Aug. 24, 1937. E. S. DODGE 2,090,615

COPY HOLDER

Filed Sept. 30, 1936 8 Sheets-Sheet 1

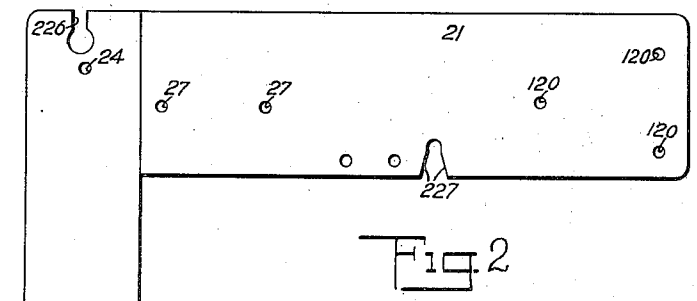


Fig. 2

Fig. 1

WITNESSES

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Aug. 24, 1937. E. S. DODGE 2,090,615

COPY HOLDER

Filed Sept. 30, 1936 8 Sheets-Sheet 2

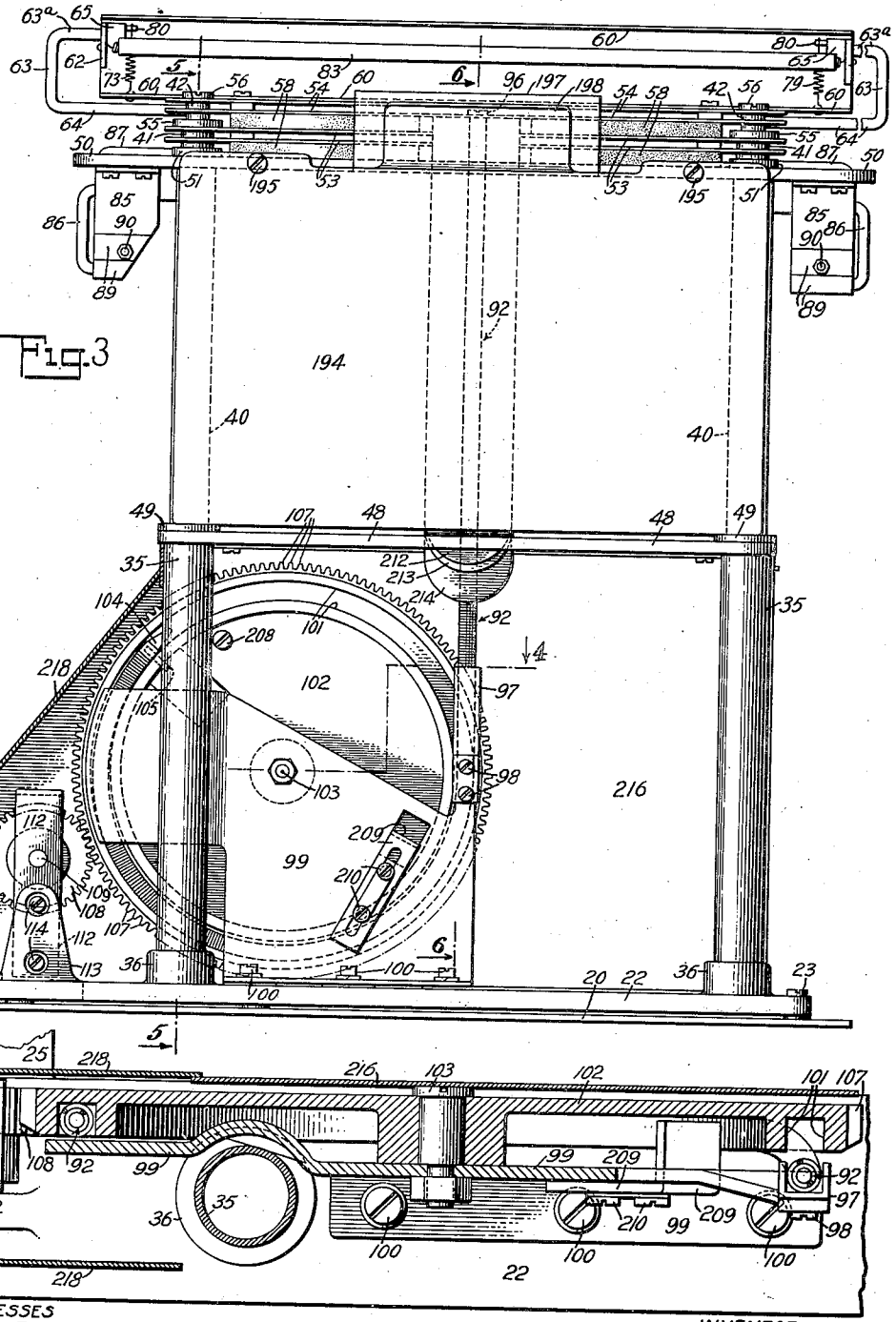


Fig. 3

Fig. 4

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COPY HOLDER

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Fig. 5

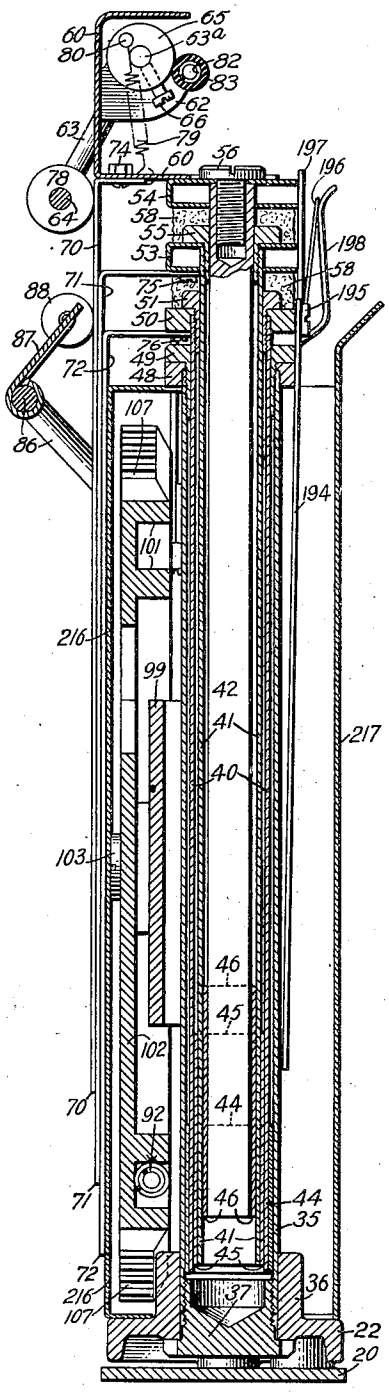
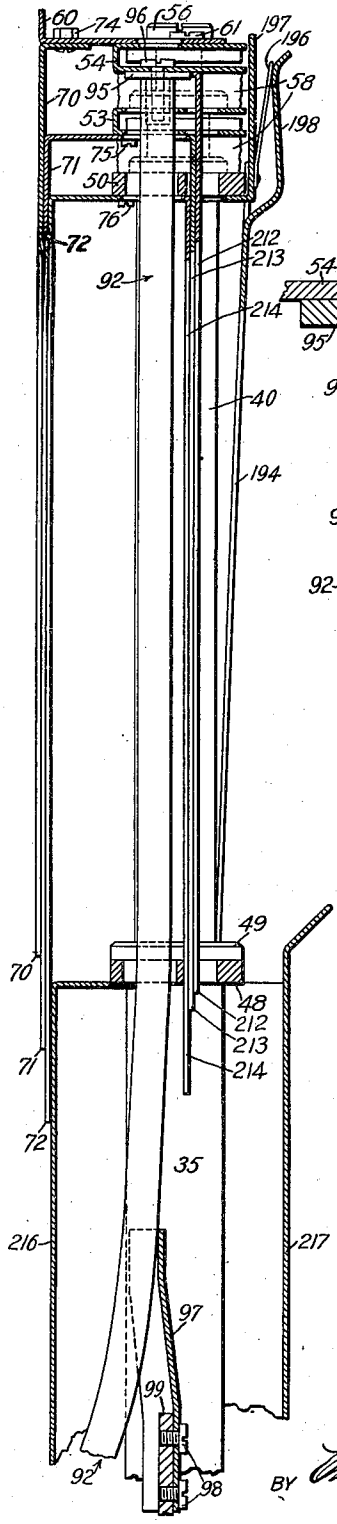


