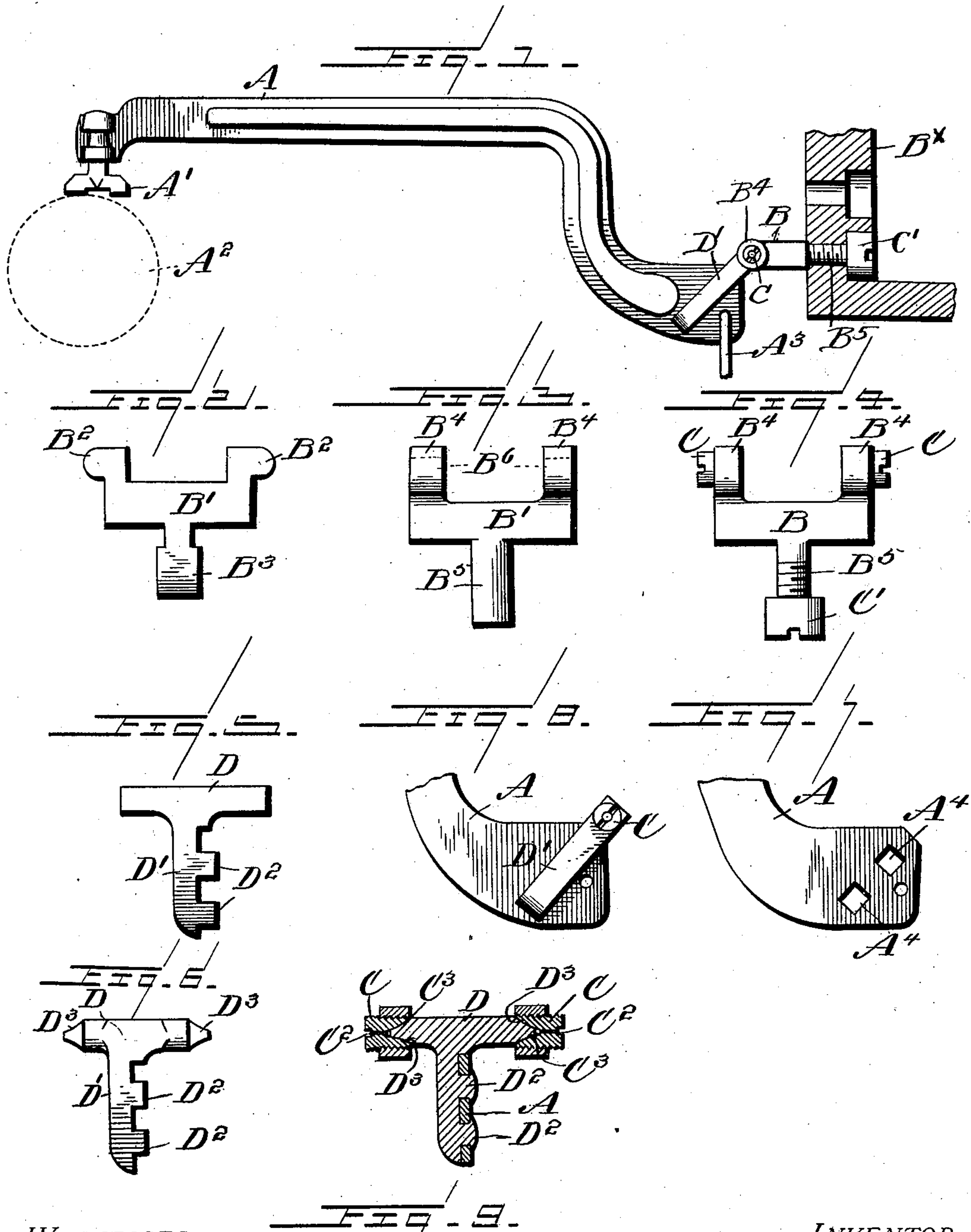


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PATENTED NOV. 17, 1903.

C. SPIRO.
TYPE BAR HANGER.
APPLICATION FILED APR. 14, 1903.

NO MODEL.



WITNESSES

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TYPE-BAR HANGER.

SPECIFICATION forming part of Letters Patent No. 744,253, dated November 17, 1903.

Application filed April 14, 1903. Serial No. 152,574. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SPIRO, a citizen of the United States, residing at New York, in the county of New York, State of New York, have invented certain new and useful Improvements in Type-Bar Hangers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to type-bar hangers for type-writers, and particularly to a structure thereof adapted to be formed principally by machine-work, thus reducing to a minimum the hand labor required thereon and the consequent cost of production, while the finished product is rendered more efficient in use.

