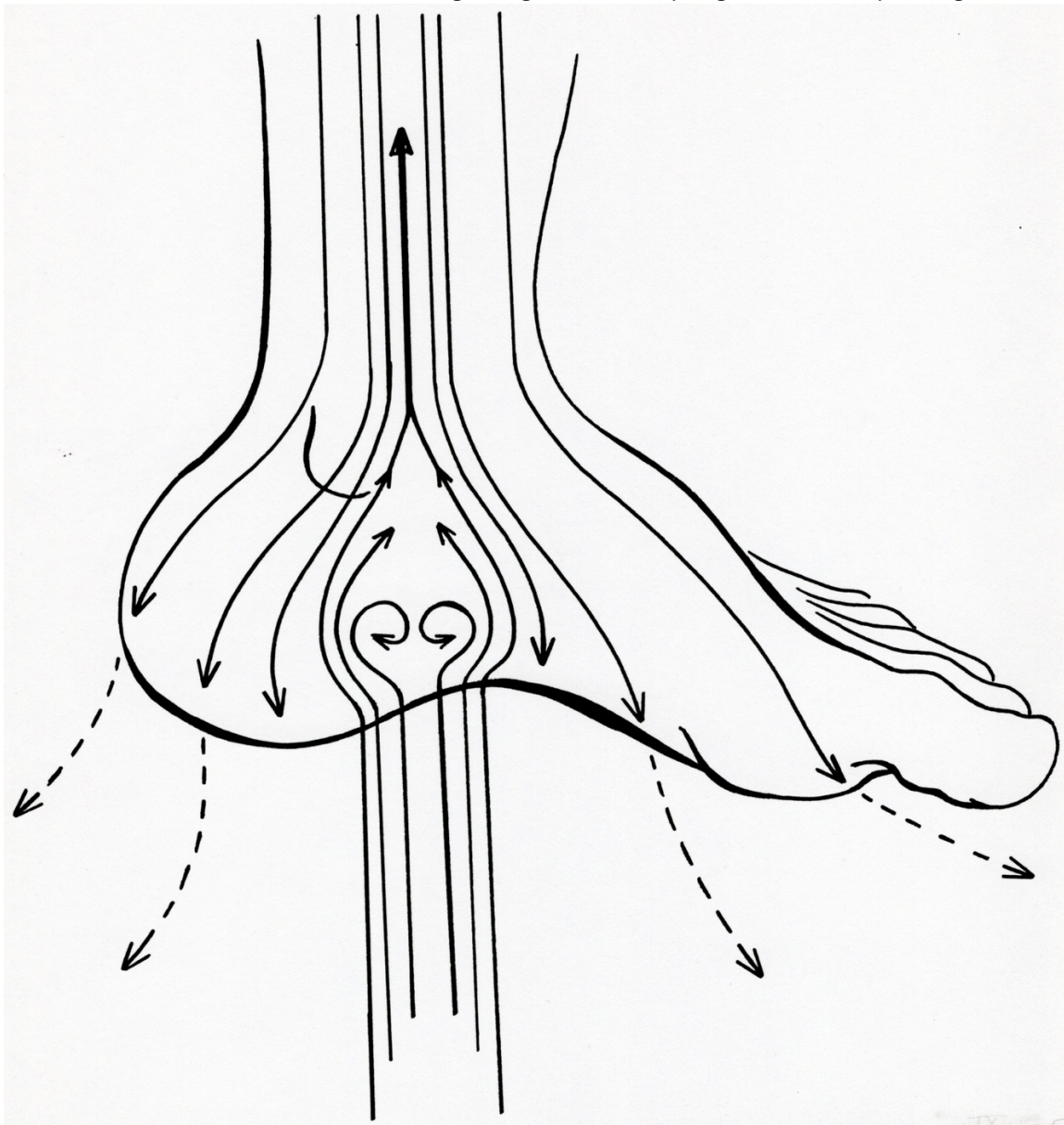


ILLUSTRATIONS OF THE FOOT - BONES, MODELS, MUSCLES, MOVEMENT

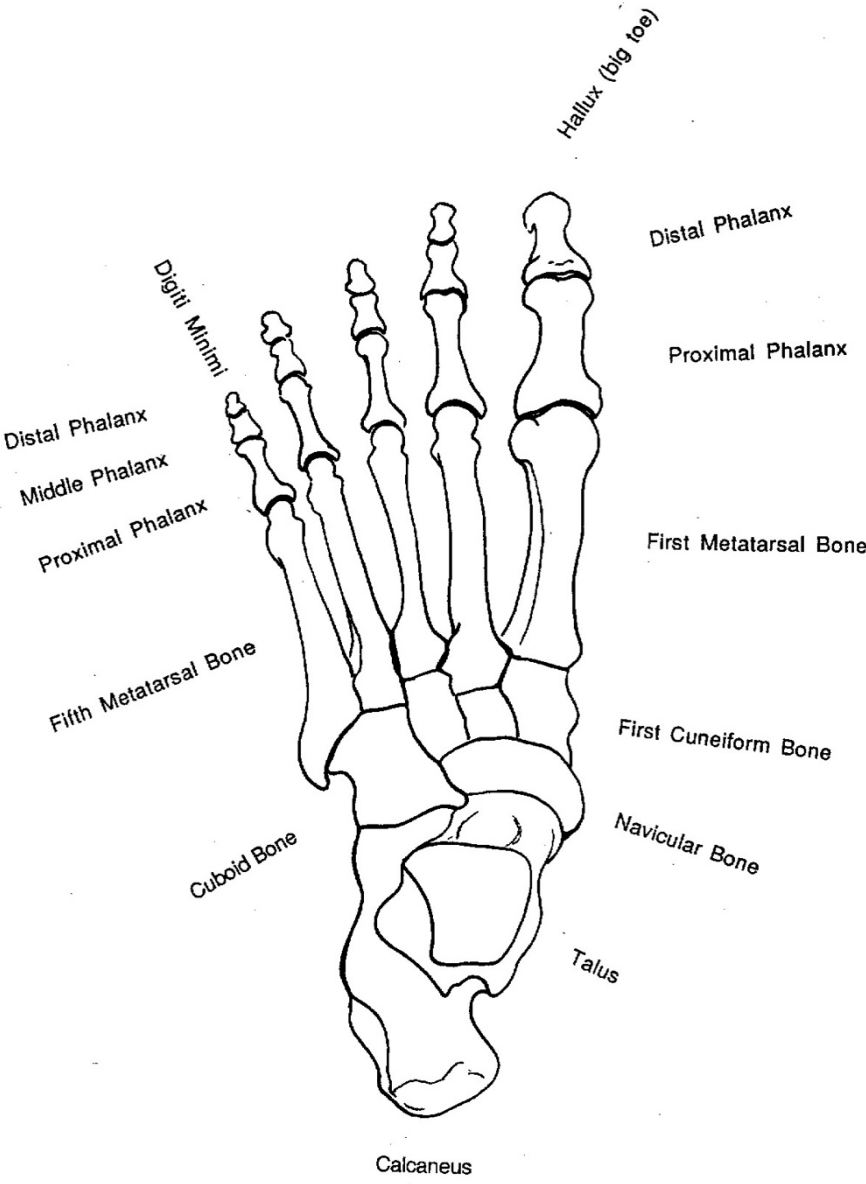
All illustrations drawn freehand by Irene Dowd between 1970 and 2024

