



# THE RURAL HOME.

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NO. 2.

## A CHAT ON AN INTERESTING SUBJECT.

"How is it Samuel, that you always get a higher price for your stock than the rest of us and have such good luck while everything seems to go against us when we venture in the stockraising line? There was that 5 year old clyde of yours; you worked him from the time he was two years old and I am sure he more than paid for his keeping and all the expense and trouble of rearing him, and last week you sold him for \$150 clear profit. Now mine was a finer looking colt than yours when foaled and I have taken the best of care of her and never put a collar on her till she was 3 years old and she has been worked very lightly since and now she has a bunch on her leg and the regular buyers wont look at her and I offered her to the minister this morning for \$50. You are the lucky man and I wish I knew your secret."

Well neighbor Brooks, as far as luck goes I do not believe in it at all, but if you want to know the secret of successful stock raising I can very soon put you on the right track.

"Do. I should be glad to have a leaf out of the book of your experience."

"In the first place you and some others about here do not give proper attention to the selection of sires. You seem to consider a colt is a colt and choose an inferior sire paying \$4 for his services rather than \$10 or \$20 for the services of a good animal. A more 'peuny wise and pound foolish' procedure than this has yet to be discovered. There are scores of worthless stallions on the road and it would be a good thing if the country would buy them up and put them beyond propogating their miserable kind for so long as they continue to travel farmers will allow themselves to be imposed upon."

"But they all look about alike; I do not think there can be much difference and if one saves \$16 in the cost and gives the colt that much extra feed wouldn't that be a good plan?"

"No it would not be a good plan, it would be a very foolish plan. There is just where the difficulty lies; these animals are fattened up and made to look so sleek that half the farmer's do not detect their faults and think they must be very fine stock indeed. You may argue as much as you like about the feed being more important than the breed but as sure as you live good

feeding and good breeding must go hand in hand. If you select good sires and take good care of the colts you will have animals that will command a ready sale even in a dull market."

Hamkins says the choice of brood mares is also of importance and ought not to be overlooked."

Very true but most of us ordinary farmers have not so much choice about the mares. We are compelled to breed from whatever sort of a mare we may chance to own. Time brings change and as an opportunity offers you should endeavour to secure a good brood mare that approaches as nearly as possible the standard of excellence. She should be free from hereditary unsoundness, spavin, ring-bone, etc., for not only are these diseases transmitted to the offspring but when the ancestors have these afflictions even though no trace is visible in either parent they are frequently handed down to their progeny."

"I always thought a mare was good enough for breeding when she was old and not fit for anything else but there must be something in what you say."

"You will find there is a great deal in it. For ordinary purposes a short legged mare is best, having large deep chest, wide oval hips, compact and in every way built so as to indicate a robust animal with a sound constitution."

"My old mare is pretty well built but I never did like the look of her head. I would like one having a more sprightly head appearance."

"The head is a point of especial importance. A mare with a large head and a dull stupid countenance will seldom breed a good colt. Above all avoid a vicious temper or a bad disposition as it is one of the characteristic laws of life that like begets like."

"You have told me a good deal but there is one thing yet I would like to know. What class of horses would you advise us common farmers to raise?"

"As to that the large farm or dray horse is undoubtedly the most profitable. For such horses there is always a demand and there is not half the risk in raising them. Besides they are strong and can be put to work on the farm at two or two and a half years old and when they mature can be disposed of for a good price. It does not pay to raise trotters. There are enough of them already and not one out of a hundred amounts to anything. Good carriage horses are in demand,

such as can travel 9 miles an hour in a journey on ordinary roads. But unless a man can get matched pairs the price realized is altogether out of proportion to the expense and care of raising this class."

"Well Samuel I am much interested in what you say but I cannot stay longer now. I am going to the forge to get a couple of bolts made to put in the fork of an apple tree that got broken down by the wind. I tried it some years ago on a tree that was so badly broken that we all though it was completely ruined. We got ropes and drew the two parts together in the proper position and then put the bolts right through the trunk so as to hold the tree together. It never stopped bearing and now the wood and bark has grown over the bolts and the split and you cannot see that it ever was broken."

Why do country people crowd to the cities? asks the city editor about 52 times a year. Why desert pure air, beautiful nature, fresh fruits and vegetables, comfort and what ought to be happiness, for foul air, poor food, rank discomfort, misery and vicious surroundings? We will tell you. It is because you city editors live in the city while your papers are read mostly in the country. You write of every thing from the citizen's standpoint. You constantly in silly smartness use the 'countryman', the 'rustic', as a butt for ridicule, unconscious of the fact that city folk in the world of nature are the greater fools. City interests are paramount with you in all discussions of labor, transportation, tariff, finance, and commerce of every degree. You forget that the city lives solely on the products and by manipulation of the country. You throw a sop to Cerberus in an 'agricultural column' which is a bad hash of waste from workshop, kitchen, stable and field. The city man and city child ape your method and thought. Honest country folk look up to people who have great opportunities and unconsciously absorb the influence of your sophistry and jug-handled preachment. They learn to look upon the city as the Mecca of all ambitious efforts, and crowd thither like the foolish fools who labor over the sands of India, perhaps only to perish in the end of fiith and fever, or by the Juggernaut which is the leading spirit of city life. Come into the country and live as men should live; then write as men should write. The evil men deplore is in your hands to correct.

# THE Rural Home.

A Monthly Magazine for the Farm,  
Garden, and Family Circle.

JOHN BRYENTON, Editor & Proprietor.

The RURAL HOME is an epitome of Agricultural Information adapted to the Maritime Provinces.

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A. J. PINEO,  
Publisher.

Publishers receiving a copy having this notice marked are invited to exchange.

Those wanting profitable employment during the winter months will do well to write for our confidential terms. We are giving large cash commissions to those securing new subscribers. This is a rare opportunity to make money easily, rapidly and honestly. Write promptly before some one else occupies the ground.

The provisions made by the greater number of our best farmers for the preservation of liquid manure are very faulty. Standing upon the threshold of a grand agricultural future and looking back upon the data which marks our advance we are fortunate in having fixed facts to guide us in this and other important matters. Long ago Dana after a careful investigation

concluded that the amount of urine from cattle was equal in value to two-thirds as much by weight as the solid. Dr. Nichols also has analyzed the solid and the liquid from his own cows with the following result.

In 1000 lbs.	SOLID.	LIQUID.
Nitrogen,	5.11	17.5
Potash,	2.00	15.0
Phosphoric acid,	3.55	10.1

The above analysis will startle many farmers who have paid no attention to the matter and a careful study of it is like a new revelation showing how many hundreds of dollars are leaking away from our barnyards each winter. Our attention is drawn by the above to the important fact that nearly all the potash is in the liquid. When this is lost what remains is only a one sided manure lacking the very substance the soil in many places stands most in need of. The liquid contains also a large proportion of the nitrogen and holds the soluble parts of the manure that act immediately upon the vegetable growth. These proportions of course are much less in other animals yet the liquid is much richer pound against pound than the solid. We cannot afford to allow such a quantity of valuable manurial elements to go to waste for the preservation and application of manure is the key note to advanced farming and large profits. The stable should be constructed in some way so that the liquid will be saved. It has been found advisable to have a cellar beneath the stable well drained to keep surface water out and cemented to retain the urine within.

The exceedingly low price of potatoes will prove a blessing in disguise if it reduces the acreage of the crop. Notwithstanding the well known fact that the potato crop is very exhaustive to the soil it hitherto held its position as a staple article of production because it usually commands a ready market and can quickly be converted into money. The cost of production, and the effect upon the soil have been minor considerations. The potato bug has already made its appearance in nearly every part of the Maritime Provinces and in some places has proved very troublesome and destructive. The labor and expense of battling with this pest must be taken into consideration, and this together with the de-

pression of trade will cause many to look around for some other crop which on the whole will give more satisfaction.

That there is a field in the Maritime Provinces for such a journal as the RURAL HOME few will deny. For every farmer who takes a strictly agricultural paper there are five who do not. There is no other way in which we can gain more information that will be profitable to us in the prosecution of our labors, than in reading that which relates to our pursuits. For the expenditure of the trifling sum of fifty cents every home may be supplied with agricultural literature which will be a benefit to its inmates both young and old. Our object is not so much to make money as to advance the interests of the farmers and to urge them on to improved systems, increasing the productiveness of the earth and the prosperity of our country. With this end in view we put the price at one-half what is asked for other papers so that no one can refuse to subscribe on the score of expense. Whatever profit may accrue will be used in extending our usefulness and in improving and enlarging the journal so that each subscriber sent in is a direct benefit to all our readers. Few of the great Agricultural Magazines in their infancy were superior to ours and even now they are not more useful to the people of our own provinces. Those who wish to see agriculture in the Maritime Provinces placed on the same footing that it is in Ontario and portions of the neighboring republic will wish us Godspeed and send in their subscriptions.

Many farmers have demonstrated to their own satisfaction that better results can be obtained from a moderate quantity of manure applied after land is plowed, the manure being covered and worked into the surface soil by a good disk harrow than by spreading it upon the land and ploughing it under. In the former case it is left near the surface and as it becomes soluble the plant roots appropriate all the fertilizing elements.

Those who wish light and profitable employment for the few following months should study carefully our liberal premium offers on page 31, or send for our confidential terms to those who prefer a commission.

The Best Milk Producing Breeds of Cattle.

## ARTICLE I.—SHORTHORNS.

BY C. C. GARDINER.

In this series of articles on the milking qualities of the different breeds I shall do the Shorthorns the honor of naming them first, as they are, no doubt, the most representative kind to be found among civilized nations of any land. There are few civilized countries in which they are not to be found. China, Japan and all the South American Republics have for some years imported them. They are a most valuable breed of cattle, which their history tells us have existed in the northern counties of England from time immemorial. Their central location may be said to have been on the River Tees, flowing between the counties of York and Durham, where they were formerly called the Teeswater breed of cattle. It is said they came at some remote period from the Continent of Europe, and having gained a footing in these counties retained it. They were, however left to propagate by chance, for a long period, but perhaps for about one hundred years before the publication of the 1st Vol. of the English Herd Book, many breeders, amongst whom might be found noblemen, and wealthy country gentlemen, had been in the habit of bestowing great care and attention upon the selection and breeding of the Shorthorn cattle, and in preserving the pedigree in manuscript in a more or less complete shape. About the year 1700, Messrs. Charles and Robert Colling commenced as breeders, and obtained a very distinguished place in the profession. Shorthorns, about this time, from their superior milking and feeding qualities, began to obtain a high popularity, and at Mr. Charles Colling's sale, as long ago as 1810, his herd consisting of 48 animals, amongst them the bull 'Cornet [155]', sold for the extraordinary sum of £7.115 stg., realizing the astonishing average of £148.5 stg., or about \$740. In the year 1822 after the breed of Shorthorns had been long established as a superior breed, Mr. Cotes, himself an eminent breeder, published the 1st vol. of the Shorthorn Herd Book. That work is continued in successive volumes until the present time; and since its inception thousands of Shorthorns have been exported from England at remunerative prices to supply the increasing demand from other countries. Many persons of great experience with most breeds of milking cattle, place the Shorthorns first for milk, above all others. In a lecture given by Dr. Voelcker, at the Paris Museum of Hygiene, in London, not long since, on 'Milk and the best breeds for producing it,' he unhesita-

tingly places the Shorthorns without a peer. He says, 'Of all breeds of cattle none hold so high a place as the Shorthorns, and this is the case not only when it is regarded as a meat producing animal, but also for dairy purposes.'

