A DEPARTMENT PREPARED FOR OUR RURAL FRIENDS.

w We Can Mapidly Improve Our Horses Ecoping Apples and Pears in Winter -To Restore Worn-out Land-The Farm a Training School.

In the construction given in agricultural tournals regarding the compounding of well-balanced rations for live stock, the word protein frequently occurs. All farmers may not clearly comprehend the meaning of the word Protein is defined by Prof. Armsby as a name given to an important group of substances, of which washed lean meat or the white of egg may be taken as the type. They all contain about 16 per cent, of the element of pitrogen, which is entirely lacking in the three other substances, water, ash and fat, composing the body of an animal, and are remarkably similar in their general properties. The organic part of bones, the ligaments and muscles which bind together and move the bones, the skin, the internal organs, the brain and perves-in short, all the working machinery of the body, are composed very largely of protein. Consequently, this group of substances as of great importance, and a due supply of it in the food, particularly to growing animals, is indispensable.

Facts About Cows.

Cows in milk will consume nearly 50 per cent, more water than the same cows when not giving milk. The New York Experiment Station at Geneva found as an average of several breeds that each cow drank 1,039 pounds of water and consumed 547 pounds more in food per month. During lactation the average per month was 1,000 pounds drank and 774.8 pounds consurned in food. The pounds of water consumed for each pound of milk produced were as follows: Ayrshires 4.26, Guernseys 5.07, Holsteins 4.43, Jerseys 5.24. Shorthorns 5. Holderness 295, Devons 4.82, making an average of 4.66 pounds. The need of an abundance of water is evident.

Charcoal for Corn-Fed Hoga A diet wholly of corn is very hard to digest. If food does not digest in the stomach it must sour, for its temperature is always at 98 degrees, which is extreme heat for a summer's day, unprofitable. Then the land was seed-When souring of the stomach occurs, it be remedied by feeding charcoal. This in not, however, a permanent remedy. The charcoal is carbonaceous, and therefore the larger part of it is like the corn. It is the potash mixed with it that corrects the acidity. But the better way is not to let the stonnach get sour. | Feed even the fattening hogs some fine wheat, middlings with milk and a few sliced beets daily. This will keep their digestion good, and when food digests it does not sour on the stownch.

There is a great deal of difference in

the character of "exhausted soil." Some is really all that these words im oly. It is loose in texture, and roots of crops have no trouble going through E. se long as there is anything for them to get. There is another soil containing much clay, which when partly exhausted of vegetable matter locks itself into cieds, which roots cannot penetrate. Analysis will show a considerable degree of fertility in this land. It is usually most benefited by underdraining. That with clover will bring the soil in one or two years so it will produce good crops. The light soil also needs se grow clover to increase the vegeta-Sie matter in the soil Usually, however, when the vegetable matter is exbansted on sandy soil it needs a dressing of potash or lime or both to enable It to grow a catch of clover. It will probably need repeated applications of these minerals until the land has grown successive crops of clover, and has thus Increased its stores of vegetable matter In the soil.

French Horse Breeding. On Jan. 1, 1894, the total number of stallions in the National Haras rose to 2.678 head, and was composed in the following manner: Pure-bred English, 195; Arabs, 87; English Arabs, 207; half-breds, 1,806; draft horses, 373. This number will increase progressively for six years. The number of animals in the national establishments rose 100 in 1892, and fifty in 1883; this increase will continue by fifty every year until 1900. It has been calculated that the produce obtained in one year by the aid of the national stallions reached a total of 126,900 head. The report states that except on rare occasions the importation of foreign horses has progressively diminished for fourteen years, while exportation has increased. The following shows the two extremes of this series of fourteen years: In 1880, importations, 15,174 head; exportations, 9,628; 1893, importations, 25,269; exportations, 24,121 animals. Belgium bought largest number (13,000) of animale; then came Germany with 6,430; and then Switzerland with 2,474.

This gives us some idea of the Eurocan horse trade. Here we see horses at by the thousands, and with our 15,679,000 horses we do not raise them good enough to go into that market. With our facilities for breeding and ng good horses we might send de of high-class horses at big to all the European countries ench Govern ent haras le g out all breeding stallions but

AGRICULTURAL NEWS | tdly tmprove our borses. Western | WORN BY THE WOMEN Agriculturist.

