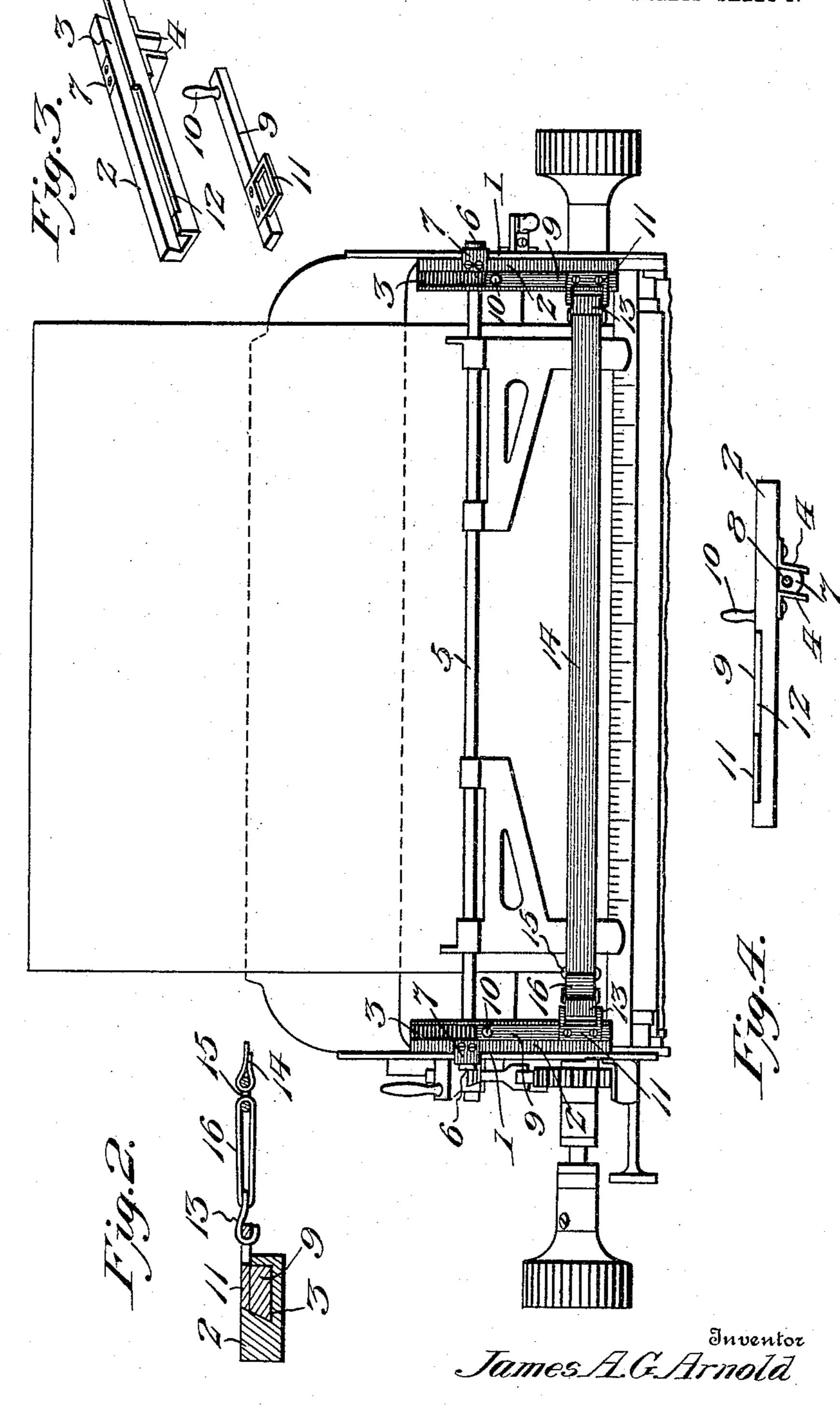
# J. A. G. ARNOLD.

# TYPE WRITER ATTACHMENT.

APPLICATION FILED OCT. 28, 1903.

NO MODEL.

