does not care to have his cows eat corn
stalks, perhaps.

It has been my lot to go pretty thor- 
oughly into the subject of dry corn
stalks versus silage, and I wish to
say that silage shows a distinct advan-
tage over dry fodder, the two condi-
tions being as good as you can make
them, and I suggest to you farmers of
Rock county, who are trying to be
first-class dairymen, that you take
your cue from what is going on about
Lake Mills. You can well afford to
consider silage.

Mr. Hill—We are told that corn in
the silo loses a percentage of its
feeding value. Now, corn when it is
ripe, just fit to shock, I suppose, has
the most feeding value, and if you can
keep it in that condition, the year
around, you can get the most feeding
value out of it, but we cannot do that.
We can feed only a little while in
that condition, and then we must put
it either into the silo or into the shock.
If it is put into the silo, we are told it
loses eight per cent.; careful experi-
ments show that when it is shocked
and fed dry in the ordinary way it
loses twenty-eight per cent., or twen-
ty per cent. in favor of the silo. Now,
where has that loss gone? Hasn't a
good deal of it gone into the woody
fibre or indigestible matter?

Prof. Henry—I cannot fully assent
to the gentleman's proposition that
silage loses eight per cent. to the
others twenty-eight. On the average,
silage loses more than eight per
cent., while twenty-eight per cent. is
nearly an average on the fodder.

Mr. Judd—The loss on dried hay in
the mow is twenty per cent., and fod-
der is only eight per cent. more.

Prof. Henry—I think twenty per
cent. is a pretty high figure. I haven't
those figures now.

Mr. Goodrich—A well balanced ra-
tion will take something besides corn
fodder and timothy hay. If you can
raise clover hay or pea vine hay, that
will go with corn fodder, or bran and
oats, or bran and gluten feed. The
cows on my farm are now having en-
silage, some dry corn fodder, some
clover hay, bran, and gluten feed.
They have had that now for three
years, and it makes an economical ra-
tion. The protein is furnished cheaper
in gluten feed than in any one thing
we have tried.

MATING, REARING AND MARKETING THE COACH HORSE.

R. F. STERICKER, Springfield, Ill.

The mating of animals to produce
uniform results has been a subject
which for generations has exercised
men's minds, and those who have at-
tained the proud distinction of having
achieved that end are in a small
minority in comparison to the large
number who have made dismal failures
of the objects in view.

This is especially true in what may
be broadly termed the half-bred horse,
i.e., all horses of the coaching and
hunting types which have been with-
out doubt, evolved through long and
trying experiences from native
stock, coupled, in the first instance
with a thoroughbred or "running"
sire, until by inbreeding and careful
selection, a desired type has been so
fixed that the members of certain
families can be relied upon absolutely
to reproduce themselves with cer-
tainty.

It is, therefore, just as easy, when
you have animals of both sexes containing the same characteristics and the same blood, to produce a coach horse, as it is to produce a Clydesdale, or a Percheron, i.e., when you have full-blooded mares and stallions of the same breed to rely upon.

**Different Authorities.**

But we are confronted here with an entirely different problem, and want to get at the best way of producing a uniformly good coach horse by the use of full-blood sires on the ordinary mares of the country. Almost everyone has a pet theory of his own on this subject, and it is surprising to see how widely many of the largest handlers and showerers of coach horses differ on this point. As New York is the largest and best market for coach horses in the United States, it certainly can not be out of place to quote from recent utterances of such eminent New York horsemen as F. M. Ware, managing director of the American Horse Exchange, Chas. F. Bates, President of the N. Y. Coach Horse and Cab Co., one of the most successful dealers and showerers in New York, and Dr. Geo. S. Gagnon, a very successful exhibitor at the eastern and also at the late Chicago Horse show.

