A black sandy loam with clay subsoil, makes the best natural pasture land, although most any of our Wisconsin land can be made good with proper handling.

The best pastures for all seasons consist of part low land and part upland. Low lands yield the most bulk of feed per acre and stand drouth the best but upland pasture is more nutritious and is prepared by cattie.

The hills we have make splendid pasture lands by clearing off the timber and brush and then sowing grass seed just as the snow is leaving the side-hills in the spring while the ground is yet soft and loose from action of the frost.

Seventy-five to one hundred pounds of land plaster should be sown per acre, as soon as the snow leaves the ground. The earlier the better. Land plaster sown with grass seed when seeding wild land that has been cleared of brush will facilitate the germinating of the seed and give the young plants a vigorous growth.

Our bluffs and steep side hills make the best pasture by never trying to plow or cultivate them. There are from two to four inches of very rich soil on the surface that produces an abundant growth of tame grasses that is preferred by cattle to the grass grown in the valleys on cultivated land. So, don’t sell your farms because they have bluffs and hills on them, for they make the best pasture, and the cattle can graze on both sides of the land, which they can not do in a prairie country. In arranging your pastures for dairying purposes have at least a day pasture and a night pasture, never allowing your stock to feed on the same field night and day. It is better to have two day pastures and two night pastures; then change your cows the first of the week from one day pasture to the other, and the middle of the week change them from one night pasture to the other.

This plan will give them fresh feed every three or four days, and allow the grass a better chance for growth. We should not allow too large a growth to get the best results from dairy cows, although very close cropping will decrease the quantity of grass production, and permanently injure the grass roots. This we cannot always prevent, especially in very dry seasons like the past summer has been.

I believe grass to be the most succulent and best adapted for milk cows when it is from two to four inches in height. Beef cattle fatten better on grass that is a little larger and more mature. As pastures diminish in production in the months of August and September, feed green corn and other feed to supply the deficiency, so that your pastures may never be very closely cropped. If on a portion of your pasture the cattle seem to shun the feed and allow it to grow up large without feeding it off, sow it heavily with land plaster, and you will find the next season they will feed on it as well as any portion of the field.

Cattle should not be allowed to graze on pastures in the fall when the grass is covered with frost, as they will destroy in an hour as much feed as they will eat all day.

Keep your cattle off from grass land in spring, when it is very soft, as they do a large amount of damage trampling down grass roots. Always try to give your cows an abundance of pastureage, but keep it fed close enough to preserve the succulent and nutritious qualities of the grass. A great many blow up their pastures too often, the older the pasture the better feed they produce. Old pastures not only produce a better quality of food, but also a greater quantity if they have been well managed.

One of the cheapest and best methods of renovating worn soil is to pasture it a few years. If it is badly worn it will also need rotating a few times.

Sandy soil makes splendid pastures by using mostly clover for seed, with land plaster and plenty of barn-yard fertilizers.

Fertilizers with a large amount of ammonia in them are very beneficial to cold, damp soil which cattle are very liable to shun, owing to a lack of nutritious qualities, this being absorbed by the grass roots.

In conclusion I will say, fertilize your pastures as you do your meadows, and aim to give the grass roots plenty of nitrogenous food if you desire good milk and good results from dairy cows.

The Horse.

[C. S. Ogden, Weyauwega.]

Having used horses in different kinds of business for over sixty years, forces me to form certain opinions and theories in regard to them.

My experience teaches me that a horse should be of such size, form and
disposition, suitable for the work which he is to do, and then should be treated right to make him useful.

There are several kinds of horses and different kinds of work for horses to do. Every man who uses horses has an idea what kind of horses suit him.

Having at different times in my life used and worked horses on the race track, on the farm, on the road, and in the lumber woods, means me to believe in the horse that I shall describe to you.

As a great many men think a fast horse to be the most valuable, we will first describe a race horse as we understand him.

A successful race horse is one that can go fast at his particular gait. He must be a light horse, and have the right kind of muscles to be a successful race horse. Like the violin strings they must stand the strain to be brought to the right pitch and hold it. If he fails in this, he is like the poor violin strings, worthless as a race horse. He must have the right action, and a disposition to do his best when called upon. With all these good qualities, he must have a certain unseen power, a power which never can be seen or known except upon trial.

A horse may have a perfect form and action, and a disposition or willingness to do—be what a horseman would call, to all appearances, a perfect horse—and then be a failure as a race horse.