drawn from live models, human bone skeleton, cadaver dissection, photographs of moving figures, x-rays and MRI scans, in addition to schematics created by Irene to illustrate various ideas & images

schematic of thrust of foot downward against ground with equal ground thrust up through foot

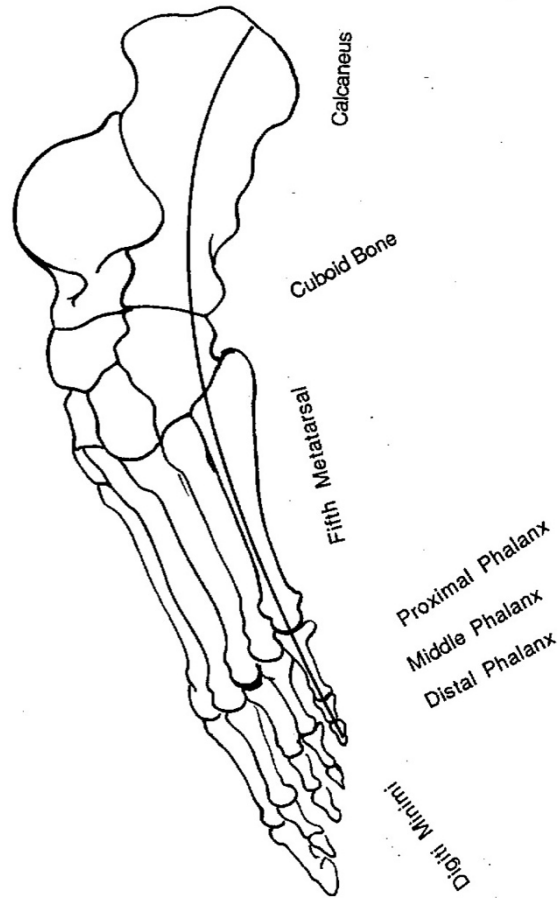


Dorsum of Foot (Top View)

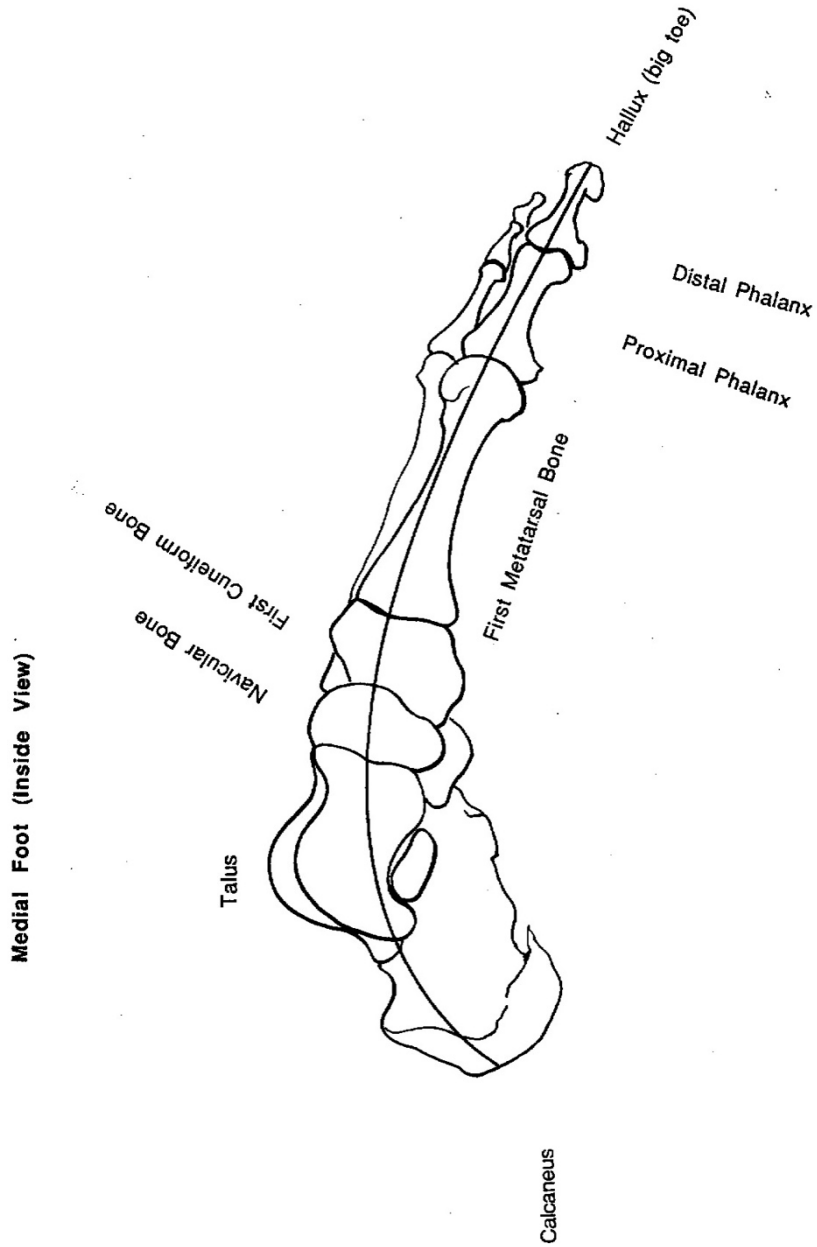


curved line represents lateral longitudinal arch of the foot (with cuboid as keystone)

