

LIGHT HORSES.

By Prof. Louis A. Clark, before the Wisconsin Farmers' Institute.

Before considering the market qualities of light horses in detail, it will be best to take a general view of the requirements of the market in respect to the form, quality and action of the horses that sell for the highest prices.

To analyze the form of any market type of horse, it is necessary to understand the extent to which the form is due to the skeleton, and how much of it should be credited to the muscular development. A comparison of the skeleton of the horse with the living and well-developed animal will show clearly that some parts owe their form entirely to the bony framework, while other regions are shaped wholly by the muscles. Beginning at the head it will be noticed that its form is determined by the bones that comprise it. The outlines of the chest are outlined and formed by the skeleton, while the shape of the leg from the knee upwards is determined by the muscles of that region, and from the knee to the fetlock chiefly by the tendons that makes the leg at this point appear flat from the side. The form of the body is covered largely by the roundness of the ribs and the width of the loins. In the hind quarter the upper part is moulded almost altogether by the muscular development, and the same may be said of the thighs and the quarters, while the tendons of the leg give the lower part of the latter its shape.

"A study of the degree to which the skeleton and the muscular development contribute to the form of the horse, brings forward the idea that the most of the power resides in the hinder parts. The fact that the greatest muscular development is in this region would indicate this. It will be noticed that the form of the loin, the shape of the crupper and the fullness of the thigh are due in the greatest degree to the extra development of muscles in these parts. The front quarter is bare of muscle in comparison with the hind quarter.

Another reason for accepting this theory is the difference in the attachment of the forelegs to the body in comparison with that of the hind legs. The shoulder blade is loosely attached to the trunk, while the hind leg next to the body through the agency of a strong ball and socket joint. The shoulder blade plays loosely seemingly for the purpose of lessening a concussion that the leg receives from contact with the ground, while the hind legs connect with the pelvis at a joint which is the most powerful in the body. The market for the light horses recognizes three leading types, the carriage horse or coach horse, the trotter or roadster, and the saddle horse.

COACH OR CARRIAGE HORSE.

The distinguished features of the coach horse are its symmetry and action. The height should be about sixteen hands to make a good appearance. In contrast with the roadster, the carriage horse is very smooth and symmetrical. The smoothness should be due to plumpness of the muscles over all parts. In the carriage type, the head should be comparatively

small and lean; the ear neat, the neck long and carried gracefully; the body round and plump, and the limbs clean-cut, with well formed and durable feet. Graceful carriage and stylish action are leading qualifications.

Style, when in any posture, is a very desirable attribute in the carriage horse. A critical examination of this type would indicate how far the position of style depends on the adjustment of the parts of the framework. When a carriage or coach horse possesses characteristic style there seems to be an appropriate blending of all proportions of form. In analyzing this it will be found that most of the lines have a smaller direction in addition to the fullness of outlines already discussed. The line running from the pole to the nose seems to be parallel to that of the shoulder. Then the line running through the centre of the pastern also has a similar direction, while the line of the thigh in the hind quarter corresponds with the slope of the hind pastern. Considering the lines that run different from these, it will be noticed that the one made by the arm from the point of the shoulder to the elbow is very similar in direction to that made by the ischium of the pelvis, and this again is similar to that of the lower thigh. Each part seems to bear a fixed relation to every other part, both in size, length and slope, giving the horse that symmetry which contributes so much to his style and beauty while standing or in action.

TROTTER OR ROADSTER.

The chief characteristics of the roadster are speed and stamina. The ability to trot fast is a leading characteristic of the roadster, and the ability to maintain a rapid gait is clearly essential in a horse of this kind, in addition to being able to stand steady road work. Such a horse should sell well on the market, and must be well mannered, so as to be safe and pleasurable to drive.

The typical roadster may be said to be about fifteen and a-half hands high and about 1,000 pounds in weight; the formation is narrow in front, deep-chested, wide at the loin, and very muscular in the quarters. Every feature about the horse appears clear-cut, giving a hard finish which indicates durability. The lineaments of the face and the outlines of the neck, and especially the distinctness with which the tendons stand away from the leg, are very characteristic features.

The type lacks the fullness and symmetry that are characteristic in the carriage or coach horse. To do effective and satisfactory road work is the sphere of the roadster, and a type that has been evolved is an illustration of the evolution of a form for a specific purpose. The type of the best campaigners that have marks of 2:10 or better will show a similarity that indicates the type towards which the trotter is tending, though it should be noted here that the roadster in show form will display quite different outlines after being subjected to the hard training the campaigner receives.

SADDLE HORSE.

