

PROFITABLE TO RAISE CALVES DURING WINTER

They Do Not Cost as Much as Those Born in the Spring Owing to the Absence of Heat and Flies—How They Are Managed.

Calves dropped in the late fall and the early part of winter can be raised at less cost than calves dropped in spring. Spring calves do not receive much benefit from grass the first season, because for some six weeks after birth the ruminating stomach is undeveloped; then, again, the summer heat and the plague of flies are a serious drawback to healthy growth. In the fall and during the winter months, outdoor work not being so pressing, more time for feeding and caring for the calves may be given. The calves being fed mostly on milk and swill, mill feed and oatmeal food, and kept in a warm, well-lighted box stall and under the management of a careful hand, will make a strong growth throughout the winter, and by April they will be large

from the mother. Afterward give sweet skim milk, to which may be added a little boiled oil cake and second quality wheat flour. Feed lukewarm twice a day, about two quarts at each meal. Give the calf the two fingers of the right hand to suck up the milk at first. The calf will soon learn to drink the milk without the hand. Feed at regular hours. After the milk has been drunk put a little hay in the calf's mouth. A little bright, sweet clover hay should be tied in the pen every day. This will teach the calf to eat. Have a clean feed bucket. Disease and no end of germs lurk in the seams of a dirty bucket. A wooden bucket should not be used unless scoured out daily. The buckets should be washed, scalded and set in the sun every day. The female



Content.

enough to turn out to pasture and do well on the dry rations of the following winter. The fall calf, properly fed and cared for, can be served when 16 to 18 months of age, coming fresh the latter part of the second winter. The calf should be left with the cow for several days after birth, as the milk of the cow, which is of a turbid, yellowish color, unfit for human food, but having medicinal qualities, wisely designed by nature to free the bowels and intestines of the newborn animal from the mucous, excrementitious matter always existing in the stomach of the calf after birth. This milk should never be given to older calves, as it would produce scours. For the first few days give fresh, newly drawn milk

calves from the best cows should be raised. It is well to raise a choice male animal, to take the place of the head bull when he becomes too old or vicious. Dairymen having the pasture and the forage should raise their cows, instead of buying them. Better milk may be had and at much less cost. The labor cost of raising a calf should not be counted, as the farmer should attend to this part of the business. He has abundant time not only to raise the calves, but also to feed and help milk. Unless the owner gives careful attention to details he had better give up the milk business. The calf pen should be kept clean, given dry bedding and fully exposed to the sunshine and well aired.

CARING FOR FARM HORSES

By Observing a Few Precautions Farmer May Avoid Loss of Time, Expense and Injury to Animals.

(By H. E. KINGMAN.)

A horse cannot do satisfactory work with shoulders that pain him every time he takes a step. The horse may be looked upon as a machine that is expected to do so much work, and if some of the mechanism is out of order then the amount of work is lessened. But, also, the animal must be looked upon as a creature with feeling and ambition, taking pride in its work, that is a willing, obedient and therefore valuable servant, and should be properly cared for.

The first thing of importance to consider in the draught horse is the collar. Most of the injured shoulders are the result of poorly fitting collars, and the fault usually lies in a collar being too large. It is a good idea to have a harness maker fit the collars to your horses. He may be able to remove padding and in other ways make the collar ever so that it will fit nicely. Heavy collar pads are to be avoided if possible. They are hot and cause the shoulders to sweat; this keeps the pad and shoulder wet, and the skin becomes soft and bilious.

Dirty collars are probably as responsible for sore shoulders as ill-fitting ones, in the spring especially, when the horse's hair is long. He is soft from lack of work, and sweats profusely. This forms a gummy dirt that adheres to the collar and makes, when dry, a hard, rough surface. The ordinary farm hand feels that his duty is done if he scrapes the dirt from the collar with the back of his jackknife. This method, however, is not an especially good one for the leather of the collar, and a smooth surface is not left. A damp sponge used in the evening as soon as the collar is taken off will, in one or two minutes, remove the dirt. This may be followed by an oiled rag; if this is done the collar in the morning should be soft and smooth.