2 SHEETS-SHEET 1.



Witnesses

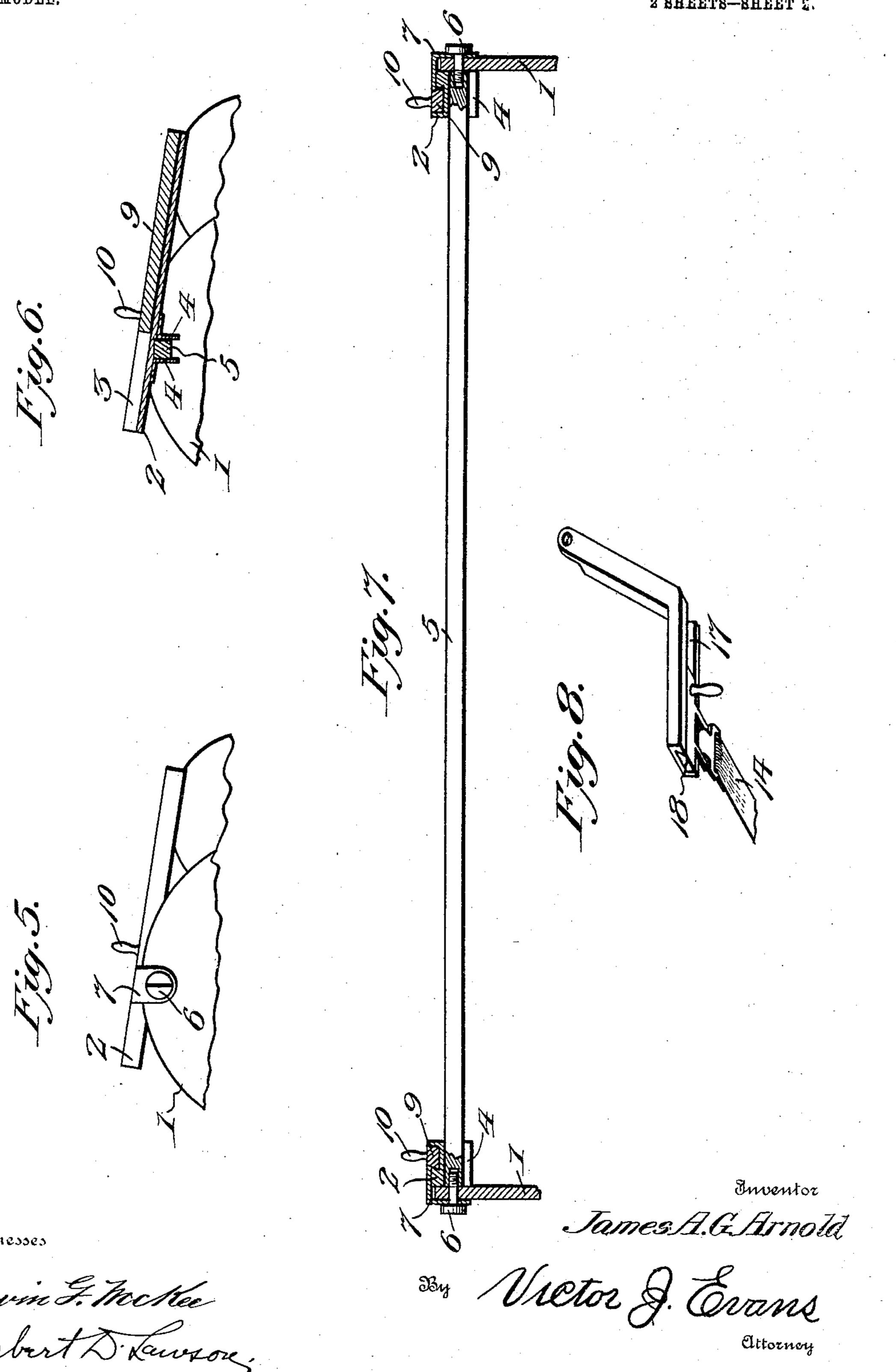
Edwin F. Mether. Hurbert D'Lawson. Hictor J. Evans
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NO MODEL.



Witnesses

Edwin F. McKee

# United States Patent Office.

JAMES A. GARFIELD ARNOLD, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO CHARLES W. MARSHALL, OF PHILA-DELPHIA, PENNSYLVANIA.

#### TYPE-WRITER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 765,804, dated July 26, 1904.

Application filed October 28, 1903. Serial No. 178,896. (No model.)

To all whom it may concern:

Be it known that I, James A. Garfield Ar-NOLD, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia 5 and State of Pennsylvania, have invented new and useful Improvements in Type-Writer Attachments, of which the following is a specification.

My invention relates to new and useful im-10 provements in type-writers, and more especially to ribbon-carrying attachments; and its object is to provide an attachment which can be readily placed in position upon the carriage of a type-writer and which serves to 15 support a detachable auxiliary ribbon which can be quickly removed or placed in position, said ribbon being preferably of a color different from the main ribbon upon the machine.

A further object is to provide an attach-20 ment by means of which the ribbon connected thereto can be readily adjusted into proper position between the type and the paper upon the platen.

With the above and other objects in view 25 the invention consists in providing detachable guide-plates which are adapted to be mounted upon the end of plates of the carriage of a typewriter, and these guides support slides having eyes extending inwardly therefrom. To these 30 eyes are detachably connected the ends of an auxiliary ribbon which is provided with a tensioning device whereby the same is held normally out of contact with the platen or paper mounted thereon.

The invention also consists in the novel construction and arrangement of the several parts, which will be more fully hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a portion of a type-writer carriage having my improved attachment thereon. Fig. 2 is a transverse section through one of the guides and the slide therein and showing the means for connecting 45 the ribbon thereto. Fig. 3 is a perspective view of the slide and its guide detached. Fig. 4 is a side elevation of the guide with the

portion of the carriage and showing the guide fastened thereto. Fig. 6 is a longitudinal sec- 50 tion through the guide and slide. Fig. 7 is an enlarged transverse section through a portion of the carriage and showing the guides and slides in section, a portion of the crossbar of the carriage being shown in elevation. 55 Fig. 8 is a perspective view of a modified form of guide adapted for use in connection with other forms of type-writer carriages.