Fig. 6



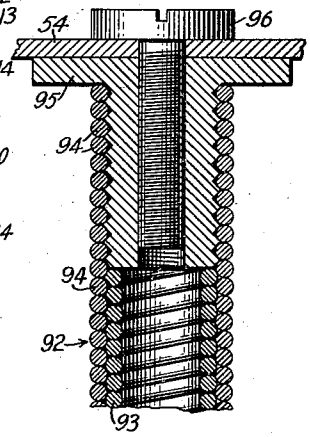


Fig. 7

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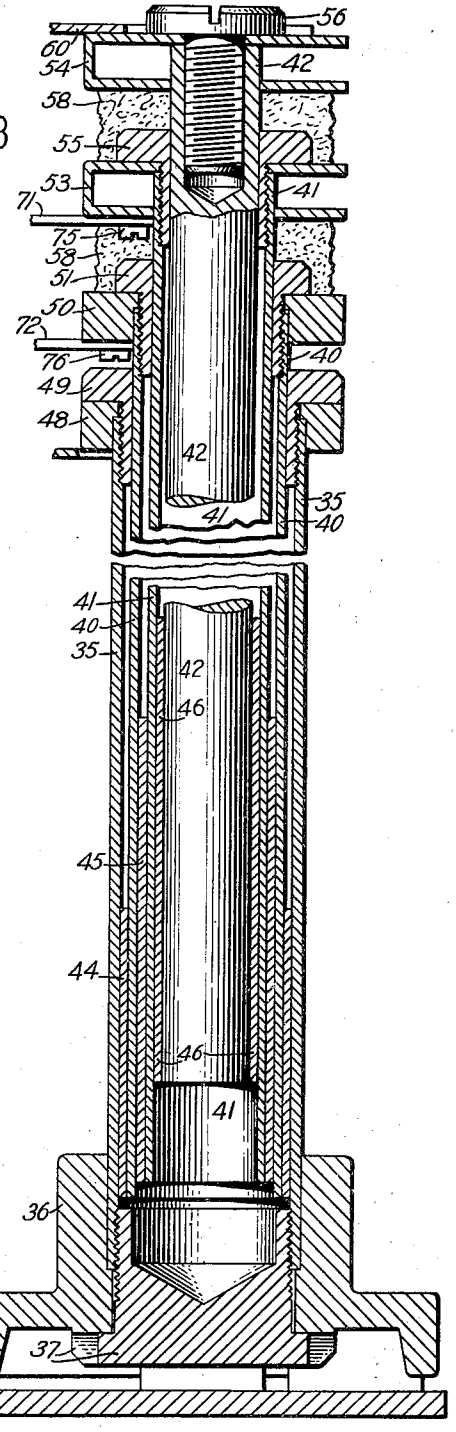
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Aug. 24, 1937. E. S. DODGE 2,090,615

COPY HOLDER

Filed Sept. 30, 1936 8 Sheets-Sheet 4

Fig. 8



WITNESSES

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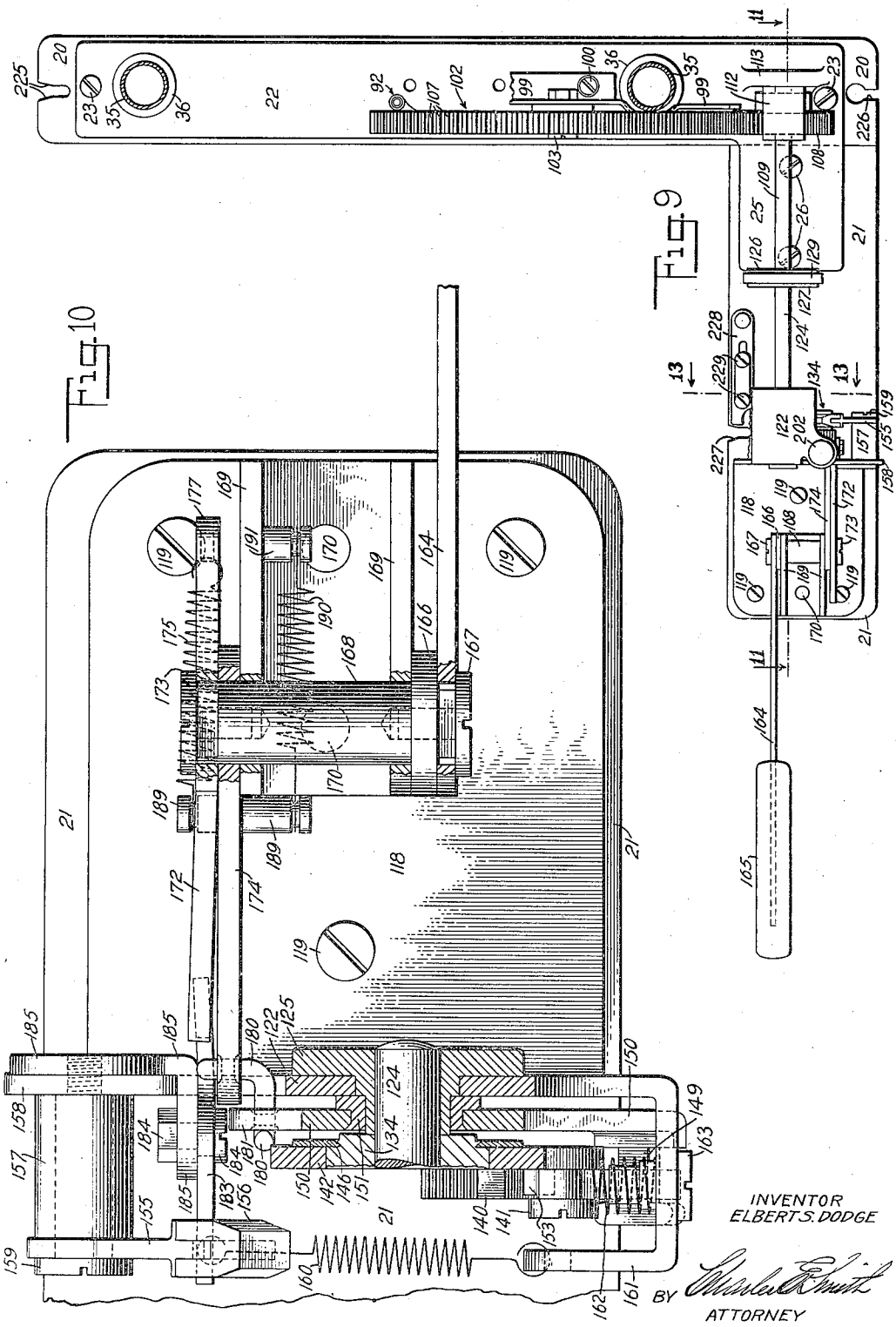
By

Attorney

Aug. 24, 1937. E. S. DODGE 2,090,615

COPY HOLDER

Filed Sept. 30, 1936 8 Sheets-Sheet 5



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Aug. 24, 1937. E. S. DODGE 2,090,615

COPY HOLDER

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Fig. 12

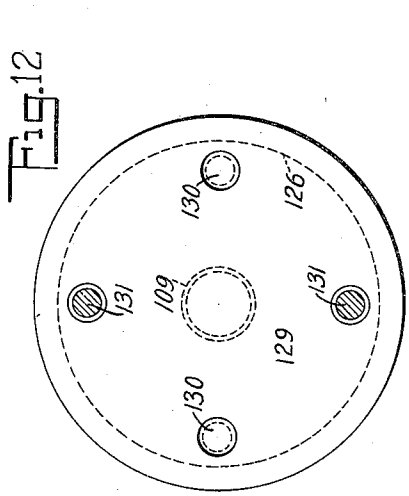


Fig. 11

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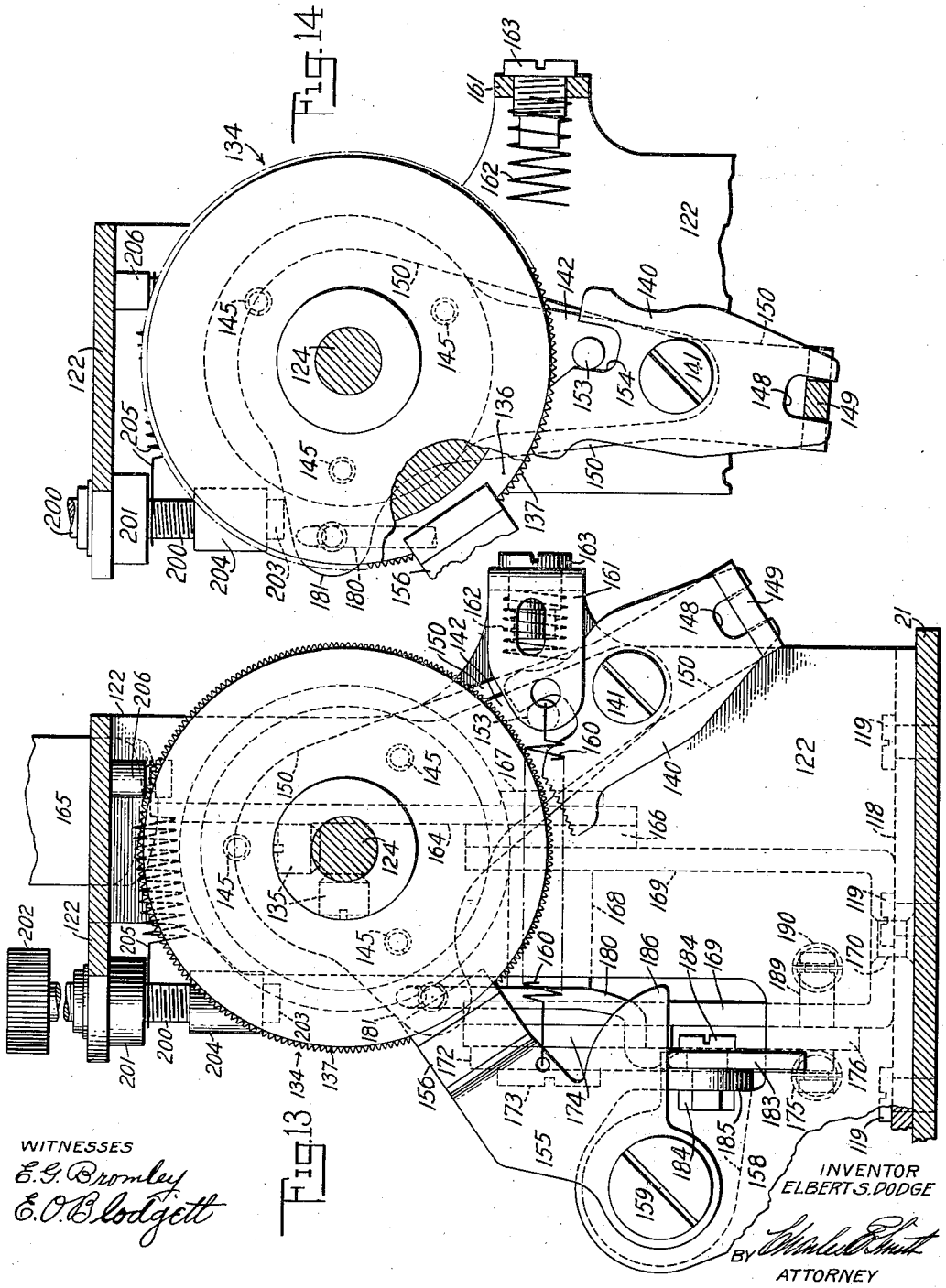
BY