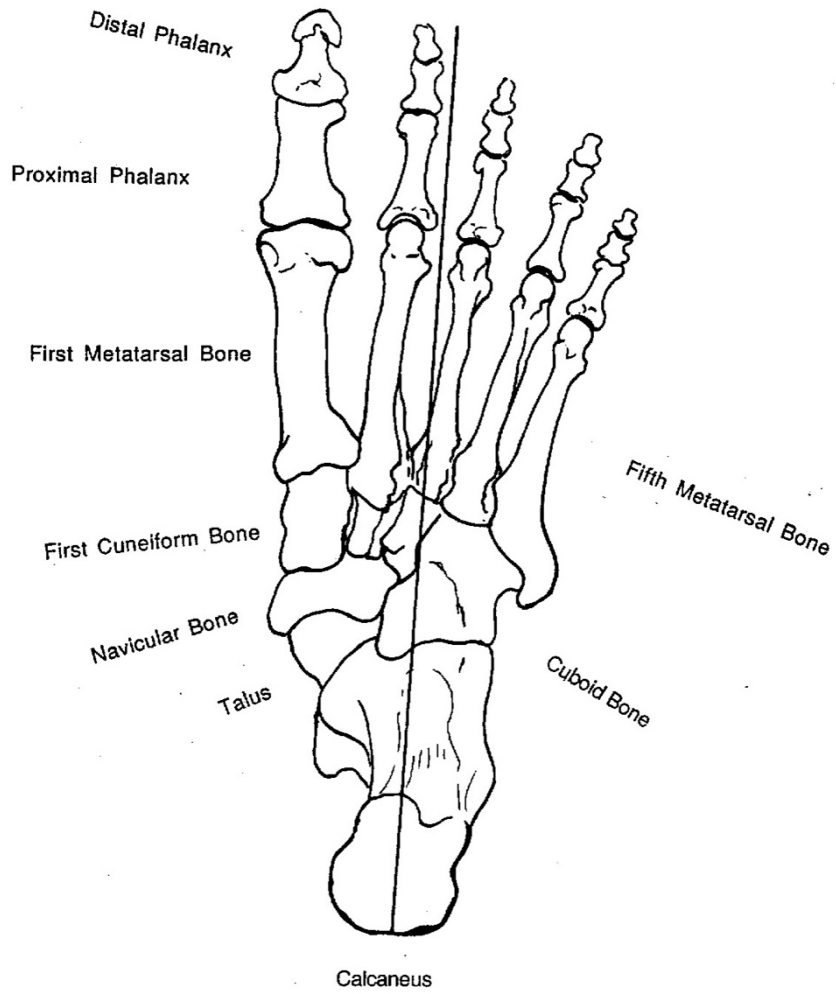
Lateral Foot (Outside View)



curved line represents medial longitudinal arch of foot (with talus as keystone)



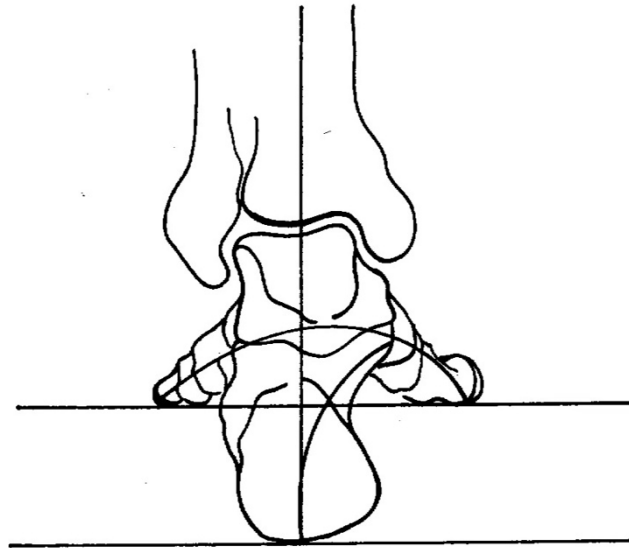
Plantar Foot (Bottom View)



© Irene Dowd 1995

line through heel to interspace between 2nd & 3rd toe represents "fundamental arch" of foot

