

**FIGURE 10-2**

Dynamic models, composite center of gravity, and radius of gyration of a mallet

- ^{*†}10-1 The mallet shown in Figure 10-2 (p. 549) has the following specifications: The steel head has a 1.25-in diameter and is 3.5 in tall; the wood handle is 1.5-in diameter and 10 in long and necks down to 3/4 in wide where it enters the head. Find the location of its composite CG, and its moment of inertia and radius of gyration about axis ZZ. Assume the wood has a density equal to 0.9 times that of water.
- ^{*†}10-2 Repeat Problem 10-1 using a wooden mallet head of 2.5-in diameter. Assume the wood has a density equal to 0.85 times that of water.

* Answers in Appendix F.

† These problems are suited to solution using *Mathcad*, *Matlab*, or *TKSolver* equation solver programs.