

Abnormal Forces Associated with Toe Grab Horse shoes

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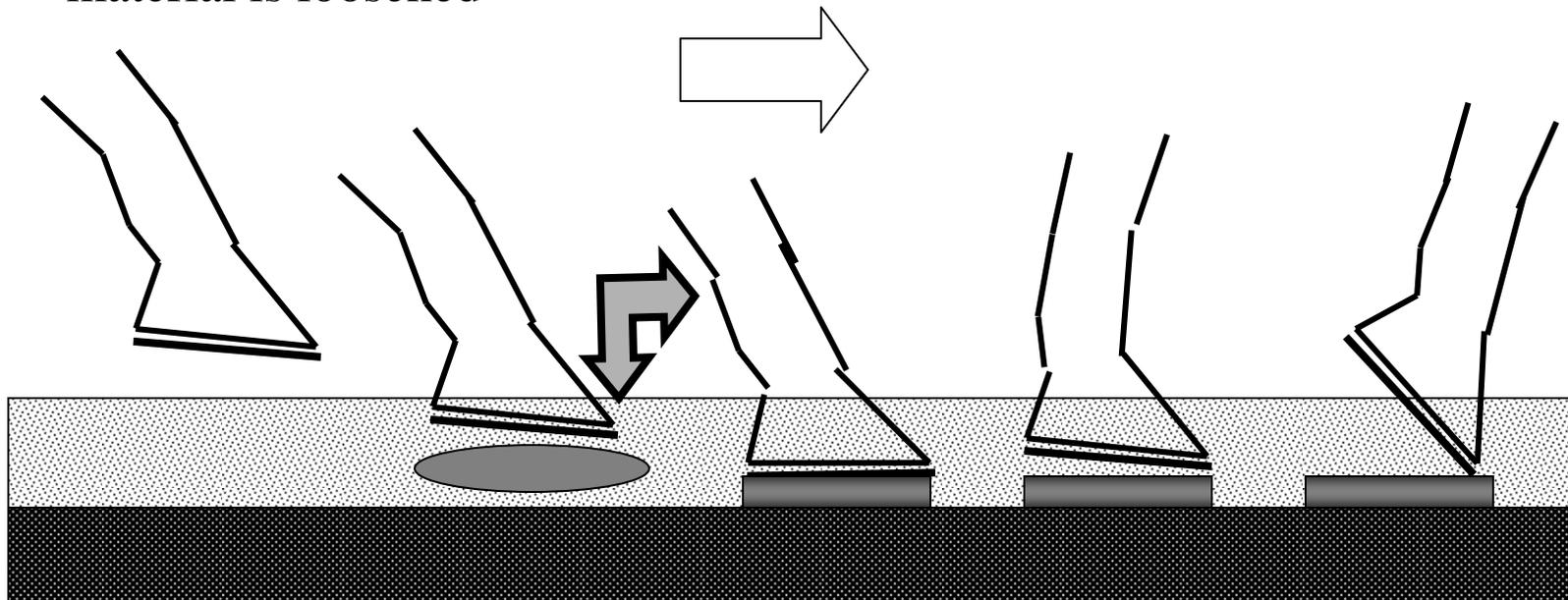
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Normal Hoof/Shoe Impact

- The hoof approaches the track and begins to enter the surface
- The material below the hoof is compressed and the surrounding material is loosened
- The toe holds its position and the heel rises upward
- The hoof then rises up and leaves the surface



