

Kerckhaert Toe Clipped Hind Shoes for Racing Market – Gaining in Popularity

One of the biggest changes in the Thoroughbred racing market in recent years is the use of toe clipped hind shoes. Many of track farriers find these to be easy to apply, saving a lot of headaches - especially with horses that are "stall kickers," or where horses have to cross a lot of hard surface to get to the track. The Kerckhaert Tradition XT and Regular Toe styles are currently available with toe clips and Quarter Horse Toe with Toe Clips will be available by the end of the year. Check with your FPD Dealer.



Try the Kerckhaert Meister Series

The Meister series continues to grow in popularity on the Hunter/Jumper circuit. The Meister is wider at the toe and in the heel area where the foot needs the most support, the branches are narrower so that they are more easily modified. The Kerckhaert Meister is a series designed and made for the German market; therefore, the sizing is different. The number on the Meister shoe is two sizes larger than normal Kerckhaert sizing for riding shoes. In addition, the mark on the Meister shoe is a "D" instead of the "K" you find on the regular Kerckhaert shoe. Meister Fronts are symmetrical. Punched for E-head.



NEW PRODUCTS



NEW RANGER RASP HANDLE

Kerckhaert has introduced a new Ranger Rasp Handle. The Ranger handle is a twist-on handle made with poly material, with a round shape that fits well in the palm. This handle material is not as slick as many plastic handles and provides a good grip. These handles are available through FPD Dealers only.

KERCKHAERT LEGENDARY RT 6 HIND

The hind shape of the Kerckhaert Legendary RT 6 is slightly more pointed than the Tradition and Kings shape and is thicker, as well. This shoe is now available through your FPD dealer.



CONNECT WITH FPD & JOIN THE CONVERSATION

facebook.com/FarrierProductDistribution
farrierproducts.com/blog

youtube.com/farrierproducts
farrierproducts.com/fieldguide



A GLOSSARY OF THERAPEUTIC FARRIERY TERMS

S. E. O'GRADY*, A. H. PARKS†, R. F. REDDEN‡ AND T. A. TURNERS§

Northern Virginia Equine, 8170 Patrickswell Lane, Marshall, Virginia 20115; †University of Georgia, College of Veterinary Medicine, Athens, Georgia 30602; ‡International Equine Podiatry Center, PO Box 507, Versailles, Kentucky 40386; and §Anoka Equine Hospital, 16645 70th St NE, Elks River, Minnesota 55330, USA.

Reprinted with permission of the American Association of Equine Practitioners (AAEP)
Original published in *Equine Veterinary Education*, Vol. 19, June 2007

INTRODUCTION

The importance of Therapeutic Farriery as a part of equine veterinary practice is well recognised. Cooperation and the symbiotic relationship between the veterinary and farrier professions continue to grow and improve. Historically, there has not been a standardisation of Therapeutic Farriery terms that can be used for communication, both verbal and written, between veterinarians, farriers and horse owners. Furthermore, a uniform list of Therapeutic Farriery terms should benefit veterinarians and farriers in their record keeping and help augment their written reports. Authors writing in veterinary and farrier journals should be encouraged to adhere to recognised terms and to qualify their descriptions wherever possible. The authors of this article have attempted to create a glossary of Therapeutic Farriery terms that will form the basis for a common language related to the equine foot. This glossary provides an accurate basis of Therapeutic Farriery terms that, with revisions and additions, will continue to evolve in the future.

