FARM.

Notes and Suggestions.

Heat is a great purifier as well as sweetener of food and drink.

Sods kept moist and warm by the stove affords a good means of testing the vitality of garden seeds.

Nine months old pigs are the most profitable and may weigh 200 to 300 pounds is not altogether confined to the "weaker room is most gorgeously furnished. He easily with good feeding.

barrels with fine road dust, that fowls may enjoy a bath in mid-winter.

The Wisconsin experiment station is well satisfied that dehorning bulls and steers is a valuable operation and productive of much good.

The regular and proper use of the currycomb and brush are wonderfully potent be accused of having wrought the ruin. Are sures and luxuries money could procure? agents in adding to the market value of a horse.

a most important direction to witness the evidences of a revival of interest in sheep doubtly the chief cause of his loss of prohusbandry. As the winter is the time when a large

quantity of ashes are made, some place should be provided for keeping them dry until spring. A sick horse is as unfit for work as is

sick man, and animals that are kept housed most of the time are easily injured by ex posure to storms. Push on the little pigs. These ought to

grow at least five pounds a week from four weeks old, and seven pounds a week from three months old.

nutriment of which it is capable. All young animals need room for exercise. Calves should not be too closely confined when being fed by hand. Colts require even more room, as they are fond of galloping around an inclosure.

The change to a horse, blanketed in a stable, when taken out in cold or stormy weather, makes the animal especially liable to take cold. In a barn the natural covering of hair over a horse is sufficient.

For ordinary purposes, the best mares to breed from are those with short legs, deep roomy chests, and wide hips. They should be neither too nervous nor too sluggish, and the general muscular structure should

be strong and good. The head of the brood mare is a very im- indulgence can do it their children's pleaportant point, as a mare that has a large head, with a dull, stupid countenance, will one care shall cross their path, not a thought not breed a good toal, for it has repeatedly of what others are suffering, or how much been observed that the colt is more apt to resemble its mother in the head and neck, than in any other part.

Ferrets for New Zealand, and Rabbits for British Columbia.

Mr. Cross, the well-known naturalist of Liverpool, who is up in London looking after the gorilla that he has just sold in the "Zoo," paid a call to Northumberland street the other day to report on the animal king dom of whom he is undisputed lord.

"The last new thing," said Mr. Cross, "is the sailing of the terrets; 120 of them have just gone off, and with them 750 pigeons, ten sacks of biscuits and 375 tins of Nestle's milk-I bought the milk for them myself."

"But what are the pigeons for?" "That I will explain to you. The ferrets are for the rabbits and the pigeons are for the ferrets. They will eat up the 750 pigeons on their voyage to New Zealand. They will also consume the biscuits and the milk. Then, I have sent sacks upon sacks of hay to make bedding for the ferrets, and plenty of Indian corn to feed up the pigeons. It was quite a sight-four big carts and two whole railway trucks were taken up with this consignment. Two men accompanied the ferrets, and very hard work they have looking after both them and the pigeons. But, then, as I told then, the further they got from England the fewer pigeons there

"And what are the ferrets sailing for?" "They are a consignment to a large wool iarmer in New Zealand. The rabbit pest, as you know, has now broken out very bad there. The Australians, I see, are going to have a rabbit-pest conference; but this New Zealand wool merchant thought he had better send to Mr. Cross, and Mr. Cross is going to send to him 120 ferrets. They won't make much headway, you say, against the rabbits. But then they breed so fast, and if none of them are lost on the voyage, in a few months' time my client ought to have 600 or 701 of them at least. "Don't spare the expense, he said to me. The rabbite are eating up all the passure on which his sheep ought to be feeding, and unless he can get them under he will be a ruined man. By the next mail I am going to send the same customer a consignment of stoats and weazels. They are wonderfully tough customers, are stoats; they will bleed the rabbits to death in no

"Cu-iously enough," added Mr. Cross, "at the very same time that I received these orders for means of destroying the rabbitts in New Zealand, I received also a large order for rabbits, and I am now hard at work getting together two thousand of them as quickly as I can. They are going to British Columbia, where they have not got any rabbits. I am sending two thousand of them-fitteen hundred does and five hundred bucks. This is a pretty large business also. They will want one hundred sacks of oats at least for the voyage, besides plenty of hay, straw and sawdust."

