

The Farm

To Avoid Milk Fever.
Experiments in the feeding of cow, goats and small potatoes are now showing that milk fever is less liable to occur when cows are fed liberally on root crops than when they are confined to hay and grain. No corn should be given for six weeks before calving. Lined meal may be allowed with the hay, which should be cut fine and the lined meal sprinkled over it.

Raising Calves.
More attention is now given to growing calves than ever before, as it is the well raised calf that must top the best market later on. A good practical calf raiser, N. A. Clapp, of Michigan, gives his own experience in this work in a letter to the *Drovers' Journal*, in which he says:
"Some of the most palatable and successful calf raisers begin by giving the calf only a pint of the first milk that comes every few hours for several days. After the first week skim milk for half ration is mixed with new milk, increasing each time the amount of skimmed milk and withdrawing proportionately the whole milk. The milk should always be fed warm, at 100 degrees, that being blood heat, and then there is no checking the process of digestion.
By the time the calf is a month old it is allowed to eat some very fine hay or rowen. The hay has a tendency to regulate the bowels and prevent scours, a disease dreaded by calf raisers. If the bowels are constipated give the milk at lower temperature; if too loose, give the milk as hot as the calf will drink it. If diarrhoea is troublesome, diminish the amount of milk, feed it very warm and give two raw eggs at each feeding.—Indiana Farmer."

The Old Fancier.
To continue the story of our experience: The party, boy or girl, that gathered the eggs and attended and cared for the hens was dubbed "The hen granny" in our earlier days. Being a bit delicate in health it was their "granny" at home.
And they called me names and did oftentimes chide me unmercifully, and seemed to think it small business. But to-day my brothers and sisters all are grannies, as I said they would be, but they have adopted a more pleasing name. "Fanciers" they are. Forty-eight years ago I took the fever, "hen fever," the same epidemic that prevails to-day up and down the length and breadth of this great land; and the only remedy is let it run its course. The patient will live through it, never fear. I was not satisfied with the old Dutch hen; they were too common for me. I bought a setting of "Shanghai" eggs, from it were hatched three chicks, two cockerels and one pullet. I remember how I watched those naked bipeds (to the disgust of my folks, who saw in them only chickens), until the last seen of either was the last one being devoured by the old sow. With this knockout the fever left me. About two years after the episode above related I met a man in town. He said to me, "Will, come and see my chicks." He had the contagion, and coming in contact with it and not being vaccinated I took it the second time, and it sticketh—no "intermittent" nor the "seven-year" kind, but hen fever proper. The Light Brahmas (Chittagons) he showed me were instantly and indelibly daguerrotyped into my imagination, have been, are now and always will be my supremest fancy.—W. H. Wert, in *Inland Poultry Journal*.

Expert Buttermaking.
The fact that a creamery has a market for all its butter is not necessary evidence that its buttermaker is making a really fancy article, not that a uniformly better quality of butter would not bring at least a little higher price, if the creamery but knows the quality is that which commands top price and can guarantee uniformly, neither is it assurance that there are no leaks in the creamery. The fact that the market reports nearly always show an insufficient supply of "extras," and much of the time an abundance of that quality just below the extras, while at conventions and fairs, where butter is scored by men familiar with the market requirements, only a small proportion of the total number of buttermakers secure really high scores, would indicate that there is plenty of room for more of the best.
That most if not all the high scores go repeatedly to the men who have had dairy school training, in addition to their practical experience would suggest the practical value of such courses as a means of improving the quality. The higher scores, and even prizes, won by men after securing a knowledge of the scientific principles underlying their work, where before their best effort was rewarded by only an ordinary score, testify to the success of the dairy schools in assisting their students to make a better article.
The leaks stopped, the conveniences provided, the labor saved, the difficulties overcome, the increased uniformity and added premiums received add force to the argument for education for the buttermaker. The introduction of pasteurization, of commercial culture, of acid test for ripeness, of the Babcock test of hand separator cream with its attendant difficulties, has raised the buttermaker's profession from one of "rule of thumb" to scientific knowledge, requiring a knowledge of principles.—Professor H. E. Van Norman, Purdue University, Lafayette, Ind., in the *Mirror and Farmer*.

