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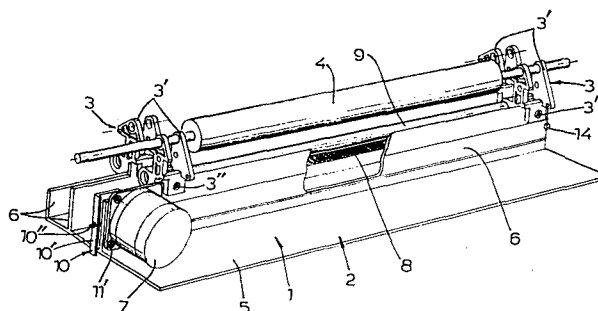
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Frame for an automatic printer.

⑤ The invention relates to a frame (1) for an automatic printer, composed of an intermediate part (2), which is connected on both sides with end parts (3), wherein a platen is rotatably mounted at both its ends. According to the invention the end parts (3) are die-castings from artificial material, wherein the platen is directly journaled, whilst the intermediate part (2) consists of an extruded section, which comprises a base plate (5) with at least two upstanding flanges (6), the end parts (3) being connected to two of the upstanding flanges (16).



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Frame for an automatic printer.

The invention relates to a frame for an automatic printer, composed of an intermediate part, which is connected on both sides with end parts, wherein a platen is rotatably mounted at both its ends.

5 The automatic printer may e.g. be of the daisy wheel type and may be applied in a work processing apparatus.

In a known embodiment of such frame the end parts are plate-shaped and are connected to the intermediate part by means of a large number of screws, which uses much labour
10 and is therefore expensive. Further the end plates are provided with bearings of artificial material for the platen, which of course forms a further complication.

It is an object of the present invention to provide a frame for an automatic printer of the type mentioned herein-
15 above, wherein this disadvantage is removed in a simple, but nevertheless effective manner.

For this purpose the frame according to the invention is characterized in that the end parts are die-castings from artificial material, wherein the platen is directly
20 journaled, whilst the intermediate part consists of an extruded section, which comprises a base plate with at least two upstanding flanges, the end parts being connected to two of the upstanding flanges.

Due to the fact that the end parts are made of
25 artificial material, it is possible according to the invention to journal the platen directly therein. Further, the end parts on both sides may be connected by means of only two screws to two upstanding flanges of the extruded section, which of course leads to a great saving of labour. The extruded section
30 is extremely rigid due to the fact that it consists of a base plate and a plurality of upstanding flanges, which is a further advantage of the frame according to the invention.

In order to minimize the costs for the dies for manufacturing the end parts, each end part may be composed
35 with advantage of two separate halves which are wholly equal, which halves are identical for both end parts.

In the known embodiment of the frame for an auto-

matic printer this frame is provided with a motor for driving a belt for the displacement of a carriage, this motor being mounted on one of the end plates by means of a motor support, whilst the belt may be tightened by means of a belt tightener.
5 This construction again considerably increases the time necessary for the mounting.

In order to provide an important improvement also in this respect it is proposed according to the invention that the motor is mounted on one of the upstanding flanges of
10 the extruded section by means of a clamping plate positioned at the side of the relative upstanding flange remote from the motor, the motor being connected to the clamping plate by means of screws, which are passed with play through passages formed in the relative upstanding flange.

15 In this manner it is possible to tighten the belt by means of the motor and the clamping plate, so that no further belt tightener is necessary anymore.

In the known frame the belt is passed over a roller driven by the motor and a freely rotating roller, this freely
20 rotating roller being supported by one of the side plates, which is a further factor causing that the assembly uses much labour.

In order to provide also an improvement in this respect it is proposed according to the invention that the
25 belt extends between two of the upstanding flanges of the extruded section, whilst the freely rotating roller is connected with one of these two upstanding flanges and is positioned underneath the relative end part.

Further a notch may be formed in the upstanding end
30 edges of said upstanding flanges at the relative side and the freely rotating roller may be supported in the two notches.

The invention will hereafter be elucidated with reference to the drawing, which shows an embodiment of a frame according to the invention for an automatic printer.

