WHAT IS CLAIMED IS:

1. A pusher assembly for a stent delivery device, the pusher assembly ~~including~~ comprising:

a distal end of an elongate inner member; and

a stent-engaging member having a proximal end and a distal end, the proximal end of the stent-engaging member being at least partially inside the distal end of the elongate inner member, the stent-engaging member ~~including~~ comprising a portion that radially outwardly extends towards the distal end of the stent-engaging member, the stent-engaging member configured to move a stent when distally advanced and configured to not move a stent when proximally retracted, wherein the stent-engaging member ~~includes~~ comprises an aperture, wherein the elongate inner member ~~includes~~ comprises an inner layer, and wherein the inner layer of the elongate inner member at least partially fills the aperture.

2. The pusher assembly of Claim 1, wherein the stent-engaging member has a first internal diameter, wherein the elongate inner member has a second internal diameter proximal to the proximal end of the stent-engaging member, and wherein the first internal diameter is substantially equal to the second internal diameter.

3. The pusher assembly of Claim 1 or 2, wherein the portion has a shovel shape having a curved distal end, or wherein the portion has a shovel shape having a flat distal end, or wherein the portion has a shovel shape having a flared distal end.

4. The pusher assembly of any ~~one~~ of Claims 1-3, wherein the stent-engaging member ~~includes~~ comprises a stem and a ratchet mechanically coupled to the stem, the ratchet ~~including~~ comprising the portion.

5. The pusher assembly of Claim 4, wherein the stem ~~includes~~ comprises the aperture.

6. The pusher assembly of Claim 4 or 5, wherein the proximal end of the stent-engaging member ~~includes~~ comprises the stem.

7. The pusher assembly of any ~~one~~ of Claims 4-6, wherein the ratchet is mechanically coupled to the stem by a plurality of spot welds.

8. The pusher assembly of any ~~one~~ of Claims 1-7, wherein the aperture ~~includes~~ comprises a plurality of holes.

9. The pusher assembly of any ~~one~~ of Claims 1-8, wherein the distal end of the stent-engaging member ~~includes~~ comprises a cutout and wherein the pusher assembly further ~~includes~~ comprises a tube positioned around the distal end of the stent-engaging member and at least partially filling the cutout.

10. The pusher assembly of Claim 9, wherein the cutout ~~includes~~ comprises a plurality of helical slots.

11. The pusher assembly of any ~~one~~ of Claims 1-10, wherein the stent is plain woven, and wherein the portion is configured to engage an intersection between filaments of the woven stent.

12. The pusher assembly of any ~~one~~ of Claims 1-11, wherein the stent-engaging member comprises a nickel-titanium alloy.

13. A stent delivery device ~~including~~ comprising:

an elongate outer member at least partially defining an outer member lumen;

an elongate inner member coaxially positioned within the outer member lumen;

the pusher assembly of any ~~one~~ of Claims 1-12; and

an atraumatic tip mechanically coupled to the stent-engaging member.

14. The stent delivery device of Claim 13, wherein the elongate inner member at least partially defines a guidewire lumen, wherein the stent-engaging member at least partially defines the guidewire lumen, and wherein the atraumatic tip at least partially defines the guidewire lumen.

15. The stent delivery device of Claims 13 or 14, wherein the atraumatic tip ~~includes~~ comprises:

a generally conical distal end; and

a generally cylindrical proximal end ~~including~~ comprising at least one aperture in fluid communication with the outer member lumen.

16. A method of manufacturing a pusher assembly, the method ~~including~~ comprising mechanically coupling a proximal end of a stent-engaging member at least partially inside a distal end of an elongate inner member, the stent-engaging member ~~including~~ comprising a portion that radially expands towards a distal end of the stent-engaging member, the stent-engaging member configured to move a stent when distally advanced and configured to not move a stent when proximally retracted, the stent-

engaging member ~~including~~ comprising an aperture and the elongate member ~~including~~ comprising an inner layer, wherein mechanically coupling ~~includes~~ comprises at least partially filling the aperture with the inner layer.

17. The method of Claim 16, wherein mechanically coupling ~~includes~~ comprises heat shrinking a flared distal end of the elongate inner member around the proximal end of the stent-engaging member.

18. The method of Claims 16 or 17, wherein the stent-engaging member ~~includes~~ comprises a ratchet and a stem and wherein the method further ~~includes~~ comprises spot welding the ratchet to the stem.

19. The method of any ~~one~~ of Claims 16-18, ~~further comprising~~ wherein forming the stent-engaging member ~~by~~ comprises cutting, deforming, and heat setting a hypotube.