String of digits. [] means "one of a range of characters,"* means "zero or more."

Period followed by digits (optional). Parentheses are used to group things together, and the ? means that the whole group is optional.

```
[0—9]*  .([0—9]*)?  ([eE][-+]?[0—9]+?  [fFdD]?
```

Exponential part, such as e+10, E4, e-22, etc.

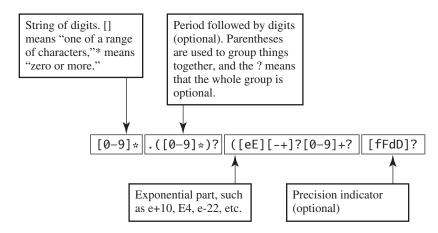Precision indicator (optional)

FIGURE 11.1:   *Reading a regular expression*

next character, using the new state, until you reach the end of the input. If you end up in a terminal state, then the regular expression matches the input string. If the final state isn't a terminal state, or if you find yourself in a state where there is no
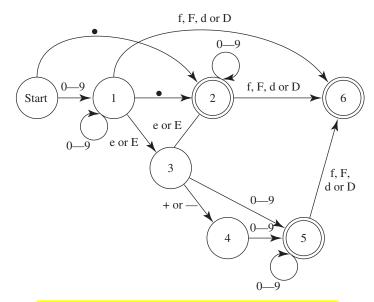

FIGURE 11.2:   *Finite state machine recognizing floating-point numbers*