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Aug. 24, 1937. E. S. DODGE 2,090,615

COPY HOLDER

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Aug. 24, 1937. E. S. DODGE 2,090,615

COPY HOLDER

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Fig. 16

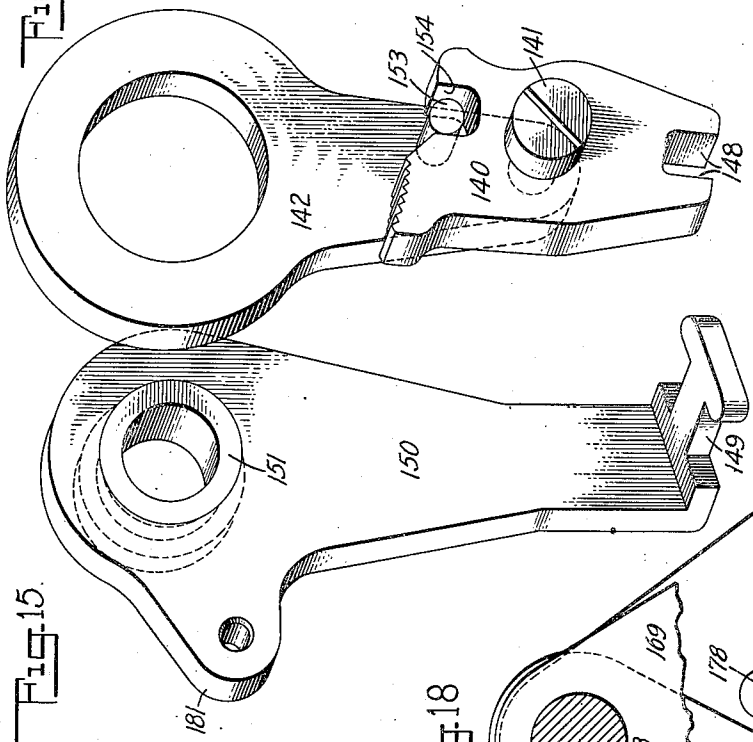


Fig. 15

Fig. 18

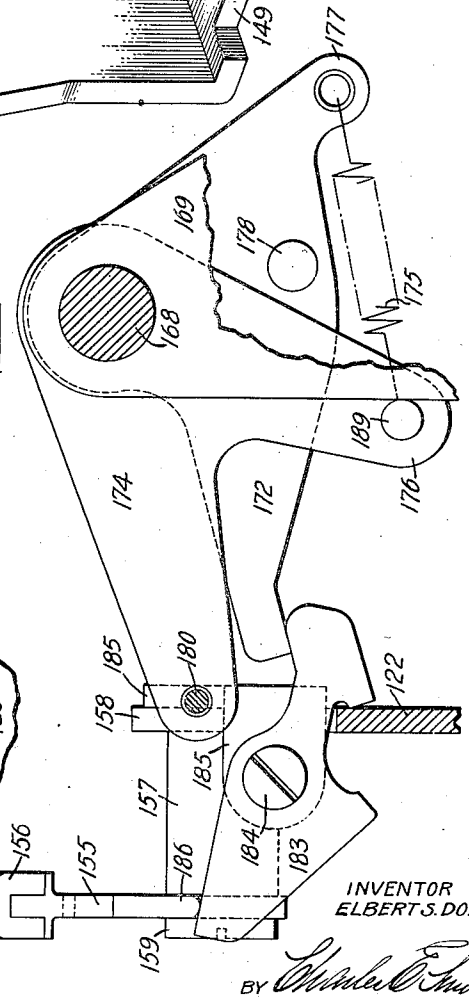
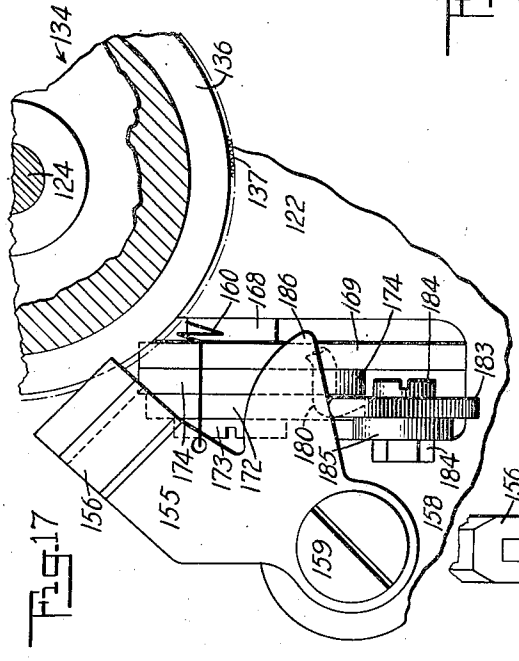


Fig. 17



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Patented Aug. 24, 1937 2,090,615

UNITED STATES PATENT OFFICE

2,090,615

COPY HOLDER

Elbert S. Dodge, Hion, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y., a corporation of Delaware

Application September 30, 1936, Serial No. 103,408

22 Claims. (Cl. 120—29)

My invention relates to copyholders and the objects of the invention, generally stated, are as follows:

To provide an improved copyholder for indicating the various lines successively one line at a time as they are being copied.

To provide such an improved copyholder of the type wherein a copy carrying member and a line indicating member may be relatively moved in steps from a first line indicating position to a last line indicating position or readily restored from any line indicating position to said first line indicating position.

To provide a construction in which the parts may be moved to a collapsed position of nonuse for convenient reception and movement into a usual drop cabinet along with a typewriting machine.

To provide in a copyholder of the above type an improved means for effecting such intermittent relative movements between the copy carrying member and the line indicating member, whereby increased ease and reliability of operation is obtained and which may be manufactured and assembled with greater ease and economy.

To provide in such a copyholder an improved means whereby the relatively movable members may at will be quickly restored to their normal or first line indicating position without undue noise and with a minimum of shock or jar upon being arrested in such normal position.

To the above and other ends which will hereinafter appear, my invention consists in the features of construction, arrangements of parts and combinations of devices set forth in the following description and particularly pointed out in the appended claims.

In the accompanying drawings wherein like reference characters indicate corresponding parts in the different views:—

Fig. 1 is a side view of a copyholder constructed in accordance with my invention, the view showing the copy supporting members in full lines in the fully collapsed position and associated with a typewriting machine and in condition to be housed in a drop cabinet therewith, the dotted lines indicating the fully expanded position of the copy supporting members.

Fig. 2 is a plan view of the sub-base arrangement of the present copyholder, the various parts ordinarily mounted thereon being removed.

Fig. 3 is a rear elevational view of the copyholder in a first line indicating position and with the rear cover plates removed.

Fig. 4 is a transverse sectional view of the same taken substantially on line 4—4 of Fig. 3 and viewed in the direction indicated by the arrows at said line.

Fig. 5 is a vertical sectional view of the same taken substantially on line 5—5 of Fig. 3 and viewed in the direction indicated by the arrows at said line, but showing the parts disposed in a fully collapsed position as shown in full lines in Fig. 1.

Fig. 6 is another fragmentary vertical sectional view taken substantially on line 6—6 of Fig. 3 and viewed in the direction indicated by the arrows at said line.

Fig. 7 is a detail sectional view on a larger scale illustrating a feature of the present copyholder construction.

Fig. 8 is a detail, fragmentary, vertical sectional view corresponding in part to Fig. 5 but showing the various parts on a larger scale.

Fig. 9 is a top plan view of the present copyholder with various parts of the copy carrying member removed to more clearly illustrate the actuating means therefor.

Fig. 10 is a top plan view with parts in section and on an enlarged scale illustrating in detail a portion of the actuating means shown in Fig. 9.

