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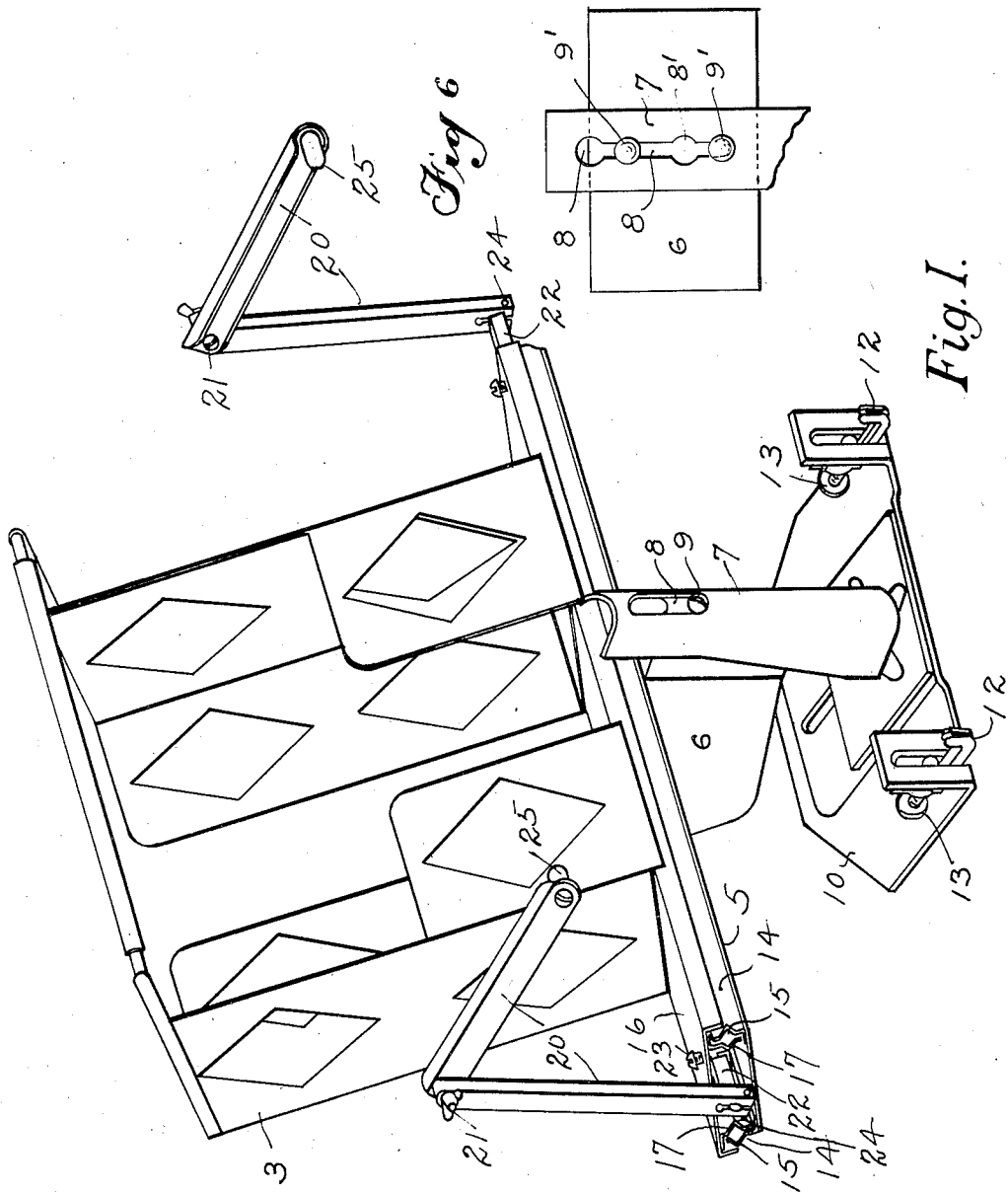
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2,012,484