35 Fig. 1 is a perspective view of an embodiment of a frame according to the invention for an automatic printer.

Fig. 2 is an exploded perspective view of the frame according to fig. 1.

The drawing shows a frame 1, which is intended for an automatic printer, which may be e.g. of the daisy wheel type and which may be applied in a work processing apparatus.

This frame 2 is composed of an intermediate part 2, which consists of an extruded section, and of end parts 3 connected to both sides of the intermediate part 2, which end parts are in the form of die-castings of artificial material, whilst a platen 4 is directly journaled in these end parts.

The extruded section, which forms the intermediate part 2, consists of a base plate 5 with at least two upstanding flanges 6. In the embodiment shown in the drawing by way of example three upstanding flanges 6 are applied.

Each end part 3 is composed of two separate halves 3', which are wholly equal and which are identical for both end parts, as particularly shown in fig. 2. Each half 3' of an end part 3 is connected to one of the upstanding flanges 6 by means of one screw 3" only. Of course the application of four equal halves 3' leads thereto that a plurality of holes are formed in the end parts 3, which are not used, but due to this construction the costs of the dies for the manufacture of the end parts 3 are extremely low.

A motor 7, which serves for driving a belt 8 for displacing a carriage (not shown) along a guide shaft 9, is mounted on one of the upstanding flanges 6 of the extruded section by means of a clamping plate 10, which is positioned at the side of this upstanding flange 6 remote from the motor 7, which clamping plate is provided with a plurality of threaded holes 11, wherein screws 11' for the connection of the motor 7 are screwed.

The passages 12 in the upstanding flange 6 in question are dimensioned in such manner, that the screws 11' pass the upstanding flange 6 with play. In this manner it is possible to use the motor 7 and the clamping plate 10 for tightening the belt 8, so that no separate belt tightener has to be applied.

The clamping plate 10 comprises a bent over flange 10', wherein an adjustable stop screw 10" is mounted, which

contacts the upstanding end edge of the upstanding flange 6 in question.

The belt 8 is passed over a roller 13 driven by the motor 7 and over a freely rotating roller 14 and extends
5 between two of the upstanding flanges 6 of the extruded section.

The freely rotating roller 14 is supported by the end in question of the two upstanding flanges 6 extending on either side of the belt 8, which flanges are provided in
10 their upstanding end edges with a notch 15 for this purpose.