"Now, how much should you think, asked Mr. Cross, "I am paying for thes rabbits ?"

Our reporter hazarded a guess, but it was below the mark.

"Five shillings a pair," said Mr. Cross, " is what I have to pay. I am buying them from a large landlord not far from Liverpool, who has raised the price owing to the large number of men he finds it necessary to employ in order to catch them. It will take sixty men, he says, to catch these two thousand rabbits for me in time for the next mail."

A young bride signing herself Clearists makes a proposal in Longman's Magazine, London, for the establishment of a bureau for the exchange of superfluous wedding presents. She says no complaint can be made of any increase of the number or value of such presents, but of their annoying sameness, She was surprised on her wedding day by the display of twelve dozens of table-spoons, sixteen travelling watches, thirteen toast-tongs, eleven gong-gongs, etc.

Modern Extravagances.

BY MRS. HENRY WARD BEECHER.

in "mind, body and estate" by loss of property is often attributed to the reckless extravagance that brings such impoverishment in most cases be more equally divided be- indulgences. tween the joint heads of the house, instead there not cases enough on record-and and some not very remote-to show that often It is a gratifying sign of improvement in | the husband's profuse outlays for his own selfish gratification and pleasure were unperty, and could not be attributable to his wife's thoughtless expenditures? Are not the taults and mistakes in such troubles on either side about equally divided-as they so often should be in most disputes? Unquestionably, there is woeful prodigality in the dress of many. How much of jewellery, velvets, laces-all of the first quality-is bought at very high prices, and, being soon tired of, is cast aside for newer and more funciful styles! Even for those who can boast a princely income this is a wicked, needless waste, when perhaps all around these splendid mansions many are really At present prices of grain and oatmeal, suffering for a morsel of bread. Seeing such one or both may be fed in connection with thoughtless appropriations of the abundant straw, the latter giving bulk and all the blessings committed to their stewardship, one naturally asks, "Where rests the chief blame ?" Too often, we fear, with those parents-particularly the mothers-who have toiled early and late and suffered many hardships to work their way up from a very low financial state to competency, and at last to affluence.

This done, they resolve that their children shall never experience the cares and hardships that they knew in their youth, never have any wish ungratified that money and their minds how their children shall be helped up to maturity, they never reflect of the husband. But we think that God expects them to teach them to become useful members of society. Fo arrange so that, so far as money and sures shall be the one supreme idea. Not by a little self-denial or a thought they can alleviate the afflicted, is allowed to come

If a girl never hears a word about economy from her birth, and is only conscious that to secure the means to gratify her slightest wish she needs but to stretch out her hands and they will be abundantly filled, how can one expect after marriage that she can have the faintest knowledge of the duties that must belong to her in the care of her household? She has never been called upon to know anything about her own expenses. What she fancied she wanted she bought without a thought that it might be well to learn if she ought to afford the money.

How money came, how it was always ready for her when she asked, were questions she had never been taught that she ought to ask, and to understand the answer. As far as any teaching she has ever received, she might imagine that money grew in the woods, and her father had it gathered for her as wanted-and of course her husband would do the same. No education before marriage ever taught her anything more rational. With such a girlhood, free from every thought but her own personal gratification, what reason can there be for surprise if she makes any mistakes-well for her if they are not irremediable. Duty was something never mentioned to her when a girl. After marriage her husband gives her no insight into his business affairs, no cautions as to expenses, never talks to her of or consults or advises with her about their mutual expenditures. The same cruel love and indulgence-or it may be indifference -surrounds her in her new home, and thus she continues to be left in utter ignorance of all practical knowledge, simply a toy, a butterfly seeking only sunshine and personal enjoyment.

And yet under proper training what a specimen of wemanhood she perhaps was capable of being made! Had she been sensibly trained, how much more of 'rue noble enjoyment she would have found, when all the talents God gave her had been turned into their natural channels! How sad to think what might have been, what talents may have been folded away and buried!

Defrauded in early youth of such know ledge as every girl, however rich, ought to have, why should so much blame rest on the fas ionable women even though her lavish expenses cripples and at last destroys her husband's financial operations? Was the fault wholly hers, or, rather, was it not more a misfortune than a fault? Is she not more to be pitied than blamed?

