April 1, 1930. G. STEVENSON 1,752,399

COPYHOLDER

Filed Aug. 27, 1927 2 Sheets-Sheet 1

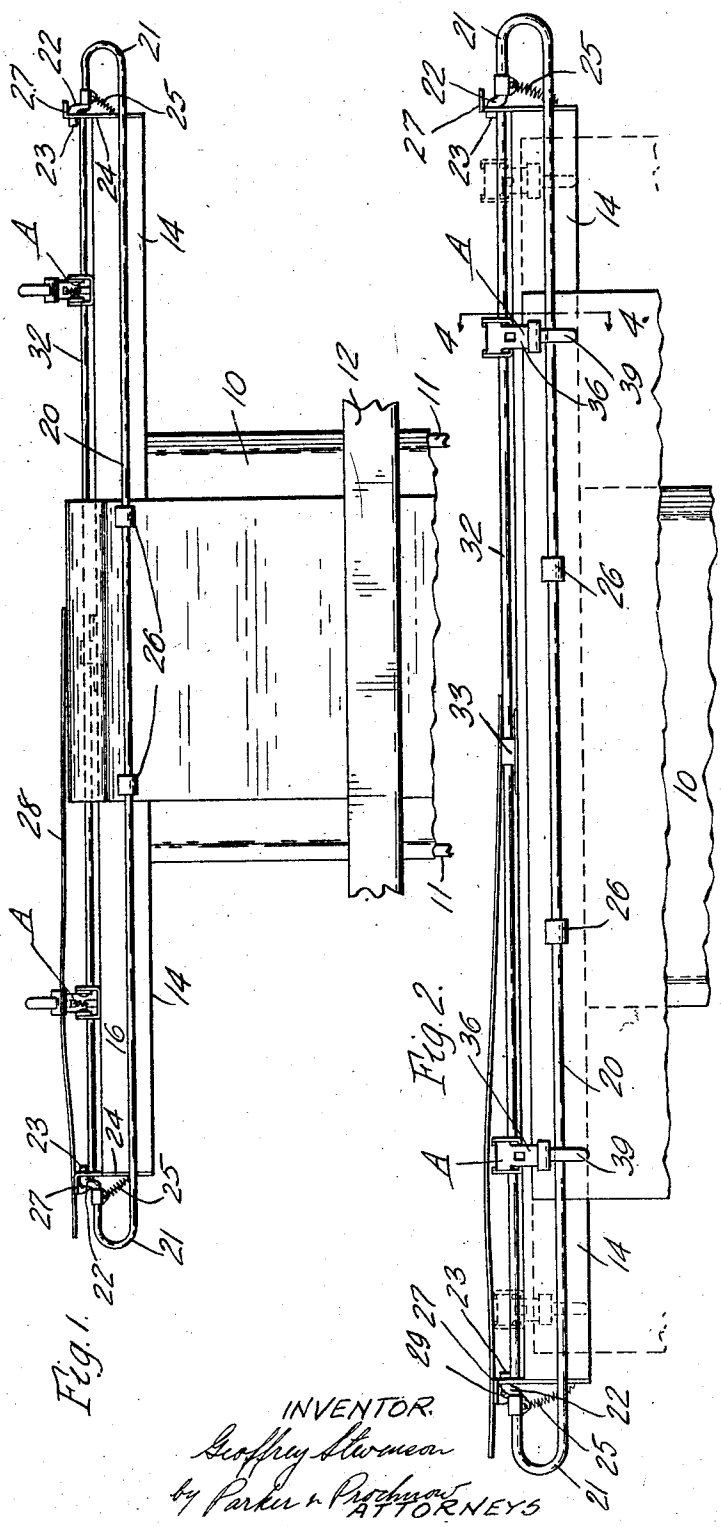


Fig. 1.

Fig. 2.

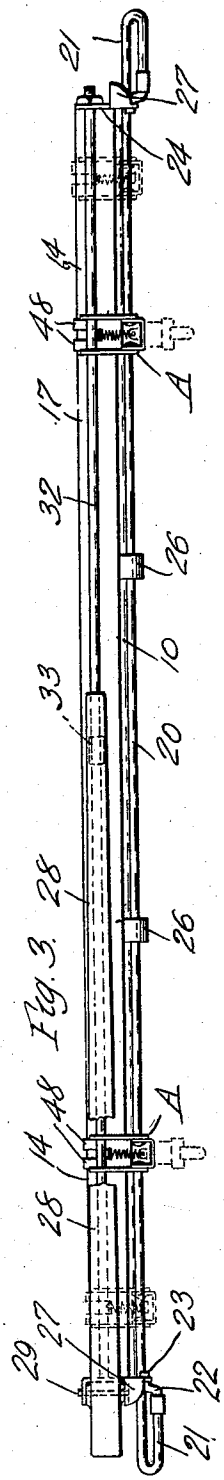


Fig. 3.