Heretofore in this art it has been common to cut or saw from a bar of metal a blank from which the bracket which in connection with the pivot forms the type-bar hanger and then bore the pivoting-lugs of said bracket, which are required to be subsequently countersunk upon their inner faces, thus requiring a great deal of hand-work in the production of the article. The present invention contemplates the formation of this bracket from a stamped or cut blank, which is subsequently die-pressed into shape, and an aperture of even diameter simultaneously bored through each of the pivoting-lugs, while the securing-shank is threaded to receive the holding-nut.

Another object of the invention is to provide an improved form of pivot for the type-bar having a connecting plate or bar provided with lugs adapted to pass through the type-bar and be normally secured therewith, while the pivot is journaled at the opposite ends in adjustable sockets, which are countersunk to form the bearing-points.

40 Other and further objects and advantages of the invention will be hereinafter set forth, and the novel features thereof defined by the appended claims.

In the drawings, Figure 1 is an elevation, with parts in section, of the type-bar in printing position; Fig. 2, an elevation of the blank from which the hanger-bracket is formed; Fig. 3, a similar view of this blank after being die-pressed; Fig. 4, a like view of the bracket in its completed condition. Fig. 5 is an elevation of the blank from which the pivot and connecting-plate are formed; Fig.

6, a similar view of this blank when die-pressed into shape; Fig. 7, an elevation of one end of the type-bar; Fig. 8, a similar view showing the pivot and connecting-plate applied thereto, and Fig. 9 is a vertical section through the assembled parts forming the hanger.

Like letters of reference refer to like parts in the several figures of the drawings.

The letter A designates a type-bar, which may be of any desired construction and is provided at its free end with a type A', adapted to coöperate with a platen A², as indicated by dotted lines in Fig. 1, while the opposite end of this bar is pivotally mounted in the hanger B, secured to a fixed support B^x—for instance, the segment of a type-writer frame. The type-bar is also provided with the usual ligament A³ for connection with the key-levers in the usual manner.

The bracket, which is secured to the support B^x, is formed from a blank of sheet metal by cutting or stamping same therefrom, and this blank is substantially of the shape shown in Fig. 2 when so cut. In this figure the body B' of the bracket is provided at opposite ends upon one face thereof with projecting portions B² and upon the opposite face with a central shank portion B³. The blank is then placed in a suitable die-press and the projecting portions B² formed by pressure into the circular pivoting-lugs B⁴, while the shank B³ is pressed into a substantially curved form, as shown at B⁵ in Fig. 3, and each of the pivoting-lugs is bored or drilled with an aperture B⁶ of equal diameter throughout, which drilling is performed at a single operation, thus assuring perfect alinement of the apertures. The blank thus pressed is now in condition for finishing, and the only further work required is the interior threading of the lugs B⁴ to receive the bearing-screws C and the threading of the shank B⁵ to receive the holding-nut C', as shown in Fig. 4, when the bracket is ready to receive the pivot. These screws C are provided with a central aperture C², adapted to permit the oiling of the bearing and also to allow a passage for the egress of any grit or dirt which may work its way therein, while the inner end of each screw is countersunk, as shown at C³, so as to have a convex curved bearing-wall adapted to en-

gage the bearing of the pivot to be herein-
after described. The pivot is formed by
stamping or cutting from material a blank of
sheet metal substantially of the shape shown
5 in Fig. 5, which comprises a T-shape struc-
ture having a pivot-bar D and a lateral plate
or bar D' at one side of the longitudinal cen-
ter of the bar, so as to bring the type-bar when
connected to this extension substantially in
10 the center of the pivot-bar. This blank is of
an angular cross-section when cut, and the
pivot-bar D thereof is subsequently die-
pressed into circular cross-section, while the
ends D³ are suitably finished to provide
15 slightly-concaved bearing-faces, as shown in
Figs. 6 and 9, it being noted that the con-
necting-plate D' is still disposed at one side
of the longitudinal center of the bar, so that
when the lugs D² are passed through the ap-
20 tures A⁴ in the type-bar A and secured there-
in in any desired manner—for instance, by
heading, as shown in Fig. 9—said type-bar
will lie substantially in line with the longi-
tudinal center of the pivot-bar, while the
25 bearings D³ at the ends of the pivot-bar D are
seated into recesses or countersunk portions
C³ of the journaling-screws C, said recesses
being of greater depth than the portions D³,
so as to allow an adjustment of the screws C
30 into contact with the bearing portions D³
without contacting with the extreme ends of
the pivot-bar.