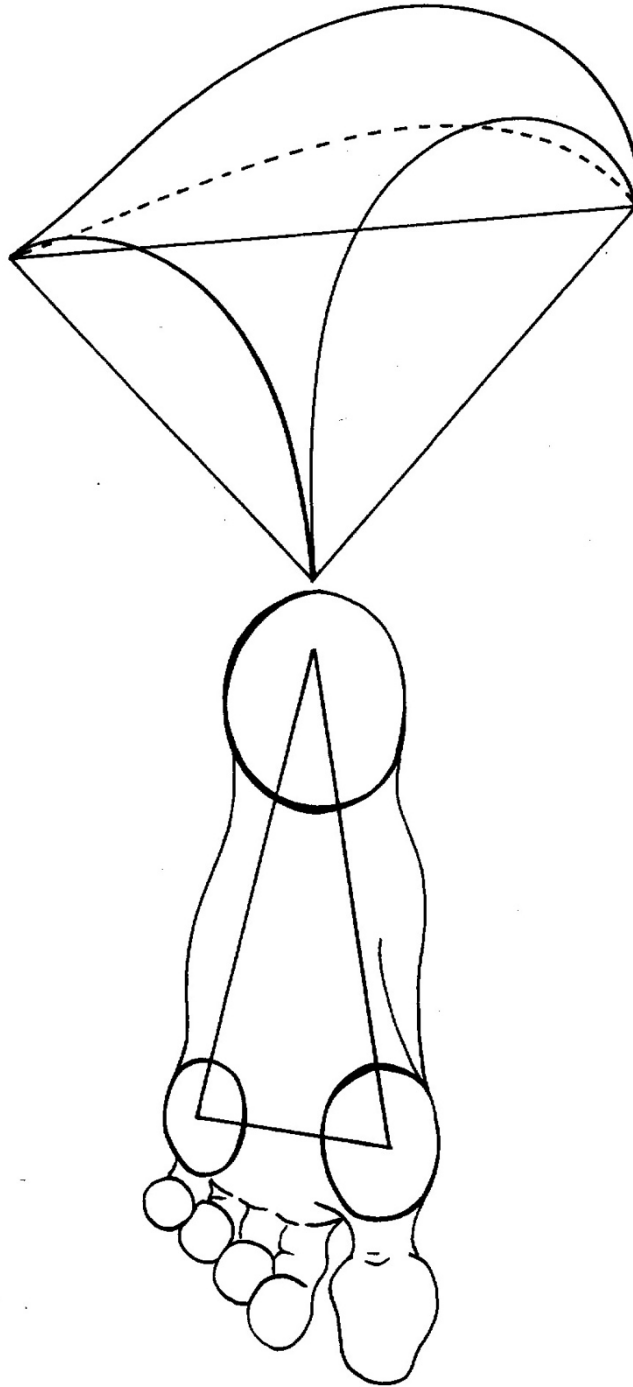
Rear Foot (Back View)

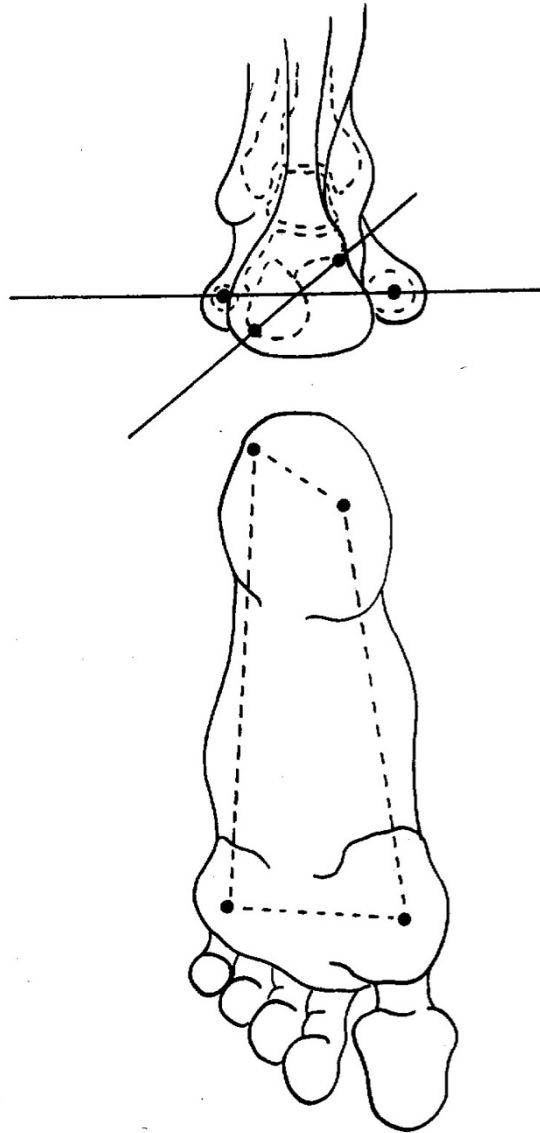


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curved line represents transverse arches (through heel and through metatarsal heads when non-weight bearing)

schematic of "tripod foot" with base as ball of heel, ball of big toe and ball of little toe, carrying "dome" on top with highest arch being medial arch

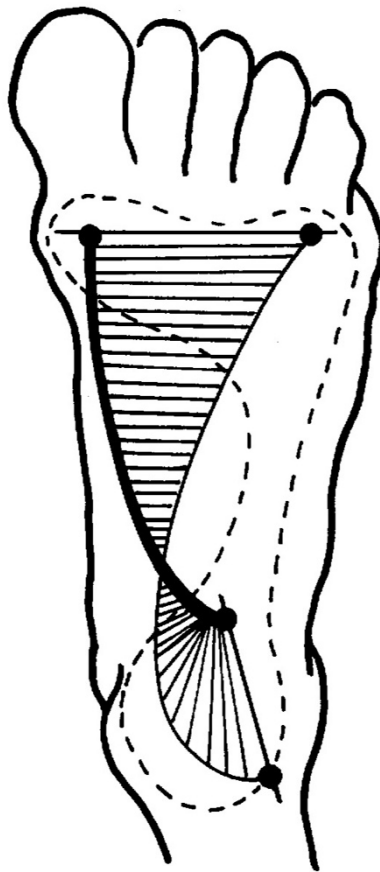




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schematic of "twisted rectangular foot"

