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FEBRUARY 28 1906



A PROMINENT SIDEBONE

at these parts changing to bone (ossifying). When present, they may be detected as prominent, hard, bony masses protruding above the hoof at the sides of the feet, towards the heels, and bulging the hoof under the part involved. When sidebones are absent, the cartilages can be grasped between the fingers and thumb, and moved or bent from side to side, as if they were formed of stout rubber. Sidebones are common in draft horses, and constitute unsoundness. Horses having very wide, flat, low-heeled hoofs are most subject to this unsoundness. Stallions or mares afflicted with sidebones or ringbones should not be used for breeding purposes, unless the unsoundness is confined to a single foot, and known to be the result of a barb-wire cut or other injury. In the case of public-service stallions, a qualified veterinarian should always be employed to decide whether sidebones or ringbones are present, and he will best be able to judge whether or not the condition discovered constitutes hereditary un-

Splints are abnormal bony excrescences formed at the sides of the cannon bones where the small splint bones (metacarpals in front, metatarsals in hind leg), overlie the large cannon bones. They are objectionable, cause lameness when forming, are often an indication of light bone, but ordinarily should not be deemed to constitute hereditary or transmissible unsoundness. If found on all legs, of large size, and associated with other bony growths (exostoses), they may indicate a hereditary susceptibility to such bony growths (bony diathesis), and the animal should be rejected as unsound for breeding purposes.

FEET.—The hoofs should be of good size, sound in texture, waxy and healthy in appearance, free from wrinkles, ridges, cracks proceeding from the hoof-head downward, and prominent projecting growths at the toes, indicating chronic founder (laminitis). The color of the hoof is of little importance, so long as the hoof is sound, fully developed, healthy and properly formed. The hoof is a continuation of the skin of the leg, and takes its color from that of the skin of the coronet and pastern. Dark horn is, however, popular with many horsemen. The hoof-head should be prominent, heels wide, strong, not too close to the ground. The sole should be slightly concave, not markedly convex or flat; the frog large, healthy, elastic, free from deep cleft, bars prominent. Small, brittle, flat, weak, low-heeled, or great spongy, soft, brittle feet, as well as those that are notably unsound, should be avoided in selecting breeding horses.

CHEST.—The chest should be of sufficient size, depth and width to give ample capacity for accommodation and free action of the lungs and heart. Large girth back of the elbows generally



Sound Hoor, showing Wide Heels, Prominent Frog AND STRONG BARS

indicates such capacity, endurance, vigor and easy-keeping qualities. The reverse conformation is objectionable in all horses. Great width of chest, with the fore legs set too far out, causes rolling motion, and is objectionable. Width of chest should be accompanied by properly laid shoulders, arms and elbows, so that the action is unimpeded and straight.

Ribs.—It is highly important that the ribs should be well sprung, so that the digestive organs shall have ample room. A round, deep barrel bespeaks good digestive capacity, and means strength of constitution and ability for hard work if the body is deeply and evenly clothed with muscle. The last ribs should be deep and come close up to the hip, constituting a close coupling. With this conformation goes a low-carried flank indicating an easy keeper. The reverse-long, weak, washy, shallow coupling-indicates poor keeping qualities, tendency to scour, constitutional debility.



Unsound Hock Joint, showing Large Curb.

BACK.—The draft horse should have a short, wide, thick, strong, straight back, giving room for attachment of large, powerful muscles, and given its size and shape not only by spring of rib, but development of the muscles alluded to.

Loins.—What has been said of the back equally applies to the loins. In stallions, a weak, low back will be apt to grow more pronounced in its weakness with age and service. In mares the back is naturally longer, but should be strongly supported at the coupling and deep in flank.

Hips.—There is great diversity of form in the hips of draft horses. On general principles, it may be said that all drafters should have wide,



X X SPLINTS. BAD "QUARTER-CRACK" ON RIGHT FOOT.

strong-muscled hips, free from prominent angles. smooth, and neither too straight nor too drooping in croup. The straight or level croup is characteristic of the thoroughbred horse and his cross-bred descendants. In draft horses, the very steep, drooping croup, probably traces to the old black horse of Flanders. It is highly objectionable, as it allows less space for the attachment of the powerful muscles of the hind quarters, and is very often associated with slouch action of the hind legs, which are advanced too far under the body when in motion. The amount of muscle upon the croup is, however, of even more importance than the degree of slope of the part. Great development of muscle in every direction is absolutely necessary at this part of the frame in every draft horse, and the same statement applies to the thighs and quarters, which should be similarly well supplied with muscle. The tail should be well set and carried, strong, well haired, free from sores, and without tumors (melanosis) on under side and about anus.



UNSOUND HOCK JOINT, SHOWING BOG SPAVIN, ETC.

STIFLES.—These joints should be strong, thick with muscle, free from dropsical swellings, showing plain indentations above and below the patella (knee cap), and properly set, so that they are neither too close nor too far from the body when resting or in motion.

GASKINS.—What has been said of the forearm applies here, but in examining this part (second thigh) care should be taken to determine that "thoroughpins" are not present, as fluctuating enlargements, noticeable at each side and running under the large tendon just above the point of

the hock joint. Hocks.—The draft horse has no more important joint than this, and it is commonly the seat of many diseases or weaknesses. The hock (not "hind knee") has to stand a tremendous amount of strain, and should consequently, be large in every direction, clean in all respects, free from meatiness, puffs, gumminess, bony growths, such as spavins and soft distensions termed "bog" or "blood" spavins. The hock joint should look and feel hard, firm, its constituent bones severally detectable under the fingers, its skin fine, and its tendons and ligaments prominent, and free from connective tissue. A "coarse" hock, given that appearance by the size and prominence of its bones, is the best hock, so long as it is absolutely free from all the other features of coarseness and unsoundness. It should be wide and deep, viewed from the front and side. Its point should be prominent, clean and sharp, and the tendons

under it straight, distinct, but free from bulging. Bone spavin is a deposit of superfluous, granular bone upon the surface of, or among the small bones, on the inner lower aspect of the hock joint, or may invole the true joint higher up, or appear upon the outer aspect of the joint, high or low. The former is, however, the common seat of bone

Bog and so-called "blood" spavins are identical, and are soft, fluctuating distensions of the synovial bursæ of the joint, and giving a bulging appearance to the lower, front aspect of the joint. Susceptibility to contract both of these conditions is transmitted by affected sires and dams. Sprain or other injury of the joint sets up the ir-

in weak hocks and those of poor conformation. The same is true of curb, which appears as a bulging, indurated or calloused enlargement upon the rear aspect of the hind leg, just under the hock joint, and implicating the tendons and liga-

ritation and inflammation, giving rise to spavins

ments of that part.

Crooked or "sickle hocks" are most prone to this injury and curb, which follows undue strain when at play or work.

Actual unsoundness implicating the hock joint, and objectionable conformation, rendering the



"WIND-GALLS" AND THICKENED BACK TENDONS