Field Tests on Potatoes.
The results of our field tests on potatoes this past season have been remarkable in that two new varieties have proven, in competition with the heavy yielding standard sorts, worthy of trial by all potato growers. We do not believe in small tests of a few hills, but rather plant new varieties as they come out, in field tests of from one to five acres each in competition with remarkably heavy yielders. The *Italia* Seedling, a new late potato of parentage of the *Rural New Yorker* family, throws a white sprout and was planted on three different farms in competition

with *Carman* No. 3, *American Giant* and *Sir Walter Raleigh*, and in each case the *Italia* Seedling yielded within a few bushels of 300 bushels per acre, more than 200 in two cases, and a little less in the other, while in the same field and the same culture the *Carman* No. 3 produced 125 bushels, the *American Giant* 175 bushels and *Sir Walter Raleigh* 150 bushels.
The other variety that has given exceedingly satisfactory results in our field tests this season is the potato known as the *Early Manistee*. This is a seedling of the old *Early Rose*, but while the skin is pink it does not resemble its parent in shape, as it is slightly oblong in form with two good ends slightly flattened more like the shape of *State of Maine* or *Green Mountain*, eyes near the surface and flesh pure white. It ripens with the early sorts, such as *Bliss Triumph*, *Cobbler*, *Bovee* and the like. This was tested on five different farms in lots of from one to five acres each, with the following results: *Farm No. 1*, yield of *Early Manistee* 200 bushels per acre. *Rural New Yorker* No. 2, 200 bushels per acre. *Farm No. 2*, *Early Manistee*, 225 bushels per acre. *Bliss Triumph*, 100 bushels per acre. *Farm No. 3*, *Early Manistee*, 225 bushels per acre. *Farm No. 4*, *Early Manistee*, 250 bushels per acre. *Early Ohio*, 100 bushels per acre. *Farm No. 5*, *Early Manistee*, 200 bushels per acre. *Early Bovee*, 150 bushels per acre.
We feel that these records made by these two new sorts in two States—Michigan and New York, certainly entitle them to fair consideration of the potato growing public.—Edward F. Dibble, in *National Stockman*.

A Good Farm Gate.
We have been frequently asked to describe a good farm gate. We give herewith illustration of a very simple, inexpensive but strong and durable gate.
In Fig. 1, AB is a piece of 2x3 heart scantling, CA and CB are simple pieces of 1x3 of length required by the width of the gate. CD is a piece of 1x3 of length according to the height of the gate desired. Place CD, CA and BA upon the ground, and lay the slates upon them. Then lay a similar strip on top, from C to A, A to B, and B to D. Then nail these together with four nails (Fig. 3) at each place, which will act as a brace.
The number of slats used can be varied to suit the convenience, as for making pig-tight, or simply cow-tight.
When properly nailed this is the strongest gate to be made out of light lumber, and requires no mechanical training, but can be made by any man who can use a hammer and saw.



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FIGURE 2.
Fig. 2 shows the method of hanging the gate. N is a block or rock for the gate to turn on. H is a piece of bent tire iron or hickory wither. The higher up it is placed the better. X, Y, Z, is simply a piece of the 1x3 slipped between the bracing, and sliding through at Z is very convenient for moving the latch, and prevents its getting lost.
The secondary brace NY may be put in or left out, and has not been found essential to the strength of the gate. OQ in Fig. 2 should be extended to A as shown in Fig. 1.

