```
chan first[1:P](int edge[n]);      # for exchanging edges
chan second[1:P](int edge[n]);
chan answer[1:P](bool);            # for termination check

process Worker[w = 1 to P] {
  int stripSize = m/W;
  int image[stripSize+2,n];    # local values plus edges
  int label[stripSize+2,n];    #   from neighbors
  int change = true;
  initialize image[1:stripSize,*] and label[1:stripSize,*];

  # exchange edges of image with neighbors
  if (w != 1)
    send first[w-1](image[1,*]);        # to worker above
  if (w != P)
    send second[w+1](image[stripSize,*]);   # to below
  if (w != P)
    receive first[w](image[stripSize+1,*]); # from below
  if (w != 1)
    receive second[w](image[0,*]);    # from worker above

  while (change) {
    exchange edges of label with neighbors, as above;
    update label[1:stripSize,*] and set change to true if
      the value of the label changes;
    send result(change);        # tell coordinator
    receive answer[w](change);  # and get back answer
  }
}
```

Figure 9.3 (a)   Region labeling: Worker processes.