**What Mr. Ware Says.**

"Did my means permit, I would start tomorrow—not next month—in the absolutely safe and profitable business of breeding heavy carriage horses, and no business that a farmer can engage in today offers anything approaching the profit from a similar investment. To insure this end, I should prefer to buy French Coach mares of the right sort; but their original cost with keep, losses, breaking, etc., would make my four and five-year-old offerings too costly when laid down in the city sales stable. Setting them aside, therefore, I would buy Percheron or Percheron grade mares (from much the same strains, possibly, as the French Coachers), all of a height, all of a color, and all of a type, especially selecting those often found, with fine head and neck; round compact barrel; smooth hips, full quarters, well set tail, ample bone, with lack of long hair about the fetlocks, denoting, with a fine coat, the possession of a drop of blood from somewhere; and with all the intelligence, speed, action and activity possible. These mares should weigh about 1,400-1,500 pounds. For a sire I would procure a trotting-bred horse, who was himself, and whose forebears were—the sires, at least—large, 15.3 to 16 hands; this animal possessing, of course, the color and the same general type as the mares selected. He must be a free, fast roadster, a great walker, with speed up to at least 2:40, and ambition enough to trot in two minutes if he could; with all the true and even knee, hock and stiflfe action possible, the more excessive the better. His disposition must be perfectly gentle, and his brain power and intelligence most marked—full of individuality.

"The females of this line of breeding I should regard as my rock of hope, and retaining only the finest individuals, I should breed again to another sire of the same type as my first; but even from the first cross I should confidently expect good results. One outcross to a family like the Percheron for size and substance—the points which our average trotting-bred horse lacks—is most essential, I think, and even the poorest animals so bred, lacking the quality for fine carriage work, would find their places with the express companies at good prices.

"The matter of similarity of size, color and type in the mares, while the keystone of the whole edifice, is the one point to which few breeders of the horse, if any, have yet paid attention. By this means one may figure with some degree of confidence upon a fair percentage of the produce being of the sort to make matched pairs,
which is the most remunerative form of marketing the raw material. Naturally a feature of such a style of breeding should be the possession of a farm or other business where the mares and some of the youngsters could earn at least a portion of their keep."

Another Opinion.

Chas. F. Bates is more patriotic in his views, and wants the large sized, smooth trotting horse as a park or coach horse. He claims he is the best and still goes on to say:

"Nearly all of the trotting-bred park horses which I have owned and exhibited were what might be termed short-bred on one side or the other. Most of them were non-standard, or, if standard, they had a cold cross not far away in their pedigrees, so that I have come to believe from this experience that a dash of cold blood is a good thing. The high-bred trotting horse is likely to be too high toned in temperament, too rakish and narrow in conformation, with low, sweeping action, which will not do at all in a park horse. When you get outside of the best families of campaigneders you will find shorter legs, bigger bodies, more substance and greater docility, as a rule, but in all families of trotters there are too many horses with ewe necks, coarse heads, long backs, light, flat-ribbed middle pieces, loosely coupled, narrow, weak looking hind parts, drooping rumps, low-set tails, crooked hind legs and shuffling gait.

"It is a difficult matter to describe the points of a high-class park horse, but he must be free from any and all the defects just mentioned as being common to the trotting horse. Action counts for more than anything else in the show ring and in the sale ring, and a horse must have naturally showy action, or he will never be a high-class horse, no matter how long or how carefully he is trained at the high-stepping game. Bitting and shoeing will sometimes work wonders in developing and improving action, but it must be there naturally for the trainer to work on, just the same as speed must be in a trotter intended for the turf."

Dr. Gagnon's Idea.

Dr. Gagnon deprecates the trotter alone, and he says:

"I think that the trotting-bred high-stepper can be made the best in the world, but he cannot very readily be bred from the trotter alone, for the reason that the trotter has not substance enough, and except in the instance of stallions permitted to remain entire for, say five years, not neck enough for use in heavy leather. "Now we may think what we may, but the fact remains that the supply of high-steamers is now so limited that we might as well call it exhausted, and be done with it at once. What we are going to do for recruits during the next five, perhaps ten years, I do not know—I do know, however, that I have no horses for sale, except at prices representing what they will surely be worth three or four years from now. Of course, a lot of bad ones will be fitted and placed on the market, and the same old claims made for them. The best will be none too good and the worst ones fit only for delivery wagons or work of that sort.

"Naturally, once in a while a real good one will be discovered, but they will not be numerous enough to cut any figure whatever. I believe, therefore, that it will pay better to breed carriage horses in the next ten years than it will to breed any other sort of horse.

