row of small holes each side of



KNITTED LACE. the border is large enough, when No. 40 thread is used, for baby ribbon to be

run through. Use steel needles and No. 40 thread or knitting silk. Cast on 19 st. First Row. - K 3, o 2,

pl 2 tog, k 2. Second Row.—K 2, o 2, pl 2 tog, k
10, o 2, pl 2 tog, k 3.

Third Row.—K 3, o 2, pl 2 tog, k 8,
o, n, k 1. o, n, k 2, o 2, pl 2 tog, k 8,
Fourth Row.—K 2, o 2, pl 2 tog, k 8.

10, o 2, pl 2 tog, k 8.

Fifth Row.—K 3, o 2, pl 2 tog, k 4. o, n, k 1, o, n, k 1, o 2, pl 2 tog, k 2. Sixth Row.—K 2, o 2, pl 2 tog, k 10, o 2, pl 2 tog, k 8. Seventh Row.—K 8, o 2, pl 2 tog, k

2, o, n, k 1, o, n, k 3, o 2, pl 2 tog, k 2. Eighth Row.—K 2, o 2, pl 2 tog, k 10, o 2, p 2 tog, k 3. o, n, k 1, o, n, k 2, o 2, pl 2 tog, k 2.

Tenth Row.—With empty needle
pick up, 3 st along the lower edge, o,
pl 1, make 2 st out of the next st by k

1, pl 1, o 2, pl 1. Eleventh Row.—K the 6 st back and forth, thus, o 2, pl 2 tog, until there are 15 loops along the strip on lower

Twelfth Row. - With the needle that has 19 st on it pick up 14 loops, k 1, al it on left needle, the sl remaining 18 loops over it, n, o 2, pl 2 tog, k 10, o 2, pl 2 tog, k 3. Thirteenth Row. - K 8, o 2, pl 2 tog

k 4, o, n, k 1, o, n, k 1, o 2, pl 2 tog, tog, turn.
Fourteenth Row.—K 1, o 2, pl 2 tog. k 10, o 2, pl 2 tog, k 8.
Fifteenth Row.—K 8, o 2, pl 2 tog, k 2, o, n, k 1, o, n, k 8, o 2, pl 2 tog.

k 2 tog, turn. Sixteenth Row.—K 1, e 2, pl 2 tog. k 10, 0 2, pl 2 tog, k 3.
Seventeenth Row.—K 1, 0 2, pl 2 tog, k 3, 0, n, k 1, 0, n, k 2, 0 2, pl 3

tog, n. turn. Eighteenth Row.-K 1, o 2, pl 2 tog. k 10, o 2, pl 2 tog, k 8. Ninteenth Row.—K 8, o 2, pl 2 tog; 4, o, n, k 1, o, n, k 1, o 2, pl 2 tog, Twentieth Row.-K 2, o 2, pl 2 tog. k 10, o 2, pl 2 tog, k 8. Repeat from beginning.

Sleeves Small, but Important. On sleeves frequently falls the burden of success in a gown. As though to bal-ance their diminished girth these are-now made the vantage ground of much intricate elaboration. The group de-



THE PICK OF LATEST SLEEVES. picted is just the pick of those latest to hand. The ones for evening wear speak for themselves, but it may be well to explain that the long day sleeve to the left expresses itself especially well in foulard, voile or soft satin, and the guipure, which clothes the fore part of the arm, is usually left transparent.

A Cherry Tart. - Make a light open crust in a pie plate and bake; then fill with the cherries, seeded and stewed with sugar quite thick. Cover with a

with sugar quite thick. Cover with a meringue and lightly brown this.

Cherry Salad.—Put in small glass tumblers first a layer of banans alice, cut across, then chopped of ange slices, then either fresh cherries stoned with a quill or the conserved cherries. Pour over all a spoonful of lemon juice. Set in a sold sleep until you serve which in a cold place until you serve, which should be soon, as the banana de after being cut.—Table Talk