This, however, is not all. Suppose after the early months of married life gradually her husband begins to hint at less lavish use of money, and then to urge upon her some little attention to economy, assuring her his business will not allow such thoughtless and wasteful purchases. Economy is a word she has seidom heard and has no definite meaning. But love for her husband (for it is but charitable to suppose that their union came through genuine love) may lead her to make an effort to follow his wishes in so far as she is able to understand them. Yet the way is dark; no one offers to lead her through the gloom into the true light. Where shall she begin, how take the first step toward reform? She presses forward to gain higher ideas and to understand how to make them practical, but steps back to the old place and tries again. She cannot yet lay hold of and follow the thread that will guide her out of this labyrinth of trouble. Now, suppose that while thus groping in the dark, earnestly but ineffectually seeking the right way and grieving that she makes so little progress, she obtains in some accidental way a slight insight into her husband's mode of practising that which he would fain teach his wife. Her mind is beginning to wake up, her vision | ble versatility. She is artist, author, poet grows clearer. Perhaps because she has had her thoughts so intent on correcting her own shortcomings she has been led also to see her husband's proceedings in a

necessary for gentlemen who desired to move in the best society. She has always known that he kept fast horses, was con-The failure of business men and the ruin stant at races, now and then "enters" a horse or bets on some favorite in the "course." He belongs to a club-in severpenditures of their tashion-loving wives. al, perhaps-is often absent at club dinners Doubtless in multitudes of cases this is all or excursions-well, why not? He amokes too true. But is it also true that the ex- the most expensive cigars, has a costly collection of meerschaums, and his smokingsex"? There are two sides to every story, spends large sums in the gratification of all Before frost closes the ground fill several and two ways by which the cause of most his so called cultivated tastes, and seldom domestic trouble can be justly explained stints himself in any of the gentlemanly and estimated. If so, should not the blame | pleasures which seem to him as reasonable

> Hitherto his wife-if, indeed, she ever of laying all on one? Were the true cause gave a thought to this part of her husband's of many financial troubles honestly investi- | daily life-supposed it perfectly consistent gated and judged, perhaps "the woman with his position in good society-was not which thou gavest me" might not so often | she also having her full share of all the plea-

> > NO THOUGHT OF CRITICISING HIS DAILY

COURSE has ever entered her mind until he began to urge some retrenchment, which she was very willing to attempt. She has turned to him for advice ; she gets only vague, uncer-

to begin this reduction of expenses. Unfortunately for her peace, it begins to dawn upon her that he lays a heavy burden upon his wife's shoulders, but takes no share of it upon his own. She sees in his and danger ahead, it is to be feared that he ready for the counter's hand. The instru will see his wife's extravagance through ment used by the counter is not a complicatunjustly censured?

A man's extravagance can be more skilfully concealed than a weman's for hers is usually in matters of dress and personal adorning.

So if trouble and lose falls heavily bytheir love can satisfy, and never soil their and every gem will be appraised at the hands with labor. Having thus settled in highest value, and charged more to the extravagance of the wife than misjudgment

> GENTLEMEN MAKE THEIR FIRST MISTAKES in being too proudly reticent on business matters with their wives. Often if there were perfect confidence, and the first warning of danger was freely talked over between them, their united counsel, made clearsighted by loving confidence, might avert the disaster they feared, or so far bring it under control as to cause no serious damage. If every wife could be so far taken into her husband's business confidence that they could freely talk over their several expenses | Engineers and Electricians, Mr. Edward and see where retrenchment was needed, Stallibrass read a paper on deep-sea soundand together plan the best way of effecting | ing in connection with submarine teleall that was needed, they would strengthen graphy. Mr. Stallibrass said the work of each other's hands, encourage their hearts, surveying with a view to ascertaining the and by such counsel secure that strength | configuration of the ocean bed previous; o most to be coveted, and ward off much pain | laying a submarine cable was of vital importand loss.