Referring to the figures by numerals of reference, 1 1 are the side plates of the carriage 60 of a type-writer, and arranged along the inner face of each of these side plates is a guide formed, preferably, of a strip of metal 2, having a longitudinally-extending dovetail groove 3 in its upper face. Ears 4 are riveted or oth- 65 erwise secured to the bottom of the strip 2 and are adapted to straddle a rectangular bar 5, which is located between the plates 1 and is secured thereto preferably by means of screws 6, which extend through the plates and 70 into the ends of the bar 5. An L-shaped retaining-plate 7 is riveted upon each strip 2 and projects from the outer face thereof and is adapted to extend over the adjacent plate 1. This retaining-plate 7 has an aperture 8 there- 75 in for the reception of the screw 6, hereinbefore referred to, and it will therefore be seen that by constructing the parts in the manner herein shown one screw or similar fastening device can be employed for securing the bar 80 5 and the guide-strip 2 to each plate 1. Mounted within each groove 3 is a slide 9, having a handle 10 projecting upwardly therefrom and a laterally-extending eye 11, which is mounted within a recess 12, extending longitudinally 85 within the upper edge of one wall of the groove 3, said eye being limited in its movement by the end walls of the recess 12. This eye is adapted to be engaged by a hook 13. Two of these hooks are provided. To one of them is 90 fastened one end of a ribbon 14, while the other end of said ribbon is connected, by means of a link 15, with an elastic band 16, which is fastened in any suitable manner to the other hook. It will therefore be seen that when 95 slide therein. Fig. 5 is a side elevation of a 1 the two hooks 13 are in engagement with the

eyes 11 the ribbon 14 will be held taut across the paper or other material upon the platen of the carriage and out of contact therewith.

When it is desired to use the ribbon 14 in-5 stead of the main ribbon of the type-writer, it is merely necessary to grasp the handles 10 and move slides 9 forward, so as to bring the ribbon 14 into position in alinement with the type. When the type are operated, the two 10 ribbons of the machine will be pressed inward thereby; but as the ribbon 14 is nearer the platen than the other ribbon of the typewriter it will be understood that the color of the letters written will be the same as that of 15 the ribbon 14. As the ribbon moves with the carriage, it will be understood that the surface thereof will be worn evenly. When it is not desired to use the auxiliary ribbon, the same can be retracted from position. The 20 same can be readily detached by disengaging the hooks 13 from the eyes 11, and if it is desired to remove the entire attachment it is merely necessary to detach the screws 6 and lift the guide-strips 2 from engagement with 25 the cross-bar 5 and the plates 1.

It will be understood that any desired form of guide-strip may be employed to adapt the attachment for use in connection with various forms of type-writer carriages. In Fig. 8 I 30 have shown a modified form of guide-strip which is angular in elevation and has a dovetail groove 17 in the bottom thereof for the reception of a slide 18. Various other forms of guide-strips may be employed without de-35 parting from the spirit or sacrificing the ad-

vantages of the invention.

Having thus fully described the invention, what is claimed as new is—

1. An attachment for type-writer carriages 40 comprising guide-strips, carriage-engaging ears extending therefrom, slides adjustably mounted within the guide-strips, and a ribbon detachably connected at its ends to the slides.

2. An attachment for type-writer carriages 45 comprising grooved guide-strips, means for

securing the same to a type-writer carriage, slides adjustably mounted within the guidestrips, eyes extending laterally therefrom and engaging the guide-strips, and a ribbon connected to the eyes.

3. An attachment for type-writers, comprising guide-strips, carriage-engaging ears extending therefrom, slides adjustably mounted within the guide-strips, a ribbon detachably connected at its ends to the slides, and a 55

tension device for the ribbon.

4. An attachment for type-writer carriages, comprising guide-strips, slides adjustably mounted therein, hooks detachably connected to the slides, a ribbon secured to one of the 60 hooks, and a tension device interposed between and secured to the ribbon and the other hook.

5. An attachment for type-writer carriages, comprising grooved guide-strips, means for securing the same to a type-writer carriage, 65 slides adjustably mounted within the guidestrips, eyes extending laterally therefrom and engaging the guide-strips, hooks detachably connected to the eyes, a ribbon secured to one of the hooks, and a tension device interposed 7° between and secured to the ribbon and the other hook.

6. An attachment for type-writer carriages, comprising oppositely-arranged guide-strips having dovetail grooves therein, carriage-en- 75 gaging means extending from the strips, slides adjustably mounted within the grooves, handles upon the slides, eyes extending laterally from the slides, and engaging the guide-strips, hooks detachably connected to the eyes, a rib- 80 bon secured to one of the hooks, and a tension device interposed between and secured to the ribbon and the other hook.

In testimony whereof I affix my signature

in presence of two witnesses.

JAMES A. GARFIELD ARNOLD.

Witnesses:

•

W. Hamilton Rose, GEO. C. SCOTT.