> Keeping Apples in Winter. To have apples and pears keep in good condition in the winter season it is necessary to start with sound fruit The practice is to leave winter fruit hang on the trees until freezing weather is near at hand. With us this is about the first of November. The fruit must then be carefully picked, that none of it be bruised. If it can be spread out in a cool room for a week or two, until the "sweating" is over, so much the better. After this the fruit may be barreled and placed in any cool cellar, the cooler the better, if it be desired to keep the fruit as long as possible. When in barrels, more air may be permitted in the cellar than otherwise. In cellars almost airtight, or where the air is slightly damp, that the fruit will not wither, it may be spread out on shelves two or three layers thick, and in this way it will keep very well. Such apples as Ben Davis, Ridge Pippin, Red Romanite, Baldwin, etc., can be kept until spring in such a place, provided the temperature can be kept low. When dry air flows freely through a fruit cellar the contents spoil. The fruit loses its moisture and shrivels away while still immature, and many s good kind becomes denounced by those who fail to ripen it because they permit it to shrivel away in some place unfit for preservation of fruit in winter. Some of our good quality winter pears can be kept in the way described: The Molines, Lawrence, Winter Nells, and others, and even the Vicar of Wakefield are of this list. The cool temperature spoken of is recommended for the fruit which is to be kept a long while. As soon as a supply of ripe fruit is wanted, it must be taken from the cool house to a warmer one, but still it should be free from air. Close closets in a warm room is a good place for it. There arealways among fruits some which display signs of ripening before others, and these should be the ones selected to be taken to the ripening room. By selecting in this way, ripe fruit of some kinds can be had all winter long.-Practical

Weed Seeds in Western Hay. There was a time when Western farms were comparatively clear of weeds, but the slack cultivation given to corn grown by the hundred acres left always some weeds that escaped the horse cultivator. After a time weeds became so plentiful that the corn crop was greatly lessened and has become ed down, and Western baled hay began to come eastward. Much of this is full of weeds, ripened and ready to shell their seeds. We know farmers who have introduced bad weeds unknown on their land before by purchasing manure from city stables where Western baled hay is used. We may in this way introduce the Russian thistle, though on cultivated ground where manure is used that is not so dangerous as it is where a chance seed may fall upon some neglected spot, where it will ripen its seeds before it is seen. - Exchange.

It remains true even to-day that the farm is the chief and best school for the training of capable men that exists in this country. It is otherwise in Europe where one does not find a class corre sponding to the independent American farmer. But with us the farmer is a superb trainer of boys. His lads are learning real things, while the town boys too often are merely studying in the books the pale reflection of things. The farmer boy knows early about land and soils, about crops and their rotations; about the seasons, the weather, and the signs of the sky. He grows up in familiar acquaintance with ant mals. He owns a dog; he has a favor ite horse; he rides wild colts; he feeds the horned cattle. He helps in the planting and in the harvesting. He is usually versed in wood lore, and knows trees, plants, squirrels, rabbits and ground hogs. He hunts with a gun and goes fishing. He develops superb health. He helps repair the fences; be learns about tools, and masters the complexities of farm machinery. In short, the range of his practical knowledge becomes very great. Albert Shaw, in Review of Reviews.

Beeds and Bheaves.

Your home tells the stranger what you are. What kind of a reputation does it give you? The man who works all the weel

ought not to worry on Sunday. Worry is the hardest kind of work. Hard times are not made any better by brooding over them and whining

about them. It is better to smile than to sigh any time. Half our evils are imaginary and most of the other half A modern philosopher once said that

the man who worked for nothing and boarded himself, hardly ever earned more than he got. "Well fed is half bred" is a true say-

of live-stock If you make companions of your children, you are laying up a store of comfort for your old age that will return a very large interest on the invest-

ing. No man ever starved money out

ment. Most of hired men have souls, but some employers treat them as if they had not. Nothing pays better in the way of returns than to treat the bired man as if he were a human being. A

word of praise now and then makes work much easier for the man. Somebody has said, "You must feed your farm if you want it to feed you," and this is true. If you keep taking off your farm and never put anything back, you are breeding poverty for

When you sell a cow, sell the poorest one you have, but don't swear that she is the best one. It is pretty hard to do this, but it can be done, and you will

SOME OF THE VERY LATEST IDEAS IN DRESS.

Great Variety of Collarettes on New Gowns-Bodices Must Be Daintily Contrived Fur Much Used as Trimming Gray Astrakhan Is Popular.