Fig. 11 is an enlarged detail sectional elevational view taken substantially on line 11—11 of Fig. 9 and viewed in the direction indicated by the arrows at said line.

Fig. 12 is a vertical sectional view of a shaft coupling means taken substantially on line 12—12 of Fig. 11 and viewed in the direction indicated by the arrows at said line.

Fig. 13 is an enlarged detail elevational sectional view taken substantially on line 13—13 of Fig. 9 and viewed in the direction indicated by the arrows at said line; said view showing the various parts as they appear when in their normal position.

Fig. 14 is a fragmentary view of a portion of the structure illustrated in Fig. 13 but showing the parts as they are disposed when an upward movement of the copy carrier is being effected.

Fig. 15 and Fig. 16 are detail perspective views of a pawl-actuating arm and a pawl carrying arm respectively of the present copyholder arrangement, these two members being illustrated as separated from their actual position of cooperation.

Fig. 17 and Fig. 18 are detail fragmentary views of features of the construction taken at right angles to each other and showing the operated

positions of various parts in restoring the copyholder to its first line indicating position.

The present invention is in the nature of an improvement on the construction disclosed in Patent Nos. 1,985,740 granted Dec. 25, 1934 and 2,067,786 granted Jan. 12, 1937. Features common to all these constructions are claimed in the above patents, the claims herein being directed to features not disclosed in said patents.

The general construction to which the present invention has in the present instance been applied involves a plurality of overlapping members that may be intermittently elevated in steps to an expanded position represented in dotted lines in Fig. 1, and may at will be readily and noiselessly returned to the first line indicating position shown in Fig. 3. These overlapping members may also be fully collapsed to their full line position shown in Fig. 1 for housing the copyholder with a typewriting machine in a drop cabinet, which may be readily effected, as will hereinafter appear.

In the accompanying drawings, I have shown the present copyholder mounted as a unit on an L-shaped sub-base shown in Fig. 1 and which as shown in Fig. 2 comprises a rear sheet metal plate 20 and a forwardly extending sheet metal plate 21. The copy carrying portion of the present arrangement is assembled on a rear cast metal base 22, while the manual controlling means is carried at the forward end of the plate 21. The two plates 20 and 21 of the sub-base are rigidly connected by the cast metal base proper 22 of the holder. Thus, the rear portion of the base 22 is connected to the rear plate 20 by screws 23 threaded into tapped holes 24 in the plate 20, and an integral forward extension 25 of the base 22 is connected to the forwardly extending plate 21 by spaced screws 26 threaded into tapped holes 27 in the plate 21. By these means the forwardly extending arm 21 of the sub-base may be readily detached with the parts carried thereby from the plate 20 to enable the copyholder to be conditioned for packing and shipment, as will hereinafter more clearly appear.

This sub-base assembly is provided with means to be later described in detail which permits the copyholder to be readily secured to or removed as a unit from the top of a desk or table.

Two parallel upright fixed guide tubes 35 are secured at their lower ends in openings in upstanding bosses 36 of the base 22, the lower ends of these guide tubes 35 engaging interior shoulders in the bosses 36 formed by reduced diameter lower portions of their openings as may be seen in Fig. 8. The guide tubes 35 are retained in the bosses of the base 22 by respective headed plugs 37 extending upwardly through the base 22 and threaded into the interior of the lower ends of the guide tubes 35.

Two tubular members 40 and 41 and a solid rod member 42, all of different diameters are received in a telescoping relation within each of the guide tubes 35. That is, each of the fixed guide tubes 35 receives one tubular member 40, whereas this tubular member 40 receives another tubular member 41, and the tubular member 41 receives the solid rod member 42. Referring to Fig. 8, it may be seen that the lower ends of the members 40, 41 and 42 are provided with outer sleeves 44, 45 and 46 respectively which are suitably fixed thereto, as by soldering for example and serve both to guide each of the telescoping members within its outer member as well as to limit the upward movement of each member relative to its outer member.

The upper ends of the guide tubes 35 are seated in holes in opposite ends of a cross bar 48, the ends of the guide tubes 35 engaging interior shoulders formed by reduced diameter upper portions of these holes, and bushings 49 having annular shoulders bearing on the top surface of the cross bar 48 are threaded into the ends of the respective guide tubes 35 to securely clamp the cross bar 48 in place. This provides a firm and rigid connection between the upper ends of the fixed guide tubes 35 and provides means which aid in effecting a ready assembly of the parts.

The openings in the bushings 49 are of a size to slidably receive the tubular members 40 but not the sleeves 44 whereby the tubular members 40 can be moved upwardly within the guide tubes 35 only to the point where these sleeves 44 engage the lower ends of the respective bushings 49.

In a very similar manner, the upper ends of the tubular members 40 are seated in shouldered openings in another cross bar 50 and shouldered bushings 51 are threaded into the upper ends of tubular members 40 to securely clamp the cross bar 50 in position and firmly connect the members 40 together. Likewise, the openings in the bushings 51 slidably receive the tubular members 41 but are engaged by the sleeves 45 to limit the upward movement of the tubular members 41 relative to the tubular members 40. Cross bars 53 and 54 also connect the upper ends of the two tubular members 41 and the two rods 42 respectively, but these cross bars 53 and 54 are illustrated as constructed from a longitudinally folded strip of sheet metal. The lower folded portion of the cross bar 53 has holes receiving the tubular members 41 while the upper folded portion is engaged by the upper ends of the tubular members 41 and has holes receiving shouldered bushings 55 threaded into the tubular members 41 for securely clamping the cross bar 53 in position and forming a rigid connection between the members 41. The cross bar 54 is retained on the upper ends of the rods 42 in substantially the same manner by headed screws 56 threaded into tapped openings in the ends of rods 42 to firmly connect said rods together. The upward movement of each rod member 42 within the associated tubular member 41 is also limited by the engagement of its sleeve 46 with the lower ends of the companion bushing 55.

Pads 58 of felt, sponge rubber or other suitable shock absorbing material are cemented or otherwise fastened to the upper surface of each of the two center cross bars 50 and 53, each of which pads in this instance comprises two separated sections. These pads 58 serve to resiliently and substantially noiselessly arrest the downward telescoping movement of the two upper sections of the copyholder, as will later be evident.

As more clearly shown in Fig. 6, a sheet metal supporting member 60 is secured by screws 61 to the upper surface of the top cross bar 54 and extends upwardly and backwardly to form a means for guiding and supporting the upper end of the paper to be copied. Rearwardly extending bracket arms 62 are attached at opposite ends of the supporting member 60, and these bracket arms are provided with bearing openings pivotally receiving inwardly extending terminal portions of arms 63 of a horizontal bail 64. As may be seen in Figs. 3 and 5, the inwardly extending end portion 63a of each of the arms 63 carries a collar 65 secured thereto by a set screw 66 to

prevent axial movement of the terminal portion 63a of the arms 63 in their bearings.

The vertical support against which the paper to be copied is adapted to rest is herein shown as formed of three overlapping sheet metal plates 70, 71 and 72, the upper plate 70 being carried by and connected at its upper rearwardly bent end to the supporting member 60 by screws 74 with its lower end overlapping the plate 71. The plate 71 is connected at its upper rearwardly bent end to the cross bar 53 by screws 75 with its lower end overlapping the plate 72 which is connected at its upper rearwardly bent end to the cross bar 50 by screws 76.

The bail 64 carries a series of corrugated rubber rollers 78 adapted to bear against the outer face of the upper end portion of a sheet to be supported by the copyholder and press it against the top metal plate 70 under the force of contractile springs 79 attached at their upper ends to respective eccentric pins 80 extending from the collars 65 and attached at their lower ends to the supporting member 60, as shown in Fig. 5. The eccentric pins 80 are normally so positioned that the force of the springs 79 causes the rollers 78 to engage and hold the upper end of the sheet to be copied. The bail 64 may be swung upwardly to a released position stopped by the engagement of screws 66 with the supporting member 60 wherein the pins 80 are moved beyond the pivotal center of the arms 63 and the springs 79 will then act to maintain the bail in this released position.

When the copyholder is to be used to support a stenographic note book or the like, the sheets forward to the one being copied may be bent back over the top of the supporting member 60 and retained under a long contractile spring 82 anchored at its ends to the brackets 62, the feed rollers 78 bearing against the exposed sheet near the binding of the book. In order to protect such bent over sheets from damage by the spring 82, and effectively hold such sheets, a flexible tubular casing 83 of rubber or the like having a corrugated surface is applied around the spring throughout substantially its entire length.

Two depending sheet metal brackets 85 (see Fig. 3) are respectively carried at end portions of the cross bar 50 where it extends beyond the tubular members 40 and the lower ends of these brackets 85 pivotally carry inturned ends of a wire bail 86. The bail 86 extends horizontally in front of the copy supporting plates 70, 71 and 72 as shown in Fig. 5, and is provided with a line indicator 87 shown as formed of a sheet metal strip turned over the bail 86 along its lower edge with rollers 88 pivotally mounted in cut-out portions of its upper edge.

