

Title (en)
Nipper for cotton combers

Title (de)
Zange für Baumwollkämmaschinen

Title (fr)
Pince pour peigneuses de type coton

Publication
EP 1046732 A1 20001025 (EN)

Application
EP 99890120 A 19990413

Priority
EP 99890120 A 19990413

Abstract (en)
A nipper of a combing machine usable either for "feeding while detaching" also called "backward feed" and for "feeding before detaching" also called "forward feed", comprises a ratchet system (6, 7, 16, 17) for activating a feed roll (5). This ratchet system consists of a ratchet gear (6) attached to the feed roll (5), one or two ratchet levers (7, 16), one of them with a spring (9) pushing said ratchet lever (7) against said ratchet gear (6), a guide plate (11) fixed to the lower nipper, a pin (10) fixed to the ratchet lever (7), wherein said guide plate and said pin (10) cooperate that the upper nipper may be opened for cleaning and maintaining the feed roll (5) and closed afterwards in a proper way which allows for immediate restart of the comb without any further action. The change from one feed system to the other is achieved by an exchange of the backward feed ratchet gear (6) to forward feed ratchet gear (17) - and vice versa - thus either the one or the other lever (7, 16) is engaged with ratchet gear (6, 17). The described mechanism might be either used as an upgrade for combers already in operation or as enhancement of newly built combers. <IMAGE>
Nipper has lower nipping unit with nipper plate (1) connected to feed roll (5) with ratchet gear (6). Backward feeding ratchet lever (7) connected to upper nipping unit with knife (2), is pressed against ratchet gear. Guide plate (11) and pin (10), restrict upward movement of ratchet lever during opening movement of upper nipping unit and pass the lever over ratchet during closing. Nipper has either of backward feed ratchet lever and forward feed ratchet lever (16), engaged to the ratchet gear. Ratchet gear is formed with teeth portion and smooth portion over cylindrical surface with diameter 20-30 mm. Ratchet lever is pressed by spring (9) against ratchet gear by force of approximately 1N. Spiral spring (12) acting on feed roll contacts the feed roll at extension (13).

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• [A] PATENT ABSTRACTS OF JAPAN vol. 14, no. 435 (C - 0760) 18 September 1990 (1990-09-18)

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