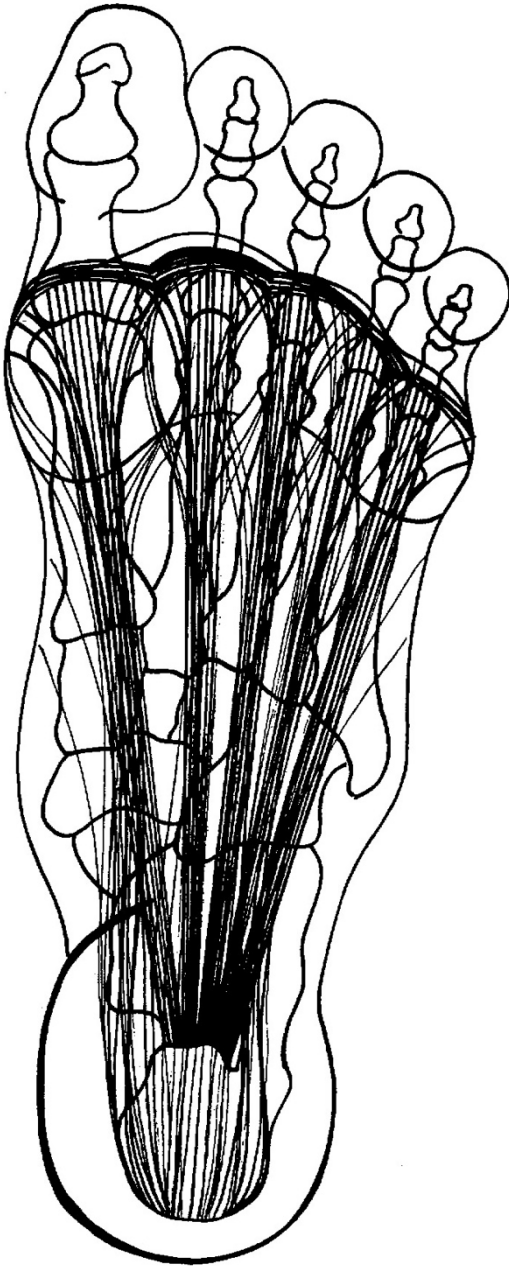
© Irene Dowd 1995



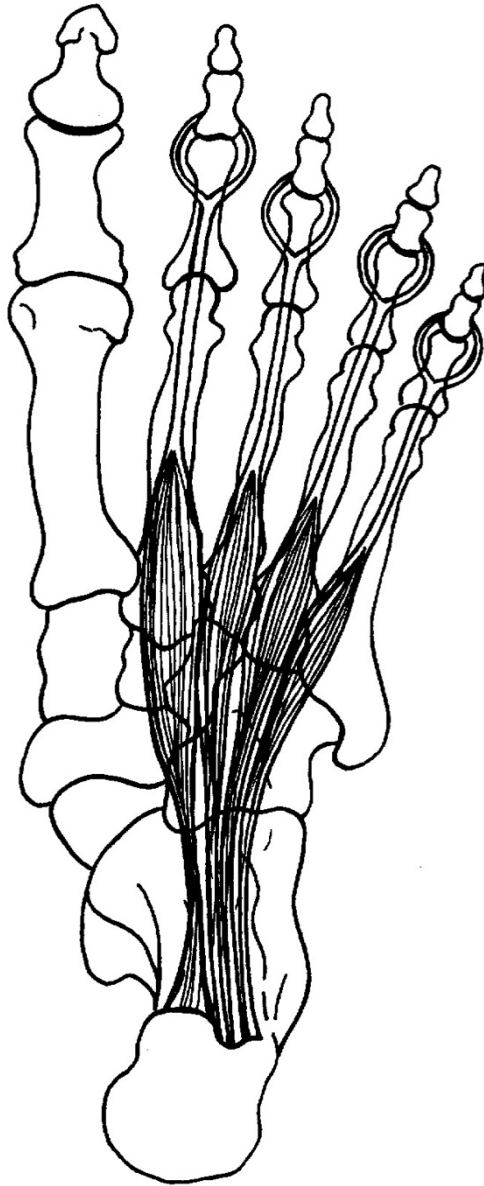
when standing, forefoot is horizontal (on floor) and rearfoot is elevated on medial side to transition to vertical leg

PLANTAR FOOT (SOLE) - first layer

Plantar fascia



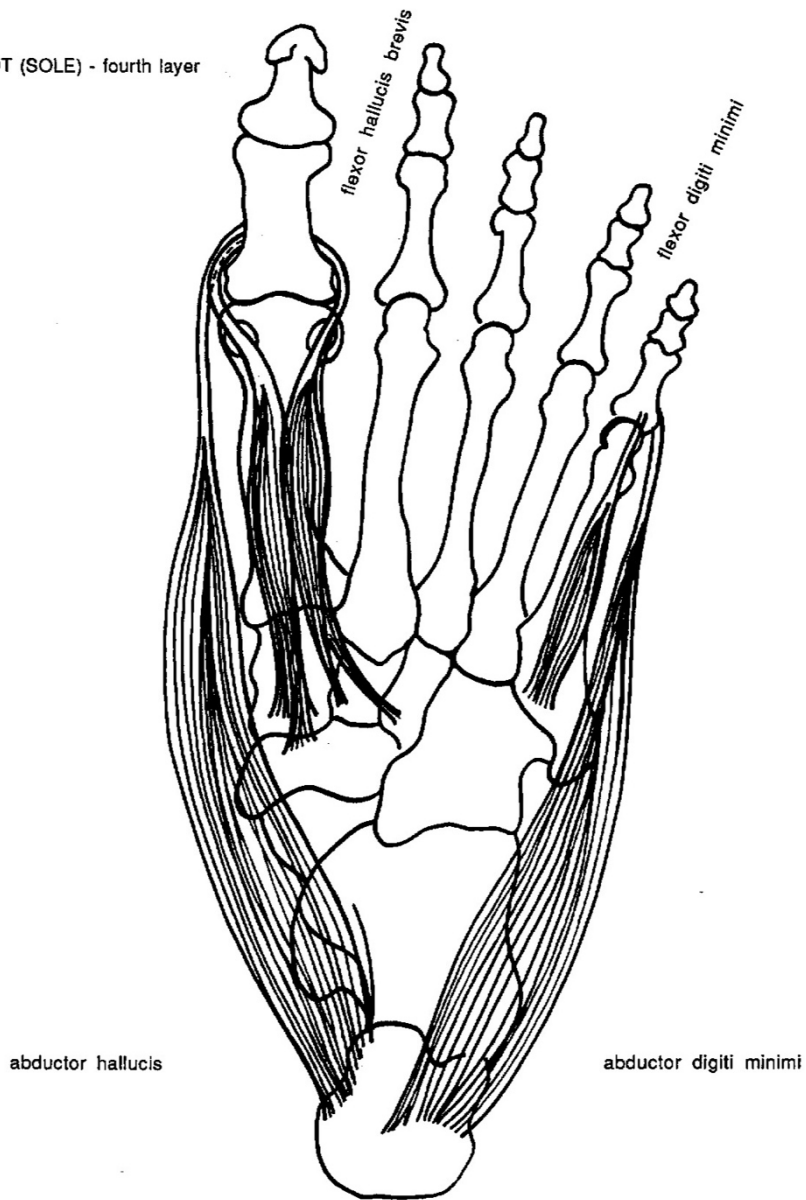
PLANTAR FOOT (SOLE) - second layer
flexor digitorum brevis