Dame Fushion's Decrees.



are the collarettes that top them. From a simple band of ribbon fastening at the back up der two little frills to an affair that is almost an entire tollet in itself, there are literally hundreds of intermediate povelties for the embellishment of costume and wearer in

AINING in num

bers and variety

with every show

ing of new gowns

the shape of bands, pufferies, bows, and fiddlededees of all sorts, and all may be called collarettes. Old-fashloned lace collars, round at the back, and coming to points at the front, are set on stocks, the space between the front points of the collar being filed with gathered chiffon over satin to match the stock A fold of relvet drawn in many soft crinkles about the neck fastens at the back under a huge pair of fan-like loops. At the lower edge of the collar in front is fastened a fan of chiffon. A yard and a quarter of five-inch chiffon is needed. This is doubled and drawn in at the centre under a buckle or a fold of itself.

Scores of these collarette models are put forward invitingly and are grabbed



up quickly, too, for the bodice now

must be daintily contrived, and if some unusual effect is only included in it it is liked all the more. If a neck fixing isn't obtainable then almost any sort of oddlty will do as well, only as has been explained, neck accessories are more abundant. Turn to the initial illustration for a good substitute. The novelty here is in the vest, which is of the skirt material-dotted velvet and over the bust spreads in two small but conspicuous revers. The rest of the bodice is of brocaded setin; it is worn inside the skirt, and its jacket fronts are ornamented with huge pearl buttons.

Now and then a bodice is seen whose ornamentation is so elaborate and on so grand a scale that it seems necessary to have its pattern extend on to the skirt below, otherwise the full effect of the design cannot be expressed. Be contrived is the bodice of the second sketch. Here the materials are Ama son cloth and liberty velvet, the bodice being plain in back and coming inside the skirt. Its cloth front is pleated, and the velvet yoke showily appliqued Bows of ribbon set off the collar, front, and waist, and the applique design of the yoke appears on the alegve cuffs. and is repeated in magnified form on the skirt below. The sleeve puffs are from the cloth. But for the applique, the cloth skirt is entirely plain, and the whole is a very handsome gown. It could be made even more rich by making the sleeves entirely of velvet In the fur-trimmed example that the

artist presents here, the pelt is not only



PURRED IN JOINTS.

used to ornament the bodice, but ex tends over the skirt from waist nearly hem, the strips meeting and imits ting a long, sharp-pointed overskirt. Golden-brown broadcloth is the dress stuff, the fur is wool seal, and the skirt in in front and in godet nek. The bodice is plain a

front only there is produced with the for the effect of a double-pointed yoke. A band of fur marks the juncture of sleeve puffs and cuffs, and a boa of it

protects the throat.

The range of prices for the different furs offered in these trimming strips is great, so that everyone should be suited. Nearly all of them are dressy and handsome. Some of them, indeed, are more suitable when thus sliced up than otherwise. Astrakhan, for instance, except as an embellishment or finish. does not look cheap. It is suitable only for elderly women of very quiet tastes. and for such looks well in ample capor even in whole cloaks. For younger wearers of stylish pretensions, skirt-



PROM THE PLEATING

ess short jackets with velvet or moire sleeves may be made of it, such little double-breasted affairs being always jauntily becoming to any figure that is not too stout. For facing of collars and the edging and finish of cloth gowns, the fur always looks well. There is an effort to revive the popularity of gray astrakhan. Nothing in the world is so trying to the complexion of the average woman in winter as this fur, and its revival is almost enough to warrant advising women wearing it in summer if they must show their admiration for it.

Women have good reason to raise up their hands and cry, "Long live the plain skirt and fancy waist!" It is a fashion from which can be worked wonders of economy. A woman having one skirt of black satin, velvet or moire, and another of ivory satin, brocade or moire, both cut just right, with great organ pipe folds at the back, a well set-out hem all around and a general stiffness and crispness to the whole, will be equipped for all but the most formal affairs, if she has Sometimes, when the bues and cut

a well-chosen outfit of fancy waists. are comparatively quiet, very jaunty effects are produced by this fashion, An example of it is portrayed by the fourth picture, wherein is depicted a visiting costume of black satin. The waist has a full front gathered at the seck and belt, and black velvet collar. belt and shoulder knots. It is com-



AN EIGHT-KNOT BODICE

pleted by accordion-pleated epaulettes and basque of black mousseline de sole. The plain skirt is pleated in back. With this is sketched a hat that is designed to accompany the dress, with which it is in tasteful accord. There is a low crown of black wings, the edges toward the outside, and the garniture consists of knots of pale-blue velvet back and front, two upright wings, and a fancy black sigrette. Spanish bats are much worn, even by

very staid-looking folks, but the latter type is not at her best with a torredo hat aslant her head, and cocked out of line by a row of brilliant roses or a fold of velvet set next her hair on one side The young and pretty girl looks, perhaps, a little bit too dashing in the sarae style, but that is not now deemed objectionable. One trick that is especially expressive of challenge is that of wearing the hat-whose brim upturns, anyhow-well back upon the fore: end. The next and final picture shows one of this sort. In this instance it consists of a wire shape covered with blue velvet, and trimmed in front with ostrich plumes and an aigrette.

