

Title (en)  
Stitching device for printing machines.

Title (de)  
Heftvorrichtung für Druckmaschinen.

Title (fr)  
Dispositif de brochage pour machines d'impression.

Publication  
**EP 0023985 A1 19810218 (DE)**

Application  
**EP 80104178 A 19800717**

Priority  
DE 2932757 A 19790813

Abstract (en)

1. Wire stitching device for printing machines having a rotating stitching cylinder (136), on to which a cut-to-size piece of wire (1) is transferred, and formed to the shape of a staple by means of female dies (98) and male dies (89) movable relative to each other on the stitching cylinder, and inserted into the product to be stitched, the male die (89) being designed as a cam for the piece of wire to be transferred, characterised in that there is provided as a female die in the stitching cylinder (136) a female die part (98), which is flexibly pretensioned radially outwardly into the transfer position, and into which the male die (89) can be moved from its locked position for the wire (1) to form the staple, this movement of the male die being effected in a plane at right angles to the axis of the stitching cylinder by means of an open four bar mechanism having four hinge axes (83, 84, 87, 88) one of whose ends, formed by the end of a first guide arm (85), is secured to a control spindle (83), which is rotatable via connecting members (93 to 97) by a cam roller (92) sensing a control curve (91) and rotating with the stitching cylinder (136), and whose other end, formed by the end of a second guide arm (86), is in hinged connection (at 84) to a height-adjustable abutment part (107) receiving the back of the staple, when the male die (89) moves down into the female die (98), which (107) in its inserted position forms the base of the female die, which is fixed in the stitching cylinder, the free ends of the first and second guide arms (85 and 86) being in hinged connection (at 87 and 88) via a middle, third guide arm (89'), which also carries the male die (89) and, in the final phase of movement of the male die into the interior of the female die, takes the female die (98) against its prestress into the interior of the stitching cylinder with the aid of a cam (109, 110), so that the limbs of the staple are gradually released from the female die (98) as the male die (89) pivots away laterally, and thus penetrate the product to be stitched (112).

Abstract (de)

Die in einer Drahtheftvorrichtung für eine Druckmaschine zur Klammerbildung zusammen mit einer Matrize (98) verwendete Patrizie (89) wird über ein offenes Viergelenk (83, 84, 85, 86, 87, 88) gesteuert. Matrize (98) und Patrizie (89) sind relativ zueinander bewegbar, wodurch die Schenkel einer zu bildenden Klammer abgebogen werden. Matrize (98) und Patrizie (89) sind in einem rotierenden Heftzylinder (136) angeordnet. Ein Ende (83) des Viergelenks (83, 84, 85, 86, 87, 88) ist über Verbindungsglieder (93, 94, 95, 96, 97) mit einer Steuerkurve (91) abtastenden mit dem Heftzylinder (136) rotierenden Kurvenrolle (92) verbunden und das andere Ende (84) stützt sich auf einem höhenverstellbaren Träger (114) ab und auf den mittleren Gelenken (87, 88) ist die Patrizie (89) gelagert. Durch den höhenverstellbaren Träger (114) ist eine Anpassung an unterschiedlich dicke Heftprodukte und eine zeitlich Führung bei der Übergabe einer Klammer durch die Patrizie (89) möglich.

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