that the value is independent aradox can be propagation of into account. interface of a ed shear stress ent of a full s strongly size

o) of radius of , nucleated on ider the action f the indicated The resulting lance with the) and modified 3). The shear st support the

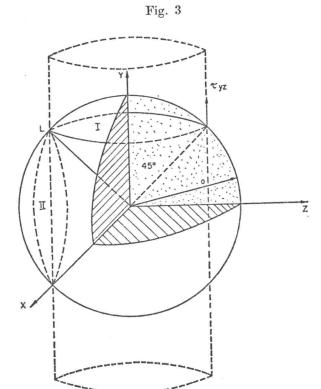
. . . (6)

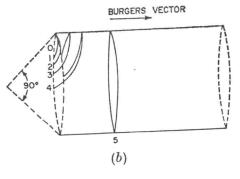
or. For small ted as $Gb^2/2R$

. . . (7)

stress which is nuity of given icle of smaller h observation, based on this are approxich dislocations be discussed

n used for the sses induced by e size necessary





(a)

(a) Spherical 'particle' of radius a in a matrix subjected to external hydrostatic pressure. The intersection of the 90° cone with the surface of the sphere corresponds to a circle of maximum induced shear stress and defines the glide cylinder, shown by the dashed lines, for the induced dislocation loops. (b) Schematic illustration of the stages of formation of a full prismatic loop at a spherical 'particle' under the action of pressure-induced shear stresses. At stage 5, the loop is capable of gliding along the cylinder, which has its axis parallel to the Burgers vector.