Besides this aat, the picture shows a simple and natty blue serge gown. In it an entirely plain skirt is topped by a blouse waist that fastens at the side, and is ornamented on the left shoulder with three satin knots. Similar knots are used to drape the sleeves, and also appear on the folded satin beit. The folded collar has a larger rosette in

THE proportion of whitee has in

CHINESE SUPERSTITION.

An Artist's Experience in Painting an Old Buddhist Pricat.

Crowds of people assembled as arrived at the inn, just before sunset, and among others I spotted the fine head of an old Ruddhist priest, says a writer in the Fortnightly Review. After a long confabulation and a few strings of cash, which passed from my pocket into his hands, I was able to induce him to sit for his picture and I dashed off a sketch in oils before he had time to change his mind. Unfortunately the large crowd that had gathered around, especially the women folks, seemed to scold him and talk angrily at him for his silliness in sitting. owing to the strange notion that prevalls in China and, in fact, nearly all over the East-that if an image is reproduced, a soul has to be given to it, and that the person portrayed has to be the supplier of it at his own expense. The venerable old Buddhist priest, who was nursing his "cash" on his lap while being immortalized on a wooden panel. and had a curious twinkle in his eye, as if he knew better, resisted bravely for some time and sat like a statue, but finally had to give in.

"You will die," cried an old woman at him; "I saw your soul coming out of you and go into the picture. I did, re-

ally; I saw it with my own eyes!" 'So did I," cried a hundred other

voices in a chorus. By the time the priest had got up they had half convinced him that at least half his soul had really gone out of him; but had the soul gone or not, he would go and take the cash for safekeeping to his home first, and complain and ask for the restitution of his lost property afterward. He was a sensi ble man. So was I, and knowing what was coming, the moment he had gone I went into the room and packed the sketch safely, then took another clean panel and smeared it over with the scrapings of my palette to show him in stead, in case he would come back and wish the picture destroyed. Twenty minutes had not elapsed when he was back again, of course without the "cash," holding his stomach and complaining of internal agontes.

"I am going to die," he cried, the moment he saw me; "you have taken away half my soul!"

"Certainly I have," said I, sternly "You did not expect me to give you all that 'cash' for less than half your soul. did you?"

"Oh, no! but I wish it back, as I feel so bad now without it."

"All right," said I. "I shall go in the room and destroy the image I did of you; will you then be satisfied?"

Here the other panel, smeared with palette scrapings, was produced, after naking pretense at destroying it with a knife, and never in my life have I seen an expression of relief to equal that of the priest. He had not felt half his soul so much going out of him, but be certainly felt it coming back again. He could swear by it. He was now perfectly well again!

This wonderful cure gave us all a very busy evening. All the villagers who had complaints of any sort came to us to be restored to bealth. A lerewho had jost all his fingers wished me to make them grow again; and a pittful case of a poor child, only a few months old, was brought up, whose mother, while busy stirring boiling water in a big cauldron, had dropped the child in by mistake. He was so badly scalded that I am afraid, though I tried to relieve his pain, the poor child cannot have fived more than a few bours.

Landed Estates in This Country. There are causes that operate against the feasibility of establishing and maintaining for any length of time large landed estates in this country. The conditions here are very different from those existing in England. English land holdings are generally productive. There is a considerable tenantry on every estate that brings in an annual revenue sufficient to maintain the property. In America the landed estates are generally unproductive. To maintain them requires an enormous annual outlay. They should be considered, therefore, as luxuries that can be safely enjoyed only by persons of vast wealth during their life time.

As legacies they prove to be incum brances that cost a small fortune to maintain and that are very hard to turn into cash. The late David Dows appreciated this when he remarked to a friend that, although he was worth \$15,000,000, he could not afford to own his beautiful country place at Irvington. When his friend asked him why he said, "I have a large family of children. When my estate comes to be divided among them my country sent will be regarded as an undestrable legacy. With \$15,000,000 it is easy to maintain with only \$2,000,000 or \$3,000,000 it will prove a burden."- New York Sun.