It will be seen that by forming this hanger-
35 bracket from sheet metal by stamping the
same may be made of much less weight than
heretofore, while the pivot-lugs being formed
with an aperture of continuously equal di-
ameter can be accurately drilled and the
40 screws threaded therein, so as to produce the
completed article with a minimum of hand-
work and at the least cost of manufacture.
It will also be observed that the improved
construction of pivot when used in connec-
50 tion with this bracket is adapted to be held
in position by the adjusting-screws, and all
danger of jamming or wedging the bearing is
obviated by the construction of screw herein
shown, while the connecting-plate of the
55 type-bar presents an extended bearing-sur-
face in connection therewith, so as to secure
the most desirable leverage and form of con-
nection between the hanger and the type-bar
carried thereby. The angular lugs entering
the recesses of similar configuration in the
60 bar prevent any possible movement of the
parts upon each other.

It will be obvious that changes may be
made in the details of construction and config-
uration without departing from the spirit of
65 invention as defined by the appended claims.

Having described my invention and set
forth its merits, what I claim, and desire to
secure by Letters Patent, is—

1. A type-bar bracket comprising a body
65 having lugs at opposite ends each provided
with threaded apertures of equal diameter
therethrough and in alinement with each

other, and a central threaded shank upon the
opposite face thereof from said lugs.

2. A type-bar bracket comprising a body- 70
plate having circular upset lugs at opposite
ends with threaded apertures in alinement
with each other and of equal diameter there-
through, a central threaded shank upon the
opposite face thereof from said lugs, and ad- 75
justing-screws extending through each of said
lugs.

3. A type-bar bracket comprising a body
having lugs at opposite ends with apertures
of equal diameter therethrough, a central 80
threaded shank upon the opposite face there-
of from said lugs, apertured screws extend-
ing through each of said lugs, and a pivot-
bar having a connecting-plate extended lat-
erally therefrom. 85

4. A type-bar bracket comprising a body
having lugs at opposite ends with apertures
of equal diameter therethrough, a central
threaded shank upon the opposite face there- 90
of from said lugs, apertured screws extend-
ing through each of said lugs, and a pivot
having a connecting-plate extended later-
ally therefrom at one side of the longitudinal
center thereof.

5. A type-bar bracket comprising a body 95
having lugs at opposite ends with apertures
of equal diameter therethrough, a central
threaded shank upon the opposite face there-
of from said lugs, apertured screws extend-
ing through each of said lugs, a pivot-bar 100
having a connecting-plate extended laterally
therefrom at one side of the longitudinal cen-
ter thereof, and a lateral lug extended from
said plate.

6. A type-bar bracket comprising a body 105
having lugs at opposite ends with apertures
of equal diameter therethrough, a central
threaded shank upon the opposite face there-
of from said lugs, apertured screws extend-
ing through each of said lugs, a pivot-bar 110
having a connecting-plate extended laterally
therefrom at one side of the longitudinal cen-
ter thereof, a lateral lug extended from said
plate, and a type-bar having an aperture to
receive said lug. 115

7. In a type-bar hanger, a pivot-bar having
a single connector-plate secured thereto and
extended laterally therefrom and a type-bar
formed of sheet material and attached to said
plate. 120

8. In a type-bar hanger, a pivot-bar having
a single connector-plate secured thereto and
extended laterally therefrom at one side of
the longitudinal center thereof and a type-
bar disposed at the longitudinal center of 125
said bar and attached to said plate.

9. In a type-bar hanger, a pivot-bar having
a single connector-plate secured thereto and
extended laterally therefrom and angular
lugs extended laterally from the face of said 130
plate next to the longitudinal center of the
bar.

10. A type-bar bracket formed from a blank
of sheet metal and having at its opposite ends

upon one side of the body pivoting-lugs of greater diameter than the body and upon the opposite side of the body an intermediate threaded securing-shank.

- 5 11. In a type-bar hanger, a bracket having a body portion with pivoting-lugs at opposite ends provided with continuous exterior walls and interiorly-threaded apertures, a secur-
10 ing-shank intermediate of the lugs upon the opposite face of the body therefrom, exteriorly-threaded pivoting-screws mounted in said lugs and having countersunk recesses therein, a pivot-bar having bearing portions
15 at its opposite ends to enter said recesses, and a type-bar carried by said pivot-bar.

12. In a type-bar hanger, a bracket, pivot-

ing-screws mounted therein and having countersunk recesses with convexed curved walls, a pivot-bar having at its opposite ends bearing portions of less length than said recesses 20 and provided with concaved curved walls, a connecting-plate carried by said pivot-bar and having lateral lugs extended therefrom, and an apertured type-bar adapted to receive said lugs and to be connected therewith by 25 heading the lugs.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES SPIRO.

Witnesses:

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F. L. SPIRO.