No man can tell the speed of a horse by his looks. The hidden power that connects the will with the muscles, is the principal thing in furnishing speed.

If the connection of the brain or will power with the muscles is perfect, the horse will be able to go fast. This power, with the form, gait, and disposition all right, the horse can go fast, and if in right condition can hold his speed to any reasonable extent.

This nerve power works some like electricity on the telegraph wire. The instant that the operator touches the keys at one end of the wire, the message is delivered at the other end. So it is with the horse. When he wills the foot to move, it moves, and the quicker this nerve power acts, the faster the horse will go. It don’t matter what the breeding may be. A horse may be what is called standard bred, and have a pedigree a yard long, and then be a lubber as a race horse.

It is an easy matter for a man to talk horse; to show and explain the good points of a horse. You will find such men at nearly every cross-roads. They will tell you how to breed such horses, how to select and handle them. They know all about it; in their own estimation they know more than their neighbors. For some reason these great horsemen generally fail to bring out any fast horses.

The fact is that raising this class of horses is like buying lottery tickets, you may draw a prize the first time trying, and you may try it a thousand times and draw a blank every time. So it is in raising fast horses; you may get one the first time trying, you stand one chance in about 10,000. My advice to you is, don’t invest too much on such chances, unless you have more than you have use for. If you have more funds than you have use for and wish to benefit your neighbors, it may be well enough to experiment some in this direction. I will not at this time undertake to tell you how to train and fit horses for riding.

If you want a horse for moving heavy loads, you will need one with large bones and muscles, large shoulders and hips, short and broad back, short legs, a good walker and a disposition to pull steady. Such horses generally find a ready market, making it a safe business to raise them.

This being a farmers’ meeting, I suppose you generally have a greater interest in the horse suitable for farm work, than in other classes of horses. The condition and circumstances of farmers differ so much that a proper horse for one might not be suitable for another in different circumstances.

A horse to suit me for farm work, or one that I would select to work on the farm, would be a well-bred horse, at least one-fourth thoroughbred, weighing from 1,000 to 1,100 pounds, with good feet, and flat legs of medium length—one that can work on the farm the year through without shoes. Without good feet and legs, a horse is nearly worthless for any purpose. He should have a strong neck, shoulders, back and hips, be easy to keep, so you can raise some grain to sell or feed to other animals; a good walker and a fair roadster. Such a horse, if well cared for, will draw the plow all day, then go to town at night if necessary, will work, if well taken care of, the year through and last
till he is 30 years of age and do good work. A larger horse may pull a heavier load for a time. He will be more expensive to keep and won't last so long. He cannot go without shoes so well, will tire quicker on soft ground, is more liable to lameness, and when lame or injured cannot perform so well as a light horse with same injury. You can also use lighter implements and tools. You don't want a four-horse wagon for two horses; neither do you want a poor plow. Some plows draw like pulling a cat by the tail. Three-fourths of the plows used run too hard. A right kind of a plow will draw from 50 to 100 pounds lighter than our common plows. Have farming implements suitable for your teams.

With all the good qualities mentioned, a horse needs a good disposition for any and all kinds of business. He may be perfect in all other respects and have a bad disposition, making him nearly worthless.

Horses are a good deal like men. Some men are stubborn and contrary, some are foolish and cranky. Such men are difficult to get along with. You avoid such men as much as possible. It is unpleasant dealing with them. They are not liked by their neighbors. Generally you want to get rid of such neighbors as soon as possible. So it is with the horse. When you get a cranky or a fool horse, go to a regular horse trader, who will generally exchange a good horse for a poor one and some money; and if you wish to make a good trade, don't publish the faults of your horse any more than necessary. Let the next man tell them.

If you wish a good horse to perform well in any place or business, you must fit him for it, feed and water him regularly, give him regular exercise according to the work you want him to do, give him a suitable stable, with good bedding, where he can rest comfortably. A horse that works hard should have the best of care.

Race horses are kept in large, roomy box stalls, turned in loose, cared for in the best manner possible, so as to be in perfect condition for their business. Give your work-horses just as good care and treatment as you do a race horse; he deserves it. Then when you call on him, he is able and willing to respond to it. When you neglect your horse, fail to care for him properly, you have no right to expect much from him. You neglect a horse to your injury, and justly too. The man who abuses the horse is not fit to own or use one.