| | | | |
|---------------------------|------------------------|---|---|
| Abaxial | Anatomical | | Away from the axis of a body part. In Therapeutic Farriery refers to the digit or foot. |
| Abscess | Pathological process | | An accumulation of purulent exudate. In the foot, this usually refers to a localised accumulation of exudate between the germinal and keratinised layers of the epithelium, most commonly subsolar or submural. |
| Acute laminitis | Disease | | 1) The initial stages of clinical laminitis. 2) The phase of laminitis beginning with the onset of clinical signs that lasts until either resolution or displacement of the distal phalanx occurs. |
| Angle of the sole | Anatomical | Angulus soleae (medialis and lateralis) | Palmarmost or plantar most part of the crura of the sole between the hoof wall at the heel and the bar. Synonym: seat of corn. |
| Arteriovenous anastomosis | Anatomical | | A direct communication between the arterial and venous circulations without an intervening capillary bed. |
| Axial | Anatomical | | Towards the axis of a body part. In Therapeutic Farriery refers to the digit or foot. |
| Balance | Descriptive (clinical) | | An anatomical and functional concept that describes the relationship between the hoof capsule, the underlying musculoskeletal system and the ground. Can be considered as a subclassification or a separate definition to conformation. 'In balance' is best described as a harmonious relationship between the hoof capsule and the deep musculoskeletal structures that is most likely to permit lasting soundness. |

| | | |
|--------------------------------------|------------------------|---|
| Bar | | 1) The inflexion of the hoof wall that lies between the crura of the sole and paracuneal sulcus 2) Any part of a shoe that extends from one branch towards the other. May be partial or complete. |
| Basement membrane | Anatomical | A thin membrane underlying a layer of epithelial cells. In the foot it underlies the stratum basale of the epidermis. It conforms to the surface of the dermal papillae and lamellae. |
| Bilateral | Anatomical | Pertaining to both sides of the body, i.e. left and right limb. |
| Breakover | Descriptive (clinical) | The phase of the stride between the time the heel lifts off the ground and the time the toe lifts off the ground. |
| Breakover point (point of breakover) | Descriptive (clinical) | The most dorsal part of the ground surface, either the hoof capsule in the unshod horse or the shoe in the shod horse that is in contact with the ground at the moment the heels begin to rise off the ground. |
| Axial | Anatomical | Towards the axis of a body part. In Therapeutic Farriery refers to the digit or foot. |
| Balance | Descriptive (clinical) | An anatomical and functional concept that describes the relationship between the hoof capsule, the underlying musculoskeletal system and the ground. Can be considered as a subclassification or a separate definition to conformation. 'In balance' is best described as a harmonious relationship between the hoof capsule and the deep musculoskeletal structures that is most likely to permit lasting soundness. |
| Broken-back foot-pastern axis | Descriptive (clinical) | The angle that the dorsal hoof wall makes with the ground is lower than the angle the dorsum of the pastern makes with the ground. This angle can be measured using radiographs but it is difficult to measure accurately because it changes with positioning and weightbearing. |
| Broken-forward foot-pastern axis | Descriptive (clinical) | The angle that the dorsal hoof wall makes with the ground is greater than the angle the dorsum of the pastern makes with the ground. This angle can be measured using radiographs but it is difficult to measure accurately because it changes with positioning and weightbearing. |
| Bruise | Pathological process | Haemorrhage within tissues usually caused by blunt trauma. In the foot most commonly occurs in the solar dermis and is seen when extravasated blood migrates into the epidermis. May be focal or diffuse. |
| Buttress | Anatomical | The most palmar/plantar aspect of the hoof wall at the heels. Formed at the point of inflexion of the wall at the heels. Synonym: angle of the wall. |
| Buttress foot | Descriptive (clinical) | A change in shape of the foot characterised by a prominence at the dorsal coronet caused by an exostosis on the extensor process of the distal phalanx. |

