

The Willamette Farmer.

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PRACTICAL FARMING.

What may properly be called practical farming is by no means scientific farming, there being a wide difference between the terms and also in the practice of each. But practical farming is the best paying of any business depending directly upon the soil for success. The average farmer can be practical and scientific simultaneously, however, and if he would be an educated, progressive farmer, one whose residence in any community would tend to establish a higher and better agriculture, he must experiment judiciously, and study his business the same as doctors, lawyers and ministers study theirs, being careful under all circumstances, and full of enthusiasm—in short, an enthusiastic farmer thoroughly in love with his noble profession, and awake to his every opportunity. The farmer of fifty years hence will have to be scientific, otherwise he will be lost. I might say this of the farmer of 1925.

As population increases, our acres are increasing in value so that in a decade or two land that is now worth \$40 per acre will then sell for from \$60 to \$80 an acre. This is bound to come true if we may judge, even to a slight degree, the future by the past. Land in this (Cooper) county now worth \$50 an acre, a few years ago could have been bought for \$25 or \$30. Thus it is not difficult to see the trend of modern times. Everything advances or reverts; nothing remains still for any lengthy period. So with agriculture. The farmer must forge to the front by surmounting the many difficulties which beset his path, remove the barriers which have so long obscured prosperity from his sight, and fertilize his fields with brains. In a recent issue of the Ladies' Home Journal the talented editor, Edward Bok, says: "To be a successful farmer calls, nowadays, for as much thought and brains as it does for a successful merchant or doctor. There is no doubt that to gain the best results out of a farm calls for more training and education today than in years gone by. This is because the markets are widening, competition is becoming keener, and also because of the greater adoption of machinery. The idea that farming is simply a manual pursuit is wrong. The farmer of to-day, and of to-morrow, must be a man of brain as well as of muscle, or he cannot succeed. There is, nothing that fertilizes the soil of the farm so well as the brains of the farmer. Cost of production and the best markets must be studied, and this requires an intelligent comprehension not only of what is going on in farming but in the world in general. He must understand citizenship as well as farming, in fact. National conditions and tendencies all have their bearing upon the farmer more than upon any other man, because he is the producer of what keeps the world alive. Haphazard farming never did pay; it has given some farmers a fair living in the past, but it will give fewer of them any living at all in the future. A young man going into farming now must have something more than money to buy land, implements and cattle. He must have a clear head on his shoulders. The time has come and conditions are imperatively shaping themselves more and more each day, when farming, or rather the science of agriculture, will be a profession, requiring the same mental capacity as medicine, law or literature. The day of the shiftless farmer is over." All of which is very well said, although Mr. Bok knows nothing about practical farming. I don't deny the education of the farmer, yet there are hundreds and thousands of successful farmers in this country to-day who can't solve John Jones' estate, the famous problem in Ray's Arithmetic, third book. These uneducated farmers are educated, this sounds like anything but consistency. But here is what is meant; these successful uneducated farmers are ignorant as regards books and business methods which obtain in cities, but they are post-graduates from the great school of practical experience, and thoroughly conversant with every item looking to their betterment; they are quick to take advantage thereof, quick to see a point of advantage. These are not haphazard farmers, however; they are practical farmers, that class of loyal citizens which to-day represents the strongest power on earth. Fancy farming is all right; but one must have means to successfully prosecute it. Let us have practical farming; then our country will become more solid, and less endangered by corrupt legislation which is so popular (!) these days.—DeWitt C. Wing, in Journal of Agriculture.

PAINTING FARM BUILDINGS.

