CLAIMS

1. A syringe (1) with high safety in use, comprising a syringe body (2) adapted to accommodate slidingly a plunger (3), the syringe body having a protruding end that is adapted to allow the mating of a base end (5) of a needle (6), characterized in that it comprises means (8) for removing the needle and/or a cap (7) of the needle which are interposed between said syringe body (2) and said base end (5) of the needle (6), said needle removal means (8) being adapted to be moved in a rotary direction for removal of the needle (6) and/or of the protective cap (7) of the needle, the rotary movement of said needle removal means (8) causing a sliding of said needle removal means (8) on a end part (4) of the body (2) of the syringe.

2. The syringe according to claim 1, characterized in that said needle removal means (8) comprise a tubular body adapted to be mated to the end of the syringe body and to allow engagement of the base end (5) of the needle (6) therein.

3. The syringe according to claim 2, characterized in that said tubular body (8) allows the screwing of said needle end (5) therein.

4. The syringe according to one or more of the preceding claims, characterized in that the diameter of a hole of the tubular body (8) directed toward the syringe (1) is equal to, or greater than, the hole of the base end (5) of the needle (6) that is connected to the protruding part of the syringe.

5. The syringe according to one or more of the preceding claims, characterized in that it comprises, between said tubular body (8) and said cap (7) fitted on said needle, a washer (11).

6. The syringe according to one or more of the preceding claims, characterized in that said tubular body (8) has slots (10) adapted to allow the engagement of wings (9) defined at the base end of said needle.

7. The syringe according to one or more of the preceding claims, characterized in that said tubular body (8) is adapted to slide on the body (2) of said syringe.