The Shorthorns are universally considered as deep milkers; and their use in herds such as Sir Hussey Vivian's, Mr. Tisdall's and others amply bears this out.' He further says, 'Two other points of the greatest importance in considering their advantages as dairy cattle are. Firstly, the possession by them in the highest degree of the power of transmitting their milking properties, on which account they are eminently suited for crossing and improving other breeds, by imparting a Shorthorn character to them. Secondly, the readiness with which the cows, when they have ceased to yield a remunerative supply of milk, will lay on meat of an excellent quality. In addition to these two chief points, there are others, such as their early maturity, robustness and excellence in rearing their young. So we find that our dairy cattle are getting stamped more and more with Shorthorn character.'

In Sir Hussey Vivian's herd the average produce of milk is 750 gallons per season, while one Shorthorn cow gave no less than 1000 gallons of milk between calving and calving, and had two calves within twelve months.

Mr. Tisdall, of Holland Park Farm, in his paper at the Gloucester Dairy Conference, speaking of his shorthorns, gives for them an average of 10.33 quarts per day for 10½ months, and says, 'if properly selected from the best families, and properly fed, Shorthorns will produce as much milk and much more beef than any other breed.'

Mr. James Long, in his lecture not long since, at the Institute of Agriculture in London, in speaking of dairy cattle, said 'the Shorthorns were highly recommended as one of the most, if not the most valuable cows for a milk seller or butter maker, more especially if the dairy be carried on in connection with grain growing or beef making. There are numerous instances of extraordinary butter making by Shorthorn cattle, and there is, perhaps, no race in Great Britain which has done such great things so far as regards yield of milk, as this race, and at the present moment Lord Warwick's, Mr. Tisdall's, and other records, stand out as probably the best results which have been obtained by any race in any country.'

To partly substantiate the statements made by Mr. Long, Mr. Tisdall, and Dr. Voelcker, who must be considered among the highest authorities, I may here state that for the last 10 years a series of experimental tests have been made under the auspices of the British Dairy Farmer's Association, at Islington, London England. The object of the association is the improvement of

the dairy stock and dairy produce by encouraging the breeding and rearing of stock, for the special purpose of the dairy. These tests help towards the solution of the question; Which are the most profitable breeds for milk? A champion prize has been given the last four years to that animal of whatever breed which united in the largest degree all the essential parts in a model dairy cow, and in each year of the four the prize has been taken by a Shorthorn cow. The last of these tests was made on the 5th of October just past, when the First Prize and Champion Cup was awarded to a Shorthorn cow belonging to the Executors of late Mr. Brdsey, with 98.30 marks out of 100, the second also a Shorthorn with 98.10 marks, and the third an Ayrshire with 97.72, this latter yielding 53 lbs of milk in 24 hours, and showing 12½ per cent. of cream. The analysis has been made by a Professor appointed for the purpose, so as to aid a Committee in determining the milking and butter producing powers of the animals, of the different breeds entered for milking prizes. The most of the classes were well filled, the Jerseys were as usual very large and fine classes, and the Guernseys are reported to have been the best in quality that have been seen at the show. Various other breeds competed, viz: Norfolk Red Polls, Kerries, and Dexters, Herefords, crosses between Shorthorn and Ayrshire, Shorthorn and Guernseys, &c. &c.

N. H. Albaugh, in his paper read before the American nurserymen at Chicago, said he found cotton warp better than bass bark as a ligature in budding, particularly for cherries. It draws the bud firmly and snugly into position, and retains it securely without any danger of becoming loose.

To make five gallons of brilliant stucco whitewash for buildings, inside and out, take six quarts of clean lumps of well burnt stone lime, slack with hot water in a covered tub to keep in the steam. It should then be passed through a fine sieve to obtain the flower of lime; add one-fourth of a pound of burnt alum pulverized, one pound of sugar, three pints of rice flour, made into a thin, well-boiled starch or jelly, and one pound of glue, dissolved in hot water. This may be applied cold on inside work, but for outside work it should be applied warm. A whitewash thus made is said to be more brilliant than plaster of paris, and to retain its brilliancy many years. It should be put on with a common painter's brush, a second coat being applied after the first is well dried. The east end of the White House at Washington was formerly painted with this composition.

## Stock.

**WINTER FEEDING OF STOCK.**—Good way for the farmer to have something to do, and something to sell in the dull months, is to winter-fatten beeves for sale. Feed the products of the farm on the farm. It is better to let them walk off than to haul them off. The manure will be saved where it is most needed, and returned to the home soil.

There are always ways to turn an honest penny, winter as well as summer, for the farmer who has gumption.

The chances of success with any kind of farm stock depends largely upon the interest the breeder takes in the class of animals he is raising. The farmer who has a natural fondness for sheep, but cares little for horses, cattle or hogs, will find more profit in raising wool or mutton, even when prices are low, than in growing oxen, beeves or dairy stock at prices comparatively higher than wool or mutton command. The same is true of horses. The man who admires a good roadster can scan his points, judging his quality and capacity with almost unerring certainty at a glance, but has an aversion to sheep and sees no beauty in neat stock, will doubtless make money in raising gentlemen's roadsters under conditions where others not inheriting a natural fondness for such animals would fail. In deciding upon what class of stock to raise, the young farmer must, of course, have an eye to the probable demand, also the losses from accidents and other causes that he is likely to encounter with certain kinds of stock, but at the same time his natural attachment to certain classes of animals should have considerable weight in determining whether he should make a specialty of wool growing, dairying, raising steers or horses. It costs much more to stock a farm with the latter, and the risks are greater, than any other class of farm animals. Those qualified to succeed, however, will doubtless find the profits fair at least, while the satisfaction of raising them, and the pleasure of anticipation that some may prove a second Maud S. will offset many of the disappointments sure to be experienced.

A great width between and prominence of the eyes indicates a teachable and tractable horse. Width between the ears indicates courage, nobleness and strength of character. Roundness and elevation between the eyes indicate mildness of disposition and desire to be carressed and to reciprocate kindness; but never trust one that shows much white above the pupil of the eye or with white in that organ.

**REST AT NOON-TIME.**—It rests a horse greatly to be relieved of his

harness during noon hour. A hurried rubbing over the surface of the body with a wisp of straw, before putting the harness back will be grateful to the horse. Practice these little acts of kindness, they bring comfort and strength to the animal, and a sense of peace and duty done to the owner's mind, which is greatly worth possessing.

**SORE SHOULDERS.**—Always guard against these on your work animals. See that the collars are kept clean, and if they have become hard, make them limber before making your horse work in them. Wash the sweat off from the shoulders after a hard day's work. If there is any inclination to soreness, apply some liniment to the spot, and relieve it by cushioning all round it. Were this course more practiced work animals would do more and better work, and less would also be heard of balky horses, for it is true that many a balky horse became such through being worked with a sore neck.

There is a limit in age, beyond which sows should be allowed to pass as brood animals, and this is likewise true of the boar. If the latter passes a certain age his flesh acquires a rank unpleasant flavor, which could not be tolerated even in bacon. Then, too, they are often not so sure and strong in their service as a younger animal would be. The sow should generally be fattened before she has passed her sixth year, and the boar castrated at four. They will both make salable meat at these ages.

Sows in pig, it must be remembered, have many lives to support besides their own. The sow herself must not be allowed to get too thin, for she ought to be prepared in flesh to rear another litter. Nor must it be forgotten that young pigs need the kind of food which will make bone and muscle the most rapidly, and not fat until they are comparatively grown. Milk, bran and buttermilk will do this. Cabbage and tares are also good.

Sows can be made to produce, if so desired, two litters each year. Most breeders, however, have been wisely satisfied and thankful to get one good litter. There are, of course, some exceptions, and where the breeder seeks to get the two litters it is desirable that the dates of farrowing be so arranged that the second farrowing may come early—not later than September.

### BEEF vs. BUTTER.

Oflate a large amount of discussion has been indulged in concerning the advantages of dairy farming and exceptional adaptability of the Maritime Provinces to the requirements of those engaging in the business. Provincial Dairymen's Associations and other agencies have by agitating the question given an impetus to the

movement and stimulated scores of farmers to engage in dairy farming with the very best results. They have realized that there is money in it and like true philanthropists are zealously recommending the business to their brother farmers. With all deference to those engaged in booming dairy farming and notwithstanding the undeniable success of the limited number who devote their attention almost exclusively to this branch, we believe it would be a serious mistake for the majority to go in for dairy cattle. The home market must be supplied but beyond this the price is too low to afford much profit. While we agree with all that has been said about the butter-making qualities of our grasses we consider that these provinces are better adapted for the production of beef than butter. A little energy will develop the trade and open a market in which it will be impossible for the supply to exceed the demand. With our healthy climate, pure water, nutritious herbage and shipping facilities we are in a position to produce beef of the best quality at paying rates. And in Great Britain we can find a ready market for all the beef and mutton that we can raise. Britain is almost entirely devoted to the improvement of the world's herds by the production of thoroughbred stock and is to a large extent depending upon foreign countries for the supply of beef. Being preeminently a beef-eating country, she pays out millions of dollars annually for this one article alone and today she gives a higher price for Canadian meat than for any other. Owing to our healthy climate and the freedom from disease in our midst Canadian animals alone permitted to be shipped inland before slaughtering. The Ontario farmers have been growing rich by exporting beef to England and at least four millions of dollars came to Ontario last year as the results of this trade. It be true that the farmers of the upper provinces find it profitable to raise beef cattle for the English market why should not we who are a thousand miles nearer the market? Surely we should have a share in the spoils. If it is owing to our lack of energy and enterprise that we have not developed a business in this direction equal to our facilities.