As best indicated in Figs. 1 and 3, the lower ends of the brackets 85 are semi-circular shaped which, in combination with semi-circular shaped ends of separate clamping members 89 carried thereby, form frictional bearings for the ends of the bail 86, thereby retaining the bail and line indicator 87 in any adjusted position, the degree of friction of these bearings being regulated by bolts and nuts indicated at 90 and which are employed to mount the clamping members 89 on the brackets 85. It may be mentioned at this point that in some cases it may be desirable to construct the line indicator 87 of a transparent material such as celluloid which may be conspicuously colored so that its upper edge is effective to distinctly indicate the various lines as they are being copied without obstructing the operator's view of the written characters on the copy that may be located immediately beneath the line indicator.

The copyholder thus far described comprises a copy supporting means including a plurality of relative movable sections which are shown in full lines in Fig. 1 for example, in a fully collapsed relation and wherein the height of the complete assembly is only slightly greater than the height of any one of the sections and of a typewriting machine with which the copyholder may be employed. These sections however, may be readily elevated relative to each other to a fully expanded position represented by the dotted lines in said figure. These sections are expanded in the present instance by rotation of a horizontal fore and aft shaft driving a rotary drum which is operatively connected by a flexible driving member to the upper copy carrying section 70 of the copyholder.

Although from certain aspects of my invention, various other means may be provided, the present means for transforming the rotary motion of the horizontal shaft into longitudinally upward motion of the copy carrying member 70 has been shown as a flexible thrust member designated as a whole by the reference numeral 92 which, as best shown in Fig. 7, is formed by an inner closely coiled spring 93 surrounded by a similar outer closely coiled spring 94. Referring to Figs. 6 and 7 it will be seen that this thrust member 92 is attached to the central portion of the uppermost cross member 54 of the copy carrying member 70 by a headed bushing 95 having exterior threads receiving the outer coil spring 94 with the end of the inner coil spring abutting the lower end of the bushing, the bushing 95 being retained beneath the cross member 54 by a headed screw 96 threaded therein.

The thrust member 92 extends downwardly through holes in the cross members 53, 50 and 48 and enters an upright channel shaped guide 97 closed on three sides and attached by screws 98 to an upstanding bracket 99 attached by screws 100 to the base 22. The guide 97 is arranged tangentially to and registers at its lower end with an annular channel 101 formed in the rear surface of a drum 102 rotatably mounted on a horizontal pivot screw 103 carried by the bracket 99, as best shown in Fig. 3. The lower end of the flexible thrust member 92 is coiled around within the channel 101 and terminates in a clamping member 104 which is fixed within the channel 101 of the drum 102 by a screw 105.

It will now be clear that the rotated position of the drum 102 determines the length of the thrust member 92 which moves from the channel 101 along the guide 97 and accordingly determines the position of the copy carrying section 70 and the upwardly expanded or the contracted positions of the sections 70, 71 and 72 of the copyholder.

Referring more particularly to Figs. 1, 3, 4 and 11 it will be seen that the means provided in accordance with the present invention for manually controlling the rotated position of the drum 102 includes a speed multiplying means in the form of a gear 107 formed around the periphery of the drum 102 which meshes with a pinion gear 108 fixed to a horizontal shaft 109 by set screws 110, as shown in Fig. 11. The shaft 109 is rotatably mounted in a bracket 112 having a lower rear portion attached to an upstanding lug 113 of the base 22 by screws 114, as may be seen in Fig. 3, while the upper portion is bent

over the pinion gear 108 to support the shaft 109 at each side of the gear 108, as shown in Fig. 11.

The portion of the copyholder thus far described is mounted entirely upon the cast metal base 22 and accordingly may be assembled as a unit apart from the remainder of the actuating assembly which will now be described in detail. This remaining portion of the actuating construction is assembled upon base 118 which is shown as attached at the forward end of the subbase plate 21 by screws 119 threaded into tapped holes 120 in the plate 21. The base 118 has an integral vertical bracket portion 122 which is bent over similar to bracket 112 to provide spaced bearings rotatably supporting a shaft 124 substantially in axial alinement with the shaft 109. The forward bearing for the shaft 124 is formed by a shouldered bushing 125 (see Fig. 11) having an intermediate diameter portion pressed with a drive fit into an opening in the forward portion of the bracket 122.

The shaft 124 is detachably connected to the shaft 109 by a flexible or universal coupling as shown in Figs. 11 and 12. This coupling comprises a metal disc 126 concentrically and fixedly mounted upon a reduced diameter forward end of the shaft 109 such as by expanding or riveting the end of the shaft into a countersunk portion as shown. The disc 126 faces a second metal disc 127 mounted in a similar manner on the rear end of the shaft 124. A coupling disc 129 of a suitable semi-resilient, shock absorbing material such as leather separates the two discs 126 and 127, which coupling disc 129 is provided with two diametrically opposite holes receiving correspondingly spaced pins 130, carried by the disc 126, while two other diametrically opposite holes at right-angle alinement therewith receive similar pins 131 carried by the other disc 127 as may be seen in Fig. 12.

The shafts 109 and 124 are thus operatively coupled in a manner which due to the resiliency or pliability of the leather disc 129 prevents any slight differences between the axial or angular alinement of the bearings in the bracket 112 and the bearings in the bracket 122 from binding or materially increasing the resistance to rotation of the shafts 109 and 124. This leather coupling disc 129 also tends to absorb or prevent the transmission of certain shocks, vibrations and noises between the shafts 124 and 109.

A controlling member wheel, or drum designated as a whole by the reference numeral 134 (see Fig. 11) is attached by set screws 135 to the shaft 124 between the bearings in the bracket 122, said screws being threaded through a reduced diameter or rear hub portion of said wheel 134. Said wheel 134 has a peripheral annular groove 136 therein adjacent an annular peripherally serrated or toothed portion 137. The fine teeth of the portion 137 coact with a manually operated ratchet mechanism to impart intermittent rotary motion to the shaft 124 in a forward direction or a direction to elevate the copy supporting members 70, 71 and 72 through the direct coaction of the flexible member 92 with the copyholding member 70, while the groove portion 136 coacts with a manually releasable frictional holding or braking mechanism to normally prevent rotation of the shaft 124 in a reverse direction or a direction to lower the copy supporting members.

The ratchet mechanism shown in detail in Figs. 10, 13, 14, 15 and 16 comprises a pawl 140 having an upper end portion provided with serrations or teeth which at times coact with the annular serrated or toothed portion 137 of the drum 134. The pawl 140 is pivotally mounted at its central portion by a screw 141 on a pawl carrying arm 142 which is concentrically mounted on a reduced diameter front end portion of the drum or wheel 134. A metal frictional disc or washer 144 (see Fig. 11) separates the rear vertical surface of the pawl carrying arm 142 from the front vertical surface of the drum 134, which washer 144 is biased forwardly against the arm 142 by three equally spaced expansion springs 145 seated in horizontal openings in the drum 134. The pawl carrying arm 142 is retained in place against the force of the springs 145 by a metal ring 146 carried by a further reduced portion at the front end of the drum 134 and suitably fixed or retained thereon as by expanding the protruding front end of the drum 134. The frictional disc 144 thus offers a certain amount of resistance to rotation of the pawl carrying arm 142 relative to the drum 134, for reasons which will hereinafter appear and which resistance is predetermined according to the force of the expansion springs 145.

The lower end of the pawl 140 is provided with a bifurcation 148 straddling the shank of a T-shaped rearwardly turned lower end 149 of a pawl actuating arm 150 shown in detail in Fig. 15 and which is fixed to an inset hub 151 rotatably mounted concentrically with the shaft 124 on a reduced diameter rear end portion of the bearing bushing 125. The pivotal motion of the pawl 140 on the pawl carrying arm 142 about its pivot screw 141 is limited in either direction by a stop pin 153 extending rearwardly from the pawl carrying arm 142 and engageable with either wall of a bifurcation 154 in the upper end of the pawl 140. The pawl actuating arm 150 is resiliently arrested in its movement to normal position by engagement with an expansion spring 162 retained on the threaded end of a screw 163 extending inwardly from an extension 161 of the bracket 122.

The releasable holding mechanism coacting with the walls of the annular groove 136 of the drum 134 to prevent movement of the shaft 124 in a reverse direction is shown in detail in Figs. 10, 11, 13 and 17, and comprises a holding dog 155 having a wedge-shaped metal end 156 attached thereto which normally wedges itself into the groove 136 and effects a tenacious frictional engagement with the walls thereof. The lower end of the dog 155 has attached thereto an elongated hub 157 as may be seen in Fig. 10, which hub 157 extends rearwardly from and is pivotally attached to an ear 158 of the bracket 122 by an elongated pivot screw 159. Referring to Fig. 13, a contractile spring 160 extends from the dog 155 beneath the groove 136 of the drum 134 to an end of the extension arm 161 of the bracket 122, which arm is bent around the actuating arm 150, the pawl carrying arm 142 and the pawl 140. This spring 160 biases the dog 155 into the groove 136, and the dog 155 is of such a length that the point of engagement of the wedge-shaped end 156 with the walls of the groove 136 is slightly above a line extending from the center of shaft 124 to the center of its pivot 159.

It will be clear that a reverse or counter-clockwise direction of rotation of the drum 134 as viewed in Fig. 13 will be prevented by the frictional engagement of the wedge member 156 with the walls of the groove 136 caused by the spring 160 and the self-produced locking action caused by the tendency of the drum 134 to rotate in this

counter-clockwise direction. However, it will also be clear that any forward or clockwise rotation of the drum 134 will tend to lift the wedge member 156 upwardly about the pivot 159 out of its wedging engagement with the walls of the groove 136 thus permitting such clockwise rotation with substantially no resistance by the holding dog mechanism.

