



FIGURE 9.7
 transformation of a
 eutectoid steel (0.8% C)
 with slow cooling. (After
 W. F. Smith, "Structure
 and Properties of
 Engineering Alloys,"
 McGraw-Hill, 1981, p. 8.)

plates of α ferrite and cementite (Fe_3C). Just below the eutectoid temperature, at point *b* in Fig. 9.7, the lamellar structure will appear as shown in Fig. 9.8. This eutectoid structure is called *pearlite* since it resembles mother-of-pearl.

FIGURE 9.8
 Microstructure of a slowly
 cooled eutectoid steel.
 The microstructure
 consists of lamellar
 eutectoid pearlite. The
 dark etched phase is
 cementite, and the white
 phase is ferrite. (Etch:
 picral; magnification
 650 \times .) (United States
 Steel Corp., as presented
 in "Metals Handbook,"
 vol. 8, 8th ed., American
 Society for Metals, 1973,
 p. 188.)