Careless driving, jerking a horse out of the furrow and into it again, allowing him to work with his head around on one side, all tend to produce sore shoulders.

Of course, the first precaution to take is not to ask a colt to do a full day's work until he learns something about his job and ceases to fret. The shoulder will then gradually become toughened. It is a good idea to sponge

the shoulders with cold water—just plain cold water. Alum water has been used to good advantage; also weak solutions of tannic acid. Alcohol tends to toughen the skin.

The injuries to the top of the neck very frequently terminate in fistulas, withers, etc. A blister near the point of the shoulder is likely to become a callous and form what is known as a "cold abscess." Ill-fitting collars and poor drivers are equally responsible for a condition known as "weeny."

TRUCK FARMING WITH DAIRY

Difficult to Conceive of More Profitable Type of Agriculture Than Judicious Blending of Two.

(By W. M. KELLY.)

The truck farmer who is farming without manure maintains the supply of nitrogen in his soil by the use of legumes and buys a fertilizer rich in phosphoric acid and potash. In this way he secures a better balanced fertilizer than the dairyman who uses manure rich in nitrogen and deficient in the mineral elements on clover sod that is already rich in nitrogen. Now as nitrogen is the most expensive element of fertility we can readily see how much more profitable it would be for the dairy farmer to lengthen his rotation one year and grow some highly organized market crop that would sell for more than enough to pay for the purchased grain foods required to feed the dairy cows.

In this way he would be making better use of the surplus of nitrogen and the purchase of a small amount of mineral fertilizers would enable him to greatly increase the yield of every crop grown in the rotation that is followed in growing food for his cattle.

I believe that we should try and incorporate some of the methods of soil handling practised by the trucker and market crop grower into the management of our dairy business if we succeed in deriving from it the largest and most certain profits.

It is difficult to conceive of a more profitable type of farming than a judicious blending of dairy farming and market crop growing, but in order to successfully combine these two types of agriculture we must abandon old and unprofitable methods of dairying and get right down to a study of the principles of soil fertility.

Of Knox and Calvin



"What do you think," the man inquired "Oh Calvin and of Knox? Have you in every way admired 'The way they led their flocks'?" We looked at him and tried to think just what his words might mean; He looked at us without a blink, With countenance serene.

"You don't reply," he argued then. "Well, now, between the two I think to open-minded men There is no doubtful view. The work of Knox was never done With froony and with haste." The chances are that we Had never set him right upon To get this Calvin placed.

He went right on and proved that Knox Was greater of the twin, And with the cunning of a fox We said that that was plain, Yet we sublimely tried To think of Calvin's post, For public knowledge far and wide Had ever been our boast.

"Now, old John Knox," continued he— We laughed: "What is your game? You know as well as we can be Philander is his name." And while he gasped and waved his hand We offered, too, to bet No Calvin ever in our land Had graced the Cabinet.

He turned and walked away at once While we sat down and thought How any man can act the dunc. Who don't know what he ought. But if he had not called him "John" The chances are that we Had never set him right upon The sage Philander C.

And Still He Lives. The man with the glittering whiskers tiptoes gently across the office and looks over the desk of the pale perspiring hireling with the discouraged mustache and the recalcitrant fountain pen.

"Say," he whispers, "here's one that just occurred to me. It's yours if you want to use it, and nobody need ever know where you got it. What is the difference between a man who loans a million dollars at usurious rates during a time of panic and instability in the business world and who subsequently collects his interest by due process of law—what is the difference between him and a monarch who discovers a plot against his throne and causes the incarceration of a nobleman whom he has reason to believe is the leader of the plot?"

"If there is any difference, what is it?" "One gets his per cent. and the other gets his Sir pent." And the sunset casts its ribbons of fire athwart the opaquely beautiful bosom of the dreaming lake.

Too Great for His Fancy.



