digraph {

"" [shape=none]

"C" [shape=doublecircle]

"E" [shape=doublecircle]

"" -> "A"

"A" -> "B"[label="b", weight="b"];

"A" -> "C"[label="a", weight="a"];

"A" -> "C"[label="b", weight="b"];

"B" -> "C"[label="b", weight="b"];

"B" -> "C"[label="$", weight="$"];

"C" -> "D"[label="a", weight="a"];

"C" -> "D"[label="b", weight="b"];

"C" -> "E"[label="a", weight="a"];

"D" -> "B"[label="a", weight="a"];

"D" -> "C"[label="a", weight="a"];

"E" -> "D"[label="$", weight="$"];

"E" -> "E"[label="b", weight="b"];

}