> must follow the thoughtless extravagance, which is said to be on the increase. One the discovery of two banks, two coral feels despondent and hear sick at the sight patches and four other shoal spots. Some of sorrow and want which they have not of the inclines near these banks were rethe power to relieve, while at the same markable for their steepness. On the east time the stores are crowded with the multi- side of one of these the bottom fell precipittude spending their money needlessly, just ously for 450 feet, and on a sounding taken for the pleasurable excitement of "shop- by the Dacia during her survey of Seine bank ping," to use the time hanging heavy on a precipice of 1,800 feet was found. A map their hands while waiting for the ball, party of the mouth of the Congo showed a most

> now and then take that wasted time and ings, many of these having been taken at inmoney to help the worthy poor, to see what | tervals of less than one mile. In the mouth money can do to bring light to eyes faded of this remakable river a depth of no less with weeping, hope to the despairing hearts, they would soon learn how infinitely better | similar locality giving only about 40 feet. it is to receive the blessings of those ready to The gully' was distinctly traced 100 miles perish who they have relieved than any- out at sea. It seemed almost incredible that thing possible to be found in their usual probably one-half of the cables now lying at round of pleasures and amusements.

An Indian Aristocracy.

The Osages are the aristocrats of the Indian population of the United States. They have an indefeasible title to the re servation upon which they live, and about \$7,000,000 in the hands of the Government bearing five per cent. interest. They are paid \$250,000 annually in cash, and as they are only 1,600 in number they constitute the wealthiest community in the country. A writer in the Kansas City Times thus describes them :

"The Osages have all the attributes of an aristocracy. They own the land, do absolutely no work, have plenty of money, know nothing of barter and sale, and therefore not much of the meanness which characterizes all commercial classes. They envy nobody, ard are satisfied with themselves and their customs. With the virtues of aristocracy they have its vices. With generosity they have shift lessness and laziness in perfection. Though magnificent pastures lie before them for miles, few of them take the trouble to own cattle, the majority preferring to buy beef already slaughtered and cut up from the traders. They are not even hunters and fishers. Their lives are spent in lying around under tents and shanties, eating to repletion and filling their blood with impurities which they do not take exercise enough to get rid of. Bad habits have brought on bronchial and scrofulous diseases, which are helping to still further reduce their number. They have no faith in white physicians, and their own medicine men have as much influence as one hundred years ago."

Heard on the Street.

"Are you still tugging away at those gloves of yours?"

"Yes, dear." "You know it disgusts me to see you walking through the street making your toilet.

"Does it, dear?"

"Why, do you know that I would just as soon see you pulling on your-stockings in the street as your gloves?"

"Most men would," was all she said, and he had nothing else to say."

Princess Beatrice is a woman of remarkaand composer. She has just published "The Sunny Month of May," a pretty tener song. The words are by Heine.

The death of Lord Lyons, who has been somewhat different light. Hitherto she seriously ill for some time, is announced at thought of his way as what was absolutely | the age of seventy.

SCIENTIFIC.

HOW DIMES ARE MADBIAND COUNTED.

It is not generally known that the United States Mint, on Fifth street, says the San Francisco Chronicle, is the largest institution of the kind in the world, yet it is a fact. Just at the present time there is a lively demand for silver dimes, and hundreds of thousands of dollars of them are being shipped to New York, Chicago, Cincinnati, St. Louis, and other Eastern cities. Two of the money presses have been for some time running exclusively on this coin. The demand is so great that these machines are not even stopped on Sundays and will be run on that day throughout the present regarded as the principal animal food. By month. The process of dime making is an interesting one. The silver bullion is first melted and run into two-pound bars. These in turn are run through immense rollers and flattened out to the thickness of the coin. These silver strips are then passed through a | than in the flesh of the sheep or hog. Beef machine which cuts them into the proper size for the presses, the strips first having been treated with a kind of tallow to prevent their being scratched in their passage through the cutters. The silver pieces are then put into the feeder of the printing and is much more difficult of digestion. tain responses and she begins to see that her presses, and are fed to the die by automatic Some persons are wholly unable to digest husband knows no better than herself how machinery at the rate of 100 per minute, veal, and when they eat of it, it acts as a 48,000 dimes being turned out in a regular foreign body in the intestines, and causes working day of eight hours. As the smooth griping and diarrhæa. It is more easy of dipieces are pressed between the ponderous gestion when well roasted or broiled than when printing dies they receive the lettered and boiled. The time required for the digestion figured impression in a manner similar to of veal is five hours or more, while beef is life no signs of the retrenchment in his that of a paper pressed upon a form of type; digested in from two and a half to three luxuries and pleasures he has urged on her; at the same time the piece is expanded in a hours. and yet, should the day come when money | slight degree, and the small corrugations is not as easily obtained for either as in their are cut into its rim. The machine drops earlier life, and the husband sees trouble | the completed coin into a receiver, and it is magnifying glasses before he will realize his ed machine by any means, as one might own. Her eyes have not yet, perhaps, been suppose. It is a simple, copper-coloured opened so far as to enable her to draw a just tray, having raised ridges running across stomach of the dyspeptic less than beef does, comparison so as to realise to the full the its surface at a distance apart the exact true situation on either side, but how can | width of a dime. From the receiver the she help feeling that she has been somewhat | money is dumped on to this board or tray, and as it is shaken rapidly by the counter the pieces settle down into the spaces between the ridges. All these spaces being filled the surplus coin is brushed back into the receiver and the counter has exactly account of its delicacy of flavor, which, howand-by, any yard of velvet, silk, rich lace 1,250 silver dimes, or \$125, on his tray, which number is required to fill the spaces. The tray is then emptied into boxes, and be selected for those whose digestive organs the money is ready for shipment. The dime are weak. does not pas through the weigher's hands as does the coin of a larger denomination. One and one-half grains is allowed for variation or "tolerance," in all silver coins from a dollar down, and the deviation from the standard in the case of the ten cent pieces is so trifling that the trouble and expense of weighing coins of this denomination is dispensed with.