In the first place make up your mind what kind of a horse you wish to raise, then select the dam and sire; there is as much if not more depending on the dam than on the sire. The old adage that, like begets like, sometimes fails. Some of the best horses in the world don't take after the dam or sire. Horses are like men in this respect. Some of the ablest men the world ever produced had weak specimens for parents, and some of the ablest men and women have weak and foolish children. Some of the best horses have poor colts. The dam and sire must be suitable for each other in order to produce the right kind of colts; then they should be healthy, have regular exercise, have proper care and food, not over-fed.

Colts should be fed on bulky food such as clover, wheat, bran, and roots of different kinds. Anything that will expand the chest, make bone and muscles, and keep them growing and healthy, let them run loose in a lot where they can exercise, with good sheds for shelter and feeding in the winter, and clover pastures in the summer, with good water and a little salt, then if you fail it won't be your fault. Colts kept in this manner, when three years old, if used properly are able to earn their keeping.

If your horse gets sick, nearly every man you meet will give you a sure cure prescription. They have tried it, have seen it tried, often if you follow their directions, you will surely cure or kill. Having been something of a horse doctor, I will give you a prescription which I seldom knew to fail, it won't cost you anything for the medicine, or for the information: when you just discover that your horse is sick, give him a handful of salt, then turn him loose in a good room and warm place where he can lie down, roll and move about when inclined to do so. If you don't know the cause of his sickness, don't give him any more medicine; if he is very bad go to some horse doctor who knows, who will tell you the cause, when you know the cause you can safely give him the proper medicine. Never drive or work a horse when sick. A horse when sick needs to be quiet just as much as a
sick person, and they need about the same treatment. Don't rely on quack horse doctors, if you do you had better get out of the horse business.

If you have a good horse or colt be careful how they are handled. Don't let any one use or handle them unless they know more than the horse. A man must have good horse-sense to handle horses successfully. Many kind and well disposed colts and horses are spoiled by bad management. A child will generally show their bringing up; so will a horse: treat a horse as you would a man, have him think that you are his friend, don't swear at him; don't whip him; don't talk loud to him; don't ask him to do an impossibility; treat him as you would a friend, that if he won't stand such treatment get rid of him. Nearly all horses can be coaxed and managed by kind treatment. There are some men that cannot be persuaded or coaxed to do right, without a club. And it is so with horses. There are exceptions to this as to other cases. A horse or man who can not be coaxed or persuaded to do right will generally yield readily with a club. They are cowards when they learn that they will get hurt unless they yield, they are very apt to surrender. A coward won't fight much after he gets hurt. A kind and well disposed horse will resent bad and harsh treatment.

If a horse wants a club and a loud-mouthed profane and blustering man to handle him, exchange him for one who prefers kind treatment.

There is much if not more depending on the training and treatment of a horse to make him useful and beneficial than upon their breeding.

A horse that is naturally stubborn and willful, may be broken of 'tis bad notions, or rather educated to a higher and better plane and be useful. It will pay one who uses horses, to study their nature and dispositions, and if the horse has faults teach him to overcome those faults. There are but few horses but what have intelligence enough to be taught new tricks and habits: teach him as you would a person. There is an enjoyment in cultivating good habits in a horse, as well as man. Show your intelligence and good disposition by treating your horse well. When you go to town, don't hitch your horse to a post and let him stand in the cold and chilly wind while you are getting a glass of beer or a smoke; put your horse in the barn and put a blanket on him even if it does cost you ten cents; better pay two shillings than spoil your horse.

There are more horses injured by standing hitched to a post, in the cold chilly winds, in this country, than by all other means combined. I have seen horses standing hitched in the streets of Wapaca for half a day at a time, when a man could not stand out for half an hour without shivering. A man ought to be imprisoned for treating horses in that way, besides losing in the value of the horse, many times horses are injured and stiffened up by standing exposed to the chilling blasts of a cold and raw wind, when the owner thinks his horse to be founedered by an over-feed or watering when too warm. Nine tenths of the stiffened and crippled horses are made so by this brutal treatment. Some horses are injured by overworking or driving while too young. Young horses while growing are tender, spavins, ring bones and wind puffs, are generally made before the horse matures. You seldom find a strictly sound horse in this country. A horse should not be put to very hard work before he is seven years old. In my opinion horses do not get to their best before seven years old, and some don't before they are ten. Some get hurt easier than others; there is as much difference in the strength and powers of endurance of horses, as there is between the strength of steel and iron. All horses are more easily injured while growing and tender, than after they mature. Some horses are injured by bad shoeing; a shoe should be put on level so as not to tip the ankle; some smiths pare the foot more on one side than the other to prevent interparing, which is wrong and unnecessary. A horse whose toes turn in never interferes unless he is crippled.