TYPEWRITER ATTACHMENT

Filed March 2, 1931

2 Sheets-Sheet 1



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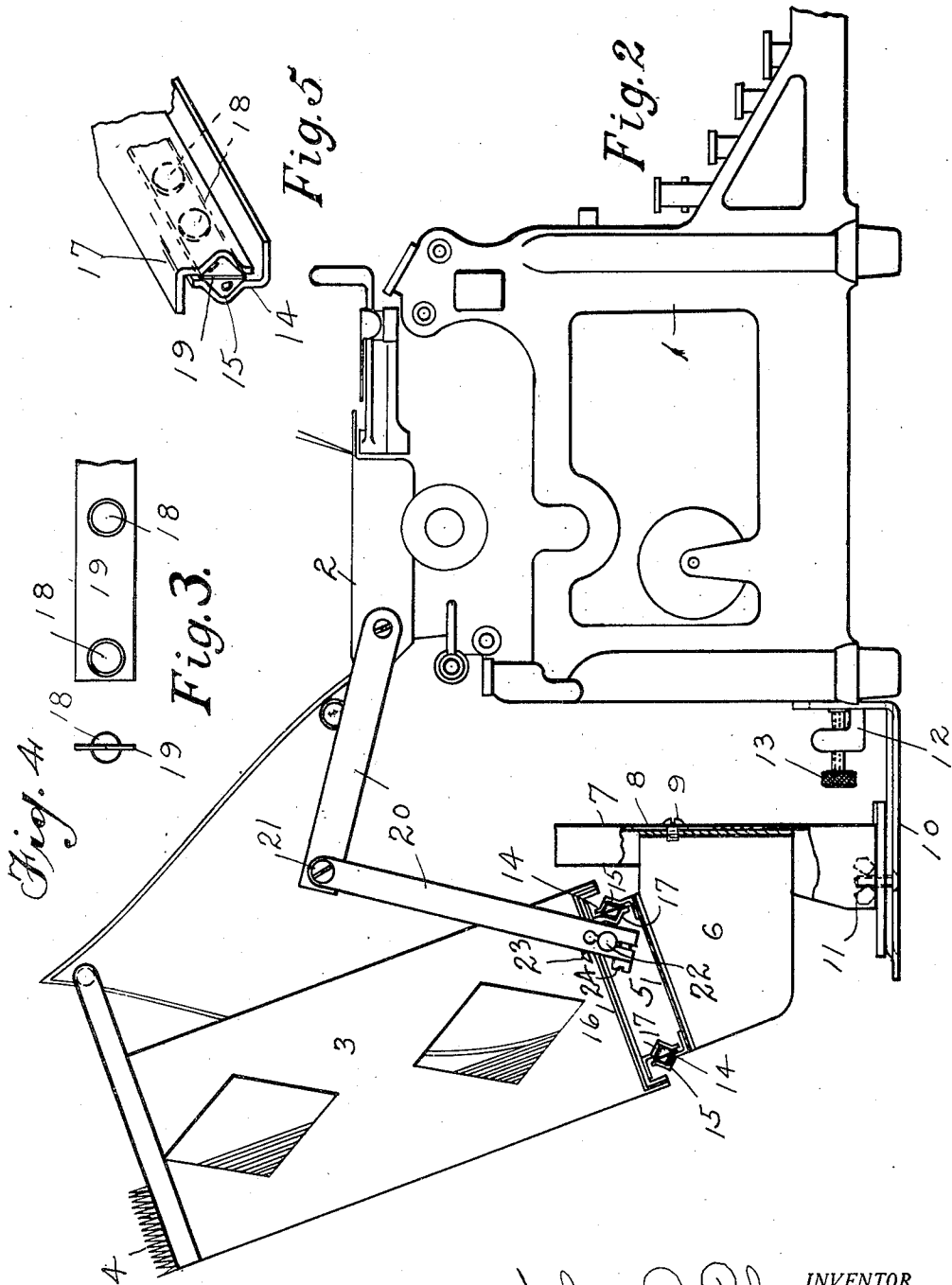
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TYPEWRITER ATTACHMENT

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TYPEWRITER ATTACHMENT

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4 Claims. (Cl. 197-133)

My invention relates to typewriters and more particularly to an attachment therefor for carrying a supply of manifolding material to and fro in unison with the travel of the platen carriage of the typewriter.

While it is quite old in this art to provide a reciprocatory carrier operatively connected with the platen carriage for unison travel, the present invention provides adjustable coupling means for interconnecting such traveling carrier with typewriter platens of different sizes, such interconnecting motion transmitting means being adjustable to compensate for different relative spacing between the traveling carrier and the typewriter platen carriage, and to further enable relative adjustment of the carrier and carriage longitudinally of their paths of travel and also provides an adjustable mounting for the traveling carrier having improved anti-friction bearings.

The object of the invention is to simplify the structure as well as the means and mode of operation of traveling carriers for manifolding material whereby they will not only be cheapened in construction but will be more efficient in use, positive in operation, uniform in action, easily controlled and adjusted and unlikely to get out of repair.

A further object of the invention is to provide improved coupling means between the carrier and the traveling platen carriage of the typewriter.

