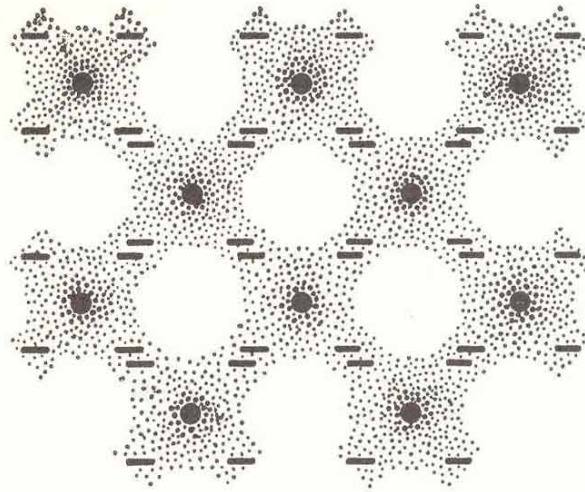
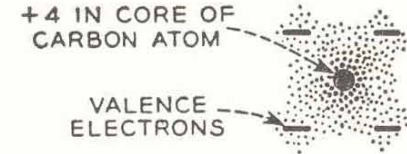


# Shockley – Valence Band VS Conduction Band

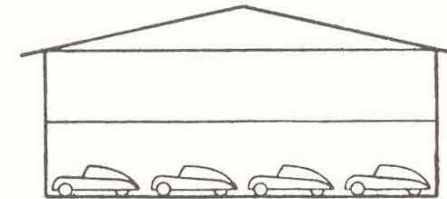


(a) ELECTRON PAIR BONDS

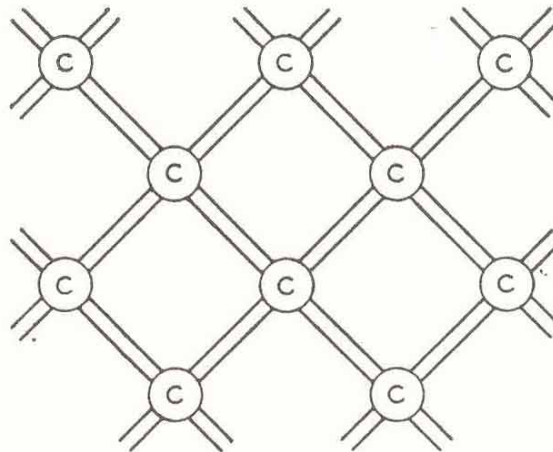


EACH ATOM, WITH THE CHARGE OF ITS SHARE OF VALENCE-BOND ELECTRONS, IS ELECTRICALLY NEUTRAL.

(b)



NO TRAFFIC POSSIBLE



(c) PLANE DIAGRAM OF DIAMOND LATTICE WITH BONDS REPRESENTED BY LINES



FIG. 1-4—Electrons in the Diamond Structure.

# Shockley – Valence Band VS Conduction Band