Occupations for Women. Among the trades peculiarly suited to women is that of repairing and riv sting broken glass and china and mending delicate fans and ornaments. There seems no possible reason why women should not be employed in jewelers' shops to repair clocks and watches, for which deft fingers and careful handling are essential. Another occupation out of which some women make : comfortable living is writing letters for people, generally for servants and others too ignorant to write for themselves.

Use for Crazy Fatches.

Since the short-lived "crasy quilt" rage subsided there has not been much use for bits of silk and velvet which accumulate in many households at a rapld rate. One woman cuts such scraps into narrow strips, runs them together on the wrong side, and makes fancy stitches with filling on the right. They are thus made into long strips of brilliant coloring, which are joined togother with alternate pieces of velvet. The whole makes a slumber coverlet and is lined with thin silk.

HAD A FELLOW FEELIN

A Watchman Who for Once a Cabinet Officer.

In spite of the fact that the generally some hundreds of app for each office in the gift of an ing administration, occasional officeholder becomes a willing to the illusion that his abilis of such a transcendent nature make him absolutely indisp to the workings of his particul partment, and that if anything happen whereby all the chiefs. away by some besom of destr should become unable to atta their duties, he could carry affairs of the nation. Such a ter, says Kate Field's Washi was an old watchman who keep guard in the Department tice during the Harrison admit tion. From long association w legal lights in the building lieved he had imbibed a fair st learning in the law, and so who night a telegram addressed to t torney General came after hor had no besitancy in opening is reading its message. It asked the tion

"Is a man to be held responsible a crime committed while under fluence of liquor?"

The watchman pondered over message for some time, and the he pondered the more convinc became that the case was urgen that if immediate action were taken the life of some fellow-cr would be placed in jeopardy. He abundantly able to sympathize the unfortunate, as he knew who influence of liquor was, and he no doubt the law of the land say he was not responsible. quently he sent the laconic answ

No, indeed. John Jones, in o of Department of Justice." Of course there was an imm attack on the Attorney Genera such a decision, and the matter to the ears of the department. A vestigation was made and the

man suspended for three month

CHEMISTRY IN INDIA.

lome Carlons Answers Given b tives in a Written Examination The uncivilized nations are like dren in their simplicity and guile ness Every adult knows what questions a child will ask and curious explanations they are in habit of giving. Nothing could e the child-like simplicity of the o tions lately given in an examina in chemistry held in an Indian

"Sulphur is a smellful gas. Nitre is a remarkably lazy gas and is for nothing. Carbon always exist a dark room. There is no living b in the whole world that does not tain carbon.

"Gas is made by filling a poker coal and heating it. Chlorine botherstion to the throat. Hydroga coloriess, invincible gas and itself without anybody's help. acid is used in the rant electricity. It is very bad teachers to pour it on our hands.

"Soda is formed by heating or oll and potash. Caustic soda is use the manufacture of soda water. this is used in medicine for purga purposes. Caustic soda is used summer drink. Quicklime is made pouring water on slaked lime. We eat this substance (CaO); it has power of digesting food.

"Lime is used as a kind of gum builders to stick bricks together.

Battle on Stilte.

In 1748, when Marshal Saxe traveling through the Low Country he came to the town of Namur, in gium. Among other things which citizens did in his boner, they got u battle on stilts. The town was subj to overflows from the rivers on e side of it, and the people, from much of stilts at such times, had become verpert with them, and often had s battles on holidays.

The young men formed themse into opposing armies, with flags

trumpets to make the scepe gay. It was against the rule to use a c or weapon of any sort, or to strike w the fists. Punching with their elbo and kicking with their stilts, to kn their opponents' legs from under the were the methods of assault employ in these stilt battles.

It was rough sport, for the comb ants fought as if their lives and i tunes depended on the result; and though no one was ever seriously jured, there were many bruised ar and legs before a battle was decided The wives and sisters of the comb ants cheered them on, and hastened the assistance of those who fell, he ing them up again as soon as they b recovered.

Marshal Saxe declared on the oc sion of the battle arranged in his bon that if two real armies should fig with as much fury as was displayed these young fellows on stilts, the butt would deserve no better name than the of butchery.

Reflected Light.

Some months ago an English man facturer made a number of exper-ments to determine the best method of Illuminating his cloth mills. Gas jet incandescent lamps and arc lights wer all tried and found wanting, as the either failed to give light enough, gav too much light, or cast beavy shadow Finally, a continental idea was ado; ed. The walls of a room were paint white and under each of a number of are lights was suspened a reflecte which threw all of the light up to th white ceiling, from which it was reflected to the room below. This system was successful from the outset and has attracted considerable attention among English weavers.—Phili