| | | | |
|-------------------|------------------------|-------------------------|---|
| Canker | Disease | | A chronic, hypertrophic, moist pododermatitis that usually affects the frog, bars and adjacent sole. Often accompanied by a foul odour. |
| Capsular rotation | Descriptive (clinical) | | Describes the divergence of the dorsal hoof wall from the dorsal parietal surface of the distal phalanx independent of the relationship of the distal phalanx with the phalangeal axis. Results from laminitis or white line disease. |
| Chronic laminitis | Disease | | The phase of laminitis that begins with separation of the dermal and epidermal lamellae resulting in mechanical collapse of the foot. Results in displacement of the distal phalanx relative to its normal relationship with the hoof capsule. |
| Club foot | Descriptive (clinical) | | An upright conformation of the foot associated with a flexural deformity of the distal interphalangeal joint. The dorsal hoof wall angle is steep accompanied by a broken-forward footpastern axis. The distance between the heels is normal. |
| Conformation | Descriptive (clinical) | | The size and shape of the distal limb determined by the shape and size of the individual structures of the limb and the spatial relationship between them. |
| Contracted heels | Descriptive (clinical) | | Decreased width of the palmar/plantar aspect of the foot so that the heel bulbs and buttresses are closer together than normal. Associated with a decrease in frog width relative to the length. May be associated with elongated or collapsed heels. |
| Corium | Anatomical | | Synonym for dermis. |
| Corn | Disease | | Bruise in the angle of the sole. |
| Corona | Anatomical | Corona | Band-like proximal portion of the hoof, including epidermis, dermis and subcutaneous tissue deep and distal to the limbus. |
| Coronal | Anatomical | <i>Coronalis</i> | Pertaining to a coronal structure. Specifically, the corona of the foot. |
| Coronary band | Anatomical | Corona | Synonym for corona. |
| Coronary groove | Anatomical | <i>Sulcus coronalis</i> | A groove in the proximal border of the hoof capsule that contains the germinal layers of the epidermis, the dermis, and subcutaneous tissue of the coronary integument. Synonym: coronary sulcus. |
| Coronet | Anatomical | <i>Margo coronalis</i> | Proximal border of the hoof capsule wall |

| | | | |
|--|------------------------|--------------------------------|--|
| Crena | Anatomical | <i>Crena marginis solearis</i> | A shallow notch in the dorsal solar margin of the distal phalanx (P3). |
| Cuneate | Anatomical | Cuneus | Pertaining to the frog. |
| Dermal lamellae | Anatomical | <i>Lamellae dermales</i> | Lamellae formed by the parietal dermis, which interdigitate with the epidermal lamellae. |
| Dermis | Anatomical | Dermis | Layer of integument between the subcutaneous tissue and the epidermis. Composed of connective tissue, vessels and nerves. |
| Derotation | Descriptive (clinical) | | See realignment of distal phalanx. |
| Developmental laminitis | Disease | | The phase of laminitis between the initiating cause and the development of lameness. Synonym: prodromal laminitis. |
| Digit | Anatomical | | The extremity of the limb distal to the metacarpophalangeal joint. |
| Digital cushion | Anatomical | <i>Pulvinus digitalis</i> | Modified subcutaneous tissue composed of fat, connective, and elastic tissue. The digital cushion is the sum of the cuneate (frog) and toric (bulbar) cushions. Forms the bulbs of the heels. Thought to function by dissipating energy. |
| Distal displacement of the third phalanx | Pathological process | | Even movement of the distal phalanx distally within the hoof capsule in horses with laminitis such that the distal phalanx remains in alignment with the dorsal hoof wall and the phalangeal axis. Often referred to as a 'sinker'. As opposed to rotation of the distal phalanx. |
| Distal phalanx | Anatomical | <i>Phalanx distalis</i> | Most distal bone of the limb. Encased within the hoof capsule. Synonyms: third phalanx, coffin bone, os ungulare and P3. |
| Dorsal | Anatomical | | In the limbs this refers to the cranial facing surfaces from the carpus and hock distally. Opposite to ventral, palmar and plantar. |
| Dropped sole | Pathological process | | Collapse of the normal arch or concavity of the sole so that the sole is flat or convex. |
| Duckett's bridge | Descriptive (farrier) | | Refers to a transverse line drawn across the centre of the foot. The bridge lies on an imaginary line drawn vertically through the centre of rotation of the distal interphalangeal joint and corresponds to the widest part of the foot. Provides a good reference point for trimming the foot. |