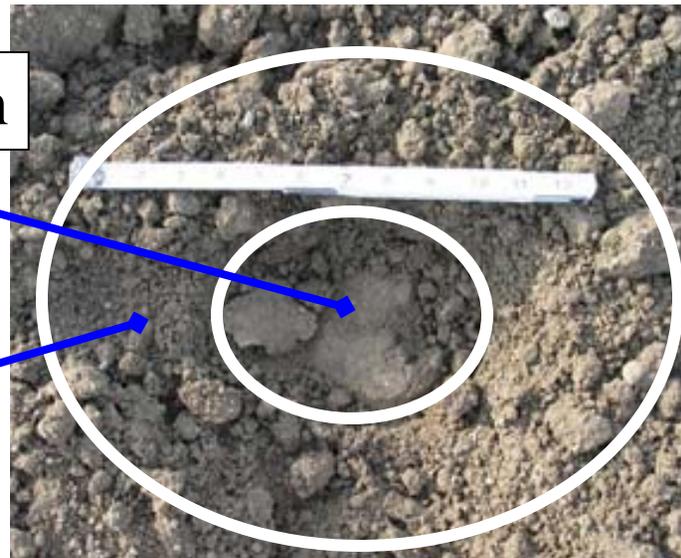
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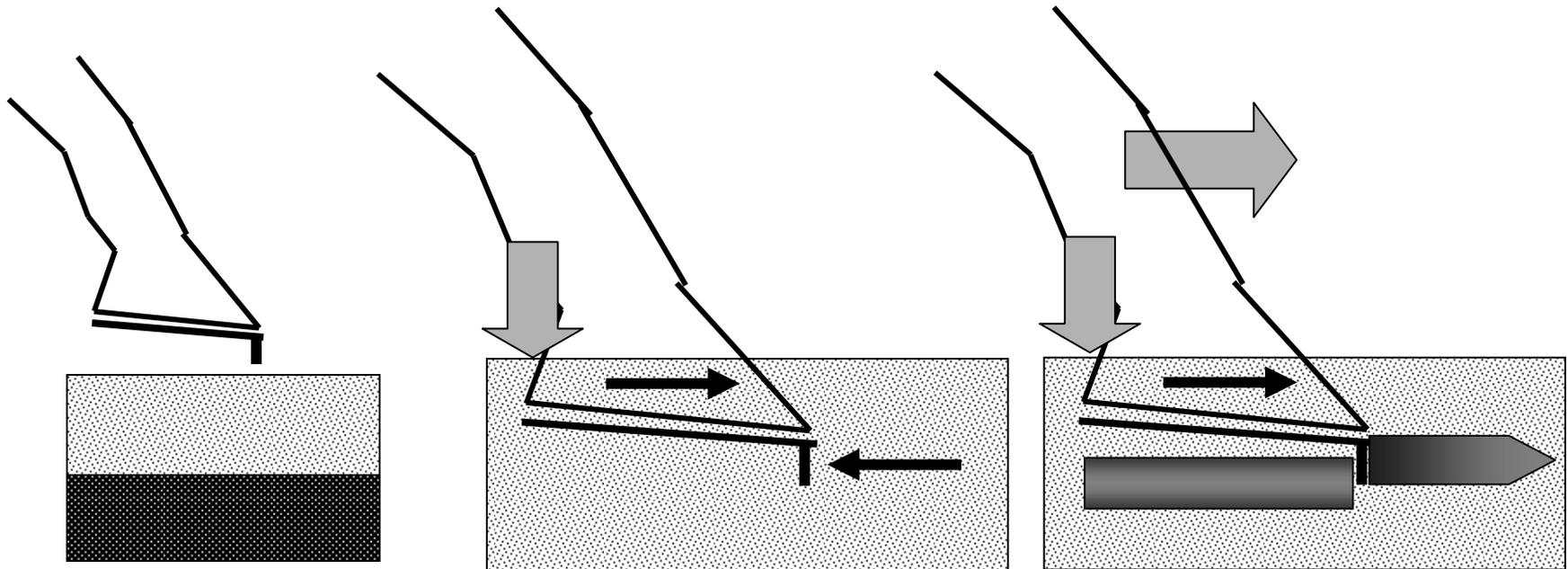
Area of Compaction

Area of Looseness



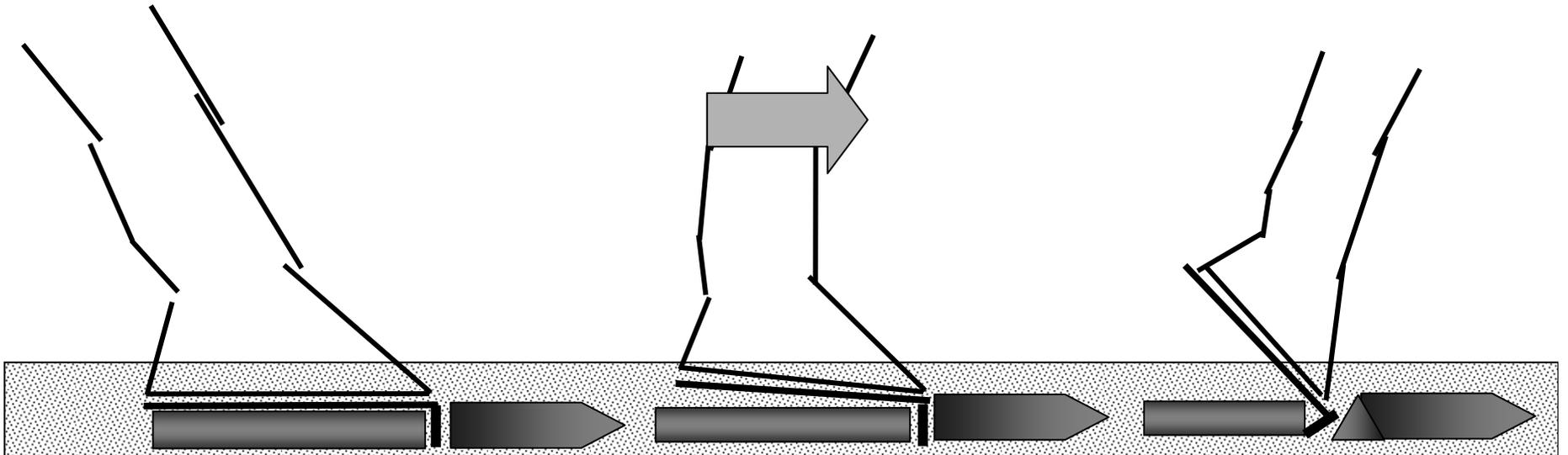
Toe Grab Entrance

- As the toe enters the surface, the toe caulk acts as a wall, compacting the surface material in front of it.
- At the same time the hoof is compacting the surface material below it.
- The distal leg continues its forward momentum.



Toe Grab Exit

- The toe caulk is fixated within the compacted surface material.
- This increases the forces needed for breakover and toe-off to occur



Toe Grab Summary

- The Toe Grab horseshoe increases the braking forces felt by the distal limb at surface contact.
- The Toe Grab horseshoe increases the forces needed to allow breakover and toe off to occur.
- These abnormally increased force loads are translated to the structure of the distal limb.