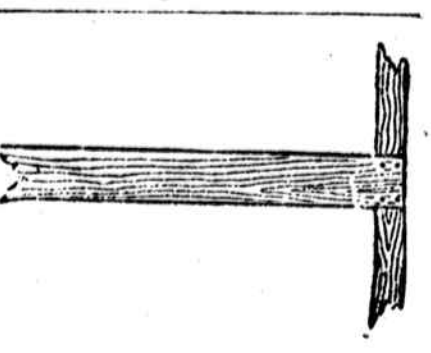


FIGURE 3.
We have one of these gates which has been in use for over twenty-five years, and is still doing good service. Eight feet in length and a very convenient length for the slats. It may be made narrow enough for persons only, or may be made a double gate by swinging two from opposite sides to meet at centre post (Fig. 2, O).
This gate will never sag, as long as the post stands firm.—Timely Suggestions.
The Difference.
Little Rodney—"Papa, what is the difference between climate and weather?"
Mr. Wayout (of Dismalhurst-on-the-Blink)—"Climate, my son, is what a home therefrom-wypp pjj pjjpjj locality has when you are buying a home there, and weather is what it has afterwards."—Puck.

Fashion Notes

New York City.—The fitted jacket of hip length is always in style whatever others may come and go. This one is exceptionally desirable for the reason



son that its seams are so arranged as to give tapering lines to the figure, and that it is quite close to the throat. As illustrated it is made of black kersey stitched with corticelli silk and trimmed with collar and cuffs of velvet, edged with broadcloth, but all the materials in vogue for coats are equally appropriate, and the collar and cuffs can be made either of the material or of the velvet as may be liked. The sleeves are the new ones that are full at the shoulders and narrower at wrists, where they are finished with becoming roll over cuffs.

The jacket consists of fronts, side fronts, backs, sidebacks and underarm gores with sleeves which are cut in two portions each. Pockets are inserted in the side fronts, which add both to the style and to the convenience.

Favorite Three Piece Skirt.
Full skirts that are so arranged as

A LATE DESIGN BY MAY MANTON.



to leave a narrow, plain panel at the front may safely be called the favorites of the season, and are exceedingly graceful and generally becoming. This one includes also a flounce that is joined to the sides and back and is finished with box pleats that conceal the seams at the front. The model is made of willow green crepe de chine trimmed with ruches of silk and full rosettes, but all materials which are soft enough to make the fullness attractive are suitable.
The skirt is made with front gore and circular portions, which are joined at the centre back. The box pleats are separate and are applied over the front seams, while the closing is made invisibly at the back. The flounce is shirred under at its upper edge and shirred in successive rows, so forming a heading, and the fullness at the upper edge is also collected in shirings.
The quantity of material required

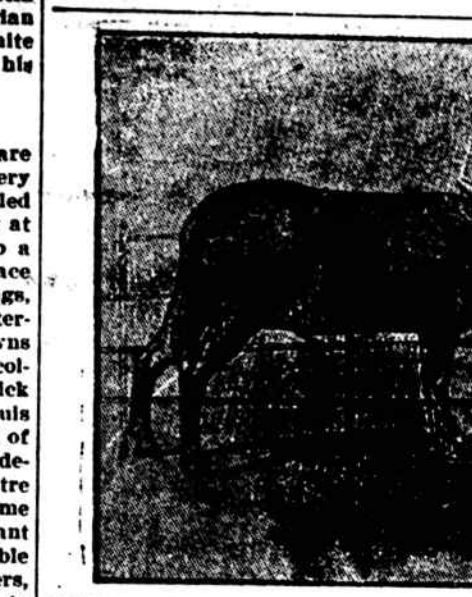
for the medium size is eleven yards twenty-one, nine and three-quarters yards twenty-seven, or five yards forty-four inches wide.
Chinese Coat Latest.
Any woman with an eye for the picturesque is bound to fall in love with a Chinese coat done over into a room gown. These coats of richest satin and silk are of a sort which the Chinese Minister might wear with eclat. Of yore it was the vogue to wear them over a pretty petticoat and let it go at that. Now we are more elaborate. The latest examples show a graduated accordion flounce of Liberty silk. This trailing flounce is edged with a ruche and is fitted up into the side slits that distinguish the Chinese coat. The flouncing is also used inside the broad sleeves. This flouncing does not necessarily match the coat color in material. It may contrast vividly. One black coat stunningly embroidered with brilliant birds and blossoms boasts flouncings of vivid cerise. Red is, indeed, very much the vogue, especially in the raspberry and strawberry shades. Half light hyacinth and periwinkle blues are much liked also, as these colors often figure superbly in these embroidered garments. All the pretty rose shades are noted in these flouncings. So is emerald green. Such a robe is much less undress than the same coat when worn with a petticoat, however ornate.
A Picture Wedding.
At a recent wedding the bride's wedding gown had a long train suspended from the shoulders with pearl ornaments, the train was lined with white chiffon and the girl of the gown was made of silver embroidery. The bridesmaids' gowns were all of pompadour