We want first the proper animal, one that will give the greatest weight in proportion to the amount of feed, that will fatten quickest, mature earliest and shrink less in the voyage. Experience shows that in these particulars the Shorthorn Durham is preferable to all others, but there are good and bad in all breeds and great care is needed in the selection of Shorthorn bulls before crossing.

This work of starting trade between us and Britain should receive the serious consideration of intelligent farmers

Let it be thoroughly discussed in our granges and through the press and a start will ere long be made and a business developed which will bring to this country thousands of dollars annually. P. E. I. some years ago carried on a profitable business in shipping live cattle and sheep to England but an evil day came when the trade from the mother country fell off to such an extent that the steamer employed in the trade after landing her load of live stock had to cross to the island in ballast and the company rather than continue the steamer on the course at a loss were compelled to sell her. Since that time no attempt has been made to put another steamer in her place, yet that brief trial was not without some good effects in pointing out the advantages to the farmer in raising beef for the English market.

It is hardly necessary to say that this industry would enable us to follow a much better system of farming. It would diversify our work, give more leisure during summer and afford profitable employment in winter and increase our incomes and the fertility of our farms.

## Farm.

### WOOD ASHES.

Among the most common and the most valuable of special manures I place wood ashes. The amount of ash, and its relative composition, vary with the kind and part of vegetable burned, but we may safely take the ash of the body of a beech tree as representing the average composition of wood ashes. One bushel of ashes represents about two and one half tons of dry body wood. Wood ashes contain all the required elements of plant nutrition except nitrogen. One hundred pounds of wood ashes contain sixteen pounds of potash worth eighty cents; three and one-half pounds soda, thirty-two cents; sixty seven pounds of lime and magnesia worth eighty cents; five and one half pounds of phosphoric acid worth twenty-six cents. If we had to buy in market in the cheapest form the manurial elements contained in 100 pounds of ashes, the cost would be \$1 16. Can you afford to throw away such valuable materials, or sell them for sixpence a bushel to the soap-boiler? No argument is needed; here is the value and there is the selling price. Draw your own conclusions. Even where ashes have been leached to the last degree, till every soluble thing has been washed away, they still have value, for the phosphate and carbonate of lime and magnesia remain and are worth thirty four cents for 100 pounds, or \$6 80 a ton. The market gardeners of Long Island knew their value and sent ships 1000 miles to bring the ashery heaps of Maine, even

when they had to draw the ashes five miles before reaching the ship. But I will not consume your time to tell you how they do things there but will give you my experience with leached ashes in Eaton county. More than thirty years ago I settled in Vermontville, and bought a lot for my home, or as I expressed it to my wife, 'I fenced in two and one half acres of paradise.' The soil was a stiff boulder clay, and had been exhausted. Here I planted every fruit bearing tree and shrub of superior value, and in the selection of fruits 'I withheld not my heart from any joy. I kept a cow and three horses, for in the thinly settled country horseflesh had to bear the brunt of hard work. I had plenty of stable manure and used it freely. But I soon found that the excess of stable manure gave my pear trees the fire blight, made my apples run to water sprouts and suckers and my grapes ran wild in wildwood. I then turned my attention to a heap of leached ashes near by, and had seventy-five to eighty tons of these ashes scattered over my field. No more fire blight or water sprouts, but golden fruits in bountiful supply. Like my ever so great grand father, Adam, I left my paradise, which passed through several hands, and at last came into the possession of Mrs. B. in exchange for a 160 acre farm. Her son told me she received more money from the sale of fruit from that two and one half acre lot than she received from the 160 acre farm. The soil has not forgotten that liberal dressing of leached ashes, applied more than twenty-five years ago. Apply ashes liberally, especially if your soil is open and porous.—[Prof. R. D. Kedzie, in *Boston Globe*.

### POTASH AND TREES.

It has long been known to orchardists that an application of unleached wood ashes was excellent in the case of unhealthy or unfruitful trees, and especially so in the case of trees as a preventive of yellows, and for apple and pear trees affected with blight and rotting of the fruit. Unfortunately wood ashes are not always to be had, but the chief constituent—potash—is comparatively cheap in some of its forms, kainit, for example, which contains from 28 to 32 per cent of chloride of potassia, besides notable quantities of magnesia, lime and common salt. Chloride of potassium also is a German product—a clay containing 25 per cent in its weight of this chloride. East it is considered the cheapest though not the best source of agricultural potash.

Sandy land is notably sought for as a fruit soil especially for peaches. These are often deficient in potash, the chief source of which in soils is from the breaking down of feldspatic and micaceous rocks and the decom-

position of vegetable matter.

As showing the value of potash in peach growing, the fifth annual report of the New Jersey Experiment Station gives detailed statements of the profits from the application of wood-ashes, stable manure, and clean cultivation on various New Jersey soils in peach-culture. One instance is mentioned where \$18,000 was netted in twelve years from fifteen acres in peaches. This cultivator used wood ashes and stable manure, planted no crops in his orchards, and cultivated thoroughly, chiefly with spring-tooth harrow, going over the ground last season from fifteen to seventeen times. He has almost no yellows, and all trees are immediately removed on the first appearance of the disease. From one young orchard he gathered seventy baskets of fruit at two years old. This orchard was manured with wood-ashes only. If he had enough wood-ashes he would like to apply from fifty to seventy five bushels an acre, but a smaller quantity does a great deal of good.

Another cultivator on a clay loam set with 3500 bearing trees uses muriate of potash and best bone manure, equal parts, and at the rate of 350 pounds an acre. In four years he has realized \$900 an acre. He plants on it the same as if prepared for corn, and raises no crop among his trees.

Many farmers allow old chunks, stones, wire boot brushes, and all manner of trash to lie around in their fields and back yards. Such things are nearly as prolific of bad expression to the man who mows as is the rusty plow to the plow boy.

The easiest way to plough a lot is to go around it until it is done, turning a furrow to the fence on all sides and leaving a dead furrow through the middle. So much land has been ploughed in this way that long cultivated fields are apt to have ridges on the outside and depressions in the middle. Ploughing a back furrow a few feet or rods from the fence only partially remedies the evil. In stubble land the field had better be laid off into lands of any desired width. But on sod ground this makes too many dead furrows especially for corn.

Corn meal is the least profitable meal to buy to make manure. A ton of wheat middlings will pay nearly half its cost in the manurial elements left in the excrement after it is eaten. These elements are the nitrogen, potash and phosphoric acid in the meal and other elements not absorbed by the animal but voided in the manure.

In localities where beans are largely grown, these vines, after threshing, are highly esteemed for fodder, especially for sheep. No other kind of stock



makes so naturally to beans as do sheep. Sheep can be taught with very little difficulty to eat with evident relish. They can be kept on bean fodder if they have in addition the use of the straw stack to give variety. Unripe and stained beans are very strong food for sheep, and are excellent in connection with other feed.

#### A NEW WAY OF KEEPING FRUIT.

It is stated that experiments have been made in keeping fruit in jars covered only with cotton batting, and at the end of two years the fruit was sound. The following directions are given for the process:

Use crocks, stone butter jars, or any other convenient dishes. Prepare and cook the fruit precisely as for canning in glass jars; fill your dishes with fruit while hot; and immediately cover with cotton batting, securely tied on. Remember that all putrefaction is caused by the invisible creatures in the air. Cooking the fruit expels all these, and as they cannot pass through the cotton batting, the fruit thus protected will keep an indefinite period. It will be remembered that Tyndall has proved that the atmosphere germs cannot pass through a layer of cotton.

#### IMPROVEMENT OF GRAINS.

(Philadelphia Record.)

The constant advice given farmers regarding the importance of improving their stock, though having the effect of inducing them to realize greater profits, should not attract their attention from the matter of improvement of the plants grown as general crops. Few farmers realize the fact that wheat is very easily improved by selection, two seasons being ample time in which to effect a marked change in the quality and yield, while but a few seasons are necessary for accomplishing the same with corn and oats. Unless the seedsmen introduce new varieties, we are not usually favored with those of superior character, owing to the neglect of the farmers in selecting seed. The celebrated Fullz wheat, now so well known, was the result of a farmer going into his wheat field and selecting the best seed, singling out particular heads and stalks at the same time. Thus improvement was made in his wheat every year, and Prof. Blount claims that any farmer can, by selecting in the same manner, add ten bushels more per acre to the yield in comparison with what the crop would be without such care and selection.

Great improvement has also been made in corn and oats in the same manner, and even rye has been increased in yield by following the prac-

tice for several consecutive seasons. The farmers can do more for themselves than can be done for them by others, for the reason that by careful selection they can improve a crop and adapt it to their own section. The originators of new varieties cannot produce a kind that will prove a valuable acquisition everywhere. Climate influences and diversity of soils are hindrances, and hence the reason why varieties that have been highly recommended in some quarters have been failures in others. But each farmer can do the same work as the seedsman who constantly experiments. By attempting the improvements of those plants which he has found by experience to be the best adapted to his soil and climate he begins with one half the difficulties removed, and the path is clear of all obstacles except the labor of selection the result of which, however is to increase the yield and improve the quality of the plants experimented upon.

In the case of potatoes, strawberries and other plants that are improved by crossing or by accidental production, the chances for success are not encouraging, and experience is required. But with those crops that can be improved by simply selecting the best the task is easy, and if every farmer would determine to use only selected grains the result would be a large production of all farms. Selection will not only cause the grains to be plump the head large and the stock firm and strong, but hardiness and ability to withstand droughts will be increased. There is much in the variety that suits the farm, as no amount of cultivation can compensate for mistakes made in growing crops unadapted to the climate and soil, while a reverse condition saves labor and protects against loss. Careful selection will improve the crops as well as the stock, and the process is as easy, cheap and economical, while much anxiety that arises from using seed of which the farmer nothing may be averted. And after selecting the seed it should be carefully preserved during the winter so that it may germinate upon the most favorable opportunity and secure an early start.

The wet weather which usually comes just before winter sets in will enable a farmer to locate the low places in his wheat fields where water is liable to stand in winter or spring. Opening the furrows deep enough to take off all surface water may very possibly save considerable wheat that would otherwise be surely winter killed.

Do not let the cattle go into winter quarters infested with lice. Before the weather gets any colder, lousy

cattle should be thoroughly washed in strong soapsuds, in which a little carbolic acid has been added. Rub the wash well into the skin in those places where lice are most usually found, and if need be wash the entire body. Take a sunny day and rub well with dry cloths until the animal is past danger from cold. We know farmers who wash their whole herds in this way, fall and spring, and believe it pays. Lice are often brought to a farm upon purchased cattle. Before turning such into a clean herd, they should be thoroughly cleaned from lice and nits. A mixture of lard and kerosene rubbed into the hair of the neck and shoulders, and at the root of the tail, will tend to clear the animals of lice. But little kerosene will be required, and the mixture should be applied sparingly in cold weather. Plenty of good food to keep cattle thrifty, will tend to keep them free from lice.

