

**Figure 1.1** Referential integrity constraints displayed on the company relational database schema diagram.

triggers and assertions can be used. In SQL2, a CREATE ASSERTION statement is used for this purpose (see Chapters 8 and 23).

The types of constraints we discussed above may be termed as *state constraints*, because they define the constraints that a *valid state* of the database must satisfy. Another type of constraints, called *transition constraints*, can be defined to deal with state changes in the database.<sup>7</sup> An example of a transition constraint is: "the salary of an employee can only increase." Such constraints are typically specified using active rules and triggers, as we shall discuss in Chapter 23.

<sup>7.</sup> State constraints are also called *static constraints*, and transition constraints are called *dynamic constraints*.