"You never can do anything with the horse that lies down on the bit or pulls your arms off. A puller is not fit for a man to drive, and he will never look well. But get your horse so he is playing with the bit continually, just enough pressure on to keep the connection between him and his driver perfect through the reins, and the restraint will direct the force that would
make him go fast toward making him
raise his knees and hocks—make him
a high-school horse if necessary.

"No, no one need be afraid to begin
breeding these horses. The shortage
is going to be tremendous, and for the
good ones competition will be very
keen. No, I don’t know to what height
prices will reach, but, I believe they
will go ‘out of sight.’

"Don’t try to breed them too flashy
in color. A quiet, solid-colored horse,
bay, brown or dark chestnut, without
any white, are the best colors, and sell
very well. Of course, very flash-col-
ored ones, bright golden chestnut with
four white legs and big blaze, for in-
stance, will sell well enough, but to a
different class of trade. A gentle-
man does not wish to be known by his
horses; he prefers that his horse
should be known by him."

Now, you see that the three author-
ities whose views I have just given, do
not agree, the first arguing that the
trotter-Percheron cross is the thing—
the second advocating the trotter with
a cold out-cross, and the last named
does not state how to breed, but ad-
mits there is need of something out-
side of the trotting horse.

**My Own Experience.**

In adding my own views on the sub-
ject, I want it distinctly understood
that while I have my preferences for
certain breeds, I have no ax to grind,
and come here to tell you what I
know from long and actual experience
in horse raising of the type we have
under consideration, and I am of the
opinion that an ounce of practice is
worth a pound of theory, and while
the trotting horse produces once in a
while a beautiful coach horse, he does
not do so with any degree of uniform-
ity. All the authorities quoted from
agree that there must be a cold cross
to obtain substance, and by this is
meant width and depth, or greater
weight. I maintain that recourse to
the Percheron or any other draft cross
is fatal to the production of a high-
class coach horse, i. e., unless a thor-
ough-bred sire is used. By this I mean
a running horse, in which case I have
known numbers of good coach and
hunting horses raised from “drafty”
mares.

**The Percheron Cross.**

Speaking of the Percheron cross re-
minds me of what an eastern gentle-
man said who had tried it. He said:
"I could get along all right if I could
only manage to breed that darned
Percheron rump off my horses, but it
will ‘crop out,’ and spoils everything."
It is an acknowledged fact that
nothing enhances the value of a heavy
harness or coach horse, more than a
long, level quarter, i. e., a quarter with
the tail set high or as nearly on a level
with the back as possible, and conse-
quently a drooping, or as it is termed
in England, a “carty” quarter, is most
undesirable and often spoils the con-
tour of an otherwise beautiful horse.
You may have a lovely head and neck,
fine, sloping shoulders, and a good
back, but if you have not a nice, level
quarter you cannot have a high-class
coacher.

The question is, how are we going
to get this desirable feature. Without
being egotistical, I think I can tell
you. First, be careful in selecting
your brood mares, and take only those
free from any admixture of draft
blood. Get mares of good conforma-
tion, standing from 15-2 to 16 hands
high, showing evidences of good breed-
ing, which may be largely either trot-
ting or running blood. Such mares
should have clean, hard, cordy legs, and
sound, open feet, long, arched
necks, well set into deep, oblique
shoulders; the heads should be clean-
cut and bony, wide between the eyes
and small at the muzzle; eyes clear
and bright, denoting mildness and in-
telligence; back and loin should be
stout and well coupled, with as long a
quarter as possible. If you get these
kind of mares and get them absolutely
sound, or at any rate, free from hered-
itary blemishes, and breed for the pro-
duction of a large, handsome coach horse, standing 15-2 in. to 16-1 in., I would strongly advise the use of a good Cleveland Bay stallion, and for the following reasons:

**Cleveland Bay Cross.**

First, there is no breed which has such uniformly lengthy quarters, and reproduces them, nor which reproduces its color in so many cases, both very valuable points in "mating" up pairs. Second, no other breed produces so many fine, stately animals, with long, arched necks and lofty style. Third, no other breed produces as much size from mares lacking in this particular. To sum up, by the Cleveland Bay cross we obtain uniformity of style and color, the quarter we want, and good size without coarseness, these points making them the most easily matched horses in the world.