The means for controlling the ratchet mechanism, which also serves to release the above described holding mechanism, is operative by a lever 164 (see Figs. 1, 9 and 10) having a finger piece or handle 165 attached at its forward end and a hub 166 attached at its rear end. The rear end of the lever 164 and the hub 166 are removably retained by a headed screw 167 on a flattened or squared end of a shaft 168 rotatably mounted in bearing holes of spaced upstanding arms of a bracket 169 attached to the base 118 by rivets 170. A controlling arm 172 is removably attached by a headed screw 173 to a flattened or squared portion at the other end of the shaft 168, and a pawl operating arm 174 is rotatably mounted on the shaft 168 between the controlling arm and the side of one of the arms of the bracket 169. A contractile spring 175, connecting a downward extension 176 of the arm 174 with a forward extension 177 of the arm 172, normally biases the pawl operating arm 174 against a pin 178 extending from the controlling arm 172, as may be seen in Fig. 11. The rear end of the pawl operating arm 174 is connected by a link 180 to an extending ear 181 on the pawl-actuating arm 150, as shown in Fig. 10.

The rear end of the controlling arm 172 overlies and is engageable with the forward end of a releasing arm 183 which is pivotally attached by a headed screw 184 to an angle bracket 185 retained on the ear 158 of the bracket 122 by the threaded end of the pivot screw 159 as may be seen in Figs. 10 and 18. The rear end of the releasing arm 183 underlies and is engageable with a horizontal extension 186 on the holding dog 155, as best shown in Figs. 11 and 13.

The pawl operating arm 174 is biased to a normal position by a contractile spring 190 where said arm is arrested by a stop pin 189 engaging the rear edge of a bracket arm as shown in Fig. 11. Said spring 190 is connected at one end to the stop pin 189, the other end of the spring being anchored to a pin 191 attached to the bracket 169. The controlling arm 172 due to its interconnection with the arm 174, through pin 178 and spring 175, also assumes a definitely normal position, but as will later be described this arm 172 may be operated in either direction from such normal position by the operating arm 164.

The present copyholder is illustrated in full lines in Fig. 1 in its fully collapsed position of non-use, which as may be seen is only slightly higher than a standard typewriting machine 193 and accordingly it will be clear that the complete copyholder in such a collapsed position may be conveniently housed together with the machine 193 in the usual drop cabinet arrangement. However, before using the copyholder for copying purposes, and assuming it to be in the fully collapsed position shown in Fig. 5, the copy supporting members 70, 71 and 72 should be raised to their first line indicating position which is shown in Fig. 3.

Although said copy supporting members may if desired be moved from their fully collapsed position shown in full lines in Fig. 1 to their fully expanded position shown in dotted lines in said figure by intermittent operation of the handle 164, and then brought to first writing line position indicated in Fig. 3, it is considerably faster and easier to merely pull upwardly on the extending ends of the cross bar 50 and thus move the complete copy carrying assembly upwardly within the guide tubes 35 to their position shown in Fig. 3.

The means for releasably holding the copy carrying assembly in this first line indicating position comprises a sheet metal holding plate 194 overlapping the rear of the upstanding tubular members 40 and pivotally attached at its upper end to the cross bar 50 by headed screws 195 extending through loosely fitting holes in the holding plate and threaded into the rear edge of the cross bar 50. The holding plate 194 may receive a slight pivotal movement about the screws 195, and the lower end thereof is biased toward the tubular members 40 by a looped wire spring 196 (see Fig. 5) carried by a rearward and upward extension 197 of the lower copy supporting plate 72, which spring 196 bears rearwardly on an upwardly extending handle portion 198 of the holding plate 194. The holding plate 194 is of sufficient height to engage at its lower edge the upper ends of the bushings 49 when the section or member 50 is elevated a given distance, as shown in Fig. 6, thus preventing the copy carrying and supporting assembly from dropping below its first line indicating position. However, when it is desired to again fully collapse the copyholder, the plate 194 may be conveniently released from its holding position by pressing forwardly on the handle portion 198 to operate its lower end rearwardly to clear the bushings 49.

In using the present copyholder when positioned as shown in Fig. 3, the material to be copied is placed beneath the rollers 78 of the bail 64 so that the first line to be copied is visible just above the upper edge of the line indicator 87 in the usual manner and if desired the line indicator may be adjusted in the usual manner to properly register with the first line to be copied, etc. In order to advance the copy to the next line, the finger piece 165 of the lever 164 is depressed which turns the shaft 168 and controlling arm 172 fixedly connected thereto forwardly or in a clockwise direction, as viewed in Fig. 11, which also, due to the pin 178 turns the pawl operating arm 174 in the same direction against the force of the spring 190. This movement of the arm 174, through link 180, turns the pawl-actuating arm 150 in a clockwise direction from its position illustrated in Fig. 13 to its position illustrated in Fig. 14.

It may be mentioned at this point that one function of the frictional disc 144 coacting with the drum 134 and with the pawl carrying arm 142 is to provide a frictional resistance to movement of the pawl carrying arm 142 which is greater than the resistance to pivotal movement of the pawl 140 on this arm 142. By these means the initial movement of the actuating arm 150 does not move the arm 142 but causes a pivotal movement of the pawl 140 thereon due to its operative connection with the actuating arm 150 at 148 and 149. This pivotal movement of the pawl 140 on the arm 142 moves its upper end from the normal position free from the teeth on drum 134 as shown in Fig. 13 to a position shown in Fig. 14, wherein the serrations or teeth at the upper end of the pawl engage and securely interlock with the serrations or teeth on

the annular portion 137 of the drum 134. The actuating arm 150 is then securely coupled to the drum 134 so that a further continued turning of the arm 150 effects a corresponding turning of the drum 134, the pawl 140 and the pawl carrying arm 142 without further relative movement therebetween.

In this manner, the shafts 124 and 109 and pinion gear 108 are rotated in a clockwise direction as viewed from the rear, as in Fig. 3, thus rotating the drum 102 in a counterclockwise direction to push upwardly on the cross bar 54 through the flexible thrust member 92 and move the copy carrying member 70 of the copy supporting assembly upwardly one line space distance to aline the next line of the copy with the upper edge of the line indicator 67.

The distance the copy carrying member 70 is thus moved upwardly is determined by the extent of movement of the lever 164, and as the lines of the various sheets to be copied may be differently spaced, an adjustable stop for determining the extent of rotation of the pawl-actuating arm 150 is provided in the form of a screw 200 (see Figs. 13 and 14) threaded into an inset member 201 carried by the bracket 122. This stop screw is provided with a knob 202 at its upper end and a leather pad 203 set in a cap 204 at its lower end, which pad 203 is positioned by turning the knob 202 to be engaged by the upper edge of the extension 181 of the ratchet operating arm 150 after this arm 150 has rotated a distance to effect the desired line space movement of the copy sheet as indicated in dotted lines in Fig. 14. A contractile spring 205 extends from the screw 200 to a pin 206 extending downwardly from the bracket 122, which spring serves to provide sufficient resistance to turning of the screw 200 to retain the adjusted position thereof against vibrations and the like.

The copy carrying member 70 may in this manner be intermittently operated upwardly to bring the written lines on the sheet being copied successively into register with the line indicator. If the length of the sheet being copied requires it, the upward movement of the upper section 70 continues until the sleeves 46 (see Fig. 8) engage the bushings 55, and then the first section together with the second section are both elevated until the sleeves 45 are about to engage the bushings 51. At this point, providing the tubular members 40 are withdrawn from the guide tubes 35 as shown in Figs. 3 and 6, further rotation of the drum 102 is prevented by the engagement of a stop screw 208 on the drum 102 with an inwardly extending end of a stop bracket 209 adjustably clamped to the bracket 99 by screws 210, as may be seen in Fig. 3. It will be understood that the full expansion of the sections 70, 71 and 72 is such as to meet all of the usual requirements and that a lesser degree of expansion is usually sufficient for the usual lengths of sheets to be copied.

Suitable guard strips 212, 213 and 214 (see Fig. 6) depend in an overlapping manner from the cross bars 54, 53 and 50 respectively, which guard strips or fingers are positioned directly at the rear of the flexible thrust member 92 and serve to prevent accidentally bending or any interference with the thrust member 92 such as might prevent proper operation or cause a collapse of the copy carrying assembly when expanded.

In the above described intermittent elevation of the copy supporting assembly, it will be clear that the holding dog 155 acts to allow the forward direction of rotation of the drum 134 imparted thereto by the depression of the lever 164, but as soon as the pressure on the lever 164 was removed at the end of each depression, the dog 155 re-enters the groove 136 to prevent any reverse movement of the drum 134, thus accurately and positively retaining the copy carrying assembly in each elevated position to which it may be shifted.