Early in spring is a much better time to paint farm buildings than later in the season when insects become more plentiful. Every farmer ought to know how to use the paint brush, so as to do this kind of work himself. Painters always ask high prices, and they are right in so doing,

for constant work among paints, especially those that contain lead, is unhealthy. But what is needed to be done on any place will take so little time that no injury to health is likely to result. Even the children ought to be taught the use of the brush and encouraged to repaint whatever they find looks worn and shabby. All kinds of farm implements not only look better but wear better if painted every year or two. In the cities we have a division of labor in which some men give their lives wholly to painting. But city painters will not often go to the country to do a job, and if they do they ask a price that most farmers cannot afford. But it is comparatively easy to learn to paint and if a farmer wants some painting done he had better learn the trade and do the work himself. Ready mixed paints can now be purchased, so that there is no need to learn the art of mixing paints, which to novices is the most difficult part of their business.—Ex.

THE COST OF FARM LAND.

A good deal of the farm land which today does not pay the owners on the investment originally cost too much. Farm land in many parts of the country is too high, out of all proportion to the cost of other improved property in cities and towns. Farms are often held high by the owners because they were duped into paying too much for them at the beginning, and they consider times pretty poor and farming going to the dogs if they cannot make good interest on their poorly-invested capital.

As a rule I do not think it is possible for a farmer to make a good living in farming on land that he has paid higher than \$50 an acre. There are a few exceptions to this, where the land is well located near large markets, and it is possible to get the products to the consumer direct. Often such land is cheaper at \$100 per acre than much of our farming land at \$50 per acre, situated many miles back from the cities. When you hear or read of complaints about farming does not pay, you will generally find, if an itemized account is given of expenses and income, that the land is put down at \$75 or \$100 per acre. Without going any further, it is just as well to say that the grumbler is not starting from the right premises. He is either valuing his land at a fancy price, and expects to make interest at the rate of six per cent, on this ideal valuation. If he paid that much for his farm land, and is honest in his calculations he is to be pitied, because he probably got stuck in purchasing the land.

In order to make farming pay it is necessary to reduce our valuation of farm land. How much is farm land worth? Merely what it will pay when carefully and properly farmed by an intelligent agriculturist, and nothing more unless it is located where in the near future it will be valuable for building purposes. Now it is an easy matter to figure out what land will pay by ascertaining the cost of labor in that region, fertilizers and transportation rates to market, and the average prices that have been paid for produce for five years past. Pay for the land what it is actually worth, and farming will be found to pay. It is because so many have paid fictitious prices for their farm land that they cannot make a living—that is, over and above the interest on the invested capital. The plea made in some localities that it is necessary for the good of the place to keep the land up to a certain figure is all nonsense. Sooner or later the land will find its true value, or it will be eaten up by its owners through inability to pay for it.—James S. Wilson, in the Journal of Agriculture.

EGG AVERAGE.

The average egg yield of Partridge Cochins is 130 eggs per year, of Buff Cochins, 150 to 160 eggs per year; of Black Langshans and Light Brahmas, 150 eggs per year; of the different varieties of Wyandottes and Plymouth Rocks, 175 per year; of Minorcas, 180 per year, and of the Leghorns, 190 per year. These average yields, let it be understood, take for granted that the fowls are standard-bred stock and that they receive proper care. The flesh of the Partridge Cochins is fair.—Reliable Poultry Journal.

PECULIAR AND PERTINENT.

The bones of an average man's skeleton weigh 20 pounds. Those of a woman are probably six pounds lighter.

At Leadville, this past winter, the snowfall was 21 feet, and at Ruby, Col., it was 42 feet, 5 inches. The experiment station at the University of Illinois is commencing experiments with nitrate of soda at Olin, at Edgewood, and at the University. The special interest in these experiments is that of finding what the fertilizer will do on the white clay soil of southern Illinois.

HEN MANURE.

An exchange says that an analysis of hen manure and well-rotted barnyard manure shows that a ton of the hen manure contains more than eight times as much potash and six times as much nitrogen as the barnyard manure. Omitting small fractions the hen manure is a fertilizer with nearly 24 per cent phosphoric acid, 2 per cent potash and 3½ per cent nitrogen, and should be worth, as these elements are figured at our experimental stations, about \$12.26 per ton, as compared with the cost of raw materials to make a fertilizer of the same strength.