A further object of the invention is to provide adjustable coupling means between the carrier and the typewriter platen carriage to enable the manifolding material carrier to be universally applicable to typewriters of different manufacture and of different sizes.

A further object of the invention is to provide adjustable coupling or motion transmitting means by which different relative spacing between the carrier and the typewriter may be compensated.

A further object of the invention is to provide adjustable motion transmitting means which will enable relative adjustment of the carrier and typewriter platen carriage longitudinally of their paths of travel preparatory to unison reciprocation.

A further object of the invention is to provide an improved mounting for the manifolding material carrier whereby said carrier may be adjusted vertically and horizontally to render it universally applicable to typewriters of different sizes.

A further object of the invention is to provide

an anti-friction mounting for the traveling carrier which will be economical in manufacture and which will enable freedom of movement whereby a minimum load or strain is imposed upon the typewriter platen carriage.

With the above primary and other incidental objects in view as will more fully appear in the specification, the invention consists of the features of construction, the parts and combinations thereof, and the mode of operation, or their equivalents, as hereinafter described and set forth in the claims.

Referring to the accompanying drawings wherein is shown the preferred but obviously not necessarily the only form of the embodiment of the invention, Fig. 1 is a perspective view of the typewriter attachment including the reciprocatory carrier, its mounting or support, and the adjustable coupling arms, forming the subject matter hereof.

Fig. 2 is a side elevation of a typewriter to which the manifolding material carrier forming the subject matter hereof has been applied. Fig. 3 is a detail side elevation and Fig. 4 an end elevation of the anti-friction bearing members and their carrier or spacer member. Fig. 5 is a detail perspective view of the anti-friction connection between the reciprocatory carrier and its support.

Fig. 6 is an enlarged detailed fragmentary view of the carrier support.

Like parts are indicated by similar characters of reference throughout the several views.

Referring to the accompanying drawings, 1 indicates a conventional form of typewriter of which 2 is the reciprocatory platen carriage. Mounted in the rear of the typewriter 1 for to and fro motion in unison with the travel of the typewriter platen carriage 2, is a basket or carrier 3 for a packet of manifolding material 4 which is progressively fed from the basket or carrier to the platen roll of the typewriter. The carrier 3 is mounted for reciprocatory motion upon a track member 5 supported upon rearwardly extending divergent wings 6 mounted upon a pedestal 7 for vertical adjustment. The pedestal 7 is slotted at 8 through which slot extends a clamp screw 9 engaging with the rearwardly extending divergent supporting wings 6. The pedestal 7 is in turn adjustably supported upon a base 10 for to and fro sliding adjustment toward and from the typewriter. The pedestal is secured in its adjusted position upon the base 10 by the clamp bolt 11. The base 10 is detachably engageable with the rear portion of the typewriter frame by means of clamp hooks 12 engageable

with the typewriter frame and tightened thereon by the adjusting screws 13. This construction enables the manifolding material carrier or basket 3 to be adjusted both vertically and horizontally to accommodate it to different typewriters of varying sizes and construction. As before pointed out one of the purposes of the invention is to afford universal adaptability of the carrier attachment to various styles of typewriters. The track member 5 is of substantially channel shape, the side flanges 14 of which, are formed with longitudinally extending oppositely disposed V shaped channels or grooves 15. The base 16 of the basket or carrier 3 is provided with similar dependent V grooved flanges 17 extending in complementary relation with the up-standing flanges 14 of the track member 5. For economy of manufacture the V grooved flanges 14 and 17 are preferably though not necessarily of identical formation and are spot welded or otherwise secured to the track member 5 and to the base 16 of the carrier or basket in reverse relation.

Interposed between the complementary flanges and seating within the registering V grooves thereof are anti-friction members 18 which may be either balls or rollers. Also interposed between the complementary flanges 14 and 17 are perforated spacer bars 19, the apertures of which are located at spaced intervals with the anti-friction members 18 projecting through such apertures into engagement with the V grooves of the flanges at opposite sides of the bars 19. These bars 19 are free for longitudinal floating movement in unison with the travel of the carrier but at a different rate of speed.