Now you can readily see that by working the toes in like a pigeon-toed one your horse wont strike his ankle; then the shoe should be set so that the frog strikes the ground as nature required it to do; it is hard to impose upon nature. Horse shoes are generally too thick and heavy, the calks too long, raising the foot too far from the ground; a shoe half worn with short or no calks at all is better than the common shoe. The shoe should not be so stiff and strong, but what it will give some, have a little spring to it; then it should not remain
on a horse's foot more than three or four weeks at the longest before setting.
A heavy stiff shoe, if on too long will cramp the foot, create a pain, making
the foot sore and tender. When the work of a horse will permit, it is better
for him to go without shoes.

Farming and Calf Raising.
[By Aug. A. Paulsen, New Holstein.]

The tilling of the soil is the noblest employment of man. We are here di-
rectly among nature's arts and in the full enjoyment of all things with which
God has been gracious enough to bless
our earth. The husbandman, above all,
should be thankful for his noble position.
Years ago farming was not such an enviable calling. What is to-
day called progressive farming was
then in its infancy. To-day farming is
a pleasure; then it was drudgery. The
inventive genius of man has entirely
revolutionized it. A knowledge of the
chemistry of the soil has put us in a
position to know wherein the producing
power of the soil is deficient, and we
are able to supply it with fertilizers
that, years ago, were unknown. Ma-
achinery has been brought home to the
farmer, which not only lightens his la-
bors, but also increases the yield of his
crops.
The merits of the different breeds of
cattle have been fully developed and
made public, and the farmer is at libe-

ty to select from these, either for a
special or a general purpose; and,
avove all things, dairying has been re-
duced from a science, in the full pos-
session of which, only a few were fav-
ored, to a simple but very remunerative
knowledge. Under these conditions
farming is no drudgery, but is pleasant;
a vocation not to be despised.
Farmers are divided into two great
classes, viz.: The special and the gen-

eral farmer. The former is again divid-
ed into theoretical and the theoretically
practical, while the latter constitutes
the practical. I do not claim that all
special farmers are entirely theoretical,
but mostly all theoretical farmers be-
long to the special class. Like every
other rule, this one has exceptions.
The theoretical farmer is by no means
to be condemned. To him we owe our
present advanced state of the agricul-
turist, both practically and intellectual-
ly. It is he who has solved the intricate
problems in agriculture, and has ex-
plained them so that the general farmer
could develop and put them into prac-
tical use. The theoretical farmer ex-
periments and gives the results to the
agricultural world; the practical sifts
these results, utilizes those that are
good and rejects the others. It goes to
follow that both are necessary in de-
veloping our agricultural resources; they
go hand in hand and unitedly have
produced our present advanced system
of agriculture.

In these days of competition, it be-
comes imperative for man, if he would
succeed in any vocation, to start out
with a firm resolution, and with his
whole energy bent on success. The man
who stands by, with his arms folded,
and looks calmly on at what happens
about him, will get the least benefit out
of this world. This is the case in every
calling in life. The merchant, if he
would have a good trade, must try his
utmost to satisfy his customers. The
manufacturer, if he would merit the
confidence of the public, must turn out
machines of the very highest order. So
with the farmer. He must put his whole
energy into his work; he must aim to
make his acres produce the very best
of grain and at the same time the most,
with the least possible expense.

Allow me to give you a brief sketch of
the "general farmer" and his position
in the world. Imagine him comfortably
situated on a finely improved farm. He
has no mortgage and no debts on the
place; in fact, he is as free as the lark.
(By the way, this is about the most en-
viable position a person may want to
occupy.) Of course, he has a fine orchard
and a cleanly kept garden; his broad
acres of beautiful grain bear evidence
as to the care with which he prepares
his soil; his herd of cattle look well-kept
and contented; his dairy looks clean
and inviting, and proves that the good
housewife takes extra pains in the manu-
ufacture of butter. He has a little of
everything, wheat, barley, oats etc., stock
and a dairy. Of course, this idea will
be rejected by the special farmer, but
in every agricultural country we must
have these general or perhaps, more cor-
rectly, general purpose farmers, and
happily, they are by far in the majority.

No suggestions will be deemed neces-
sary in regard to grain-raising. All
farmers know that it must be done, and
all know how to do it. There is one sub-
ject however that I wish to devote a