Difficulty is often experienced in finding some suitable covering for tender plants. Leaves have not given very good satisfaction as they pack so closely that the air cannot circulate, and they are objectionable because they are so liable to blow off. Straw and litter have the same faults. For some purposes course manure may do but this has a very repulsive appearance. Spruce boughs are very servicable and none of these objections can be urged against their use. They never become soaked or flattened together are always clean and allow enough air in their interstices for the protection of green plants. The wind will not blow them off and they may be so laid as to present quite an attractive appearance. They will retain the snow and this is a very great advantage. Raspberries, Grapes and Strawberries may be perfectly protected in this manner with little trouble.

Now more than any other season the farmer should make an effort to place all his farm implements under cover. It does not pay to leave machinery exposed or to put it away in a dirty condition to become covered with rust. Winter will soon be here and we should keep our eyes open as we go about the farm and perchance we may find some implements left where last used and hoes hanging upon the fence and forgotten. Let us gather them up and if they are beginning to rust brighten them before storing away for winter. We should no more think of leaving such things to take care of themselves than we would leave our purse to take of itself. "The best farmer is he who treats that which he possesses in the best manner be it plough or cow."

**Orchard and Garden.**

All farm seeds should be covered to a depth equal to three times the diameter of the seed. Write this rule on the granary door.

Fruit-growing is an advance degree in farming. It demands a higher order of intelligence than many others. Requires more brain and less muscle. It promotes, advances, elevates every farmer who engages in it.

An experienced gardener says that a sure sign to find out if plants in pots require wetting is to rap on the side of the pot, near the middle, with a finger knuckle. If it give forth a hollow ring the plant needs water, but if there is a dull sound there is still moisture enough to sustain the plant.

In collecting seeds (in large quantities) of melon, squash, tomato, cucumber and other plants, Joseph Harris advises that we put a little brewer's yeast in the barrel. The seeds drop to the bottom of the barrel, and will be white, clean and entirely free from mucilage.

**DON'T OVERWATER.**—After the freedom in watering that was allowable in dry summer weather, there is a tendency to overwater plants after operations begin indoors. At no time of the year is growth so slow as during this and the two following months, consequently less water is needed than at any other time. Remember this.

Don't make all the small, unsalable apples into cider; just store a liberal supply away somewhere, where they will not freeze, and feed them to your hens in the winter. Boiled apples, mixed with bran and shorts enough to make a stiff dough, and seasoned with salt and pepper, make a capital breakfast for laying hens; apples are cheap feed, too.

**THE STYLE OF A GARDENER** may be judged pretty well from the size of his compost heap—the larger the better gardener. This is one of the things in which one looks ahead. To be tidy, which is a virtue, there should be a big enclosure of rough boards, into which all the young weeds and bits of sod and vegetable refuse generally are thrown, and if the house slop, swill, etc., are added, it is all the better. It is surprising what a quantity of the very best manure can be accumulated in this way, without a cent of expense.

**Coal Ashes in the Garden.**

Many persons make no use of coal ashes, but it certainly is an excellent mulch, "particularly for evergreens,"

so says an old gardener, and gardens where the soil baked badly have been brought into excellent condition by spading in coal ashes after other things had been tried without success. Fertilizing qualities are not claimed for coal ashes, but it gives depth to the soil in a very inexpensive way. It makes it work easier, serves as a mulch and insects are not fond of working in it.

**Storing Roots.**

We observe that some writers on vegetable gardening speak of the difficulty of keeping succulent vegetables, like beets, turnips and parsnips, from wilting when placed in cellars, and recommend packing them in the earth of the cellar bottom. This mode is necessarily cumbersome and inconvenient. An easier and more perfect way is to pack them in damp sawdust placed in barrels of moderate size, or in boxes of not more than two feet in width. Place a layer of sawdust in the bottom, then a layer of the roots, then fill in all the interstices with another layer, and so on till the box is full, leaving no crevices. We have taken beets out of such boxes after remaining in them a full year, so fresh in appearance that no external difference could be seen between them and fresh roots. Nurserymen's moss is neater than sawdust, where it can be had, and serves an excellent purpose for packing winter cabbage in large boxes.

**A Good Way to Use Waste Matter.**

In order to utilize in the garden the waste from the house at the least expense, first purchase a barrel of unslaked lime, then take an empty barrel and begin by putting in it a layer of soil or ashes, and then the waste from the house, everything that a cat or a dog will not eat. Keep this decaying vegetable matter covered with an inch of soil or ashes, using coal or wood ashes. Once a week in winter, and oftener in summer, cover with lime, say half an inch. The lime will be slaking, of course, and should be kept dry, but, as lime retains its virtue a great while, the one barrel will last a year or more, according to the waste kept. If starting this experiment in autumn, early in the spring empty the contents of the barrel into the garden beds, cover with coal ashes, if the soil is not already deep enough, and spade it in. Should the soil be deep and good, the compost can be used without the ashes; then, when the weather is right, put it on the plants.

**Berries and Grapes.**

The most popular berry in the Boston markets at the present time is the Charles Downing. It is of fine quality, desirable size, good color and a fair keeper. For all purposes it seems to best suit the popular demand. Am-

ong Southern growers the Crystal City is popular, as it is one of the earliest, and this is followed by the Crescent and the Wilson, the latter being a great favorite everywhere.

Worden we place first, for hardness of vine and productiveness. It is a better grape than the Concord, which it resembles in many respects. As a rule it is from ten days to two weeks earlier than the Concord, but this year we saw bunches much riper and better eating on the 4th. of Sept. than of the Concord on the 24th.

Concord would come second as it will usually return a crop though very little trouble may have been bestowed upon it. Want of proper care is too often the cause of failure and prevents the growing of better grapes; and failure from this cause with the Concord we believe would be a disgrace.

Although the Moore's Early has not sustained the claims made by some for it, it might prove profitable on account of its earliness and corresponding high price. It is very little if any earlier than the Worden, and claimed by some not to be half as productive

**A FUTURE FOR THE HUCKLEBERRY.**

(Rural New Yorker.)

What a wonderful improvement there has been in the various sorts of fruits, large and small! The catalogues are filled with glowing descriptions of new apples, pears, plums, peaches, grapes, currants, raspberries, etc., etc. Of strawberries there is no end to the new sorts, and even the lowly cranberry boasts of a dozen or more varieties; but who has ever given a thought to the improvement of the whortleberry, the huckleberry of some, and the huckleberry of everybody, and yet more bushels of it are annually consumed than of almost any other one fruit. Who so lost to all that is toothsome that he cannot be coaxed into a good humor with a generous piece of huckleberry pie? Will not some of our enterprising horticulturists please try the possibilities of the humble huckleberry? It has been neglected for centuries, and allowed to grow wild on its mountain sides or pine plains, annually robbed of its load of fruit, which it never fails to produce. Let us now see what selection, cultivation and the judicious raising of seedlings may do for it! Is there any reason why it should not be as good in flavor and as large as the largest cherries? Our word for it, there are fame and a fortune to him who discovers and develops the possibilities of the huckleberry. Who will be first?

**STRAWBERRY CULTURE.**—Successful strawberry culture demands a thorough cleaning after bearing, and careful culture during the remainder of the summer. Old strawberry beds are not



profitable. To weed and cultivate an old, neglected bed is a thankless task, and much more laborious than the preparing and planting of a new one. Although some varieties will continue to bear for four or five years, yet it seldom proves profitable to take off more than two crops from the same plants.

New beds may be made by renewing one half the plants every year. In some soils strawberries may be grown on the same ground for many years if liberal manuring is given. A successful grower renews one-half his plants every year, having his rows one foot apart. Plants set out two years ago are spaded under immediately after bearing, incorporating at the same time a heavy dressing of composted manure. The ground is raked over occasionally, so as to kill every weed as soon as it germinates.

The rows planted one year ago are hoed and cleaned, and all runners removed except one or two of the strongest from each plant, which are layered in the loose soil. As soon as the young plants are large enough they are taken up on a damp or cloudy day and carefully transferred to the new bed without disturbing their roots. They will bear a very good crop next season and a still better one in two years, while the next summer they furnish young plants for the other half of the bed to be renewed in the same manner.

#### PROFITABLE APPLES.

R. M. McKinstry, who is probably the largest apple grower in the United States, and who yearly ships apples to Europe from his orchards at Hudson, Columbia county, N. Y., in reply to a question from Patrick Barry, President of the Western New York Horticultural Society, in regard to the most profitable varieties with him and his methods of culture, says:

"As for varieties, I would name the following. The Early Red Astrachan and Dutchess of Oldenburg, then Gravenstein and Maiden's Blush, later varieties, Baldwin, Greening, Ben Davis, Tompkins County King, Jonathan and Newton Pippins. As respects cultivation, I think it well to crop with potatoes, cabbage or corn for a few years, but always to keep the soil in good condition, for which I prefer barnyard manure. I turn in green crops, such as clover, rye and buckwheat, clover and rye preferable with me. My trees are planted twenty feet apart, say 108 trees in the acre, and they, of course, drop their heavy foliage in the fall on the land about the trees, which, together with the clover and a light sprinkling of manure, decays and keeps the soil in fine condition, which when turned under apparently causes the trees to make a good

yearly growth. I have tried the experiment of grass and have found it to act well by top dressing. The trees appeared brighter later in the fall, and the leaves did not drop as soon as the trees that had received cultivation; there was not so great a growth, but a very healthy, hardy appearance.

"My soil is gravelly and sandy loam, porous nature, and in planting I have always made it a point to set the trees deeper than usually recommended, and have found it of benefit, as the roots are well out of the way of the plow, and I find but little difficulty in plowing close up to the trees. As far as my experience goes with my orchards, I find the result satisfactory, but different soils and locations might require different treatment."

He also says that "all leached ashes can lose a little of their potash, and all the other materials cannot be washed out by water." He says in regard to strawberry beds; "If the ground is in good condition, I should use little else than leached ashes." Again, in reference to German potash salts, which are used on Jersey sands, "Better pay \$1 a bushel for good wood ashes."—Prof. R. C. Kedzie.

#### Dairy.

Some cow's teats are so small that the grasping process is thoroughly impracticable, says a writer. We advise the milking with a wet teat, as you can milk more easily, and it is certainly more in harmony with nature. Kindness and gentleness with your cows are things that are greatly conducive to a liberal flow of milk.

