the wedge directed outward. This fact is especially noted by Redard, who classes this as one of the main reasons why adduction of the foot is so hard to overcome. The observation of the writer does not correspond with this, only one or two cases showing marked thinning of the internal surface. The articular portion is narrowed and found chiefly as a narrow strip along the upper border continuous with the superior or trochlear surface. The balance of the internal surface is taken up with the attachments of the deltoid ligament. The internal surface of the normal fetal astragalus shows a similar narrow band of articular surface and it extends forward on to the side of the neck.

The external surface has its articular surface enlarged, on account of the forward displacement of the bone, so that it extends nearly as far backward as the posterior border. The anterior portion of this articular surface is pushed forward in front of the external malleolus and separated by a distinct vertical ridge from the posterior portion which articulates with the external malleolus. Sometimes the anterior portion of this surface is thickened so as to form a prominence or even a tubercle, and may in that event prove an obstacle to reposition of the bone, by wedging itself against the external malleolus in attempts at dorsal flexion.

The superior surface has its articular surface placed more posteriorly than normal. The surface commences about halfway back on the bone and extends backward from this point to the posterior surface. The anterior part of this new trochlear surface is about normal in width, but gradually tapers as it proceeds backward, so that the trochlear surface, instead of being rectangular, is more or less triangular with the apex backward. The portion of the bone in front of this which was originally part of the trochlear surface, is usually covered with ligamentous structures, the anterior ligament of the ankle being attached to it.

The inferior surface may have its articular facets entirely displaced, the usual arrangement being a crowding of the posterior facet forward so that it comes to occupy nearly all of the surface. The long axis of this facet, instead of being directed forward and outward, is directed forward or even in some cases slightly inward. The interosseous ligament is thinned at its posterior part or sometimes is absent. The anterior facet is small and placed partially under the sustentaculum tali and partially on under surface of the neck.

The posterior surface is nearly lost, only a narrow edge of bone representing this surface, separating the superior from the inferior surfaces. The groove for the tendon of the flexor longus hallucis is nearly always absent or very slightly marked when it is present.