| | | | |
|--------------------------|---------------------------|-----------------------------|---|
| Duckett's dot | Descriptive (farrier) | | An external reference point located 10 mm behind the apex of the trimmed frog on the average size foot. Reference point which is used to locate the centre of the distal phalanx. |
| Dynamic balance | Descriptive (clinical) | | The concept of balance applied to feet of an animal in motion. Mediolateral dynamic balance describes the relationship between the medial and lateral side of the foot as it lands. Dorsopalmar dynamic balance describes the relationship between the toe and the heels as the foot lands. |
| Epidermal lamellae | Anatomical | <i>Lamellae epidermales</i> | Lamellae formed by the parietal epidermis. |
| Epidermis | Anatomical | Epidermis | Most superficial layer of the skin or integument. |
| False sole | Descriptive (clinical) | | A false sole is a layer of cornified epithelium that is detached from an underlying layer of cornified solar epithelium that is attached to germinal epithelium and dermis in the normal fashion. May result from a previous abscess. |
| Flare | Descriptive (clinical) | | A local or general deviation of the hoof wall away from the central axis of the foot. |
| Flat footed | Descriptive (clinical) | | A hoof capsule that has no concavity to the sole. |
| Flexural | Descriptive (clinical) | | Abnormal flexion of a joint, frequently the distal deformity interphalangeal or metacarpophalangeal joint, caused by relative shortening of the musculotendinous structures on the flexor surface of the limb. |
| Floating | Descriptive (farrier) | | To unload a section of the foot by creating a space between the foot and the shoe. |
| Foot | Anatomical | | The specialised extremity of the digit. The hoof and all structures enclosed within it. |
| Foot-pastern axis FPA | Descriptive (clinical) | | The axis formed by the dorsal surface of the hoof wall and axis FPA the dorsal surface of the pastern viewed from the lateral aspect. |
| Founder | Pathological process | | A lay term for chronic laminitis: the latter term is preferred. |
| Frog | Anatomical | <i>Cuneus unguulae</i> | The 'digital pad' of the horse which includes the epidermis, dermis and subcutaneous tissue. It lies between medial and lateral bars and crura of the sole. |
| Gravel | Descriptive (clinical) | | A lay term for a variety of abscesses involving the dermal, soft tissue structures of the foot, especially those that drain at the coronary band. |

| | | | |
|-----------------------------|----------------------------|-------------------------|---|
| Heel | Anatomical | | Palmar portion of the foot that includes the bulbs and the palmarmost aspects of the wall, sole and frog. |
| Heel bulb | Anatomical | <i>Torus unguulae</i> | Integument immediately proximal to the point of inflexion of the wall palmarly/plantarly. The stratum corneum forms the bulbs of the hoof capsule and the subcutaneous tissue forms the palmar part of the digital cushion. |
| Hoof | Anatomical | Ungula | Integument of the foot and includes the epidermis, dermis and subcutaneous tissue (tela subcutanea). |
| Hoof angle | Descriptive (clinical) | | The angle the dorsal hoof wall makes with the ground. |
| Hoof capsule | Anatomical | <i>Capsula unguulae</i> | Horny hoof, formed by the cornified or horny epidermis (stratum corneum) of the limbus, corona, wall, sole, frog and heel bulbs. |
| Hoof-pastern axis | Anatomical | | Synonym: foot-pastern axis |
| Hoof rings | Descriptive (clinical) | | Rings formed in the hoof wall distal to the coronet that are associated with variations in hoof wall growth. |
| Hoof wall | Anatomical | <i>Paries corneus</i> | Horny wall formed by the stratum internum, stratum medium and stratum externum. |
| Hoof wall separation | Descriptive (clinical) | | Disruption of the hoof wall's structural integrity. Commonly seen where all or part of the stratum medium is separated from the stratum internum. |
| Horn-lamellar distance (HL) | Descriptive (radiographic) | | Distance measured between the dorsal parietal surface of the distal phalanx and the outer surface of the hoof wall. Synonym for the thickness of the dorsal parietal hoof (preferred). |
| Insensitive lamellae | Anatomical | | A historic synonym for epidermal lamellae. |
| Jamming | Descriptive (clinical) | | Jargon that describes the proximal displacement of the coronary band due to excessive loading of the wall distal to that area. |
| Keratoma | Disease | | A tumour of the keratin producing cells of the epidermis of the hoof. |
| Lamella | Anatomical | | A thin flat layer. Ridges formed by interdigitation of the parietal dermis (dermal lamellae) and epidermis (epidermal lamellae) that extend in a proximal to distal direction in the wall of the hoof. Synonym: lamina. |