But we have heard of farmers and gardeners who had tried it assert that they wanted no more of it on their land. This may have been because it contained so much nitrogen of which their fields, long manured with horse manure, did not stand in need. It may have been because it was so dry that its strength was not imparted to the



soil until the winter's rains had thoroughly soaked it from its not being well adapted to the crop it was used on.

We have composted or mixed it with loam or sand, preferring the sand, and received good results from it in a garden on poor soil and as a top dressing on grass, and we have added it to the barnyard manure when it was thrown over in the spring, and thought the manure much richer for its use; and this also we have thought the best way to use the contents of vaults and cess pools, allowing the whole heap to heat or ferment together, but not allowing the ammonia to escape. We think the poultry keeper who has land in grass or in cultivation will find that the manure the hens make is of considerable importance as an addition to the income from them.—American Cultivator.

THE CARE OF CHICKS.

The early chicks are with us. They are well worth caring for to the best of our ability. I firmly believe in feeding only dry rations, and keeping the little fellows busy all the time. At this season of the year, especially, little chicks will not stand up to much of a fast on wet and sloppy meal mixtures. In fact such mixtures should not be fed to chicks at any time. There is no better feed for these chicks at this time than commercial oatmeal, wheat bread, cracked wheat and millet seed, home-made Johnny cake, corn meal cake. When making this cake mix with it a small quantity of bone meal. See to it that the youngsters are supplied with plenty of grit. Nothing will so effectively prevent chicks confined—as these extra chicks must necessarily be—from having diarrhoea as cracked or powdered charcoal. They will readily eat it if placed at their disposal. It thoroughly regulates the bowels and keeps the chicks in good condition. Nine-tenths of the loss of early chicks is due to bowel complaint. Charcoal will absolutely prevent this, other conditions being right. If for any reason the chicks do not eat the charcoal in their runs, mix a quantity in their feed two or three times a week. It can be mixed in the corn meal and shorts of which the Johnny cake is made or in sprinkled on the bread given.—Thos F. Rigg in American Poultry Journal.

BREAKING UP THE SITTERS.

It is really cruel, no matter what the method may be, as the hen prefers to follow her natural instincts. To "break up" a sitter is easy enough, but will the desired end of changing from sitters to layers be accomplished thereby? Not in the way the people would have it. Broken up hens may start to laying again very soon but chances are that they will lay a few eggs and again be broody. This is because the condition of the hen which causes broodiness has not changed, and cannot be changed by force methods. When a hen becomes broody it means that the egg-producing capacity of her system, for the time being, has become exhausted and that recuperation is needed. The first step to such recuperation nature indicates to be "rest." You can induce even an exhausted animal to exertion beyond its natural capacity, by using stimulants of various kinds—the whip for instance, will drive even a tired horse—but the use of such stimulants is generally and rightfully defined as cruelty, and in the end nothing will be gained. Give the hen one egg and let her sit on it for a week, feeding her once only in two days (as she will need very little food on account of no exercise), then place her in a flat coop (with slat bottom) raised from the ground, for two days, and she will abandon the attempt and soon begin to lay.

DROOPY CHICKS.

When chicks droop and refuse to eat it may frequently be due to lice. The large gray lice come from the heads of the hens to the chicks. Experienced incubator operators will not allow a hen within a hundred yards of a brooder. The remedy is to anoint the head and neck with a few drops of melted lard, dust well with insect powder and clean their quarters. Add a teaspoonful of tincture of nuxvomica to every part of drinking water for

a week. Give millet seed, cooked bread (which should contain some fat), and clover that has been chopped very fine. Milk in the bread instead of water, is also excellent, and fine grit that is sharp should also be allowed. Three times a week (during dry weather) a teaspoonful of sulphur may be added to the material composing the bread. Keep their coops and runs clean.

CAUSES OF POOR HATCHES.

