CLAIMS

1. A plunger for a retractable syringe comprising a barrel that comprises a mounting member to which is mountable a repleaceable needle assembly, said plunger comprising: a biasing means; a plunger member releasably connected to a control rod; a plunger housing; and a plunger seal mounted to the plunger member; wherein the control rod comprises an arm that initially engages said plunger housing to maintain said biasing means in an initially energized state prior to retraction, wherein the plunger member comprises a needle-engaging portion capable of engaging a retractable needle of the repleaceable needle assembly to facilitate needle retraction and the plunger housing comprises one or more lock elements capable of forming a lock with the barrel, or a barrel collar, after retraction.

2. The plunger of Claim 1, wherein the plunger housing comprises an arm having a shoulder which locks onto the barrel or barrel collar.

3. The plunger of Claim 2, wherein the collar comprises a release ring that comprises a rim, wherein the shoulder locks onto the rim of the release ring.

4. The plunger of any one of Claims 1 to 3, arranged so that at the end of depression of said plunger to deliver fluid contents of said retractable syringe, said control rod is disengageable from said plunger housing to facilitate a release of energy from said biasing means to thereby retract said control rod and said plunger member with a needle coupled thereto.

5. The plunger of any one of Claims 1 to 4, wherein the biasing means is a spring.

6. A retractable syringe kit comprising a barrel prefilled with fluid contents and that comprises a mounting member to which is removably mountable a repleaceable needle assembly and the plunger of any one of Claims 1-5 in combination; and a plurality of replaceable needle assemblies.

7. The retractable syringe kit of Claim 6, wherein the plurality of needle assemblies respectively comprise a 0.5 inch needle, a 1.0 inch needle and a 1.5 inch needle.

8. The retractable syringe kit of Claim 6 or Claim 7, which comprises a plug removably mounted to the mounting member of the barrel.

9. A retractable syringe comprising: a replaceable needle assembly removably mounted to a mounting member of a barrel of the retractable syringe and a plunger according to any one of Claims 1-5.

10. The retractable syringe kit of any one of Claims 6-8 or the retractable syringe of Claim 9 wherein the replaceable needle assembly comprises a retractable needle that is engageable by said plunger to facilitate retraction of the retractable needle; a needle mount that is removably mountable to the mounting member of the barrel; and a needle retainer to prevent inadvertent retraction of said retractable needle.

11. A method of operating a retractable syringe comprising a barrel and a plunger according to any one of Claims 1-5, including the step of removably mounting a replaceable needle assembly comprising a retractable needle that is engageable by said plunger to facilitate retraction of the retractable needle; a needle mount that is removably mountable to the barrel; and a needle retainer to prevent inadvertent retraction of said retractable needle to a barrel of a retractable syringe prefilled with fluid contents.

12. The method of Claim 11, which includes the step of removing a plug from a mounting member of the barrel prior to removably mounting the replaceable needle assembly to the mounting member.

13. The method of Claim 11 or Claim 12, which includes the step of screw-threadedly mounting a needle mount of the replaceable needle assembly to a mounting member of the barrel.

14. A method of making a pre-filled syringe including the steps of coupling a plunger according to any one of Claims 1-5 and a plunger seal in a syringe barrel, wherein the syringe barrel is prefilled with fluid contents, and comprises a plug member removably mounted thereto or a replaceable needle assembly removably mounted thereto.