chene silk, opening in the front over tucked white chiffon petticoats, and chene silks of the silk crossed the petticoats and were caught with straps and bows of pale blue. The pointed bodices had Schuss of Mechlin lace over vests of finely tucked white chiffon. Their large white felt hats had pink roses under the brims and loops of pale blue velvet ribbon adorned their tops and came around under the brims and tied in strings. The little girl train bearer wore a Puritan bonnet of drawn blue silk and a blue satin frock, and the page was in a Georgian page suit of blue cloth, with a white waistcoat, white silk stockings, and his shoes had paste buckles.

Handsome Black Gowns.
Entire absence of black panne are another Parisian novelty, and a very attractive one; the silks are creased with broad pleats in a religious, but at the waist the fullness is reduced to a myriad, tiny pleats taking the place of the heretofore stoutening shirrings, becoming only to the very lean sisterhood. These handsome black gowns are worn with a deep, beautiful collar of rich old Venetian or other thick lace, and corresponding cuffs in Louis XIII. style; while the cavalier hat of felt, panne, or soft, hairy felt, now denominated polluchon, instead of feutre castor—an old friend under a new name—is simply trimmed with long, elegant drooping feathers of the same sable hue, or with black and white feathers, the latter shading up from black to white through numerous intershades of gray, the white tip in several instances lightly flecked on the edge with black.—Washington Times.

Revival of Old Style Repp.
A novelty material, already offered in Paris, and to be in evidence here, is repp. This repp material has not been shown to any extent for two or three years. In colorings, grays, browns, certain not bright shades of ruby, and green are the favorites, blues being relegated to the background.
Favorite Three Piece Skirt.
Full skirts that are so arranged as

NEW ANTELOPES AT THE NEW YORK ZOOLOGICAL PARK.
BY J. CARTER BEARD.
It is by no means an easy matter to assign their proper place in the animal kingdom or to determine what really constitutes an antelope. No better opportunity has ever been given in this country to see for one's self the different members of this family, from the pygmy Dik-dik antelope to the ox-like eland, and from our own aberrant type, the American prong-horn antelope, to the still more aberrant giraffe, than is now given by the incomparable collection of antelopes at the New York Zoological Park.
Among the most singular types in some respects are the water antelopes. There are five allied species, of which



LITTLE ANOA BULL OR ANTELOPE BUFFALO AT THE NEW YORK ZOOLOGICAL PARK.