When the chicks do not begin to hatch uniformly the fault is with the eggs. In summer, or in a warm climate, the trouble in hatching is due mostly to the eggs and not to the incubator or hen. If the incubator can hatch a dozen strong chicks, why not all? The reason is that the eggs differ, and the chicks in the shell are just what their parents are—weak, strong, or having some other fault. Old hens may be moulting (so may the males), and the pullets may be immature. Chicks are like babies—no two alike—some live while others die, depending on the condition of the parents, etc. In summer the most of the eggs are from fat hens, and that is the cause of nearly all the poor hatches.

BUTTER FLAVOR.

The market value of butter depends more upon its flavor than upon any other quality. This flavor is not only very delicate. Few persons can thoroughly appreciate it. The great majority of butter-eaters would be unable to distinguish a first-class product from a butter which an expert would place far below it. The taste of the public differs in different localities. Some persons, says an English writer, prefer a mild butter, while others are not satisfied unless their butter has a strong taste. It will be found that, as a rule, people like the butter they have been accustomed to use, and if an attempt should be made to change the flavor of the butter, even though it should be to a superior quality, it would not be likely to meet with favorable reception. As regards the origin of the butter flavor, it would be natural to suppose that it is due to butter fat as such, but that appears to be a mistake, as chemical changes are necessary in some of the constituents of the butter in order to develop the butter flavor. Unaltered fat of milk has little taste, and the flavor of butter is not due to this, its chief constituent. It is generally believed that the butter aroma is due to the ripening of a acid in the butter after ripening, and most butter-makers believe that the object of ripening is to make it acid. This idea, according to Dr. Conn, is a mistake, or at least only a half truth. Lactic acid does not furnish the delicate flavor which we find in butter. It is probably true that its sour taste is a part, but only a small part, of the butter flavor. In some of Dr. Conn's experiments, a high quality, almost typical, butter flavor was obtained without trace of acid, either in the ripened cream or in the resulting butter. Cream may be ripened completely, without its becoming acid in the slightest degree. It is probably true that in the best quality of cream ripening acid should be produced, but its production is not the chief factor in butter flavor. The butter aroma which appears in the butter is the result of the ripening process. Sweet cream butter does not have this delicate flavor. During ripening, certain changes take place in the cream, some of which we understand, and others which are at present beyond the reach of chemical

knowledge. The composition of cream except in the higher portion of fat, is essentially the same as that of milk. It is made up chiefly of butter fat in the form of globules, of casein in partial suspension in the liquid of milk sugar solution, and of a small amount of albumen, probably partly in the form of a delicate network of fibres, which we call fibrin. Cream always contains a large number of bacteria, yeasts and molds which are the active agents in ripening. The sources of these micro-organisms are varied. They are not present in the milk when secreted by the cow, but find their way into it in a variety of ways. Some come from the air; some from the hairs of the cow; some from the dust of the cowhouse; some from the hands of the milker; some from the milk vessels; and others from sources of contamination. The chances of contamination are sufficient to stock the milk with an abundance of these organisms under all circumstances. By the time the cream has reached the cream jar it contains organisms varying widely with temperature and other conditions and it is to these that the subsequent ripening is due. If kept at a moderately warm temperature, say 60 to 65 degrees, the bacteria grow rapidly, and during the twenty-four hours or so of ripening, increase enormously, and at the end of the ripening period the number of organisms varies with the time of year. In winter the cold weather keeps the bacteria from growing rapidly, and the cream contains a smaller number of bacteria than in summer.

DIVIDE THE HOGS IN FEEDING.