An exchange gives the following bit of advice. Have regular hours for milking. We always obtain the greatest yield by milking while the cows quietly eat their meals in winter, and while they chew the cud, or lick a little salt in a dark shed in summer. A good milk-pail is a four or six gallon can, having a movable cover with a hole in one side of it. Set a five inch strainer funnel in the hole and milk into it.

The over stimulation of dairy cows has already had its effects, showing the injury to cows by stuffing with special food to produce wonderful butter at the expense of the future usefulness of the cow. Another point, also practically determined, is that these wonderful amounts of butter produced have been at an expense greater than the value of the product.

Some interesting experiments have been made in France on the advantages of giving water to milch cows warmed, instead of in its natural cold state. At the Agricultural school of

St. Remy two cows were fed on the same food, but one was supplied with cold water and the other with the water 113 degrees Fahrenheit. The latter yielded a third more milk,

There is no breed of cattle the best for the milk business, quality and quantity of milk considered. A cross of Jersey and Ayrshire, or Jersey and Holland cattle, would come the nearest. With good pastures, liberal feeding the last cross would probably be best. We have seen such cows and they were grand milkers, and the milk was of excellent quality. The Jersey-Ayrshire cross would do best on more scanty pastures and less liberal feeding. We have had such cows and there are no better ones for a general purpose cow. Both of these crosses would make hardy but fine looking cows.

#### HOW TO SELECT A COW.

The best milk cow as a rule, says a writer in the *Agricultural Gazette*, is of medium size and small boned. The head is small, and rather long, narrow between the horns and wide between the eyes. The lips are long and thick giving the muzzle a flat appearance. The ears thin, covered with long, but soft, silky hair, the inside of the ear, being a rich orange color. The eyes are large and bright, with a placid expression, the horns set on a high pate bending outward at the base, and light clear and smooth: the neck long, clear and thin, slender and well-cut under the throat, thickening handsomely as it approaches the shoulder, but entirely free from anything like a 'beefy' appearance. The shoulder blades should meet narrow at the tip, widening gradually towards the points which should be broad and well rounded, the ribs rather straight and wide, indicating good digestion and constitution for everything depends on that in a good milk cow. The loins should be broad and the hips high and wide, the rump even with the hips, the pelvis wide, giving plenty of room for the udder, the thighs thin, the hind legs a little crooked, and small below the hock, with a long large foot. The udder should be long and broad with the teats all the same size and well set apart, the belly to sag a little in front of the udder, and to rise slowly as it approaches the brisket, and somewhat large as compared with the size of the cow. The tail long and slim, tapering gently to the end. The hair must be soft, indicating a mellow skin, which on taking in the hand, feels like soft kid gloves, and no coarse rough hair will grow on such a skin. The color of the skin must be of a rich butter yellow. This is the first point in handling. Then, pass your hand on the belly in front of the udder, and feel

the 'milk veins.' They are an infallible mark of a good milk cow. The larger they are the better indications. In extra good cows they branch out into four veins, but they all unite before reaching the udder. The more irregular the course the more sure you may be the cow is a good milker. The udder should be covered with a short downy coat of hair. This hair should begin to turn its backward course from the front teats, then on the backpart of the udder, called the escutcheon, and on as far as the vulva, in the best cows. The wider the belt of this up-turned hair the better; it should be short and velvety, covering a soft orange-colored skin.

## Poultry.

### POULTRY NOTES.

#### TURKEYS.

Turkeys are an ornament to our poultry yard; they are also very profitable if rightly managed, though they need a great deal of care when young. When they are hatched let them stay in the nest a day or two without disturbing them, as good brooding is better than feed at this period; then put them in a coop with a board bottom, or where it is very dry on the ground, as dampness is sure death to young turkeys. For the first few weeks give them hard boiled eggs and the curd of milk. Do not feed them much meal, but what you do feed them, cook and season with pepper. When they are grown they can stand severe weather, but do not let them roost out of doors in very cold weather as they will be reduced in flesh, the feed going to create animal heat; and right here comes in the reason why farmers do not succeed in raising poultry; they do not provide suitable quarters for the fowls, and then the food does not perform its proper action. Turkeys should have a good range in summer, they will wander a long way from the poultry house in the tall grass and thickets, and pick up the greater portion of their living. Keep nothing but thoroughbred turkeys; they will weigh nearly double what mongrels will.

#### TO MAKE HENS LAY.

If your hens have ample accommodations and good feed, and do not lay in summer, you may be sure that something is wrong with them. The comb is a good indication of a fowl's health. If she is in a good healthy condition her comb will be a bright red, if otherwise, her comb will be of a pale color. Feed egg food twice a week. Give variety; a warm breakfast, raw meat quite often; wheat screenings and the like. Cayenne pepper mixed with the soft food given them is excellent. Do not feed much corn to laying fowls as is very fattening.

#### SHIPPING POULTRY:

Breeders of poultry who ship fowls by express, should be a little considerate of their customer's purse. In many cases the box weighs a great deal more than the contents. Do not get a box that weighs too heavy. The best material to be used is half inch stuff. A convenient size for a pair of fowls is eighteen inches long, sixteen inches wide and twenty inches high. By this mode your customers will be saved a great deal of unnecessary express charges, which is no small item. When shipping, supply the fowls with enough feed to last them until the end of the journey. C. GRANT PRICE.

Fat hens lay few eggs, and many of the latter are apt to be deformed, double yolked, or soft shelled.

Oats make hens poor, and often pack in their crops, and they die. They clog up the pipes leading from the crops to the gizzard, and, when this is the case the hens get no nourishment; another thing—the skins or hulls of the oats clog up the gizzard and prevent its action. When the crop is packed, it is perfectly safe to cut into it and remove the contents and then sew it up.

**SOME POINTS IN POULTRY KEEPING.**—Let no one think, when visiting the coops of fine fowls at the shows that all beauty and size lies in the breed and not in the keeping. Common fowls kept as well as these have been, would show an immense improvement over common fowls as we ordinary see them. To breed fancy or any kind of poultry well, make up your mind to attend to them yourself, with care and with diligence. Go in person every day to the coop, whether it rains or shines, is hot or cold, and see that every individual is having its needs properly met.

**BEST FOOD FOR LAYING HENS.**—It has again and again been demonstrated that wheat is the best of all the cereals for production of eggs. But next to that is milk, and especially sour milk, and if we add to these a third substance, namely, gravel produced from broken granite, of suitable size and quantity, we have as nearly a perfect food as can be furnished for egg-producing fowls. But there are some details which ought to be attended to in order to obtain the best results. Thus in hot weather and in all weather but which is very cold, the grain should be previously soaked twenty-four hours and the water salted, but only moderately so. But shrunken wheat, or mill screenings when they are not musty and when they do contain rotten or unsound grains are quite as good as clear wheat, and some say they are better, because shrunken wheat kernels con-

tain more of the egg and flesh-making principles than sound ones. But we cannot always procure wheat or wheat screenings, and then we must find the best substitute. The following are good in the order in which they are named: Barley, oats, cracked corn and whole corn, and each and all should have the preliminary twenty-four hours soaking. Buckwheat and rye will do very well as complements to other grains, but when fed alone they are unsafe; the former because it is too stimulating, and the latter because it is too fattening and difficult of digestion. Meat, offals and scraps, broken vitual vegetables and the like are valuable additions to the rations, but they are unsafe if fed in large quantities, for they not only injure the health of the fowls, but impair the quality and flavor of the eggs. One essential point which must not be forgotten in the make-up of the daily rations—in case they are not principally wheat and sour milk—the constituent elements of bones and egg shells must be furnished in the shape of burned bones, broken small or ground oyster shells.

#### ABOUT SULPHUR.

By ALFRED BLANCHARD.

All poultry raisers agree upon the question of the value of sulphur as a protection against vermin upon fowls but disagree as to the best means of using it. Its cheapness induces many persons to use it so lavishly as to tend to great waste, and oftentimes to the injury of the stock. Economy in little things is the secret of success in poultry keeping, as it is in enterprises of greater magnitude, and study should be made to reduce expenses to the minimum, and procure the largest results from the least possible outlay of time and material. In the matter of the use of sulphur, I have been accustomed to mixing it with soft food when the latter was cold, but have found this somewhat objectionable, as the plan is laborious, and it takes considerable time to thoroughly mix the two. Unless the sulphur is well distributed some of the flock will receive more than is necessary, while others will get none. I have recently adopted a plan that insures a uniform mixture of the sulphur with the food, prevents waste, and requires but a trifling amount of labor in preparation. I give this method to the readers of the BULLETIN, and believe it will be found a most convenient way of using an article that no poultry keeper can well dispense with.

Once a week feed a ration of cracked corn, say about a quart to twenty hens. Upon this pour just sufficient water to dampen the whole, say not over two tablespoonfuls. By stirring this thoroughly it will moisten the corn so that the sulphur will adhere to it.

## Poetry.

## NELLIE'S FATE.

Into the meadows the farmer rode  
At harvest time; his hay to load;  
His little girl, his knee astride,  
As proudly rode as knight would ride,  
The farmer trotted her on his knee,  
She clapped her hands in childish glee,  
And sought her fancied steed to guide  
With the horses pulling side by side.  
The sun peeped out from the sheets of the sky  
The first he saw was the light of her eye.  
He thought it as bright as the flash of his own,  
As over the meadows the sunbeams shone.  
Oh, bright was the day when the farmer rode  
Into the meadow, his hay to load.

Away in the top of the cherry tree  
The robins sang with native glee,  
As they helped themselves abundantly  
To cherries large and ripe and free;  
But the cherries hanging on the tree  
Were not so red or fair to see  
As the cheeks of the child on the farmer's  
knee.

The cheeks that glowed so healthfully,  
Her young heart beat without pang,  
Warm as the breasts of the birds that sang.  
The farmer worked with a willing heart,  
And piled the new hay upon the cart;  
While moving on from heap to heap  
He bade the horses with him keep.  
The child, without a thought of fear,  
Not knowing of the danger near,  
Had stopped to pluck a clover spear,  
When over the fragile figure bent  
The heavy wheels of the wagon went  
With a terrible, crushing, grinding sound,  
As the horses gave a forward bound  
That seemed to shake the very ground,  
And made the farmer's head swim round.  
He quickly sprang to his darling's side,  
And bending o'er her loudly cried,  
'Oh, God, I've killed my only child!'  
And smote his breast in anguish wild.

