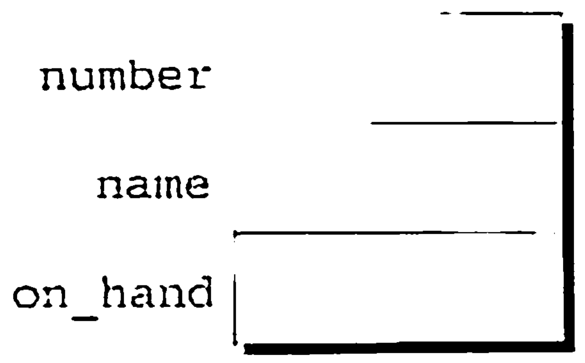
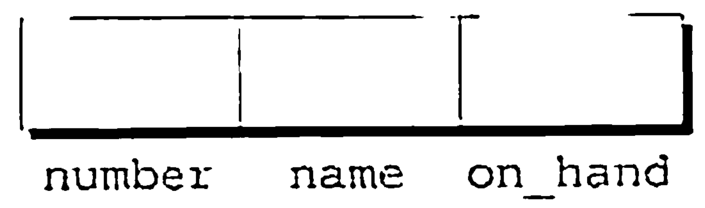
Usually it's not necessary to draw structures in such detail. I'll normally show them more abstractly, as a series of boxes:



I may sometimes draw the boxes horizontally instead of vertically:



Member values will go in the boxes later; for now, I've left them empty.

Each structure represents a new scope; any names declared in that scope won't conflict with other names in a program. (In C terminology, we say that each structure has a separate ***name space*** for its members.) For example, the following declarations can appear in the same program:

```
struct {
  int number;
  char name[NAME_LEN+1];
  int on_hand;
} part1, part2;

struct {
  char name[NAME_LEN+1];
  int number;
  char sex;
} employee1, employee2;
```

The `number` and `name` members in the `part1` and `part2` structures don't conflict with the `number` and `name` members in `employee1` and `employee2`.

Initializing Structure Variables

Like an array, a structure variable may be initialized at the time it's declared. To initialize a structure, we prepare a list of values to be stored in the structure and enclose it in braces:

```
struct {
  int number;
  char name[NAME_LEN+1];
  int on_hand;
} part1 = {528, "Disk drive", 10},
  part2 = {914, "Printer cable", 5};
```