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(54) **CYLINDER HEAD AUTOMATIC LOCKING APPARATUS AND SPOOLED YARN DYEING MACHINE COMPRISING THE APPARATUS**

(57) Provided in the present invention are a vat cover automatic locking apparatus and a spooled yarn dyeing machine comprising the apparatus. The vat cover automatic locking apparatus is arranged between a vat cover (1) and a vat (2). Arranged on the vat cover (1) are teeth (12) that are uniformly distributed along a circumference. A hoop (21) holding the vat cover (1) is arranged on the upper-end of the vat (2). The hoop (21) is provided with an annular groove for accommodating the teeth (12) and with an annular flange arranged above the annular groove. The annular flange is provided thereon with grooves (213) matching the teeth (12). Also comprised are: a boom (3), arranged above the vat cover (1), pivotly

connected at a first end to the vat cover (1), and pivotly connected at a second end to the hoop (21); a driving device having a driving end, where the driving end is connected to a location on the vat cover (1) deviated from the central axis of the vat cover (1) to drive the vat cover (1) to rotate around the central axis of the vat cover (1), thereby locking or unlocking the vat cover (1). The present invention saves labour, has great production efficiency, reduces labour costs, increases the levels of mechanization and automation for the apparatus, and facilitates implementation of automated production.

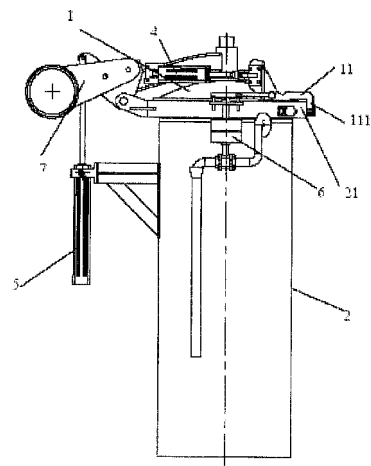


Fig. 3