Crimson her blood had stained the hay,  
Lifeless the mangled body lay.  
Closed were the beautiful eyes of blue,  
Dumb were the lips of ashen hue.  
The father raised the drooping head,  
And saw his lovely child was dead.  
Oh, dark was the day when the farmer rode,  
Homeward with his heavy load!  
When the sun went down behind the hill,  
Reflecting on life's varied road.  
The last he saw was a sweet, white face  
And curly head in its usual place.  
So he said, as he took the farewell peep,  
'The third child has fallen asleep.'  
But her soul had joined the spirit throng,  
And the angels sang their harvest song.

—Philadelphia North American.

## Story.

## The Master of Pennrauen.

BY ENON ANGLAI.

'This is Mr. Gaylord's residence, sir,' said the driver of a carriage, as he checked his horses before the carved iron gates and high stone wall that shut in a handsome modern mansion, standing in the midst of park-like grounds.

His passenger alighted, paid the fare, and walked away up the avenue of elms, without speaking.

The driver noticed that he limped badly, and leaned heavily for support on an ivory headed cane.

His heart was full, and his mind was busy with the day, now just ten years ago, when he and Walter Gaylord parted. Both were poor—both were ambitious. And here was the end of all their dreams and aspirations of that bygone time!

Walter was a wealthy man among the magnates of the city, and the husband of a fashionable woman, who had inherited from her dead father a large fortune in her own right.

John Weston sighed and shook his head, looking down at his shabby clothes and crippled foot.

'We are first cousins, and we were like brothers in the dear old days. Will he be glad to see me now? and like this?' he wondered.

The question was soon answered. Down the avenue towards him came his cousin. A lady leaned with an air of rightful appropriation on his arm. A few paces behind the pair walked a slight, graceful girl of seventeen, plainly dressed and carrying a superb Indian shawl.

'Walter himself looks more than ten years older, and far less happy than he used to look,' commented the new comer. 'His wife, of course. Handsome, if she did not seem so haughtily conscious of her dowry of half a million. And who is that pretty, timid girl? She seems to be actually afraid of madam. And madam looks at her as if she were her white slave! Ugh! how sharp her voice is!'

'Margaret, give me that shawl! Why do you fall behind so? One would suppose that you might feel the air grow sharp and bring it to me without being told!' said the lady in a peevish tone.

The pretty girl started nervously forward, and arranged the shawl upon Mrs. Gaylord's shoulders, without receiving a word of thanks.

'Pray, who are you, sir,' continued Mrs. Gaylord, addressing the new comer. 'Do you not know that these are private grounds, and that you are committing a trespass in entering?—a very impertinent one, too?'

The visitor removed his hat with a murmured 'pardon'.

They saw a frank, open, sunburned face, with a white forehead, shaded by curling, dark hair, and a pair of fine, dark eyes, that now looked through a suspicious moisture at his boyhood's friend.

'John Weston! dear old Jack!' cried Mr. Gaylord, dropping his wife's gloved hand unceremoniously from his arm and seizing upon the stranger 'My dear boy!' How glad I am to see you safe at home once more!

They held each other's hands in silence. Neither could speak as the

sad and tender memories of the past rose up around them.

Margaret Gaylord looked on sympathizing with their emotion, and loving her cousin Walter better than ever for his hearty greeting of one to whom fortune evidently had not been too kind. But Mrs. Gaylord stood apart, swelling with indignation, biting her thin lips, and scanning every article of the stranger's shabby, worn attire with her deeply set black eyes.

'I'll go back to the house with you, Jack,' said her husband, still utterly forgetful of her presence. 'You'll want luncheon now, for we dine late—half-past seven. Where is your luggage? Margaret you'll send it up to the cedar room as soon as it comes. Now, old fellow, tell me where you have been, and how you have got on and all about it.'

'The cedar room, Mr. Gaylord?'

The sharp imperative tone recalled Mr. Gaylord to his senses, reminding him that he was a husband, and a bitterly henpecked one to boot.

'Yes, my dear,' he said apologetically, as he hastily drew her aside. 'I beg your pardon for forgetting to present John to you. Jack Weston, you know, Julia—my oldest, dearest friend. I have spoken of him to you more than a hundred times.'

'You have indeed!' Her tone and look spoke volumes. 'But I beg you to remember, Mr. Gaylord—and you too, Margaret—that the cedar room is to be reserved for my friends, General and Mrs. Molyneux, who are to be here next week in time for my birthday party.'

'All right, all right, my love. But you'll let me introduce Jack to you? I must ask him to stop with us, Julia. The best friend I have in the world.'

'It is excessively inconvenient, Mr. Gaylord—just when every room is wanted for the night of the party. If he must stay, as you say, I suppose I can put up with it. But I wish people would choose a better time for coming. He is not to have the cedar room, you will remember, I cannot possibly allow that.'

'Any room you choose to assign to him my dear. Now, shall I bring him to speak to you?'

'I can see him at dinner, Mr. Gaylord,' was the ungracious reply.

Mr. Gaylord turned as his wife swept away, her head held high, her eyes ignoring the very existence of the new comer. The latter stood meekly aside and lifted his hat. But his eyes followed the girlish niece of the imperious lady, and his face was as serene as if every rude word his unwilling hostess had uttered had been Greek or Chaldaic, so far as his understanding was concerned.

'Women are the strangest creatures,' said his friend, irritably. 'At any other

time than this, Jack, Julia would have been pleased to see you, but just now every one within seventy miles is raving about the Master of Pennraven, and Julia is as bad as the rest. You must excuse her Jack, for my sake!

'Of course,' said John Weston, with most aggravating indifference to the magnificent Julia's moods. 'But, Walter, tell me—who is that pretty girl?'

'My cousin Margaret, the only child of my uncle George, who broke his heart over his failure in business during the last panic, and died. He made my fortune, Jack, by taking me into the firm on equal terms when I was very young. Margaret seemed like my own little sister when she was born; and so when my uncle died, leaving her without a penny, it seemed to be no more than my duty to offer her a home here. But Julia does not like it and Margaret is not happy,' he continued, sadly. 'I suppose it will end in her going out as governess, unless the Master of Pennraven should have the good taste to fall in love with her. If you had only come home rich, John, what a wife you might have had!'

'Rich or poor, she is the only girl that I will ever marry,' said John Weston. 'I'm not quite a pauper, though I am a cripple for a time. If I can prove to you that I am able to offer your cousin a comfortable and respectable home if she can bring herself to care for me in time, even lacking a large fortune, will you give me your consent to marriage?'

'With all my heart, Jack. You have but one fault—that you are not rich. But if Margaret don't object to that, I am sure no one else need do so. Make her happy, Jack, whatever your home may be, and I will give her to you with my blessing, and with a small purse for housekeeping expenses to boot. And now come up to the house old fellow, and for this one week we will take what comfort we can and may.'

'The week of comfort,' as Walter Gaylord called it, soon passed. General and Mrs. Molyneux arrived, and were duly installed in the cedar room; and from morning till night conversation turned entirely upon two subjects—the master of Pennraven and the birthnight ball.

John Weston troubled himself very little about either. In his shabby brown suit he pervaded the house and grounds, generally contriving to keep close to Margaret Gaylord's side.

The lonely, unappreciated girl felt very grateful to him for the pains he took to interest and amuse her. Before the week ended, she had grown to look upon him as a very dear and confidential friend.

So that when he found her one evening sitting by herself in the drawing room and sobbing as if her heart

would break, it seemed quite natural that he should sit down beside her and gently draw the handkerchief away from her eyes, while he asked what caused her grief.

'So foolish you will think it, Mr. Weston, she said. 'But I did so wish to go to that party. I was never at one in my life.'

'And why don't you go?' asked Jack.

'Mrs. Gaylord does not wish it; she just now told me so.'

'Why?'

'I am very poor,' said Margaret looking down and blushing. 'Why, my father lived, I had every luxurie since his death I have had no money except what Cousin Walter has given me. He would give me some now readily if I should ask him, but I cannot bear to do that. It is quite enough that I have a home here with him.'

'But what has money to do with the birthnight ball, my dear Miss Margaret?' asked Jack Weston.

She looked at him smiling. He had evidently known all the shifts and miseries of poverty, and she had no hesitation in confiding in him.

'Mrs. Gaylord says that I have no dress nice enough for her ball. If I had money I would buy one. Don't you see?'

'Pardon my stupidity! And tell me, Margaret, may I call you Margaret?—what dress would you buy if you had the means?'

'If I was rich, nothing less than lace over white silk would suit me, and pearls for my neck and arms. Being poor I would content myself with a white tarletane, made very full, and a natural white rose in my hair. But even that simple toilet would cost a great deal more than I would like to ask of Cousin Walter.'

On the day before the party a box arrived for Miss Margaret Gaylord, and was found to contain the very dress of her dreams—white lace, looped up with clusters of roses, over white silk; a necklace and bracelet of pearls, a silver and pearl bouquet-holder, filled with fresh white roses; a cluster of white roses for the hair; and a pair of satin slippers, such as Cinderella might have worn.

Margaret stood utterly confounded as the servant lifted out these treasures one after another and laid them on the bed.

'Who could have sent them?' she cried.

She stood a moment lost in thought. Then with flushed cheeks and sparkling eyes, she hurried from the room.

John Weston was walking to and fro on the gravel path outside the front door, smoking his cigar.

'Oh, Mr. Weston, did you tell Cousin Walter?'

'Did I tell him what, Margaret?'

'About the ball dress. Oh! it is so

beautiful! But it must have cost a small fortune.'

'I have not uttered one word about your dress to your cousin,' said John Weston, quietly.

'But who could have sent it then? I never dared tell anyone, except you, the kind of dress I wished for. Who can it be?'

'Some good fairy, no doubt,' said Jack Weston, openly meeting her inquiring gaze. 'The day for fairies has not quite gone by.'

She shook her head.

'Did you send it?' she asked.

'I? He looked down at his shabby clothes.'

'Do you suppose I should go about in this guise if I had money to throw away on white silk ball-dresses?' he asked.

A soft and kindly sympathy shone upon him from her gentle eyes.

'Are you so very poor?' she asked.

'No one knows more of poverty than I. It is a bitter degrading companion. Worst of all when it lays a seal on a man's lips in the presence of the woman whom he loves.'

Margaret was silent. All thoughts of the ball-dress seemed to have gone entirely out of her mind.

John Weston took her hand.

'We have not known each other long, Margaret, and yet I think we have learned to know each other well. And if I was a rich man—as rich as the master of Pennraven, for instance—I should ask you to be my wife. But I cannot expect you to care for me as I am—a poor, shabby, crippled fellow, twice your age.'