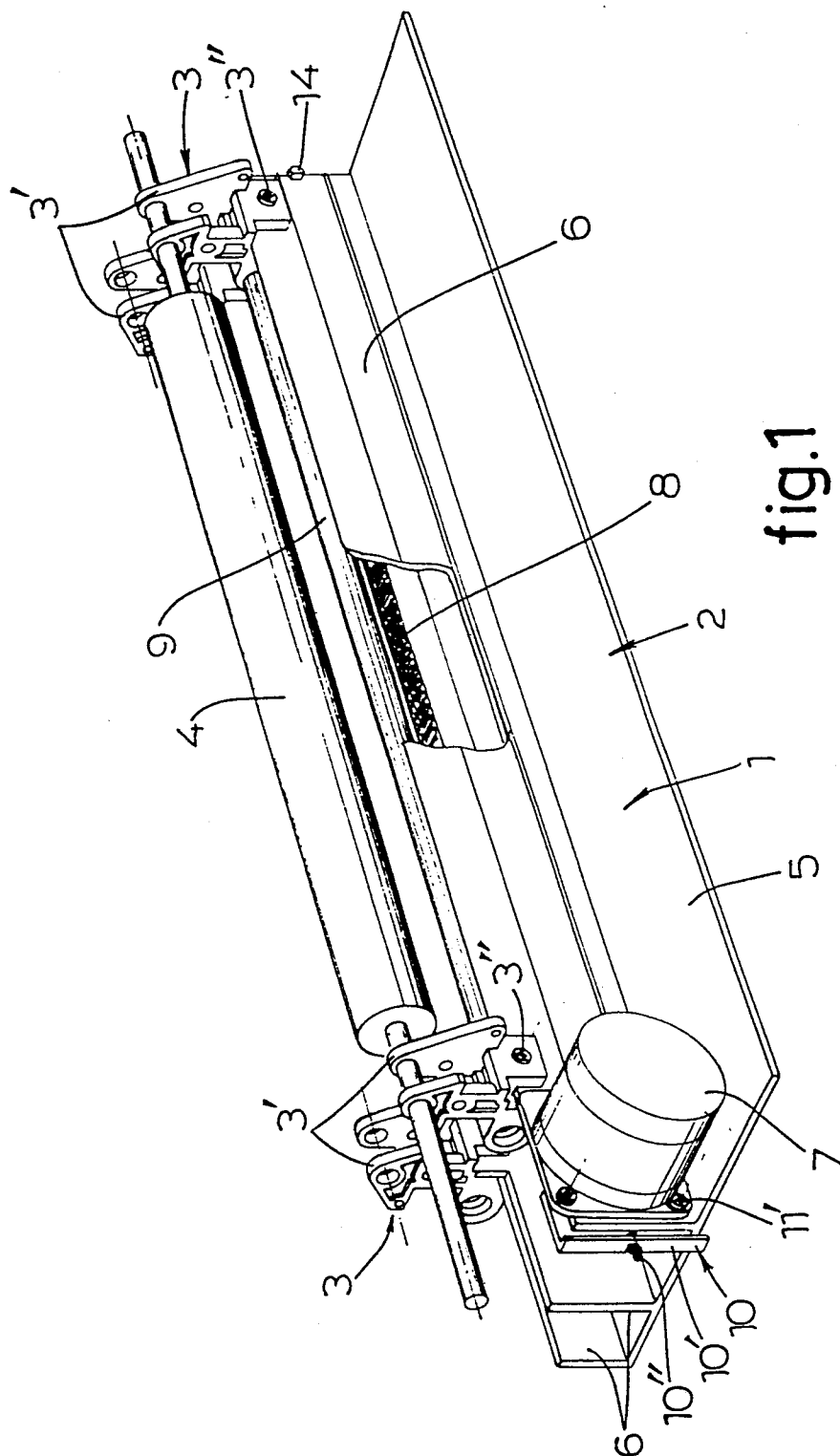
As shown in fig. 1, the freely rotating roller 14 is positioned underneath the end part 3 positioned at the side in question.