| | | | |
|--|------------------------|------------------------|---|
| Lamellar | Anatomical | | Pertaining to the lamella. Synonym: laminar. |
| Lamina | Anatomical | Lamina | Used interchangeably with lamella, though the latter is preferred. |
| Laminitic rings | Descriptive (clinical) | | Refers to unequal hoof wall growth at the coronet that results in a disparity of growth between the toe and the heels i.e. unequal width of rings, which are further apart at the heels than the toe. |
| Laminitis | Pathological process | | Idiopathic inflammation or ischaemia of the submural structures of the foot. Divided into developmental, acute and chronic. |
| Lateral cartilage | Anatomical | | Synonym: unguis cartilage. |
| Limbus | Anatomical | Limbus | Modified band of integument between the skin and the hoof that forms the softer horn of the stratum externum. Synonym: periople. |
| Limbic groove | Anatomical | <i>Sulcus limbalis</i> | Narrow groove in the stratum corneum of the limbic integument immediately proximal to the coronary groove that contains the germinal layers of the epidermis, the dermis and subcutaneous tissue. |
| Long toe, low heel | Descriptive (clinical) | | Describes a foot that is considered to have excessive toe length relative to the conformation of the heel. |
| Natural balance | Descriptive | | Hoof conformation that is modelled after the foot in its (farrier term) natural state i.e. feral horses. |
| Onychomycosis | Pathological process | | A mycotic disease of the nails in humans. There is no direct proven corollary in horses. |
| Palmar | Anatomical | | Used to describe the caudal facing aspect of the forelimb from the carpus distally. The opposite of dorsal. |
| Palmar/plantar angle of distal phalanx | Descriptive (clinical) | | Angle between the plane of the solar margin of the distal phalanx and the ground measured from a lateral radiograph. Angle can be positive or negative. In fact the angle is distal rather than palmar/plantar. |
| Parietal | Anatomical | | Pertaining to or forming the paries or wall of a cavity. Refers to the wall of the hoof, e.g. parietal dermis, parietal epidermis, parietal surface of the distal phalanx. |

