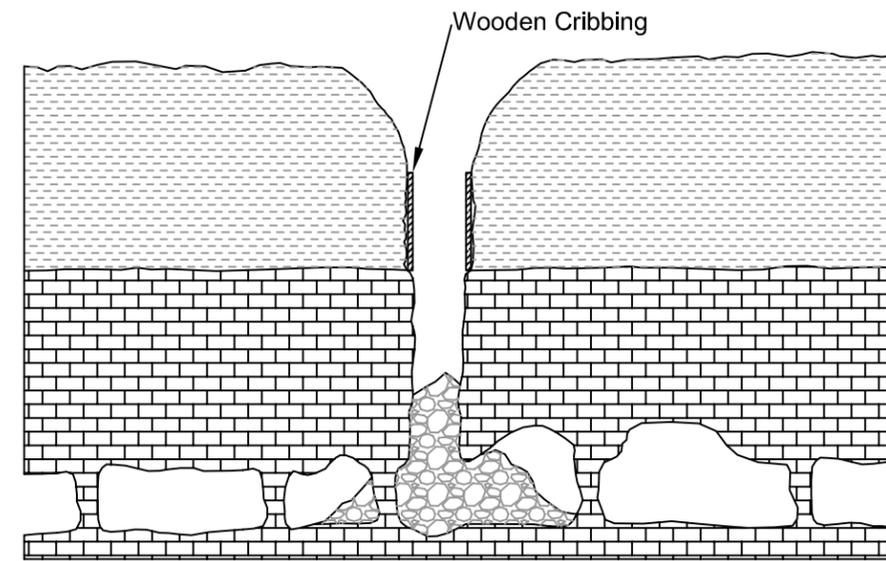
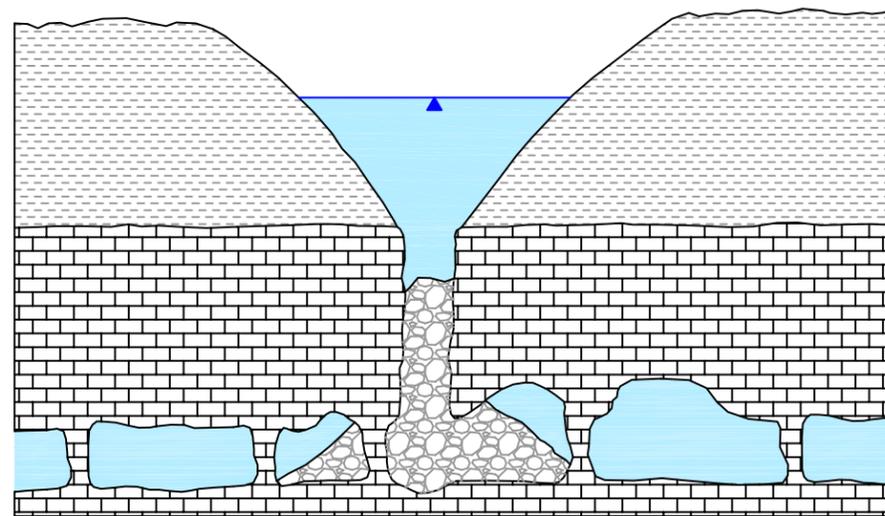


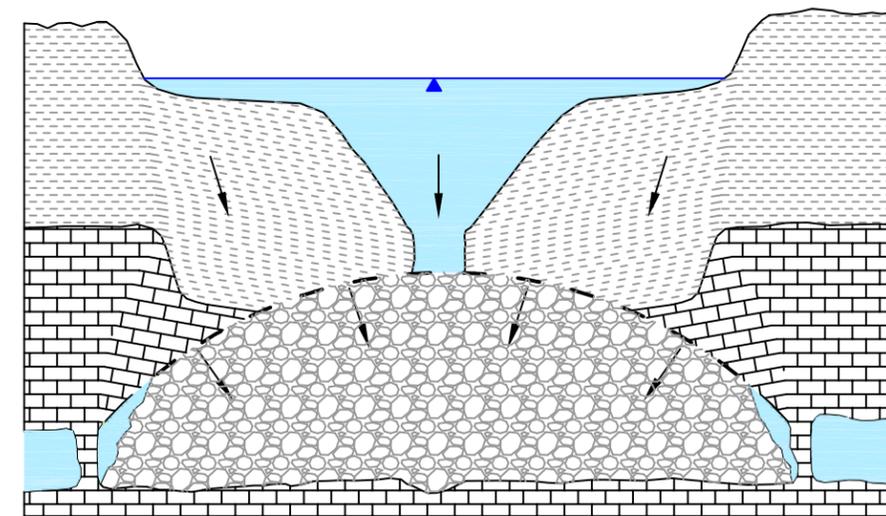
(a) Typical Open Shaft and Underground Mine Workings.



(b) Early Stage of Shaft Failure.



(c) Advanced Stage of Shaft Failure.



(d) Major Collapse After Pillars Removed

AutoCAD FILE: Fig_4.3 Shaft_Collapse_StagesPROJECT NUMBER: 1010226.011602

Figure 4.1

PROJECT:
PICHER MINING FIELD SUBSIDENCE EVALUATION
 DRAWING TITLE:
**Various Stages of Shaft
 Related Collapses**

NOTE: MODIFIED FROM LUZA, 1986.