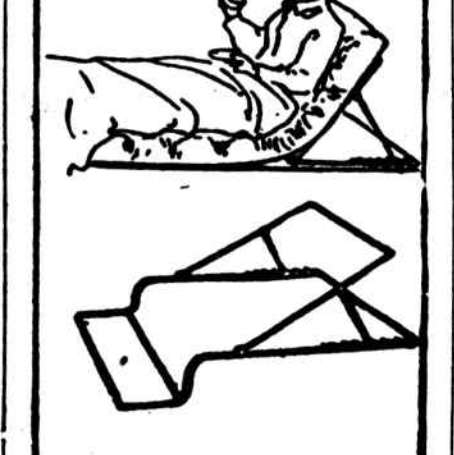
the Sing-sing antelope, a fine specimen of which is to be seen at the park, is a representative.
It scarcely carries out our idea of an antelope, being a rather heavily-built animal, which, instead of presenting the sleek, glossy appearance of other members of its family, is clothed with a coat of long, soft, loose, and flocculent hair, longer upon the neck than elsewhere, but not forming a mane. The color is grayish brown. The males alone carry horns. These in the adult individual are lyre-shaped, and covered almost to the tips with bony rings. The animal exhales an odor, and the flesh is so powerfully scented and so bad a flavor as to be entirely unobtainable, a circumstance which will go far to preserve the species from becoming exterminated, long after its congeners have disappeared forever from the face of the earth. The natives, we are told, tame these antelopes, and allow them to run with their cattle (in much the same way as we keep a goat in the stable) because the animal is supposed to bring good luck and ward off disease.
Sing-sing antelopes abound in marshy districts on the banks of lakes and rivers in central and western Africa. If disturbed, they invariably make for the water at full speed. In this way they escape lions and leopards, who in common with other cats are reluctant to take to the water, but they cannot get away from the natives, who pursue them in boats, which they paddle faster than these antelopes can swim.
In view of the fact that the curious little anoa has been adopted, along with the other inhabitants of the Philippine Islands, as a citizen of the "Greater United States," the specimens at the New York Zoological Park assume an additional interest.
Although the anoa is ranked among ungulates with the oxen, and more particularly with the buffaloes, it has so many features in common with the antelope that it is sometimes called the antelope buffalo. It is a veritable pygmy, being when full grown, according to Mr. Hornsby, two feet nine inches high at the shoulders. "We have," says the last-mentioned gentleman in writing to me, "three specimens at the park, two full-grown males and a female, the latter immature. These little creatures take kindly to captivity in zoological gardens, and breed with fair regularity. Two of those that we have are quite docile, but the third, a

It may be added that, as far as least as the anoa of Celebes is concerned, the animal seems to occupy a place almost exactly half way between the antelopes and the oxen. "It approximates to the antelopes," writes Lydekker, "in its slender build, the structure of the hinder parts of its skull, the upright direction and the straightness of its horns, the spots on its head, back and limbs, and its small size."—Scientific American.
FOR AN INVALID'S BED.
Will Permit of Any Possible Position of Occupant.
Among the patents recently granted was one for a mattress, which is calculated to make the life of the invalid easier and to permit of a variety of changes of position without submitting the patient to any distress. It will be readily seen how this is accomplished.



MATTRESS FOR INVALID'S BED.

Formed in the mattress at one end thereof is a framework consisting of two parallel ratchet rods, having downwardly extending parts and the guide braces. Hinged to the ratchet rods is the adjustable framework section of the mattress, to which arms are pivoted, the free ends of which engage and operate in the ratchets.
This arrangement forms a bed rest, which is always available with very



MATTRESS FOR INVALID'S BED.

little trouble and with little disturbance of the patient. On the other side of the bed is a similar arrangement, by which a collapsible chair is called up as desired as if by magic.
Anyone who has ever been confined to bed by a long spell of sickness will recognize the benefits of this arrangement. Likewise will also the nurse who has been compelled to move a helplessly bedridden person during one of these spells.—Philadelphia Record.
George Ade as a Farmhand.
Judge Sanderson, who is practicing law in Everett, Wash., formerly lived in Kentland, Ind., the boyhood home of George Ade, the humorist.
"Ade was a peculiar character in his younger years," said the Judge. "He made my office a sort of loafing place during the little time he spent in loafing. He was employed on a farm owned by a banker. One day he walked into the office and said to me: "That man is the best I ever worked for."



THE SING-SING OR WATER ANTELOPE.

full-grown male, was once so savage that for nearly a year he was bent on killing something or somebody. The creature is quite cow-like in form, but its horns most nearly resemble the horns of the harnessed antelope of Africa, except that they are not twisted. The color is a rich chocolate brown, becoming dark with age. Celebes is the home of the specimens which we have.
The specimens which inhabit the Philippines (Hos mindorensis) is called tamarao. "It stands," writes Richard Lydekker, "three and a half feet in height. The horns, though massive, are comparatively short and rise upward in the plane of the face with a lyrate curvature; they are distinctly triangular, with the largest face in front, and are somewhat roughened. In its massive form, thick legs, and uniform coloration this species comes nearer to the Indian buffalo than to the anoa."



New Sponge and Soap Holder.