But, to produce the smaller, snappier coacher, standing from 15 hands to 15-2 in., or even 15-3 in. (and which must have lots of action), I would advocate the use of a good Hackney stallion on much the same class of mares as before described. My reasons for using the Hackney are as follows:

**The Hackney Cross.**

First, in a majority of cases you get good action, i.e., free play of knee and hock, without which a small horse is today practically unsalable, and with it, he can command most any figures. Second, we get a quick, sound, sprightly horse, with smooth, round body and well sprung ribs, an easy keeper, an animal of good disposition, and one that is usually very showy and attractive. Third, in most every case you get a horse that matures early, and sells on sight, at the best prices going.

When a man goes to buy a horse now-a-days, the first question he asks after looking the animal carefully over for blemishes or defects, is, "What can he do?" Now, I claim that the Hackney gets horses that can "do" some-

thing,—in other words, he gets a large proportion of good actors and at the same time animals of excellent conformation, just what people are looking for every day. Some point to our great horse shows and claim the trotter takes the bulk of the ribbons. I admit there are a few phenomenally good, high-acting trotters being kept for show purposes, but start out to find such, and where can they be got? These show horses represent less than one per cent. of the trotting horses annually put on the market; they are almost as rare as the horse that trots in 2-10 or better. Who can afford to breed horses on such slim chances? A

![Hackney Horse](image)

HACKNEY HORSE.

man does not expect to find "Prodigies" by the score or even by the dozen, but he ought to have a reasonable assurance of getting a fairly good all-around selling coach horse very much oftener than that, and he can do so. If he will follow the crosses I have advocated he will find they are safe ones, and will give satisfactory results by producing good, salable coach horses nearly every time. The Hackney for the smaller and sprightler type—the Cleveland Bay for the larger.

**Feeding Our Horses.**

To rear a horse to the best advantage he must be well fed from the time he is old enough to eat, i.e., as a colt he should have free access at all times to a little bruised oats and bran until weaned, when he will soon learn to forget his mother and eat anything else which may be given him. On no
account must he be allowed to go back at this stage, and in fact he should be kept going all the time and more especially until two years old, as the first two years of a colt's life determine his form in after life. After he gets to an age when he should be broken, say at three years old, he should be still more generously fed, and although some soft feed is desirable, he must not be fed entirely on it. Boiled feed, although a very rapid fattener, should be used very sparingly and at intervals, otherwise serious results may ensue through the weakening of the digestive organs, partial paralysis, and sometimes death is the direct result of the injudicious use of boiled feeds. I prefer to stick to cut hay, with bruised oats and bran fed damp, at least once a day. Oats should generally form the staple diet of the horse although a little corn can be fed to good advantage in winter, it is desirable to feed only clean, bright hay. A mixture oftimothy and clover strikes me best; bright, well cured corn fodder makes a very good substitute for hay once in a while, and is a nice change.

Getting Ready for Market.

Most every person has his own methods of feeding, and no fixed rules can be laid down, but it is essential that horses be well fed; before they can be marketed to the best advantage they must be in good condition, or in other words, fat, their coats or hair must be smooth and glossy, and they must have good manners to recommend them. Nothing is more conducive to this end than an hour's exercise daily, in box stall or paddock, with breaking bit and dumb jockey, or some other kind of sensible bitting rig. Then they should have a short, steady drive every day, around town, if possible, so they will get accustomed to the sight of steam and electric cars and the thousand and one other things a horse seldom sees in the country. Horses that are bitted properly drive much more pleasantly than those which are used promiscuously; they have softer, lighter mouths, and flex their necks so much better and are more easily controlled, showing all their style and action in a natural manner, going along well within themselves, and not pulling and tearing like they would pull the driver off the box. Besides driving well up to, and not lugging on the bit, and being in good condition, a coach horse must be properly shod, perfectly sound and of the proper age, i.e., not younger than five nor older than eight years.