"Why don't you finish your point of 'The Cattle Ranch'?" "Every time I work on it I begin thinking how good a porterhouse steak would taste."

An Acknowledgment.

That "woman is as good as man." Is something that I've oft conceded; I've said in the eternal plan. She is the element most needed. But now from England comes the word That women every now and then are seen smoking—with cigars preferred. So, soon they'll be as bad as men are.

Atavism.

"It is odd about Prof. von Boppen-schmidt, isn't it?" asks the philologist "As a usual thing he converses with one in broken language, but when he becomes excited and swears, his profanity is confined to the German words. I wonder why that is?" "Easily explained," says the man with the ingrowing face. "The swear words are strong language—too strong for him to break."

Put Out.

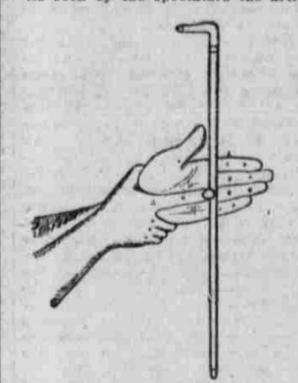
"O, very well," says the browbeaten husband, "you may say what you like but I would have you know that there have been many other women who said I was the light of their life." "The light of their life!" sniffs the strenuous wife, "Hump! And I don't doubt that each and every one of them turned you down."

YOUTH'S DEPARTMENT

FUN WITH MAGNETIZED CANE

Trick May Also Be Performed With Table Knife, Billiard Cue or Similar Article.

The principles involved in magnetizing a cane as here described can be applied equally well to a table knife, a billiard cue, or any similar article, says Scientific American. No preparation is necessary. The article used is first stroked lengthwise by the performer's hand to apparently magnetize it. It is then taken in his left hand while he stands with his left side toward the audience, and while held at the center parallel to and against the extended palm, is pushed down toward the fingers by the pressure of the right hand fore-finger upon it from the rear. The remaining fingers and the thumb of the right hand are grasped around the wrist of the extended left hand as illustrated. As seen by the spectators the arti-



Magnetized Cane.

cle appears to hang unsupported by the left hand. Spreading apart the left-hand fingers and shaking the left hand up and down, strengthens the illusion. A considerably greater distance can be covered by the extended fore-finger than is generally supposed, and this, together with the fact that the right hand appears as a whole to be circling the left wrist, accounts for the effectiveness of the illusion.

MANY HARD WORDS TO SPELL

State-Wide Spelling Test to Be Conducted in Indiana Schools Next Winter.

E. G. Bunnell, assistant state superintendent of public instruction, to whom has been assigned by Robert J. Aley, state superintendent, the work of preparing for the state-wide spelling test for next winter among the pupils of the common and high schools of the state, has prepared a list of 100 words to be used by the best speller in every school in the state, from these to select the best in the township, town or city, from these the best in the county, and with the pupils thus selected to form the class for the state test, says the Indianapolis News. If arrangements can be made, the best spellers in the state will hold a contest with the best spellers from other states.

The 100 words chosen by Mr. Bunnell have been selected from a list of words commonly misspelled, and the list is designed to give the pupils an idea of the nature of the test. All the words selected probably will be used in the test. The list prepared by Dr. Bunnell follows: Mania, Philippine, neuralgia, traf-ficker, separate, receive, believe, aeroplane, chauffeur, susceptible, alacrity, disk, humus, dirigible, icicle, inflammable, iniquitous, rigid, thoracic, vigorous, Rensselaer, February, benefitted, embarrass, acquiesce, privilege, parallel, judgment, until, analysis, lettuce, precede, divisible, pursue, origin, fulfill, descendant, government, vertical, prejudice, noticeable, miniature, umbrellas, adjacent, similar, foreigner, hygiene, victuals, millinery, sovereignty, laboratory, cistern, reverend, cemetery, mischievous, vinegar, bilious, sieve, clevis, celery, diptheria, disipate, khaki, harellip, erysipelas, vaccinate, legible, specimen, participle, auxiliary, censure, facilitate, license, serviceable, fugitive, audible, rhinoceros, versatile, bicycle, cynical, acetylene, indelible, millinery, alpaca, surcingle, mado-moiselle, apparition, lachrymal, cavalier, inimitable, dexterity, agility, cylindrical, isosoles, corpuscle, chute, Delaware.