| | | | |
|--------------------------------|------------------------|--------------------------------|--|
| Pedal osteitis | Pathological process | | A radiographic diagnosis associated with osteopenia of the margin of the distal phalanx. Thought to be caused by inflammation of the sole. |
| Periople | Anatomical | Limbus | Synonym: limbus |
| Phalangeal rotation | Descriptive (clinical) | | Describes rotation of the dorsal surface of the distal phalanx palmarly/plantarly from its normal orientation and relationship with the middle and proximal phalanges, usually occurring concurrently with capsular rotation. |
| Plantar | Anatomical | | Used to describe the caudal facing aspect of the hindlimb from the tarsus distally. Opposite of dorsal. |
| Prolapsed sole | Descriptive (clinical) | | The sole has developed a convexity distal to the solar margin of the distal phalanx. |
| Quarters | | Paries pars lateralis/medialis | Abaxial portions of the wall that border the toe dorsally and the heels palmarly. The boundaries are poorly defined. |
| Quittor | Disease | | Infection and necrosis of the unguis cartilage. |
| Realignment of distal phalanx | Descriptive (clinical) | | A term used to describe realigning the palmar/plantar solar surface of the distal phalanx with the normal weightbearing surface of the hoof. |
| Rotation of the distal phalanx | Descriptive (clinical) | | Rotation of the distal phalanx can refer to either deviation of the dorsal surface of the distal phalanx from the wall (capsular rotation) or from the axis of the phalanges (phalangeal rotation), but if unspecified capsular rotation is usually assumed to be the default meaning. |
| Seat of corn | Anatomical | | Synonym: angle of the sole. |
| Seedy toe | Descriptive (clinical) | | Cavitation in the distal hoof wall, usually dorsally, involving the stratum internum and/or stratum medium. Commonly seen as widening of the sole wall junction. |
| Sensitive lamellae | Anatomical | | A historic synonym for dermal lamellae. |
| Sheared heels | | | Displacement of one heel bulb proximally relative to the adjacent heel bulb. Thought to result from abnormal loading on one side of the foot. |
| Sinker | Descriptive (clinical) | | See distal displacement of the distal phalanx. |
| Solar | Anatomical | | Pertaining to the sole. |
| Sole | Anatomical | Solea | That part of the hoof bordered by the wall, bars and frog. |
| Static balance | Descriptive (clinical) | | The concept of balance applied to a horse's feet with the animal at rest applies to the symmetry of the limb from the dorsal viewpoint and the foot-pastern axis from the lateral viewpoint. |

| | | | |
|----------------------|------------------------|-----------------------------|---|
| Stratum basale | | <i>Stratum basale</i> | Single layer of cells attached to the basement membrane. |
| Stratum corneum | | <i>Stratum corneum</i> | Formed from dead keratinocytes |
| Stratum externum | Anatomical | <i>Stratum externum</i> | Stratum corneum of the limbic (perioplic) epithelium. Synonym: stratum tectorium. |
| Stratum germinativum | | <i>Stratum germinativum</i> | Collective term for the stratum basale and stratum spinosum. |
| Stratum internum | Anatomical | <i>Stratum internum</i> | Stratum corneum of the parietal epithelium. |
| Stratum lamellateum | Anatomical | Stratum lamellateum | Synonym: stratum internum (deprecated). |
| Stratum medium | Anatomical | <i>Stratum medium</i> | Stratum corneum of the coronary epithelium. |
| Stratum spinosum | | | Layer between the stratum basale and stratum corneum several cells thick in which the prickle cells generate keratin filaments. |
| Stratum tectorium | Anatomical | Stratum externum | Deprecated in favour of synonym: stratum externum. |
| Sulcus | Anatomical | Sulcus | Groove. |
| Third phalanx | Anatomical | | See distal phalanx. |
| Thrush | Disease | | A moist exudative dermatitis that involves the central and lateral sulci of the frog. |
| Underrun | Descriptive (clinical) | | Describes angulation of the hoof wall towards the axis of the limb so that the hoof wall lies inside the expected position of the hoof wall in relation to the distal phalanx. |
| Underrun heels | Descriptive (clinical) | | The angle of the heels is considerably less than the angle of the dorsal hoof wall. The horn tubules are commonly folded under the bulbs of the heels. |
| Ungual cartilages | Anatomical | <i>Cartilago unguularae</i> | The cartilage of the hoof that is attached to the palmar/plantar process of the distal phalanx. There is a medial and lateral unguual cartilage. Synonyms: lateral cartilage, collateral cartilage. |
| Unilateral | Anatomical | | Pertaining to one side of the body, e.g. left or right limb. |
| White line disease | Descriptive (clinical) | | A keratolytic process involving the deeper nonpigmented zone of the stratum medium. |
| White line | Anatomical | <i>Zona alba</i> | The junction between the hoof wall and the sole. Actually this junction is seen as a yellow line on the solar surface of the foot. |