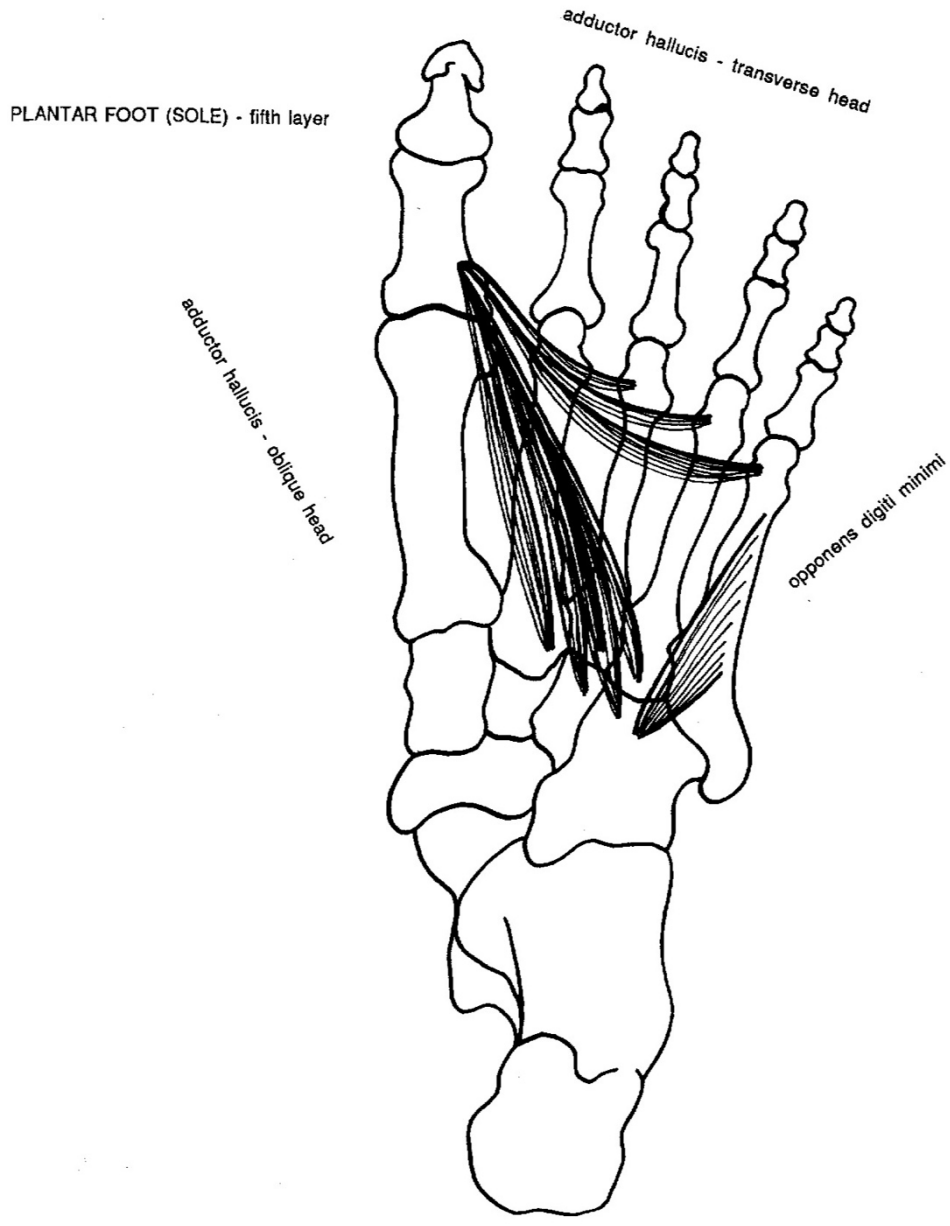


PLANTAR FOOT (SOLE) - third layer

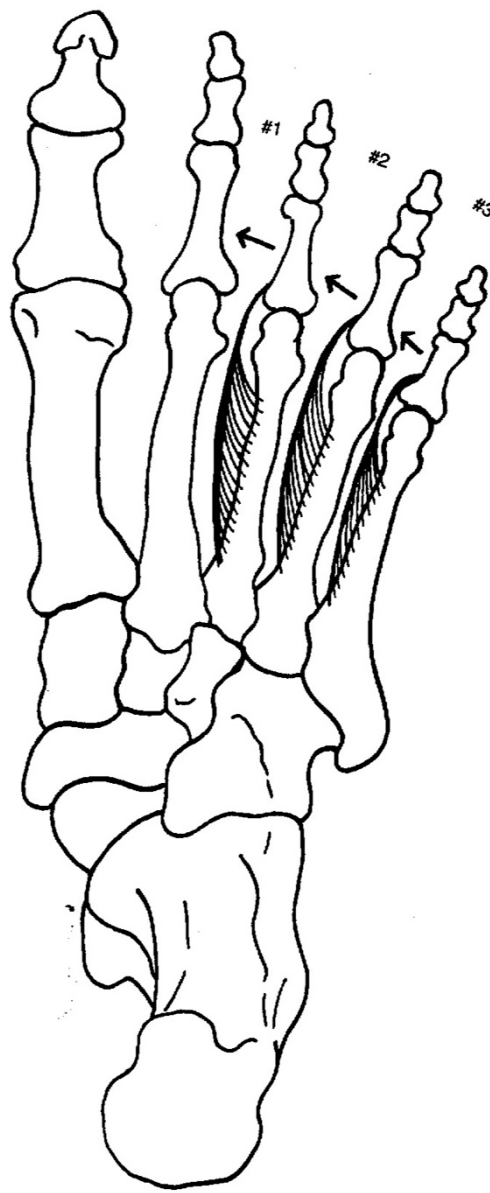


PLANTAR FOOT (SOLE) - fourth layer



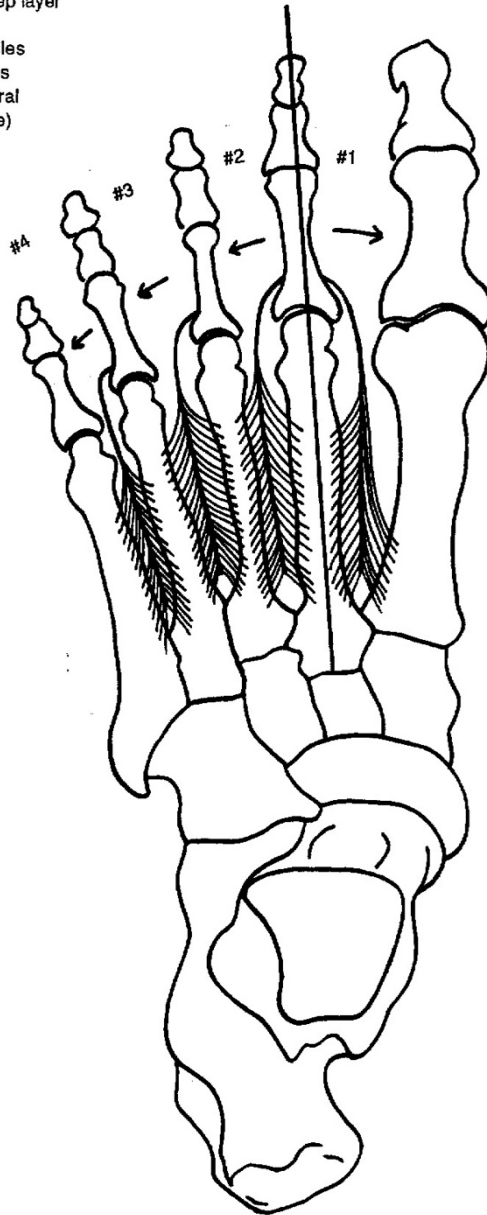


PLANTAR FOOT (SOLE) - sixth layer
plantar interossei muscles
(adductors of the toes toward second toe)