Where to Market.

If a man has horses with all the before named qualifications, he will find it is not difficult to sell them, and if they cannot be sold at home, most any of the large cities have some good, reputable firm of commission men, who hold regular combination sales, where the best buyers come and buyer and seller come together. This may not always be the best mode of marketing but there does not appear to be any alternative, except selling at home, and that is not always feasible. Great distances cannot be traveled with profit to look at one or two horses unless they are exceptionally good, and therefore the export and other buyers stay in such places as Chicago, St. Louis, Indianapolis, and others, where they can see several hundred horses per day, and generally pick out a few they want. The seller is of course placed at some disadvantage when he ships to market, as horses get temporarily sick, etc., etc., all of which operates against him, but if he has really first class animals, that fill the bill, he will usually get a fair price at such sales. The export demand is one well worth catering to and is what has kept up the little life there is in the trade. I feel quite safe in saying that no horses sell better for this trade than the Hackney and Cleveland Bay crosses. I speak from actual experience, when I tell
you I can sell as many good half-blood Hackneys with action, and as many big, stylish, long-necked half-blood Cleveland Bays, as I can find, and at prices which will pay any man to raise them. When I make this statement I only tell you the plain truth. We want more good ones, and now is the time to start to breed. There is no doubt the supply will run short, in a year or two, and the man who commences now and goes at the thing in a systematic manner, and is careful to begin with a definite object in view and on a right basis, American people the trotting-bred coach horse and to make him prominent as the coach horse of the world.

Mr. Stericker knows where the majority of all the prize winners come from. We have not been obliged to go outside of the horse that we have at the present time. We have got the size; we have got the beauty; we have got the intelligence; we have got the grace of carriage, and we have got the speed. In our American trotting horse today we have got the grandest horse of the world. There isn't a place in the world he cannot go and all we have to do is to stick to size and there is no better horse in the world.

Mr. Stericker—The bulk of the horses that Mr. Bates has been handling have been “studs.” Now, the supply is gone. Where is he going to get them in the future? The trotting horse is a good horse, I wouldn't say a word against him. I could give you an instance where a man gave $40,000 for a stallion and sold him in Chicago for $800, and he never raised a $75 horse from him. By his own admission he lost $150,000 but got five years' experience.

Mr. McKinney—There is no doubt about that. I know a great many of the stallions of this country have been taken by these parties. Today Mr. Bates has 300 coach horses from fourteen up to sixteen hands. Tichnor & Co. of Chicago have 150, and I know the Wares of New York have 150. When you say there are none left, I can tell you there are a great many left.

Mr. Stericker—What I am advising farmers to do is to breed so they can get a good horse every time, and not one that won't bring $25 when it is four or five years old.

Mr. McKinney—I understand that. No farmer should breed to a small horse, but neither should he change his breed at the present time.

Mr. Galbraith—Mr. Bates has one good horse named “Coxey.” He is
by a trotting bred horse and his dam is a pure coach mare.

Mr. Stericker—I think probably Mr. Galbraith is confounding the name of "Coxey" with that of Mr. Hamlin’s "Cogent;" the latter is bred as Mr. G. says. I do not know how the former is bred.

Mr. McKinney—The pick of England was brought to the New York Horse Show, and proved to have been developed from the American horse. There is no horse on earth that can compete with them.

Mr. Stericker—Mr. McKinney can scarcely call one small consignment the pick of England and he should remember these horses showed at a great disadvantage having only recently arrived in New York. Many good horsemen who were present at the New York Horse Show and saw the awards made expressed their opinions that "Storm King" in their estimation should have ranked higher in the awards. Mr. McKinney is not correct in stating the animals in this consignment were descended from the American horse, those that won prizes being largely or entirely of Hackney blood.

Question—Is the Hackney as pure a bred horse as the French or German coach horse?

Mr. Stericker—I should say that there is not the slightest doubt about the Hackney being ten times better bred than either one of them. If you will show me a French coach horse pedigree that runs back five generations that has not a cross of English thoroughbred or an English Hackney in him, I will give you the best horse in my barn.

Question—Is a large, finely built, sixteen hand horse, with poor action, preferable to a small horse, with a high, nice action?

