

CLAIMS

1. A catheter assembly comprising:
 - a catheter;
 - a needle having a distal tip and disposed in the catheter;
 - a catheter hub carrying the catheter and the needle;
 - a needle shield connected to the catheter hub when the needle is in a first position; and
 - a clip disposed in the needle shield that cooperates with the needle, the clip including:
 - a first leg disposed on a first plane;
 - a second leg disposed on a second plane and angularly connected to the first leg, the second leg having a foot and a latch; and
 - a first flag extending from the second leg toward the first leg;wherein
 - the foot is disposed between the first and second legs, the foot extends outwardly from the first flag and away from the first leg and the second leg;
 - the latch extends upwardly from the foot and is positioned between the first plane and the second plane;
 - the latch is configured to engage the catheter hub such that the latch engages the catheter hub in the first position of the needle; and
 - the latch disengages the catheter hub when the needle is retracted to a second position to enclose at least a portion of the needle.
2. The catheter assembly of claim 1, wherein the first flag includes the foot and the foot includes the latch.

3. The catheter assembly of claim 1, wherein the foot is perpendicular to the second leg.
4. The catheter assembly of claim 1, wherein the latch is perpendicular to the foot.
5. The catheter assembly of claim 2, wherein:
the first leg includes a second flag; and
the second flag extends from the first leg toward the second leg, and the first and second flags are disposed between the first and second legs.
6. The catheter assembly of claim 5, wherein:
the first flag and the second flag are parallel to each other and disposed on separate planes.
7. The catheter assembly of claim 1, wherein:
the foot is disposed between the first and second planes.
8. The catheter assembly of claim 1, wherein the first leg includes a U-shaped spade.
9. The catheter assembly of claim 8, wherein the U-shaped spade includes an angled lead-in portion.
10. The catheter assembly of claim 8, wherein the U-shaped spade includes an outer wall that is exposed to an outside of the catheter assembly.
11. The catheter assembly of claim 8, wherein the U-shaped spade is disposed at a distal end of the first leg.

12. The catheter assembly of claim 1, wherein the first position of the needle biases the second leg toward the first leg of the clip into an open position during needle use.
13. The catheter assembly of claim 5, wherein the second position of the needle allows the clip to move to a closed position to block the distal tip of the needle by the first flag and the second flag when the needle is retracted after needle use.
14. A clip for use in a catheter assembly, the clip comprising:
 - a first leg disposed on a first plane;
 - a second leg disposed on a second plane and angularly connected to the first leg, the second leg having a foot and a latch; and
 - a first flag extending from the second leg toward the first leg;wherein
 - the foot is disposed between the first and second legs, the foot extends outwardly from the first flag and away from the first leg and the second leg;
 - the latch extends upwardly from the foot and is positioned between the first plane and the second plane;
 - the latch is configured to engage a catheter hub such that the latch engages the catheter hub in a first position of a needle; and
 - the latch disengages the catheter hub when the needle is retracted to a second position to enclose at least a portion of the needle.