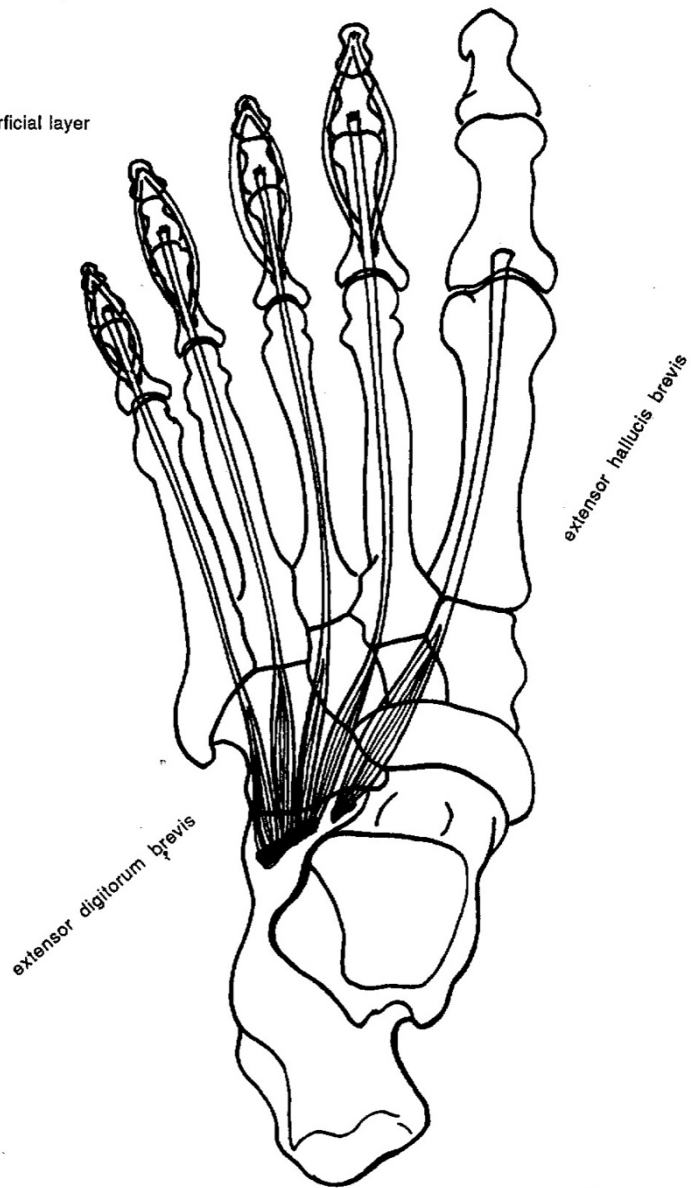


DORSUM FOOT (TOP) - deep layer

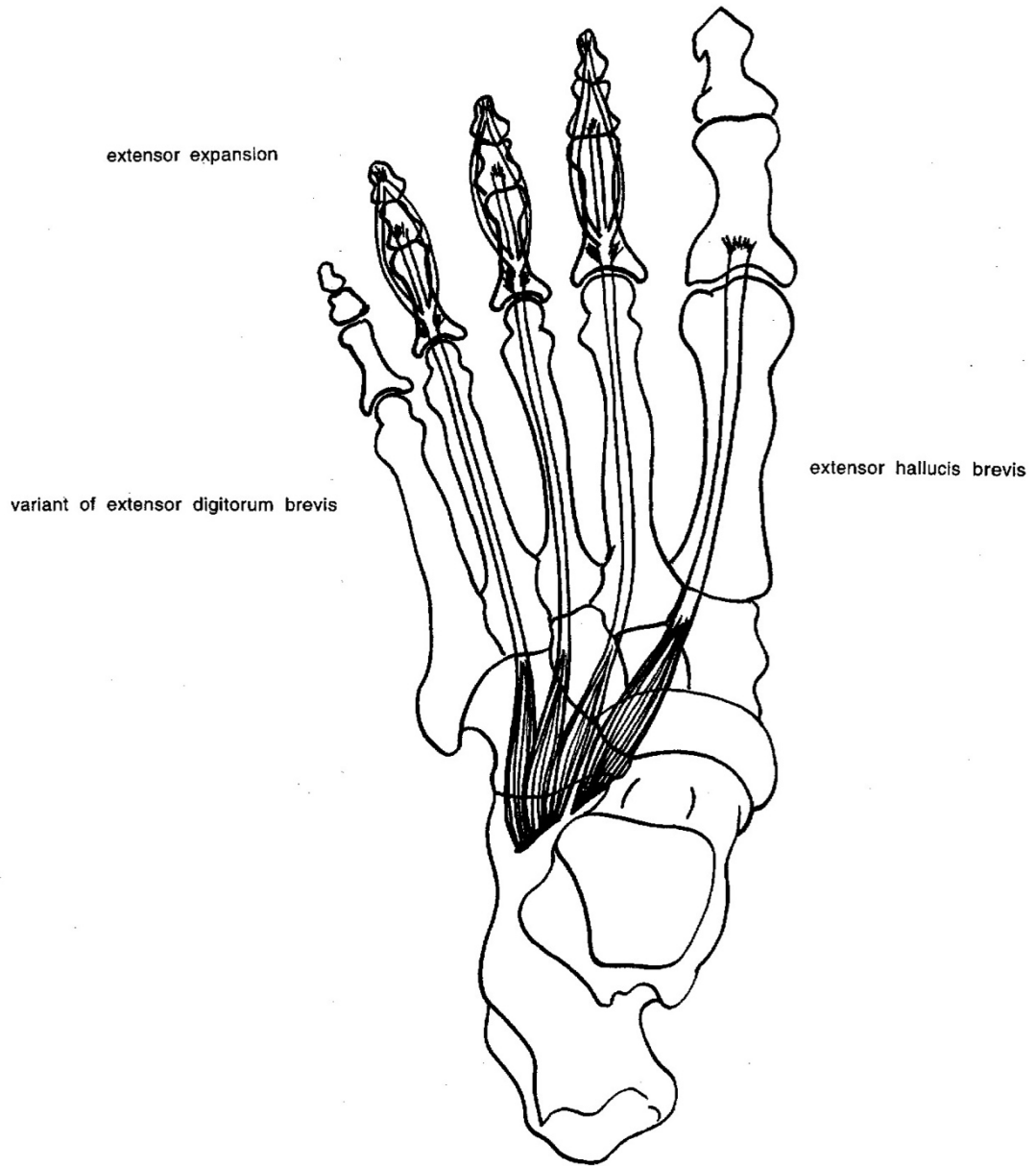
dorsal interosseal muscles
(abductors of the toes
from anatomical neutral
position of second toe)



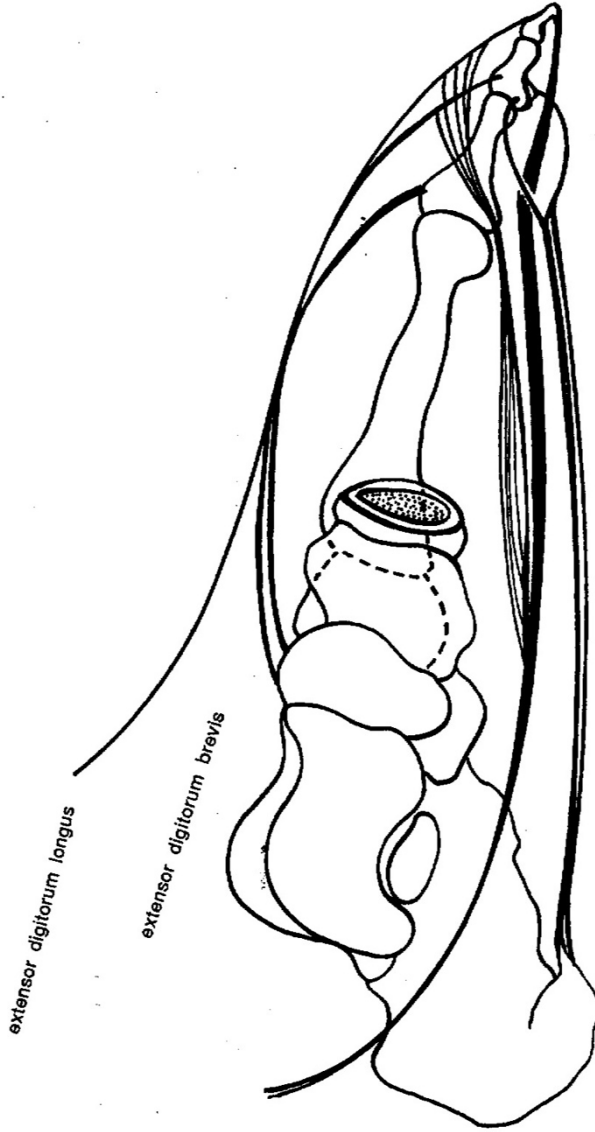
DORSUM FOOT (TOP) - superficial layer



DORSUM FOOT (TOP) - superficial layer



VIEW OF MEDIAL FOOT WITH FIRST METATARSAL REMOVED TO SHOW SECOND METATARSAL.



a model of weight transfer in gait from heel strike to push off: serpentine path of arrow shows heel strike, full weight (slightly more medial), heel off (weight more on ball of little toe), toe off (weight coming off of big toe)