The successful feeding of hogs depends to a considerable degree on dividing them off according to size, says the Epitomist. A farmer cannot suc-



cessfully feed pigs weighing 50 pounds with hogs ranging from two to three times that. I observed an illustration of this in a herd of 20 hogs belonging to a neighbor. Among the lot were a few small, stunted fellows, that gave promise of anything but developing into profitable young. Left as they were it was very plain that they would amount to nothing. They were removed from among the others, and placed in a small yard to themselves. Their food has been mostly good, rich swill; but the greatest point in their favor is that they have been by themselves, so that each could get its share of the feed, and without being molested by some hog three or four times its size. I saw recently, one would hardly know that they were the same pigs. The change that they have been given, and the care bestowed, will pay the owner well. There are thousands of pigs in the country just like these, and all they want is a chance to pay the owner for their keep.

As a rule cows prefer dry to sloppy feed.

FRUIT CULTURE OF THE FUTURE.

The consumption of fruit increases in this country every year, and people are learning to buy fruit now as a food instead of a luxury. There is little chance of the industry of raising fruit for this demand more than keeps pace with the supply. The nursery business has increased enormously also in recent years. In 1890 there were in the nurseries of this country 37,000,000 pear trees, 250,000,000 apple, 38,000,000 cherry and 43,000,000 peach trees. Most of these trees would in the ordinary course of events be in bearing to-day, and at that time when the nursery statistics were supplied it was supposed that these trees would swamp the market with their fruits. But the fact is there are not enough trees today in bearing to supply the demand. In the first place account is not taken of the great number that die. A good percentage of trees from the nursery perish after being planted out through negligence and ignorance of their need. It is estimated that from one cause or another at least one fourth of the trees die before they reach maturity, leaving only three-fourths which actually come into bearing.

Then the great number which are killed off after they have reached maturity. In a winter like the past, millions of fruit trees have been killed, throughout the country, devastating the number to produce fruit the coming summer very materially. When one considers these statistics the dread of a great fruit overflow does not seem so near at hand. One cannot judge the probable outlook of the fruit industry by counting the number of trees set out every year, and then multiplying

them by the average product of a full bearing tree. The planting of more fruit trees every year should be the policy of every farmer. Close planting for all fruits is desirable, which will bring the largest yield from an acre when young trees are not in favor to-day. When they are in favor to-day in their production it is time to fall off in the orchard to each other two can be thinned out if necessary by removing every other tree in the row. Interfacing of the branches should not be allowed. Trim back rather than permit this.

At the Minnesota station rape was compared with timothy hay for feeding sheep. Eight sheep were divided into two groups, each containing four sheep. Group one ate 587 pounds of hay in thirty-two days, group two ate one-fifth more of rape in the same time. The increase in live weight was calculated at 4 cents per pound and timothy hay worth \$5 per ton. At this rate one acre of rape was estimated to be worth \$8.90 for late pasturage of sheep.

Stick to the farm.

