

frog does not. The body of the coffin bone only extends backwards to about an inch past the point of the frog. It there divides into two processes which extend nearly to the heels, but leaving between them a large space which is filled by a pad of elastic material, over which the frog rests. This arrangement permits the frog great freedom of movement, and gives to the back portion of the hoof the special feature of elasticity so necessary to its function of breaking concussion when the foot comes to the ground during progression. The front part of the foot, by the thickness and hardness of the wall, and by the rigid basis of bone within, is specially fitted to sustain the strain which is placed upon it when the toe takes the weight of the horse, as it does in all forward movements. The back part of the foot, by its thinner and more elastic horn, by its prominent and soft frog, and by the partial substitution of cartilage for bone as its inner basis, is specially endowed for receiving its first impact with the ground during progression. That the foot may preserve its functions intact, the hoof must be maintained in its best form. No parts must be defective, and all must be proportionate. A foot denuded of horn may have its sensitive portions injured, and a foot covered by an excessive or disproportionate hoof may so destroy the balance of the limb as to cause grave lesions, resulting in lameness.

THE IMPROVED HACKNEY.

The present fashionable Hackney horse, through many generations of purity, has been stamped with various good and desirable qualities, not the least of which is his unparalleled action, writes W. R. Gilbert, in *Rider and Driver*. Since the early shows held by the Hackney Society, there can be no doubt that great permanent improvement has been made in the general style and symmetry of the Hackney; but I specially refer to the improvement in action. There are various styles and classes of action, but they all involve more or less lofty knee movement. Breeders find it very difficult to produce hock action relatively as lofty or as good as the well-established knee action; hence, a fore foot lifted a great height in a trot, has not time to reach the ground at exactly the same period as the hind foot comes down, this want of cadence being fatal to the horse for riding purposes.

Nothing is more uncomfortable than the double bump experienced and endured by a struggling rider on a horse with a lofty knee action. The rider first bumps the saddle exactly at the moment when the horse's hind foot reaches the ground, and he bumps again the moment after when the fore foot comes to the ground. However perfect the horse in mouth and manners, this double bump is absolutely fatal for riding purposes. Better ride a low-actioned Thoroughbred or breezy saddle horse, which kicks the same stone all the way home, than a horse that almost knocks his teeth out with his knee.

It is impossible to avoid the above uncomfortable ride, as the nervous energy, transferred to such muscular energy in the loins and quarters of the horse as swing the hind leg, and lift up the rider, are out of tune and time with the much admired shoulder action.

Just as Hackneys are improving and advancing in their action, so they are becoming less suitable for riding purposes. It is therefore extremely inadvisable for Hackney admirers to describe these high-steppers as saddle horses. They are being bred further away from saddle work, and the greater the distance from the pigskin, the greater their value for the park phaeton or other light and fashionable carriage.

If the rider springs him into a canter, there is still the uncomfortable and undesirable struggle of the shoulder; hence, with scarcely an exception, the Hackney should stick to harness as closely as the cobbler to his last. The more action, the higher price; but even should any show produce one or two solitary Hackneys to compete in the new classes for high-school riding, let not judges and junior breeders thereby be influenced.

There has ever been a market for the harness stepper, and that market seems likely to improve with the modern carriage, which is made smaller and lighter than formerly. The various influences in this direction are as follows: The great improvement in roads, and especially the adoption in cities and towns of asphalt, has removed the necessity for such great strength in carriages as was required formerly; in fact, ever since the introduction of coaching, the various vehicles have gradually become lighter, in consequence of road improvements. Another point is that certain city jobmasters find that a smaller horse answers their purpose better, and they now buy 15.3 to 16 hands, instead of 16 hands to 16.2.

Some of those who combine their jobbing business with the carriage-horse trade, further state that there is a better demand for the smaller horse, as the private buyer has well-grounded suspicions of softness and unsoundness in oversized horses. One cannot have size without sacrifice, and if roaring and other unsoundness, together with dropsical legs and doubtful feet, are the ac-

companiments of size, those private buyers and hirers who prefer a 15.3 horse are wise in their generation.

Without the increase of size (which I have so frequently advocated upon certain lines), the present pure-bred Hackney can meet these small and light carriage requirements; and, with rapidly-growing large centers of population, together with a foreign demand, there will, in the future, be required a vastly increasing number of harness steppers.

No doubt some readers may mentally ask, What about the motors? Well, for business purposes the motor has come to stay, as many calls can be made in a short time; but even this necessitates a considerable country-like distance between calls. The fashionable suburban doctor or the important wholesale traveller may require a motor, but the lady of the parks will ever prefer her victoria and pair; and if the lady, then, of course, the gentleman.