To interconnect the reciprocatory carrier with the platen carriage of the typewriter for unison travel, jointed arms 20 are provided at each side of the traveling carrier for contact engagement with the opposite sides of the platen carriage. The arms 20 are formed of interpivotated sections connected by clamp bolts 21 by which the sections of the arms 20 may be fixedly locked in adjusted relation. The arms 20 are also pivotally connected to longitudinally sliding bars 22 mounted in suitable guides on the under side of the base 16 of the carrier or basket and adapted to be locked in their adjusted position by set screws 23. The arms 20 are fixedly locked upon the terminal trunnions of the sliding bars 22 in their pivotally adjusted positions by means of clamp screws 24. By releasing the clamp bolts 21 and screws 24 the arms 20 may be extended or retracted relative to the carrier 3 to accommodate the attachment to different relative spacing between the carrier and the typewriter. After being adjusted to proper extended relation the bolts 21 and screws 24 are again tightened to hold the arms in such adjusted position. The arms 20 carry at their extremities fiber or other non-metallic contact heads 25 which have free sliding engagement with the lateral faces of the typewriter platen carriage. These contact heads 25 bear upon the lateral faces of the typewriter carriage and transmit the reciprocatory motion of the carriage to the manifolding material carrier. However the typewriter platen carriage is free for vertical movement independently of the arms 20 to enable the writing of capital letters in which case it is customary for the typewriter platen to be elevated.

The longitudinally adjustable bars 22, having sliding adjustment with the base 16 of the carrier enable the adjustment of the motion transmitting arms 20 toward and from each other and relative

to the carrier to accommodate the device to typewriters having platen carriages of different width. This relative adjustment of the arms and carrier by sliding movement of the bars 22 upon release of the set screws also enables the carrier to be adjusted relative to the typewriter platen carriage longitudinally of their paths of travel and thus permits the carrier to be more accurately aligned with the writing position upon the platen of the typewriter.

These various adjustments of the arms 20 relative to each other and relative to the carrier, and the capability of the arms 20 for extension and retraction together with the vertical and lateral adjustment of the carrier support render the attachment universally applicable to typewriters of a wide range of sizes and proportions and of many different styles.

In the modification disclosed in Fig. 6, the bracket 6 is mounted upon a pedestal 7 for vertical adjustment. The pedestal 7 has a vertical slot 8' laterally enlarged at spaced intervals through which slot extends a pair of clamping screws 9' engaging with the rearwardly extending bracket 6. This arrangement permits the use of a straight bracket 6 instead of the wing bracket disclosed in Fig. 1. The spaced headed studs 9 carried by the support bracket are insertable through the enlargements of the slot.

From the above description it will be apparent that there is thus provided a device of the character described possessing the particular features of advantage before enumerated as desirable, but which obviously is susceptible of modification in its form, proportions, detail construction and arrangement of parts without departing from the principle involved or sacrificing any of its advantages.

While in order to comply with the statute the invention has been described in language more or less specific as to structural features, it is to be understood that the invention is not limited to the specific features shown, but that the means and construction herein disclosed comprise the preferred form of several modes of putting the invention into effect and the invention is therefore claimed in any of its forms or modifications within the legitimate and valid scope of the appended claims.

Having thus described my invention, I claim:

1. In a typewriter attachment, a carrier for manifolding material mounted for travel to and fro in unison with the platen carriage of a typewriter, an arm upon one of said traveling members having sliding contact engagement transversely of the path of travel with the other traveling member comprising interpivotated sections, and means for locking the arm sections in different positions of pivotal adjustment whereby the operative range of the arm may be extended and retracted to greater or less degree.

2. In a typewriter attachment, a carrier for manifolding material mounted for to and fro travel in unison with the travel of the platen carriage of a typewriter, a pivotally jointed actuating arm pivotally connected to the carrier having sliding contact engagement with the carriage and adjustable about its respective pivots to accommodate the arm to greater or less spacing between the carrier and the carriage with which the arm engages to transmit motion from the platen carriage to the carrier.

3. In a typewriter attachment, a carrier for manifolding material mounted for to and fro travel in unison with the travel of the platen car-

riage of a typewriter, a pair of arms carried by the carrier and having sliding contact engagement with the opposite sides of the carriage, said arms being medially jointed and also pivotally
5 connected with the carrier whereby they may be flexed to greater or less degrees of angularity, sliding supports upon the carrier to which the arms are pivoted enabling lateral adjustment of the arms relative to each other and relative to the
10 carrier, and means for locking the arms in various positions of adjustment.

4. In an attachment for typewriters, a travel-

ing carrier for manifolding material, a track upon which the carrier is mounted for to and fro travel in unison with the travel of a typewriter carriage, a pedestal upon which said track is adjustably mounted for vertical adjustment, a base
5 upon which the pedestal is mounted for adjustment toward and from a typewriter, coupling means for operatively connecting the carrier with a typewriter carriage for unison travel, and clamping members for attaching the base to the
10 frame of the typewriter.

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