Didn't Deliver Them.

A young man called at the office of a justice of the peace and with some hesitation made known his business, which was to be married. The rustic replied that he thought he could perform the service and asked if the young man had his license. "Yes, sir," the youth replied. "Well, where is the young lady?" "She's at her father's." "Well, bring her here." "She'd rather be married at home, squire." "And you expect me to go there and marry you?" "Yes, sir, if you please." "Young man," said the justice, "this office of mine is like a department store. We sell matches here, but we don't deliver them at the house."—Youth's Companion.

DRESSING UP.



It is for other folk I wear The ribbon that is on my hair. For they can see it, fresh and bright, Although for me it's out of sight. In bows and ends my saak is tied; For me it's on the other side, But other folk will have the chance To see it while I gayly dance. It's just the same way with my curls. I think it's kind of little girls To dress as nicely-as can be In things for other folk to see.

CUTTING IRON BY ACETYLENE

Intense Heat Has Recently Been Used in Marvelous Tool, Results Seem- ing Like Magic.

Most of our young folks have seen pictures projected on a screen by an oxyhydrogen "limelight" stereopticon. In this double "magic lantern" a bright light is produced by the intense heat of burning oxygen and hydrogen together against a small cylinder of lime. The heat makes the lime shine very brightly, on the same principle that a piece of iron glows when the blacksmith takes it from his forge. Though this familiar form of burning gases is very hot, it is far excelled in heat by burning acetylene (a gas) in oxygen.

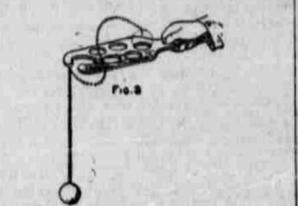
This intense heat has recently been used in a marvelous tool, the results of which seem almost if not quite like magic. The Davis-Bournonville company has perfected a torch that burns oxygen and acetylene together and makes it convenient to apply this intense heat to cutting off or welding iron.

Running this penlike flame across a thick sheet of iron melts a very narrow strip and cuts it off about as you might cut a sheet of ice with a red-hot poker. It will also melt the edges of two sheets or blocks of iron and enable a mechanic to fasten them together easily. Huge iron castings that have been broken may be repaired by running the flame around the edges of the fracture and "sticking" them together. From the mechanical point of view the possible uses of this new tool are very many. The intensely hot flame melts a narrow open space through a piece of iron, even up to half an inch thick, almost as easily as would a red-hot wire melt through a very thin sheet of ice.—St. Nicholas.

NEW INDOOR GAME AMUSING

Object is to Toss the Ball on Rubber Leash into One of Holes on the Paddle.

The object of this perforated-paddle ball game is to toss the ball on the end of its rubber leash in such manner as to land it in one of the holes.



Perforated-Paddle Ball Game.

provided. The largest count is gained by first succeeding in jerking the ball up through the hole at the end of the paddle and then depositing it in one of the other holes.

"CANDLE TREE" OF PANAMA

Undoubtedly One of Wonders of Vegetable Kingdom Known as Parmentiera Cerifera.

One of the wonders of the vegetable kingdom is undoubtedly the "Candle tree" of Panama, known to botanists as Parmentiera cerifera. This tree, says Prof. H. F. MacMillan in the Strand Magazine, produces from its stem and older branches a great profusion of yellowish, cylindrical, smooth fruits, 12 to 18 inches long, which appear exactly like wax candles, as the botanical name implies. So close is this resemblance that travelers, seeing the tree for the first time, are liable to be temporarily puzzled as to whether the candles of shops are made in factories or grown on trees. The candle-like fruits are suspended from the branches and bare stems by short, slender stalks; dangling in the air, they readily give the impression of the chandler's shop. As night falls, and the numerous fire-flies move among the fruit, the impression is intensified.

