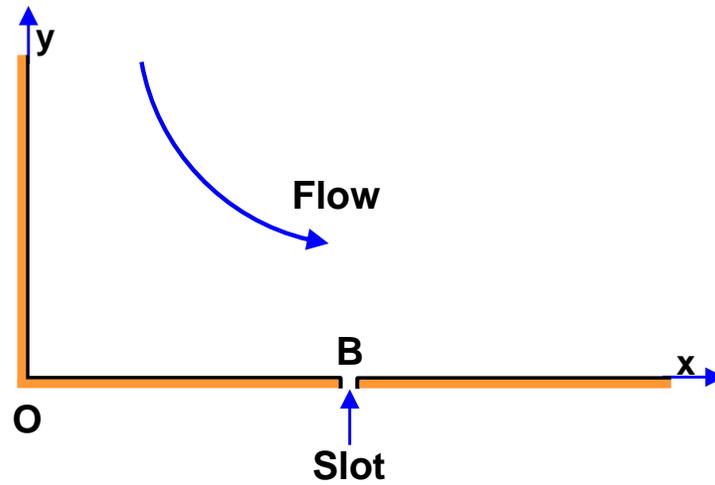## Problem 120B

Consider the irrotational, planar flow of an incompressible and inviscid fluid in a right-angle corner:

The basic corner flow ($\psi = Cxy$, $\phi = C(x^2 - y^2)/2$) is modified by the fact that fluid is being injected into the flow through a slot at the location, B, shown above where the distance OB is denoted by a. The volume rate of injection of fluid per unit depth normal to the sketch is denoted by Q. Find the location of the point between O and B where the velocity is zero (in terms of C, a and Q).