(a) Circuit
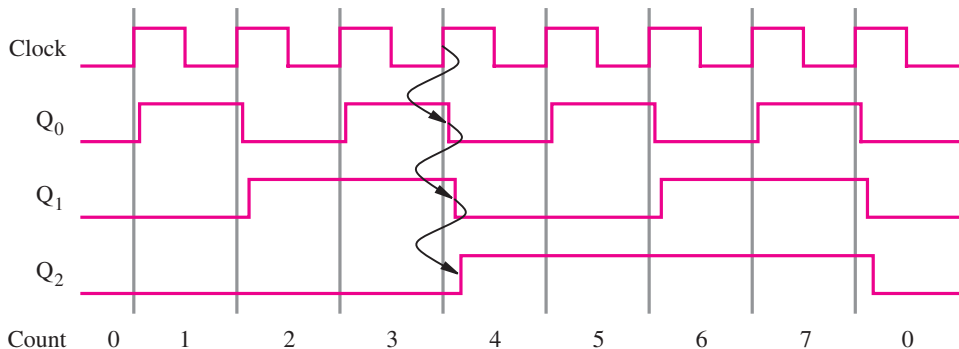
(b) Timing diagram

Figure 7.20 A three-bit up-counter.