THE BOTTOM OF THE DEEP BLUE SEA.

At a meeting of the Society of Telegraph ance. Between Cadiz and Teneriffe alone, a No one can fail to see the mischief that distance of about 700 miles, 673 soundings were taken on one expedition, resulting in remarkable submarine gully, the contour If, just for an experiment, they would lines of which were drawn from 202 soundthan 1,452 feet was found, the Thames in a the bottom of the ocean, amounting to a value represented by several milions sterling, had been placed on their on their ocean bed, whiles those carrying out the work were almost totally ignoraut of the bottom on which the cables were destined to lie. -Pall Mall Gazette.

A FOUNTAIN OF NAPHTHA.

A Russian newspaper gives details of an outburst of naphtha in the Baku region. The naphtha, owing to the pressure of the gases which acompany it, rises to a height of from 280 feet to 420 feet, and is carried by the wind to a great distance, falling like tine rain at the more distant parts of the district, but near the fountain coming down in torrents that formed rivers and streamlets. Further on it falls like sleet, and settles in a layer on a building in the neighborhood. These naphtha rivers flow for a distance of more than a half mile, and pass through wells, works, reservoirs and inhabited houses, etc. Unfortunately all the reservoirs in the neighborhood were full when the fountain broke out, and the oil was thus wasted.

IN OMERNIAN SIBLE DISTANCES.

It is conceded that the stars are some distance off, so far that the human mind fails to get even a faint comprehension of the distance, but the astronomers are always giving us new figures. In one of the English magazines speaking of the star Alpha Centauri, it is said to be in round numbers twenty billions of miles off from the earth. Now, a billion means a million of millions, so that the distance of Alpha Centauri may be stated to be twenty millions of millions of miles. The astronomer supposes a train to leave the earth, travelling day and night at the rate of 50 miles an hour without stoppages. In six months it would reach the moon, in 200 years it would reach the sun, and in 6,000 years it would reach the planet Neptune, the orbit of which forms the extreme known limit of the planetary system. The same train, however, would not reach the star Alpha Centauri in less than 42,000,000 years. One more illustration may be useful. Comets, in general, revolve in very eccentric orbits. When a year. comet is in the perihelion of its orbit it is comparatively near to the earth; on the other hand, when it is at the aphelion it is his most pleasing production. remote-in many instances very remote from the earth. For instance, the celebrated comet of 1858, known as Donati's comet, one of the greatest comets of modern times, at the time of its passage of the perihelion fly, but the hawk, sitting on the back of the was distant from the sun 50,000,000 miles, but when it has attained the aphelion of its He always steers his victim to his nest in erbit (which will secure in about 1,000 | the forest.

years hereafter), its distance from the earth will not be less than 30,000,000.000 miles. Now our typical railway wain starting from the earth would not reach the aphelion of the orbit of Donati's comet in less than 60,000 years, and yet the aphelion distance of Donati's comet is only one seven-hundredth part of the distance from the earth to Alpha Centauri, the nearest of the fixed

HEALTH.