'Indeed I do care for you!' she said, warmly. 'How can I help it, when you have been so kind?'

'Margaret!' a sharp voice called from the door.

Margaret drew her hand away, and turned with burning cheeks to meet Mrs. Gaylord.

'Pray, what do you mean by such disgusting forwardness?' asked Mrs. Gaylord. 'I was watching you from the drawing-room window. I distinctly saw that man take your hand there he stood holding it till now. And you allowed it!'

Margaret felt that she was guilty, and hung her head in silence—guilty, moreover, of the strange thrill of joy and hope and pride with which she had listened to the story of John Weston's love. 'And what is all this that I hear about an expensive ball-dress that has been sent to you?' Mrs. Gaylord went on. 'If my husband has lavished money so foolishly on you, he will hear my opinion of his conduct in very plain terms.'

'It was not Cousin Walter who sent it,' said Margaret.

'How do you know?'

'Mr. Weston said so.'

The very mention of Jack's

seemed to anger his hostess.

'Mr. Weston indeed! Have you been talking to him about your dress? Never did I know any one half so forward. Well, your wonderful ball-dress will do you very little good in this house. I distinctly forbid you to appear at my party. Do you understand me?'

Tears filled Margaret's eyes.

'Go up to my room and finish turning that blue dress that I told you to alter three days ago!' said Mrs. Gaylord, sweeping back into the house with a scornful toss of her head.

For once Margaret Gaylord did not obey. Instead of going meekly up to Mrs. Gaylord's room, she went down the long walk—boldly following John Weston, as Mrs. Gaylord would have said.

Sympathy was very sweet to Margaret. And cousin Walter saw but very little of his wife's tyranny, and seemed afraid to remonstrate when he did see. Nor did Margaret wish him to. Not for worlds would she have been the cause of trouble between them. But John Weston could be in no wise harmed by her confidence.

He had paid her the highest compliment in his power by loving her, and by saying that but for his poverty he should ask her to be his wife. Poverty might prevent their marriage, but surely it need not deprive her of the consolation which his sympathising support would give her?

She found him pacing up and down beneath the trees, with a serious face.

'I should have braved Mrs. Gaylord's anger and come boldly to the house to claim you in five minutes more if you had not come to me,' he said. 'Margaret, I don't like the way in which that woman treats you. I could not hear what she said, but the tone of her voice was quite enough. You must not stay here; it is a wretched life!'

'It is indeed!' said Margaret, sighing. 'Once or twice lately, when it seemed more than I could bear, I have asked Cousin Walter to find some situation for me.'

'What was your particular sin of omission or commission this afternoon?' inquired Jack.

'I had forgotten to finish a dress she gave me to alter. I meant to do it; but when my box came, with that beautiful dress in it, I could think of nothing else. And oh, only think!' she continued, flushing up; I cannot wear it, after all!'

'Why not?'

'Mrs. Gaylord is very angry about it. She forbade my appearance at her party. I am so disappointed!'

'But you shall go!' cried Jack. 'That is, if you will be guided by me. I have just been having a few words with your Cousin Walter. He owns that or the sake of peace in his house he

has passed over too many things without notice. It grieved him to see you treated badly and he would be glad if you could find a better home. I have satisfied him that I can give you one; that is a happier one. For you will be happier, Margaret, even in a poor cabin, if you are the sole mistress there, and honored and beloved. Now, it is for you to decide. Your cousin Walter will take you from this house to-night, if you choose, to his sister's home. I will come there to-morrow afternoon and take you to church. Anticipating your decision, I have procured a special license. You shall wear the lovely ball-dress that the good fairy sent you,' he added, with an indulgent smile. 'And as soon as the ceremony is over, you and I will return, and you shall attend the party. Rely upon it, Mrs. Gaylord will not refuse to receive you as my bride. Will you Margaret?'

'Yes,' she said, frankly. 'I shall be glad to go with you. You are the only person, except my cousin Walter, who has been kind to me since dear father died.'

'But you quite understand that your life may be one of poverty and care? I don't wish to deceive you on that point; but, I can promise to love you through it until the end.'

'That is all I ask—that and to make you happy. I shall care nothing for care or poverty if I share them with you.'

John Weston's face looked radiantly handsome in this hour of triumph.

'It has always been my dream of dreams to be loved for myself alone, Margaret. And now that dream is realized. A poor, shabby cripple, I have yet won the one woman in the world that I could love for my own dear wife.'

'I dislike to hear you speak of yourself in that slighting kind of way,' said Margaret. 'Please don't.'

'I will not, my darling. I'll allude to myself as reverently as if I was the Master of Pennraven himself. Margaret, you have not yet seen him. If he should love you at first sight, as I did—if he should wish to marry you—'

'Do not talk of such things, Mr. Weston.'

'Mr. Weston! Am I to be called by that name still? Tell me the truth, Margaret. Is it not selfish in me to hurry you into this marriage? Would you rather wait a little longer? The master of Pennraven might—'

'If you mention his name to me again I shall think that you mean to insult me,' said Margaret with spirit. 'I hate the sound of it even now.'

That evening a close carriage left Mr. Gaylord's house, containing Margaret and her Cousin Walter.

John Weston had already vanished to the great delight of Mrs. Gaylord.

'I was so afraid he would hang about here in those shabby clothes, disgracing us before my guests at the party,' she said to her husband.

And she was puzzled by his quizzical look as he meekly answered that John Weston would never intrude upon her until she should ask him to come.

'Then he will stay away forever,' said she.

Mrs. Gaylord drew a long breath of relief as the carriage drove away. She was glad to have Margaret out of the house till the party was over. It would be so tiresome to see her moping with red eyes, thinking herself injured and abused; and it would be an easy matter to recall her at the proper time for her return.

The eventful day dawned at last and with it came tidings that for a few minutes dampened Mrs. Gaylord's sunny self-content.

The Master of Pennraven, who had been in delicate health for years, had died suddenly at sea on his way from Maderia. His fortune and estate had fallen to the 'next of kin', of whose abject poverty at the time of the great windfall the most romantic stories were told. He was coming instantly to Pennraven. After a moment's thought, Mrs. Gaylord wrote a fresh card and despatched it to 'Mr. J. W. Pennraven.' One would do as well as another, she told herself with a smile.

At the appointed time the guests assembled; but oddly enough, no master of the house was there to receive them.

Mrs. Gaylord made such excuses as she could for his absence, hiding her annoyance and indignation under a pleasant smile.

'If he will only come before the Master of Pennraven arrives I will forgive him,' she thought.

In one of the pauses of the music she heard a carriage drive up to the door. In a few minutes the butler appeared, his eyes rolling with wonder.

'Mr. and Mrs. Pennraven,' he said to his mistress, 'and my master.'

Hastening forward to greet her distinguished guests, Mrs. Gaylord suddenly forgot her good manners, and stood staring at them as wildly as the butler had stared at her.

There stood the obnoxious John Weston, in a handsome evening suit; and Margaret—Margaret Gaylord—was leaning on his arm, looking bright beautiful and happy in the white silk dress and pearls.

Behind the pair stood Walter Gaylord, smiling slyly over his wife's discomfited surprise.

But seeing a storm of indignation in her eyes, he came forward in time to prevent it.

'Our friend John Weston was the man to whom Mr. Pennraven's fortune



fell,' he explained. 'With the fortune he took the family name. He is a romantic kind of a fellow, and he wished to marry a woman who would accept him, believing him to be very poor. He found that woman in our Cousin Margaret. And having been so long under your care, Julia, she looks to you entirely to introduce her into the best society here and in town,' he added, in a lower tone.

He knew his wife well. The bait he administered was eagerly swallowed. Mrs. Gaylord forgot her anger in the pleasure of presenting the mistress of Pennraven to her guests that night.

'They met at our house,' she would say afterwards when the marriage was discussed. 'I was against it at first. I dreaded poverty for her, for she had never known it. So, feeling sure that I would not approve, they made a run-away match of it in the end. But it has turned out charmingly. They seem to have been made for each other, and they are as happy as the day is long.' She spoke the truth. In all the country no happier home exists than that over which the mistress of Pennraven presides to this day.

### Miscellaneous.

Some apples, plenty of nuts, good books, plenty of hard wood, and a fire place—these are not extravagances for a farm. A sweet wife, loving, joyous children, rooms arranged and cared for by tidy, tasty hands—all lend a charming tint to the scene. It is night, the wind is rough, and the storm beats high, but the fire glows on the black log, and all is cheerful within. In no place on earth can we find the serene comfort to be found nestling in such a farm cottage as this. It is an everyday dream, very possible, yet too rarely created in American homes.

How it does tear the hearts of sentimental Americans to see women working in the fields in Germany! But those women are full-chested, broad-backed, broad-hipped, strong, and full of health and vigor. They are the mothers of the great German army, mothers of the leading thinkers of the age, mothers of many of the best of our own people. We have seen them in Bavaria, Wurttemberg and Prussia, and they are the finest class of women physically to be met with in any country. They themselves say that they much prefer the outdoor work to exclusive housework, and they live in far more comfort than their sisters of the same pecuniary standing in Algeria,

ca, who live mostly indoors and drudge away their lives in hot kitchens, knowing no more leisure than their German sisters, and too often go into early graves, the prey to consumption and over-work. Spare your pity for the German women. Bestow it liberally upon the American farmers' wives who don't know of the health they might find in some regular out-door work, or in daily two and three-mile walks, or even in the daily care of a flower bed.

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## Boys and Girls.

All are invited to contribute to, and solve the puzzles in this department. Only original contributions desired. We will publish next month the names of those sending correct answers, and to the person sending the correct answer to the greatest number of these puzzles during the next three months we will send as a prize a beautifully bound volume of Tennyson's Poems.

### NUMERICAL ENIGMA

The answer, composed of 42 letters is an old-time proverb.

The 17, 21, 1, 23, 37 is to glide.

The 9, 14, 3, 10, 2, 6, 7, 8 is vain ostentation of learning.

The 5, 39, 4, 29, 13, 11 is hardy.

The 15, 24, 19, 22, 12, 16 is a command.

The 38, 18, 35, 30, 31 is a lover.

The 33, 20, 26, 34 is mature.

The 42, 28, 36, 25 is want.

The 27, 32, 40, 41 is a pain.

### CHARADE.

My first are places of safety for ships,  
My second is a part of an animal,  
My whole is a town in England.

### BEHEADINGS.

1. Behead an adverb and get a bird;  
2. Behead a two masted vessel and leave to fit out; 3. Behead to make shorter and get a part of the nose; 4. Behead to walk tremblingly and get an animal; 5. Behead a bird and leave to awaken one suddenly; 6. Behead a heap of hay and get a sharp pointed article; 7. Behead ornamental ground and get an ancient ship.

