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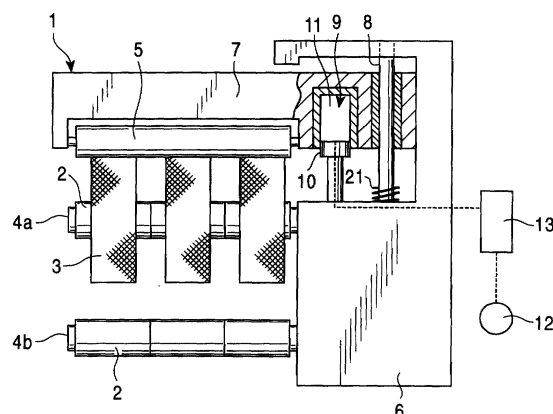
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(54) **Yarn winding apparatus**

(57) The shock imparted by the contact roller against the package when a yarn winding apparatus switches from gap winding to normal winding is lessened. An elastic holding means 21, such as a plate spring or the like, is positioned between frame 6 and slide box 7. The slide box 7 can be raised and lowered relative to the frame 6, and holds a contact roller 5. The elastic holding means 21 exerts elastic counter-force in the opposite direction to that in which the contact roller 5 is drawn to the package 3. This softens the sudden spike in contact pressure normally seen when the contact roller 5 makes contact with the package 3. Additionally, the distance of separation between the contact roller 5 and the bobbin 2 can be reliably maintained at the pre-set level during gap winding. This makes it easier to estimate the exact contact time at which the contact roller 5 will meet the package 3, thereby enabling the switch from programmed control of the bobbin rotation speed to feedback control of the bobbin rotation speed to be timed precisely to the moment of contact between the contact roller 5 and the bobbin 2.

FIG. 1





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