Mr. Stericker—No; I should say that the small horse was decidedly preferable. Action will sell any horse, if he has any kind of conformation. Good action is the article most sought after and brings the highest price of anything going today.

Mr. Chadwick—with a fifteen and three-quarters' hand Hackney, will his progeny show as good offspring as any other class of horse?

Mr. Stericker—I think you will get more salable horses from a good Hackney sire, those that are built more on the lines of the Hackney, with good, round barrels and well sprung ribs, than from any other breed I know of in the world.

Question—What do you think of the Cleveland Bay?

Mr. Stericker—I have had a lifelong experience with Cleveland Bays, and I like them so well that the very last time I was in Wisconsin I paid $100 for a four-year-old, and he went to France and sold for—I don't know how much.

Question—What is good weight for a Hackney?

Mr. Stericker—From twelve to thirteen hundred pounds.

Question—What about the Cleveland Bay?

Mr. Stericker—They will run a little more than that.

Mr. Scott—is the Cleveland Bay horse as well pedigreed as other horses of the driving strains that are imported?

Mr. Stericker—Quite as well. They are better than a good many.

Mr. McKinney—What is the average size of the Hackney horse in America?

Mr. Stericker—I should say from fifteen hands to fifteen-three, and all the way from 1,100 to 1,400 pounds. I am speaking of the grades, the half-breds.

Question—How do you get the best results with these imported horses, Hackneys or Cleveland Bays? On what class of mares do they cross the best?

Mr. Stericker—From the kind of mares I described, pretty well-bred; say, for instance, thoroughbred or trotting blood, if you like; something
of that kind, something that has size and quality.

Question—What weight of horse sells best for a coach horse?
Mr. Stericker—From 1,200 to 1,300 pounds.

Question—What is your method of rearing and caring for colts, these high-stepping colts, and especially your method of preparing for market? that is where the farmer lacks.

The Chairman—He gave that pretty thoroughly in his paper.

Mr. Moseley—If you had a dam that had a colt by her side this coming spring, how would you get the colt to feed?

Mr. Stericker—I would let the colt learn to eat by feeding it where the mother couldn’t get at it. It will soon learn.

Mr. Goodrich—I have lived in Rock county for fifty-nine years, and they are all talking about raising horses to sell. I have a horse that stands seventeen hands high, a bright bay, nice color, that can haul a surrey with four in it a mile in three minutes, but I wouldn’t dare sell him because I never could live long enough to get another one that suits me as well as he does. I say that the farmer in Wisconsin who has a horse that fills the bill and suits him, should keep him for his own use and ride out with his own wife and let the Chicago men buy their horses where they can get them.

The Chairman—I am going to take part with Mr. McKinney in a certain sense. I say that if Americans would give the same attention to breeding for quality and size as we do for speed, we would be wise. We have too many horses with a speed pedigree that haven’t anything else.

Mr. McKinney—The great trouble is that the good ones have been sold and we have too many culls.

THE BEST HORSE TO RAISE.

J. S. COOPER, Union Stock Yards, Chicago, Ill.

Mr. Chairman and Members of the Convention:

I wish to thank you for the courtesy of extending to me an invitation to address this honorable association on the important question of the best horse for the farmer to breed. I make no pretensions to oratory and, like Mark Antony, am only a plain, blunt man with neither words nor power of speech to move men’s minds. I shall only show you the condition of our domestic and foreign trade and let you draw your own conclusions. Like Patrick Henry, I have no guide for the future except the experience of the past.

Early History of the Horse.

The period when the horse was first subjected to the use of man extends so far back beyond the origin of written history that no mention is made by writers of the native country of this noble animal. That his native territory was the hill and plain regions of tropical or sub-tropical Asia, there is, however, little doubt, since it is in such regions the world over that this animal upon regaining his freedom and becoming semi-wild, soonest multiplies into vast herds.

In none of the most ancient inscriptions is the horse found represented in a wild state, but always in connection with man. The fabulous stories of the centaur, a creature half human and half horse, arose from the imagination of those savage tribes, who were conquered by more enterprising and partly civilized foes who had ac-