### CROSS WORD.

A consonant; a young deer; a poet's name; occurring at an established division of time; a girl's name; a measure; a vowel or a consonant..

Answers to puzzles for October.

No. 1. — Asparagus.

No. 2. — Mid.

No. 3. — Robin Hood.

No. 4. — Gold-fish.

No. 5. — Vest.

Correct Answers have been received from Professor; Josephine A. Eagles, Archibald W. Bishop, John R. Morrow, J. Hiltz & Lona Clark.

### CATARRH—A NEW TREATMENT.

The Globe.

Perhaps the most extraordinary success that has been achieved in modern medicine has been attained by the Dixon treatment for catarrh. Out of 2,000 patients treated during the past six months, fully 90 per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of patients presenting themselves to the regular practitioner are benefited, while the patent medicine and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished, the catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has attempted to cure catarrh in this manner, and no other treatment has ever cured catarrh. The application of the remedy is simple, and can be done at home, and

the present season of the year is the most favorably for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. Dixon & Son, 305 King St. West Toronto, Canada, and enclose stamp for their treatise on catarrh.

## What Is Catarrh!

From the Mail (Can.) Dec. 15.

Catarrh is a muco-purulent discharge caused by the presence and development of a vegetable parasite in the internal lining membrane of the nose. This parasite is the simplest living form known that lives upon organs, and is only developed under favorable circumstances, such as: Morbid state of blood as the blighted corpuscle the germ poison of syphilis, mercury toxomoon, from the retention of the effete matter of the skin, suppressed perspiration, badly ventilated sleeping apartments, and other poisons that are germinated in the blood. These poisons keep the internal lining membrane of the nose in a constant state of irritation, ever ready for the deposits of the seeds of the germs which spread up the nostrils and down the fauces, or back of the throat, causing ulceration of the throat; up the eustachian tubes causing deafness; burrowing in the vocal cords, causing hoarseness; usurping the proper structure of the bronchial tubes, ending in pulmonary consumption and death.

Many attempts have been made to cure this distressing disease by the use of inhalants, medicated vapors and other ingenious devices but none of these treatments can do a particle of good until the parasites are either destroyed or removed from the mucous tissue.

Some time since a well-known physician of forty years' standing, after much experimenting, succeeded in discovering the necessary combination of ingredients which never fail in absolutely and permanently eradicating this horrible disease, whether standing for one year or for forty years. Those who may suffer from the above disease should, without delay, communicate with the business managers,

MESSRS. A. H. DIXON & CO.

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### READ THE FOLLOWING

Montreal, April 4th 1881.

MESSES. A. H. DIXON & SON, GENTLEMEN.—Last month my wife called on you to consult you about catarrh, she having been troubled with catarrh of an aggravated form for the last six years, during which time she has used nearly every remedy that came to her notice, but without any good results. As a last hope she decided to try your treatment and I am happy to say that after the use of one application of your remedy the disease has entirely disappeared. Her general health is also greatly improved. You are at liberty to use this letter if you see fit, and I shall always recommend your remedy to any friends of mine whom I may find suffering from that terrible disease, Catarrh.

Yours truly, A. P. LEFFEBVRE,

Cor. Notre Dame and Mc Gill Sts

Ritcey's Cove, N. S., June 22, 1885.

GENTLEMEN,

I am happy to say that the treatment which you sent me last February has effectually cured me of catarrh. Mine was a case of long standing, and up to the present time I have been waiting for developing remains of catarrh but none are manifest. You may use my name as a proof that your remedy cures catarrh. I feel grateful for the removal of such a trouble.

Yours, etc., REV. G. O. HUESTIS.

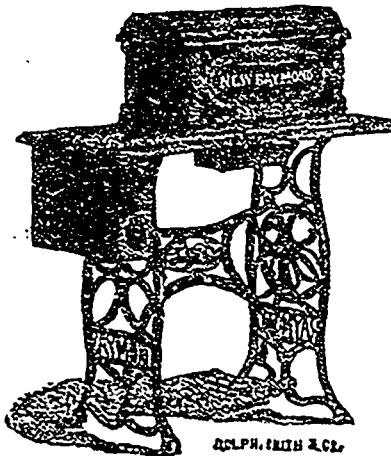
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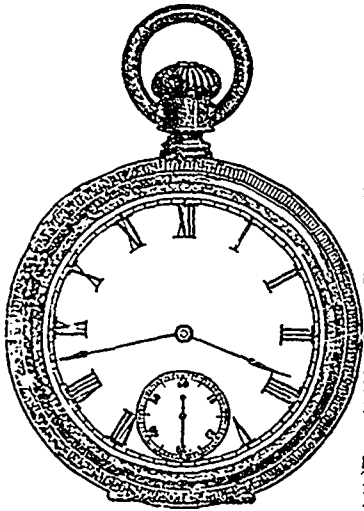
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**Premium No. 2.**—A Stem-Winding Watch, similar to the above. Will be given for a club of 15 subscribers.

**Premium No. 3.**—Gentleman's Solid Sterling Silver Hunting or Open Face Watch, Full Jewelled, Lever Movement, sold for \$18.00. Will be given for 30 subscribers.

**Premium No. 4.**—Waltham Watch, guaranteed by Waltham Watch Co. Jewelled Escapement compensated balance, Dust Proof Band, Patent Safety Pinion. Will be given for 38 new subscribers.

**Premium No. 5.**—Ladies Gold Hunting Watch, Handsomely engraved case, lever movement, sold for \$30.00. Will be given for 65 subscribers.

**Premium No. 6.**—Gentlemen's Solid Gold Watch, Handsomely engraved case, Lever movement. Will be given for 100 subscribers.

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2. The list of names may be closed and sent in at anytime, and the premium earned will be at once received.

3. The list may be kept open and names added thereto until July 1st, 1886.

4. But all names together with the exact cash must be sent in as soon as received so that the subscriber may begin to receive the paper at once.

5. Remittances made by P. O. Order or registered letter are at our risk.

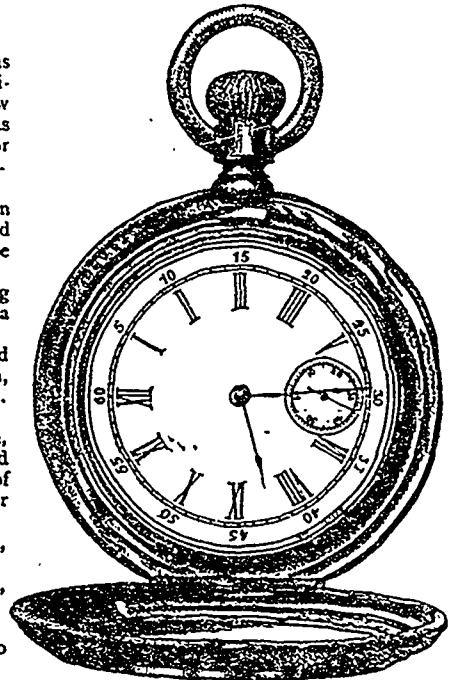
We are continually adding to the list of Premiums, and next month many other useful articles will be included in our offer. Go to work at once and secure one of these valuable watches. If you prefer a cash commission write to us and we will enable you to make money easily, rapidly and honestly.

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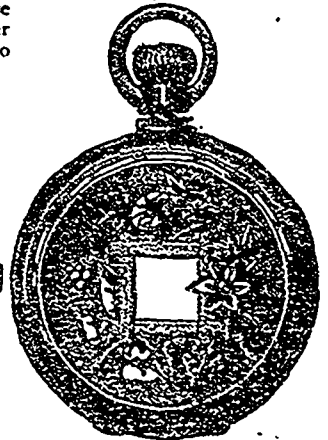
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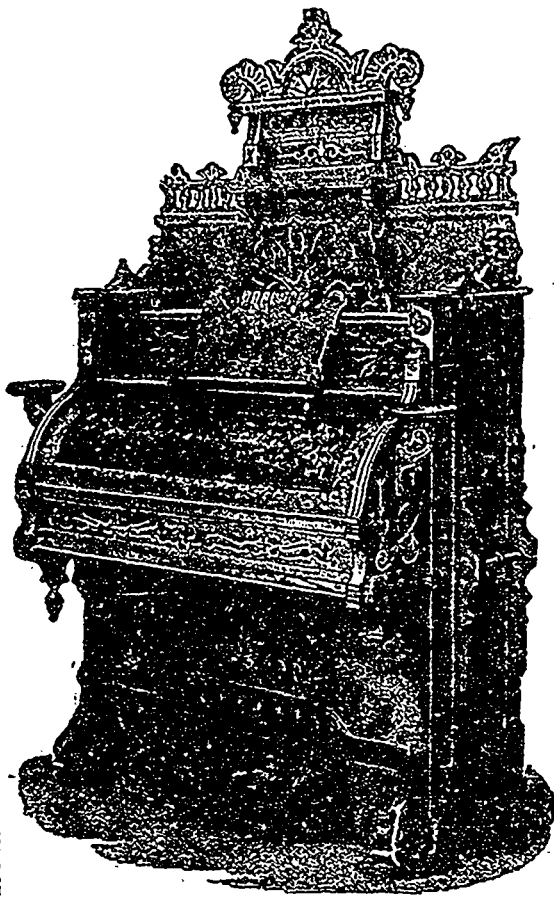
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AGENTS FOR THE

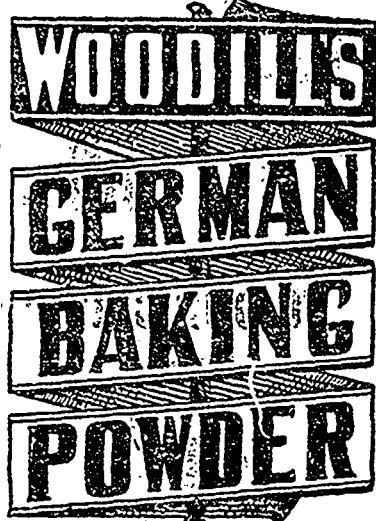
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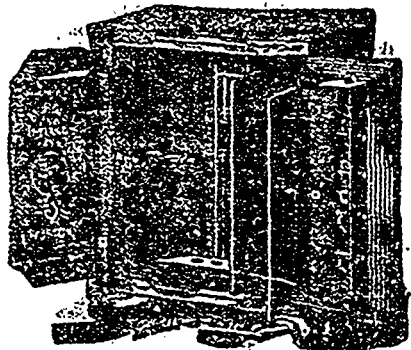
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