CLAIMS

1. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap, comprising at least one inlet opening (2; 2') for supply fluid, and at least one outlet opening (3; 3') for supply fluid; a main closure member (4; 4') being capable of being received in a main seat formed in one of the at least one outlet or inlet openings to close the tap and of being removed from the main seat in order to open the tap and allow passage of the supply fluid between the inlet and outlet openings; control means comprising a push element (67) to control a movement of the main closure member by means of a control rod (6, 6'); and timer means intended for moving the main closure member into the main seat at the end of a preset time interval following removal of the main closure member, an element (27; 27') forming an intermediate closure member and an associated intermediate seat also being provided, an arrangement of the device being such that a movement between positions in the intermediate seat and outside the intermediate seat of the intermediate closure member is controlled by the timer means, synchronisation being carried out between the movements of the main and intermediate closure members respectively by means of the supply fluid, and the arrangement of the device being such that the supply fluid passes from the at least one inlet opening to the at least one outlet opening through two paths, a first path passing only through the main seat and a second path passing through the main seat and the intermediate seat, and such that, as long as a user keeps pressure on the push element (67), the tap remains closed, since the tap can only be opened to allow the supply fluid to pass after releasing the pressure on the push element (67).

2. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to claim 1, wherein the supply fluid is water.

3. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to either claim 1 or claim 2, characterised in that synchronisation of the main and intermediate closure members (4, 27; 4', 27') is such that when the intermediate closure member is in the intermediate seat, the main closure member is also in the main seat, and when the intermediate closure member is not in the intermediate seat, the main closure member is not in the main seat either.

4. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to any one of claims 1 to 3, characterised in that the timer means comprise a main timer chamber that affects a displacement of the control rod, the main timer chamber being filled with a timer fluid.

5. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to claim 4, wherein the timer fluid is a different fluid to the supply fluid.

6. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to either claim 4 or claim 5, wherein the timer fluid is air.

7. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to any one of claims 1 to 6, characterised in that the intermediate closure member consists of a flexible membrane, the actuating rod pushing the flexible membrane into the intermediate seat so that the main closure member is also pushed into the main seat and the actuating rod moves away from and leaves a mechanical connection with the membrane to release the membrane, causing the membrane to leave the intermediate seat and causing the main closure member to leave the main seat.

8. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to claim 7, wherein the flexible membrane is made from an elastomer material.

9. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to any one of claims 1 to 8, characterised in that an intermediate discharge chamber is provided, said chamber being able to fill with supply fluid between the two main and intermediate closure members, the synchronisation arrangement being such that, when the two main and intermediate closure members are received in their respective seat, the intermediate discharge chamber is empty or substantially empty and, when the two main and intermediate closure members have left their respective seat, the intermediate discharge chamber is filled with supply fluid.

10. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to any one of claims 1 to 9, characterised in that one of the at least one outlet opening or the at least one inlet opening receiving the main seat of the main closure member is arranged axially in relation to the tap, while the other

one of the at least one outlet opening or the at least one inlet opening is arranged radially in relation to the tap.

11. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to claim 10, characterised in that one of the at least one outlet opening or the at least one inlet opening arranged axially is the inlet opening, while the outlet opening or openings is/are arranged radially.

12. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to any one of claims 1 to 11, characterised in that displacement of the control rod to control passage of the main closure member out of the main seat takes place by pushing towards the main closure member.

13. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to claim 4 or any one of claims 5 to 12 when dependent on claim 4, characterised in that non-return evacuation means are provided for the timer fluid in the main timer chamber.

14. Device forming a timer-operated tap or timer cartridge for a device forming a timer-operated tap according to claim 13, wherein the non-return evacuation means is a lip seal (65).