A new combination sponge and soap holder is here illustrated. It is made of brass wire, polished and nickelled, and is designed for use against a wall or wainscoting. The sponge holder is 6 inches deep and 5 1/2 inches in diameter; the soap holder above it, 5 1/2 by 3 inches.—Philadelphia Record.
Two Senate Clocks That Tick as One.
At a cost of \$225 the new clock authorized by Senator Spooner's resolution passed by the Senate last spring has been hung over the chair of the Vice-President in the Senate chamber. It is a six-day hand-winder, equipped with modern appliances, and is a duplicate of the old clock which has hung for forty years on the opposite side of the chamber. The old timepiece has been repaired so that it will keep exact time with the new one. By the present arrangement Senators can see the time without turning half around, as they have had to do in the past.—Washington Post.

POPULAR SCIENCE.
A report to the Department of Commerce and Labor from Rio de Janeiro points out the warning afforded by Brazil, concerning the effects of forest denudation. Through the destruction of trees in Northern Brazil, the report says, large states have been brought to the verge of ruin. In Rio Grande do Norte and Ceara chronic droughts occur, causing famine and depopulation in regions which were once richly timbered and well watered. The Brazilian laws are beginning to call for the scientific replanting of their devastated forests.
The project of running a geodetic baseline between Cairo and the Cape of Good Hope calls attention to the strange hostility often shown by savage tribes to the operations of the engineers. In India it has been found that the erection of pillars and chains to mark the site of surveying stations almost inevitably attracts the attention of the tribespeople in the neighborhood, who subsequently destroy the monuments. Similar trouble is found in Africa, South America and elsewhere. For this reason it is suggested that the only way to safeguard the basal points of a great triangulation in uncivilized lands is to fix a large number of secondary points, scattered over the country, consisting of natural features which cannot be removed, and which will remain unknown to the natives.

The apparatus by which Dr. Arthur Korn, a German inventor, has succeeded in transmitting photographs about 500 miles over telegraph and telephone lines depends for its action upon the changing electric resistance of selenium under the influence of light of varying intensity. A ray of light caused to pass systematically over the surface of a transparent film containing a photograph, falls upon a selenium cell whose electric resistance varies with the amount of light passing through different parts of the photograph. These variations are transmitted to the electric wire, and at the receiving end they vary the illumination of a small vacuum tube, which passes over a sensitized photographic paper synchronously with the ray of light moving over the film at the sending station. Thus a copy of the original photograph is produced.
That a body can acquire during the night a different temperature from that of the surrounding atmosphere has been demonstrated by Mr. Well, an English physicist. If a thermometer is taken from a window, wrapped in cotton and placed on the ground, its mercury will descend seven or eight degrees. Vegetables similarly situated, and being better conductors, may freeze at a time when the thermometer does not mark the freezing point—proof that the cold experienced by a plant may be entirely different from the temperature of the surrounding air. This low temperature of plants, however, only occurs when the night is clear, since at this time the plant sheds its heat throughout space and becomes chilled, whereas if the night is cloudy the phenomenon does not occur. This gives rise to the popular superstition that plants and buds are frozen by moonlight.

Luncheon by Suggestion.
Lots of women order their luncheons merely by force of suggestion. If you don't think so watch the wavering ones sit down, look on the card, glance at their neighbor's plate, and then order whatever the latter happens to be eating. In a crowded luncheon room on midtime one little round table seating four women bore out this statement. Two of the women refreshed themselves on cake and coffee. The third was putting away a savory clam chowder. A fourth came in, observed the cakes, gazed appreciatively on the chowder, and requested the latter. The first chowderer ushered and departed, and the woman who immediately took her place looked around the table and ordered cakes and coffee.
By this time the first two cake and coffeees had finished, and an uncertain-looking woman sat down at that side of the table. She looked at the two opposite, glanced at the card and said, "Bring me a clam chowder."
This is a fact, and there is every reason to suppose that nothing but coffee and cakes and chowder were served at that table all the afternoon, or at least as long as wavering ladies sat down at it.—Philadelphia Bulletin.