Nothing Left to Learn.

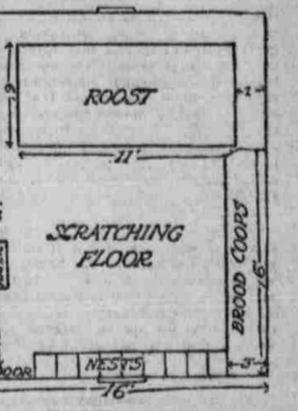
Mamma—Why, Tommy, are you home already? Is school out? Tommy—No-o. Teacher sent me home. Mamma—Why, were you naughty? Tommy—No-o. He wanted to give me a set of books a fellow used last term, and I wouldn't take them, 'cause he got 'em all there was to learn 'out of them.

DOULTRY

HEN HOUSE IN COLD CLIMATE

Warm in Winter and Moderately Cool in Summer—Easily Constructed and Inexpensive.

Last fall I built a chicken house with double walls. The inside was tar-papered and the roof covered with rubber roofing, says a writer in Missouri Valley Farmer. Three whole windows were put in the south side and a half window at each end, with no windows on the north. The door



Floor Plan of House.

was put in the southeast corner. There is a ventilator, and the windows can be opened to permit free circulation of air. This house is warm in winter and moderately cool in summer. Our chickens were not bothered this summer with lice, while a year ago, in the old quarters, we could not rid them of the pests.

WHITEWASH FOR HEN HOUSES

Excellent Plan to Treat Building Once Every Year—Government Formula Is Given.

Each year many prefer to whitewash their poultry houses both inside and out. This is a good plan; it effectively destroys mites and purifies the premises. The following is a formula used by the government on light-houses, etc. Slake one peck of quicklime with boiling water, covering closely as soon as the water is supplied. When it is slaked strain and add one gallon of salt dissolved in hot water, two pounds of powdered rice previously boiled to a thin paste, a quarter of a pound of Spanish whiting, a half pound of clean glue dissolved in warm water. Thoroughly mix these ingredients, cover, and let the mixture set for a few days to ripen. It may be applied with a white-wash brush or made thin enough to be sprayed on with a spray pump. In the latter case give two or even three coats, one after another, as soon as dry. Every nest, coop, fence, and wood trough should receive the spray on all sides. No lice, mites or vermin can live where this whitewash has been well applied. It should be put on while warm. This will last as long as paint, they say.

DOULTRY NOTES

A lock on the henhouse may save some of your best stock.

Coops and brooders should be disinfected often and thoroughly.

There is no better thing to use about the roosting quarters than plenty of air slacked lime.

An unfertile egg is worth just as much as any other—but it must be found out before set upon.

Rape will stand a good deal of freezing and is often in good condition until near the end of the year.

If you have good stock you can always find a market for it, and if it is not good it will pay you to make it so.

Filthy houses, runs or yards invite disease, while cleanliness is one of the roads to healthy fowls and success.

A small quantity of wild onions was fed to some laying hens and in about two weeks an onion flavor was noticed in the eggs.

Hang cabbages in the pens for the hens to pick at, also raw livers. If they can reach these too easily shortens the strings.

There is no better pets for the boys and girls than well bred pigeons, Pans, Pouters, Tumblers, Magpies, Owls, Homers, etc.

The last meal of the day is the most important now and it should be warm and substantial as it prepares the hen for the duties of the next day.

There is a profit in selling eggs on almost any market if the business is properly conducted; but there is no big money without special markets. Underfeeding chickens is as bad as overfeeding. Give them enough to live on comfortably whether we provide enough to lay eggs on or not.

When you mark a crate of eggs "strictly fresh" mean what you say. Stand back of every egg you offer for sale. That is what builds up reputation.