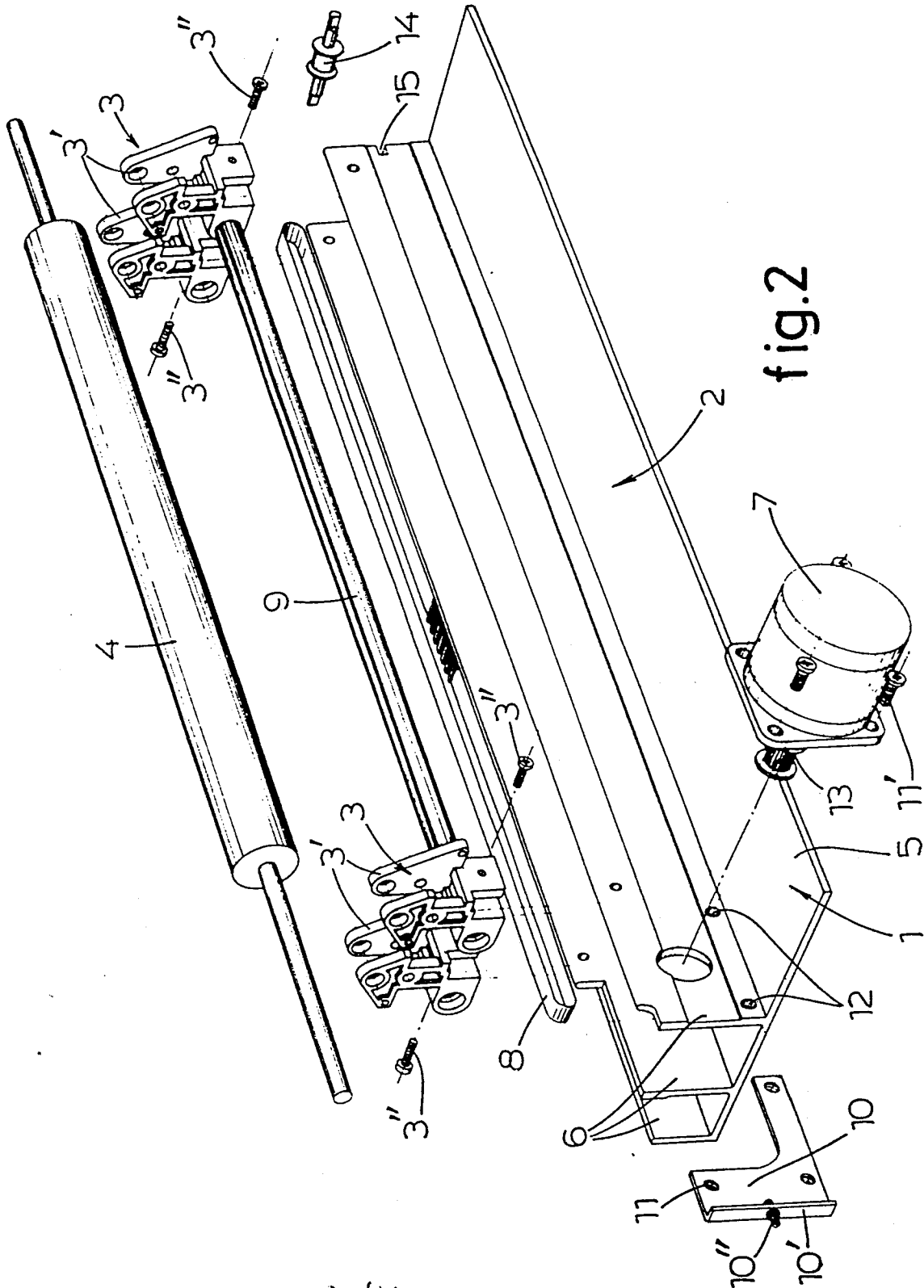
According to the invention a frame 1 for an automatic
15 printer is provided, which may be assembled very quickly, whilst the mounting of the cooperating parts may also take place in a quick manner, so that an important saving in labour costs is obtained.

The invention is not restricted to the embodiment
20 shown in the drawing by way of example, which may be varied in several ways within the scope of the invention.

Claims:

1. Frame for an automatic printer, composed of an intermediate part, which is connected on both sides with end parts, wherein a platen is rotatably mounted at both its ends, c h a r a c t e r i z e d in that the end parts are die-
5 castings from artificial material, wherein the platen is directly journaled, whilst the intermediate part consists of an extruded section, which comprises a base plate with at least two upstanding flanges, the end parts being connected to two of the upstanding flanges.
- 10 2. Frame according to claim 1, c h a r a c t e r i z e d in that each end part is composed of two separate halves which are wholly equal, which halves are identical for both end parts.
- 15 3. Frame according to claim 1 or 2, provided with a motor for driving a belt for the displacement of a carriage, c h a r a c t e r i z e d in that the motor is mounted on one of the upstanding flanges of the extruded section by means of a clamping plate positioned at the side of the relative upstanding flange remote from the motor, the motor being
20 connected to the clamping plate by means of screws, which are passed with play through passages formed in the relative upstanding flange.
- 25 4. Frame according to claim 3, wherein the belt is passed over a roller driven by the motor and a freely rotating roller, c h a r a c t e r i z e d in that the belt extends between two of the upstanding flanges of the extruded section, whilst the freely rotating roller is connected with one end of these two upstanding flanges and is positioned underneath the relative end part.
- 30 5. Frame according to claim 4, c h a r a c t e r i z e d in that a notch is formed in the upstanding end edges of said upstanding flanges at the relative side and that the freely rotating roller is supported in the two notches.







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EUROPEAN SEARCH REPORT

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Application number

EP 84 20 0367

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
A	CH-A- 266 655 (PAILLARD S.A.) * Whole document * -----	1	B 41 J 29/02
			TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
			B 41 J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 10-07-1984	Examiner VAN DEN MEERSCHAUT G
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	