The type of the saddle horse that is desirable on the market is somewhere similar to that of the light carriage horse, but the typical saddle horse will

show more quality and better manners than any other class of light horses. Aside from these features, the chief qualifications of the saddle horse is the ability to show the following gaits in a satisfactory manner: Walk, trot, rack, canter and running-walk.

THE COLOR OF SHORTHORNS.

"Ontario Breeder," writing to *The Breeders' Gazette* of Chicago, makes the following interesting remarks on the color of Shorthorns: An order for a young Shorthorn bull from Missouri and also from Kansas from two well-known breeders, and the stipulation that they must be red and from red sire and dam if possible, brings up very important questions regarding color. First, are reds as good handlers, as good doers, as thrifty, as full of quality, as whites, roans, or red-and-white? After many years of close observation and a thorough and intimate knowledge of my own herd especially, and of many individual animals in other herds, I am decidedly of the opinion that an indiscriminate use of animals because of their color, even if well bred, is a great mistake. No herd can stand it. They will depreciate unless the owner is a most skilful and determined culler of poor quality, no matter how fine a red the animal may be. My reason for this statement is that only one red in a dozen is of the quality in hair and handling that a sire at least should have. In our own herd with daily watchfulness this is about the ratio, namely, one red in a dozen has hair long and silky and consequently a mellow handler while under a year old; and very often this individual becomes disappointing in quality as he matures.

"White is almost out of the question, but it should not be so, for we have noticed several white sires that were always creditable both as to quality in themselves and their produce, and skilful breeders do not hesitate to use a white sire when quality and form are found in sufficient abundance in the individual to justify his use. Then color is so much under our own control that if one really wanted red produce, even from roan sire and dam a little trouble on the breeder's part will get it, and generally of the quality we want when the quality is present in the parents. After close observation of herds where red sires have been the rule, and not without some discrimination in choosing those sires, I have noticed a very dark and unthrifty red—almost approaching a brindle in many cases—getting almost black close to the hide, and certainly not a hide or hair of quality that would promise a good return for food consumed.

"I do not say that all whites or roans are of good quality, but the proportion is so much higher than a good roan seldom disappoints one, in fact I have often thought that blindfolded I could tell what my hand was on. Red-and-white; how I like to think of it! The best sire I ever bred or owned had a good sprinkling of it, and the white hairs always so long and silky spreading out over the red; in fact superiority in the white spots seemed to impart its quality to the red, making the animal several points better, the white hair being longer and

silky than the red. For thrift and quality I have never seen his equal in our herd. The breeders of the West should think seriously over this matter. It is quality that makes the return in the majority of the herds, and I am confident that any person willing to give attention to the matter of thrift and quality in his herd will soon decide for both in preference to a fancy red without those qualities. Solid reds can be had of quality, but I repeat that only one in a dozen as we find them to day are of first-rate handling qualities, and to keep up this craze will end in disaster to many herds that might otherwise be profitable, not only to their owners, but to the whole cattle community of the great West."

THE FARMER'S WIFE.

The farmer's wife gets very little sympathy, but a great deal is heard from time to time of the hardworking farmer, who, according to his own showing, works all the hours that are made and a few over. He is always up before daylight, and he keeps on working till long after dark. He says so himself, and he ought to know. I have studied the farmer for more years than I now care to count, and I feel impelled to say that I don't quite agree with him when he talks of all work and no recreation. On well managed farms in the coast districts, where a regular rotation of crops is grown, the farmer and his assistants are kept pretty fully occupied during the greater portion of the year; but in the wheat-growing localities there is always a very easy time between the sowing and harvesting periods. If the farmer works then, the result of his labor is not often apparent. The farmer's wife, on the contrary, has to work hard all the year round, and harder than usual when the harvest is being gathered. She it is who really keeps the house going by her industry and economy, and the money she makes out of poultry, eggs, butter, etc., which the wheat-grower looks upon as rather beneath his notice, though he well knows their value in reducing the household bills. If dairying as well as agriculture is carried on, the female members of the household do most of the milking, while the farmer takes the milk to the butter factory or creamery, and discusses the Eastern question with other farmers whom he meets there, believing all the time that he is working hard. I never knew a prosperous farmer who did not owe a large measure of his success to his wife, but neither in the press nor on the platform has she ever received the recognition she deserves. The farmer's wife is entitled to far more consideration than she now gets. She should not be compelled to wait for her reward till "we meet to greet each other in the coming by-and-by."—*The Australasian*.

NEW TREATMENT FOR LICE.—Two hens, badly infested, were dipped in a bath of boiled elder flowers, twigs and leaves, the elder concoction being mixed with some soft soap. In both instances all the lice were killed and the plumage in nowise damaged.