But all this will not in any way interfere with the carriage stepper, whose position is not to be interfered with. Therefore, let Hackney breeders persevere in their journey from the simple to the complex—from modest mediocrity to superlative extravagance and superiority in action, balance and address. Encourage smartness and intelligence of countenance in harness horses—a point once much neglected—encourage constitution, insist on good limbs (I need not mention soundness, as the Hackney is a sound breed), and, above all, encourage good all-round action. That alone suits the fashionable carriage, and for which high prices are freely given.

GOVERNMENT ENTERPRISE IN HORSE BREEDING.

Government enterprise in America is tackling all kinds of stunts in the way of breed-making. The United States Department of Agriculture is co-operating at present in three distinct lines of breed evolution. Out in Colorado, the State resources are being supplemented by Federal aid in the attempt to establish an American breed of carriage horses, using the trotter as foundation stock. In New England the Washington Government is co-operating with the Vermont Experiment Station to rejuvenate the Morgan; while not to

juring with the equine race, it must not be inferred that Canada is behind the band waggon. The Dominion Department of Agriculture has been lending its good offices in a re-inspection of foundation stock for the French-Canadian Horse Studbook, which is one of the registers kept by the National Records at Ottawa, and if anticipations are realized, Canada will soon have a distinctive breed of native horses of well concentrated blood lines, and a really high degree of equine merit. In fact, these horses are already acknowledged as being for all practical purposes pure-bred, the first move to establish a record having been commenced in 1885. Later the Province was visited by inspectors, with a view to making a first selection of animals for the records. Last year, Hon. Sydney Fisher, Dominion Minister of Agriculture, proposed the new selection, which has since been made. Thus this distinctively Canadian breed, preserving and systematically perpetuating what blood lines remain of the celebrated old French-Canadian pony, lays claim to a considerable measure of national interest and pride, and it is considered by some that the Canadian experiment in breed evolution is not unlikely to prove the most successful of the four.

PREMIUM PICTURE OF BARON'S PRIDE.

A splendid photo-engraving of the celebrated Clydesdale stallion, Baron's Pride, may be obtained by any present subscriber of "The Farmer's Advocate" who will send us the name of one new yearly subscriber, accompanied by \$1.50. The engraving is 7½ x 11 inches in size, and is printed with a soft tone, combined with much clearness of detail, on a card of finest coated stock. It is a beautiful picture to frame and hang in the library or sitting-room of any horseman's home. Copies may be purchased from "The Farmer's Advocate" at 50 cents each.

LIVE STOCK.

JUDGING LIVE STOCK.

Having carefully considered the general principles of stock-judging, and being confident that from experience and observation he has an intelligent conception of these, which may be tersely classed under the heads

breed type, quality, conformation, fitness for a purpose, and indications of constitutional vigor, the person accepting the position of judge will do well to first take a general view from all sides of the entries brought before him for placing, then select a "short list," of such as to his mind may possibly come into the prize-list, leaving the clearly impossible ones to one side; or, perhaps better, if the number is limited, place all in order of merit. A careful individual examination in all important points should next be made, and in case of doubt as to the claims to preference of any two or more, bring them together for closer examination, noting and allowing value for merit in breed character, handling quality of skin, hair or fleece, and flesh, symmetry of conformation, soundness and proper plac-



Dissenter (7044).

Hackney stallion; chestnut; foaled 1898; sire Connaught (1453). Winner at Dublin Show, 1908.

be outdone, the Iowa State College besought Federal countenance, and, if we mistake not, financial support, in the ambitious attempt to develop a new breed of draft horse, to be known as the Amgrey, and produced by a blending of the blood of gray Clydesdales and Shires, with a dash of Percheron to be probably introduced. Of course it remains to be seen what will come of all these schemes. The last would appear to be the largest order of the three, and the least commendable. Horsemen who might otherwise look with favor upon the project do not see the wisdom of undertaking to confine the breed to the gray color. The blending of the two breeds is in itself a sufficiently difficult task to render success uncertain and tedious, not to say improbable.

While our American friends are doing so much con-

ing of legs and feet, sprightliness and truthness of action, especially in horses; thickness and firmness of flesh in meat-producing animals; size and form of udder and proper placing of teats in milking cows; wide and strong loins in all classes, together with the accepted indications of constitution. These last are, briefly stated, a broad chest floor, ample heart girth, deep and well-sprung ribs, and the comparatively short face, broad forehead, large muzzle and prominent eye, tokens, generally, of thrift and inherent good-feeding quality, or the faculty of making profitable use of the food consumed. Having placed the animals in apparent order of merit, a final closer examination should be made, testing by their walking or other action, and by standing them in different positions, and if after this critical comparison he concludes that a somewhat different