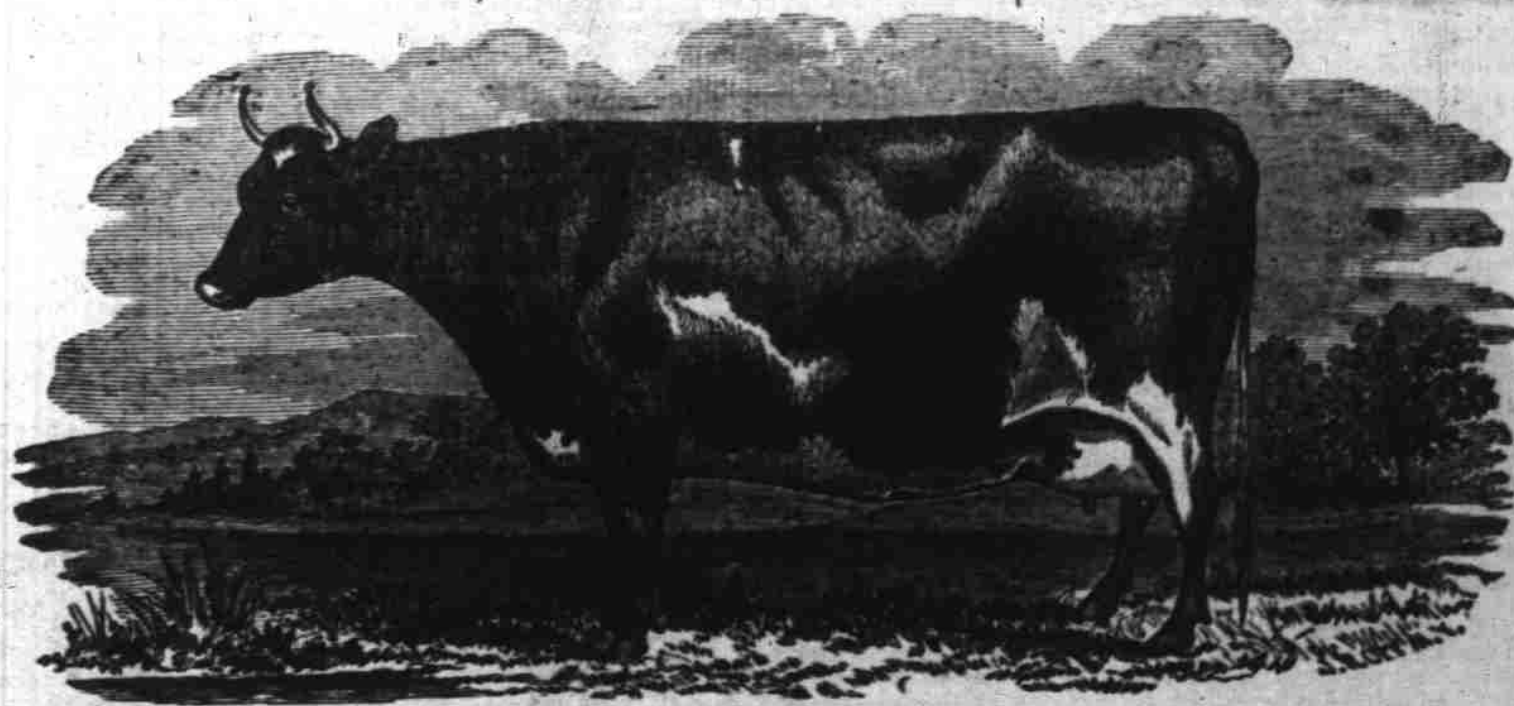
CHOOSING THE RIGHT BREED.

Many dairymen who grasp the correct idea that improved methods of breeding benefit their milk herds feel disappointed at results. This is because they do not acquire the breed best adapted to their needs and location.

As a truthful illustration of what I mean, I wish to cite an instance of which I was personally cognizant

some little time ago. A New York dairymen bred into Holsteins under the supposition that because of their copious milk yielding qualities, they were the best cows for him. Two-thirds of this man's farm was low-lying land, and the pasture necessarily of a watery nature; that is, the luxuriant grass growing from a proverbially moist soil contained far more water than does highland herbage. Now, Holstein cows are known to lean toward the production of watery

milk, and in this instance, stimulated held good their reputation to the extent of yielding milk that did not contain the legal per cent. of solids. The man was disappointed with the breed without recognizing the fact that his inferior pasturage had more to do with this, I know of a number of other prominent dairymen living on river bottom land, who, with Holstein cows, find it difficult to produce milk possessing a legal standard. In



by the character of their feed, they some cases they have supplemented grain rations to help them out, and in others gradually introduced other breeds of cows. Do not infer from this that I am saying anything against Holsteins, for in their proper place I am a great admirer of the breed, but a breed must be adapted to its surroundings and the requirements of the dairymen. If a dairymen is not quite sure what kind of milk stock will meet his best

ing a thoroughbred bull, first class grades can be secured at nominal cost. This looks easy enough, but yet it requires skill and careful study on the part of the breeder to breed successfully. It can be said that as a general rule a successful dairymen will make a good breeder. One must be an accurate judge of the points of a good milk cow. This is the main essential and the side issues are sure to be taken care of by one who has the right principles at heart.