When the last line of the sheet has been copied, the copy carrying assembly may be readily lowered to its first line indicating position shown in Fig. 3 by lifting the lever 164 upwardly from its normal position. The effect of this upward motion of the lever 164 is clearly shown in Figs. 17 and 18 wherein it may be seen that the controlling arm 172 is operated in a counter-clockwise direction as viewed in Fig. 18 without moving the pawl operating arm 174 which is prevented from moving in this direction by the engagement of pin 189 with the cooperative bracket arm 169, the arm 172 in this case operating against the force of spring 175 and independently of the arm 174. The downward motion of the rear end of the arm 172 rocks the releasing arm 183 about its pivot 184 which lifts the holding dog 155 out of the groove 136, as shown in Fig. 17, thereby allowing the drum 134 to rotate in a reverse direction to lower the copy supporting assembly.

The copy supporting assembly when released as above described returns to its lower or collapsed position by gravity, and due to its considerable weight, it is desirable to prevent undue momentum from obtaining during such movement to avoid the noise and shock produced in arresting its motion. The disc 144 coacting frictionally between the drum 134 with the pawl carrying arm 142 in addition to its function hereinbefore explained has another function, that of retarding or preventing excessive speed of the drum 134 during the return movement of the copy carrying assembly, thus permitting this copy carrying assembly to be returned to its first line indicating position or to its fully collapsed position quietly and with very little shock upon being arrested. The telescoping arrangement of the tubular members 40, 41, 42 and 35 also provides a dash pot action which in a very obvious manner further tends to cushion the collapsing or the returning movement of the copy supporting assembly to its first line indicating position and to its fully collapsed position.

I have shown the lower part of the present construction as enclosed by a front cover plate 216 and a rear cover plate 217 (see Figs. 5 and 6) which jointly enclose the portion of the copyholder beneath the cross bar 48. These two cover plates 216 and 217 have inwardly turned interfitting edges provided with suitable quickly detachable holding means. As will be understood from a consideration of Fig. 3, a three sided cover 218 is provided to enclose the pinion gear 108 and the portion of the drum 102 which extends beyond the guide tube 35, which cover is retained in place by screws 219 threaded into the end of the base 22.

A convenient means for detachably anchoring the completely assembled copyholder to the top of a desk or table is shown in Fig. 9, wherein the sub-base plate 20 is provided with a slot 225 in its left-hand end to receive the shank of a screw in the desk top and a key-hole slot 226 in its right-hand end having an inner portion

passing the head of another screw and an outer contracted portion slidable under the head. The inner edge of the forwardly extending sub-base plate 21 is also provided with a slot 227 for receiving the shank of a third screw, and a slidable locking member 228 is mounted on the plate 21 by screws 229 for longitudinal movement into a position wherein its front end passes outside of the screw shank. In installing the copyholder, the locking member 228 is moved to an ineffective position as shown, and the left-hand end of the plate 20 is moved to a position wherein the screw is partly within the slot 225 and the larger inner portion of the key-hole slot 226 can be placed over the head of its companion screw. The complete copyholder is now moved to the left, positioning the left-hand screw and the front screw at the end of their respective slots 225 and 227 and positioning the shank of the right rear screw within the narrow outer portion of the key-hole slot 227. The locking member 228 may now be moved forwardly around the shank of its screw thus preventing a right-hand movement and securely anchoring the copyholder to the desk top. It will be clear that the copyholder may at any time be conveniently removed by merely reversing the order of the above operations of installing.

From the foregoing description, it may be seen that I have provided a highly effective copyholder that is comparatively simple in construction, that is highly efficient, reliable and substantially noiseless in its operation and which may be fully collapsed when not in use for convenient storage in a drop cabinet with a typewriting machine. One of the more important features of my copyholder is the improved means for intermittently operating the relatively movable copy carrier and line indicator which comprises a drum having a serrated or other suitable gripping surface with which a pawl coacts which is pivotally carried on an arm frictionally connected to the drum. The pawl is then actuated in such a manner that the initial movement thereof is to positively lock itself with the drum due to the frictional resistance to movement of the pawl carrying arm relative to the drum. Such an arrangement insures an accurate and uniform rotation of the drum each time the manual lever is operated which results in a dependable and uniform relative movement between the copy carrier and the line indicator.

Another feature of the present copyholder which contributes to its improved operation is the speed changing means whereby the ratchet and holding drum is operated at a considerably greater speed than the drum for effecting relative movement between the line indicator and the copy carrier. Such an arrangement permits a more accurate adjustment of the distance which the copy carrier and line indicator are relatively moved at each actuation as well as more uniform and dependable operation. It will also be noted that the frictional coupling between the actuating drum and the pawl carrying arm herein has a dual function, namely to insure positive engagement of the pawl with the drum during intermittent line spacing movements and also to prevent undue speed of the drum in restoring the copy carrier and line indicator to their relative normal positions.

Various other features of the present copyholder contribute to increased facility in manufacture, assembly and transportation, such for example as the construction of the complete device in substantially two units, that is, the copy carrying assembly including all parts to the rear of the coupling disc 129 and the controlling assembly including all parts forward of such disc. These units may be manufactured, assembled or replaced separately and may be mounted in coacting relation in a very simple manner due to the readily detachable universal coupling including the disc 129.

Although I have shown my invention in the nature of an improvement on a specific type of copyholder wherein the copy carrying member is movable relative to a stationary line indicator, it is to be understood that from certain aspects of my invention it is not restricted to such construction but may be incorporated in other types of copyholders, such for example, as the type wherein the copy carrying member is stationary and the line indicator is movable relative thereto. So, therefore, when I refer herein to an intermittently movable line spacing member of the copyholder such term from certain aspects of my invention is intended to apply either to a copyholding member or to a line indicating member.

Various changes may be made in the specific construction shown, and certain of the features thereof may be employed without others, without departing from my invention as it is defined in the accompanying claims.

What I claim as new and desire to secure by Letters Patent is:

1. In a copyholder having a movable member and a drum operatively connected thereto, the combination of a shaft operatively connected to said drum, manual means for intermittently operating said shaft in one direction, manually releasable means normally preventing operation of said shaft in the other direction, and means for retarding operation of said shaft when said releasable means are actuated.

2. In a copyholder having a vertically movable member and a rotatable drum operatively connected thereto, the combination of a rotatable shaft operatively connected to turn said drum at a reduced speed, manual means for intermittently rotating said shaft in one direction, manually releasable means normally preventing rotation of said shaft in the other direction, and means for retarding rotation of said shaft when said releasable means are actuated.

3. In a copyholder having a copy carrying member and a line indicating member relatively movable, and a rotatable drum for effecting such relative movement, the combination of a forwardly extending shaft, speed reducing means for intermittently turning said drum from said shaft, a finger piece, means controlled thereby for effecting a forward turning of said shaft, holding means releasable by said finger piece for normally preventing reverse rotation of said shaft, and braking means for retarding reverse rotation of said shaft when said holding means are released.

4. In a copyholder having a copy carrying member and a line indicating member relatively movable, a rotatable drum and operative connections therefrom for effecting such relative movement, the combination of a forwardly extending shaft, speed multiplying means operatively connecting said shaft with said drum, manual means for intermittently rotating said shaft in a forward direction, manually releasable means normally preventing rotation of said shaft in the other or reverse direction, frictional means for

retarding the reverse rotation of said shaft, and a shock absorbing flexible joint in said shaft intermediate said speed multiplying means and said manual means.

5. In a copyholder having a collapsible copy carrying member and rotatable elevating means therefor, the combination of a forwardly extending shaft, speed reducing means for driving said rotatable elevating means from said shaft, an operating lever, a serrated operating wheel on said shaft, a feed pawl mounted for movement into engagement with the serrations of said operating wheel and for movement around said shaft by actuation of said operating lever in one direction from its normal position, a grooved wheel on said shaft, a dog member coacting with said grooved wheel to prevent reverse rotation only of said shaft, and releasing means operated by actuation of said operating lever in another direction from its normal position for moving said dog member to an ineffective position relative to said grooved wheel.

6. In a copyholder having a movable copy carrying member and rotative elevating means therefor, the combination of a forwardly extending shaft, means for operatively connecting said shaft with said rotative elevating means, a ratchet wheel on said shaft, a carrier mounted for concentric rocking motion relative to said ratchet wheel, a feed pawl pivotally mounted on said carrier, and actuating means operatively connected to said feed pawl for first pivotally moving said feed pawl into engagement with said ratchet wheel and for then effecting a movement of said feed pawl and carrier around the axis of said shaft for turning said ratchet wheel and shaft.

7. In a copyholder having a movable copy carrying member and rotative elevating means therefor, the combination of a forwardly extending shaft, means operatively connecting said shaft with said rotative elevating means, a ratchet wheel on said shaft, a carrier mounted for concentric rotation relative to said ratchet wheel, a feed pawl pivotally mounted on said carrier, actuating means operatively connected directly to said feed pawl for first moving it relatively to its carrier into engagement with said ratchet wheel and for then moving said feed pawl and carrier around the axis of said shaft for turning the ratchet wheel and shaft, a holding wheel on said shaft, and a detent member frictionally coacting with said holding wheel to normally prevent rotation thereof in a reverse direction only.

