```
chan left[1:n,1:n](double);  # for circulating a left
chan up[1:n,1:n](double);    # for circulating b up

process Worker[i = 1 to n, j = 1 to n] {
  double aij, bij, cij;
  int LEFT1, UP1, LEFTI, UPJ;
  initialize above values;

  # shift values in aij circularly left i columns
  send left[i,LEFTI](aij); receive left[i,j](aij);
  # shift values in bij circularly up j rows
  send up[UPJ,j](bij); receive up[i,j](bij);
  cij = aij * bij;

  for [k = 1 to n-1] {
    # shift aij left 1, bij up 1, then multiply and add
    send left[i,LEFT1](aij); receive left[i,j](aij);
    send up[UP1,j](bij); receive up[i,j](bij);
    cij = cij + aij*bij;
  }
}
```

Figure 9.7   Matrix multiplication by blocks.