VALUE OF DIFFERENT MEALS AS FOOD.

Beef .- Among all civilized people beef is common consent we admit that beef is more nutritious than any other kind of flesh. This universal opinion is supported by the investigations of science. There is a larger proportion of nutritious material in beef is of closer texture, and is fuller of red-blood juices. It is richer in flavor than the flesh of any other domestic animal, and a smaller amount of it will satisfy hunger.

Veal is not nearly so nutritious as beef,

Mutton.-This is more easily digested than beef, though in a healthy man no marked difference would be observed, since in the stomach of such a man there arises no inconvenience from the digestion of beef. However, mutton will be found to tax the valuable to a person suffering from dysentery or kindred affections of the bowels. But mutton is not so nutritious as beef.

Lamb .- This is not nearly so nutritious as mutton. The tissue is soft, gelatinous, and rich in water. It is used principally on ever, is very variable, depending upon the breed and nourishment. Lamb should not

Pork, Bacon and Ham.—As a rule, dried meats are more difficult of digestion than the same meats in the fresh state. Bacon and ham are, however, exceptions to this. rule, for when well cured they are digested with more ease than fresh pork. In cold weather, nice bacon is especially suited for furnishing a large amount of heat by its oxidation in the body. The inhabitants of cold countries find fatty food necessary to their existence.

Fowl.—There is no bird that may not be eaten in case of necessity. In other words, the flesh of no bird is in itself poisonous. The same is true of the eggs of all birds. It is true that cases of poisoning from eating quails during spring have occurred; but the poisoning was due to the buds of the mountain laurel, upon which the birds fed. The flesh of carnivorous birds is strong in odor and in taste, and would not form a tempting dish, save to one threatened with starvation. The light meats of birds are more easily digested, less rich in nitrogen and in flavor than dark meats. Chicken broth is more nutritious than that made from either mutton or beef, and often of great value to the sick.

Where Jet Comes From.

Jet is the commonest substance in use for personal ornaments, and yet not one out of 1,000 persons knows where it comes from or what it is composed of. The English jet, which is the most popular, is dug on the coast of Yorkshire, near Whitby and Scarborough. The trade from Whitby dates back to the latter part of the sixteenth century, and jet is known to have been used for ornaments by the early Britons and their Roman conquerors. The price of the raw material is from 10 to 18 shillings a pound. It is worked altogether by hand. Pieces are sawed to the proper size and then the pattern is scratched upon the jet with a sharp pointed instrument. Then a workman takes a knife and commences to whittle the jet just as you might a stick of wood, the material working easily. With this knife and with small chisels he works out the pattern, after which the piece is taken to the grindstone and the rough parts are ground off. Swift-whirling wheels do the polishing, except where there are deep incisions in the ornament, in which case boys finish the polishing with thin strips of list.

Brilliancy is given to the ornament by sprinkling on a little rouge and polishing lightly with a rubber. Jet was once used almost entirely in the way of pins, bracelets, etc., but now the larger part of the output is made up into dress trimmings.

Never Too Late to Learn.

Socrates, at an extreme old age, learned to play on musical instruments.

Cato, at eighty years of age began to study the Greek language.

Plutarch, when between seventy and eighty, commenced to study Latin.

Bocaccio was thirty years of age when he commenced his studies in light literature; yet he became one of the greatest masters of the Tuscan dialect, Dante and Plutarch being

the other two.

Sir Henry Spellman neglected the sciences in his youth, but commenced the study of them when he was between fifty and sixty years of age. After this time he became a most learned antiquary and lawyer.

Dr. Johnson applied himself to the Dutch language but a few days before his death.

Ludovico Monaldesch, at the great age of one hundred and fifteen, wrote the memories of his own time.

Ogilby, the translator of Homer and Virgil, was unacquainted with Latin and Greek till he was past fifty.

Franklin did not commence his philosophical researches till he reached his fiftieth

Dryden, in his sixty-eighth year, comcommenced the translation of the Æneid,

A Southern clergyman, who is an amateur naturalist, announces that when a sparrow hawk pounces on a guinea he lets the guinea fowl, uses his own tail to guide the guinea.