8. In a copyholder having a movable copy carrying member, a rotatable actuating member operatively connected thereto, the combination of a forwardly extending shaft, means connecting said shaft with said rotatable actuating member, a ratchet wheel on said shaft, a carrier mounted for concentric rocking motion relative to said ratchet wheel, a feed pawl pivotally mounted on said carrier, actuating means connected directly to said feed pawl for first moving said feed pawl pivotally into engagement with said ratchet wheel and for then moving said feed pawl around the axis of said shaft to move the feed pawl, its carrier, ratchet wheel and shaft together, and frictional means interconnecting said ratchet wheel and said carrier for retarding rotation of said ratchet wheel relative to said carrier and thereby retard the return movement of said copy carrying member.

9. In a copyholder having relatively movable copy carrying and line indicating members, and a rotatable drum operatively connected to the movable member, the combination of a forwardly extending shaft, means for rotating said drum by said shaft, a controlling wheel having an annular serrated portion and an annular grooved portion carried by said shaft, a pawl carrier rockably mounted on said shaft, a feed pawl pivotally mounted on said pawl carrier, an actuating arm rockably mounted on said shaft and operatively connected to said feed pawl, a manually actuated lever, means connecting said actuating arm with said lever whereby said feed pawl is first engaged with the serrated portion of said controlling wheel and said feed pawl is then moved around the axis of said shaft by operation of said lever in one direction from its normal position, micrometer adjusting means for limiting the rocking of said actuating arm around said shaft, a holding dog frictionally coacting with the grooved portion of said controlling wheel for normally preventing reverse rotation of said controlling wheel, and means operatively connecting said actuating arm with said holding dog whereby said holding dog is moved to an ineffective position by operation of said lever in the other direction.

10. In a copyholder having a vertically movable copy carrying member, and a rotatable drum operatively connected therewith, the combination of a forwardly extending shaft, means for rotating said drum by said shaft, a controlling wheel having an annular serrated and an annular grooved portion carried by said shaft, a pawl carrier arm rockably mounted on said shaft, a feed pawl pivotally mounted on said pawl carrier arm, an actuating arm rockably mounted on said shaft and connected to said feed pawl, a manually actuated lever, means connecting said actuating arm with said lever whereby said feed pawl is engaged with the serrated portion of said controlling wheel and said feed pawl is moved around the axis of said shaft by operation of said lever in one direction from its normal position, adjusting means for limiting the rocking motion of said actuating arm on said shaft, frictional braking means interposed between said controlling wheel and said pawl carrier arm, a holding dog frictionally coacting with the grooved portion of said controlling wheel for preventing reverse rotation thereof, and means for operatively connecting said actuating arm with said holding dog whereby said holding dog is moved to an ineffective position by operation of said lever in the other direction.

11. In a copyholder, the combination of a copy carrying member, and means for controlling the movements thereof comprising a drum, a flexible member controlling the movement of said copy carrying member in accordance with the rotated position of said drum, a forwardly extending operating shaft, means operatively connecting said operating shaft with said drum, actuating means including a finger piece operative in one direction from its normal position for intermittently turning said operating shaft in a direction to elevate said copy carrying member, holding means for normally preventing turning of said operating shaft in a direction to lower said copy carrying member, means controlled by operation of said finger piece in the opposite direction from its normal position for releasing said holding means, and means coacting with said operating shaft for retarding the speed of movement of said copy carrying member toward its lower position.

12. In a copyholder, the combination of a copy carrying member, and means for controlling the movements thereof comprising a drum, a flexible

member controlling the movement of said copy carrying member in accordance with the rotated position of said drum, a forwardly extending operating shaft, means operatively connecting said operating shaft with said drum, actuating means including a finger piece operative in one direction from its normal position for intermittently turning said operating shaft in a direction to elevate said copy carrying member, holding means for normally preventing turning of said operating shaft in a direction to lower said copy carrying member, means controlled by operation of said finger piece in the opposite direction from its normal position for releasing said holding means, and frictional means for retarding the speed of rotation of said operating shaft.

13. In a copyholder, the combination of a copy carrying member, and means for controlling the movements thereof comprising a drum, a flexible member controlling the movement of said copy carrying member in accordance with the rotated position of said drum, a forwardly extending operating shaft, means operatively connecting said operating shaft with said drum, actuating means including a finger piece operative in one direction from its normal position for intermittently turning said operating shaft in a direction to elevate said copy carrying member, holding means for preventing turning of said operating shaft in a direction to lower said copy carrying member, means controlled by operation of said finger piece in the opposite direction from its normal position for releasing said holding means, and frictional means coacting with said operating shaft and said actuating means for retarding movement of said operating shaft relative to said actuating means.

14. In a copyholder, the combination of relatively movable line indicating and copyholding members, and means for controlling the movement of the movable member comprising a manually operated intermittently actuated two-part shaft, and means for operatively and readily connecting the two parts of said shaft including a flexible interponent between the adjacent ends thereof and through which the two parts of the shaft are connected to turn together.

15. In a copyholder, the combination of relatively movable line indicating and copyholding members, and means for controlling the movement of the movable member comprising a manually operated intermittently actuated two-part shaft, and means for operatively and readily connecting the two parts of said shaft including a flexible interponent between the adjacent ends thereof and through which the two parts of the shaft are connected to turn together, a metal disc fixedly connected to each part of the shaft and having pins that extend from a face thereof into holes in said flexible interponent.

16. In a copyholder, the combination of relatively movable line indicating and copyholding members, and means for controlling the movement of the movable member comprising a manually operated intermittently actuated two-part shaft that extends forward from the copyholding member, means for affording a ready connection and disconnection between said shaft sections, a two-part base for the copyholder, one member of said base being detachably connected to the other, an actuating lever and means controlled thereby and associated with the forward section of said shaft for intermittently rotating it for line spacing and for affording a reverse rotation of the shaft when desired, said lever, controlling means and forward shaft section being mounted as a single unit on and detachable with one of said base members, and means mounted on the other base member and associated with the rear shaft section for transmitting movement from the forward shaft section to one of the relatively movable line indicating and copyholding members.

17. In a copyholder, the combination of a movable copyholding member, controlling means for controlling the movement thereof comprising a drum, a flexible connection between said copyholding member and drum, a two-part shaft the sections of which are detachably united, a geared connection between said drum and the rear section of said shaft, a two-part base one of the members of which is detachably connected to the other and on one of which base members said movable copyholding member, drum and rear section of said shaft are mounted, and additional controlling means associated with the forward section of said shaft and comprising a manually actuated lever, a ratchet wheel on the forward section of said two-part shaft, a pawl actuated by said lever and cooperating with said ratchet wheel, adjustable means for limiting the stroke of said lever, a locking wheel on said forward shaft section, a locking pawl coacting therewith, and means controlled by said lever for releasing said locking pawl, said additional controlling means and forward shaft section being mounted as a single unit on the other member of said two-part base.

18. In a copyholder, the combination of relatively movable line indicating and copyholding members, and means for controlling the movement of the movable member comprising a shaft, a manually actuated lever, a ratchet wheel on said shaft, a line spacing pawl coacting with said ratchet wheel, a locking wheel on said shaft, a locking pawl coacting with said locking wheel, and means controlled by a movement of said lever in one direction from its normal position for actuating said line spacing pawl and controlled by a movement of said lever in the opposite direction from its normal position for releasing said locking pawl.

19. In a copyholder, the combination of relatively movable line indicating and copyholding members, and means for controlling the movement of the movable member comprising a shaft, a manually actuated lever, a ratchet wheel on said shaft, a line spacing pawl coacting with said ratchet wheel, a locking wheel on said shaft, a locking pawl coacting with said locking wheel, and means controlled by a movement of said lever in one direction from its normal position for actuating said line spacing pawl and controlled by a movement of said lever in the opposite direction from its normal position for releasing said locking pawl, said last mentioned means comprising two actuating members spring pressed to move together when line spacing and movable one independently of the other when releasing the locking pawl.

20. In a copyholder, the combination of relatively movable line indicating and copyholding members, and means for controlling the movement of the movable member comprising a two-part shaft, the sections of which are detachably united, a manually actuated lever, a ratchet wheel on the forward section of said shaft, a line spacing pawl coacting with said ratchet wheel, a locking wheel on the forward section of said shaft and adjacent said ratchet wheel, a locking

pawl coacting with said locking wheel to prevent a reverse rotation thereof, and means controlled by a movement of said lever in one direction from its normal position for actuating said line spacing pawl and controlled by a movement of said lever in the opposite direction from its normal position for releasing said locking pawl.

21. In a copyholder, the combination of relatively movable line indicating and copyholding members, a manually actuated lever, and means controlled by a movement of said lever in one direction from its normal position for intermittently effecting a line spacing movement of the movable member and controlled by a movement of said lever in the opposite direction from its normal position for affording a reverse movement of the movable member, said means comprising two actuating members positively connected to move together in one direction from normal position and resiliently connected together to afford movement of one of said actuating members independently of the other in the opposite direction from normal position.

22. In a copyholder, the combination of relatively movable line indicating and copyholding members, a manually actuated lever, and means controlled by a movement of said lever in one direction from its normal position for intermittently effecting a line spacing movement of the movable member and controlled by a movement of said lever in the opposite direction from its normal position for affording a reverse movement of the movable member, said means comprising a first actuating arm positively connected to said lever, a second actuating arm operative in a forward direction only from its normal position, means biasing the second arm to said normal position, means connecting said second arm with said first arm for positive operation thereby in a forward direction, and resilient means interconnecting said first and second arms to afford operation of said first arm only in a reverse direction.

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