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Fig. 4.

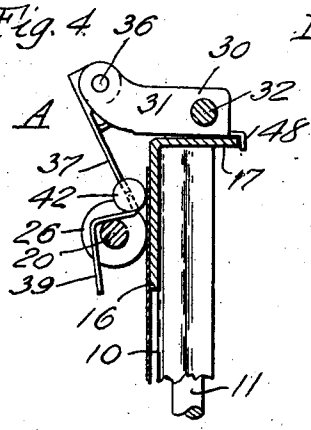
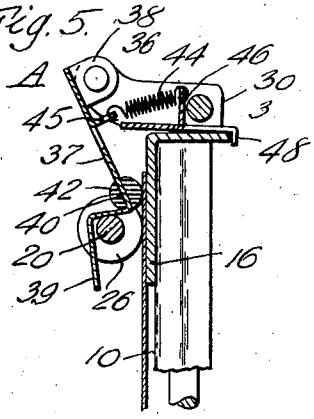


Fig. 5.



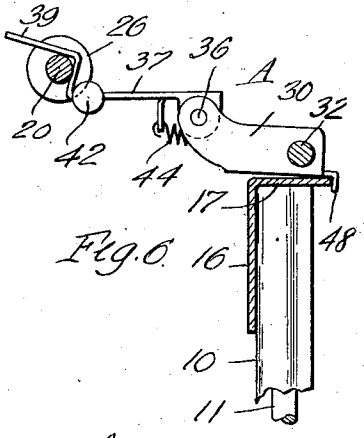


Fig. 6.

Fig. 7.

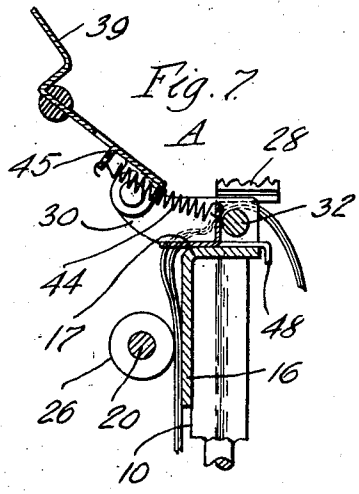


Fig. 8.

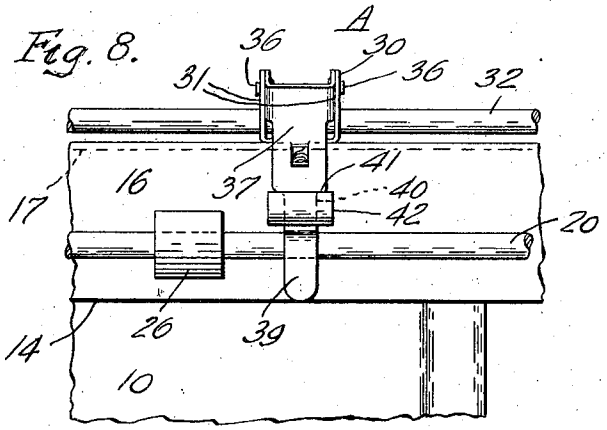


Fig. 9.

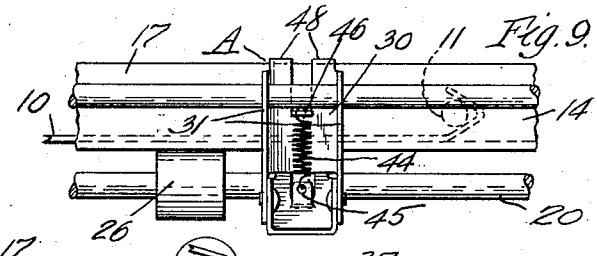


Fig. 10.

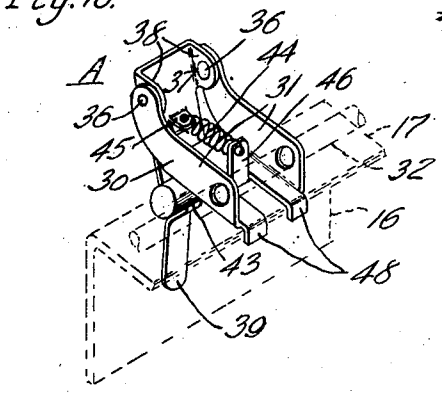
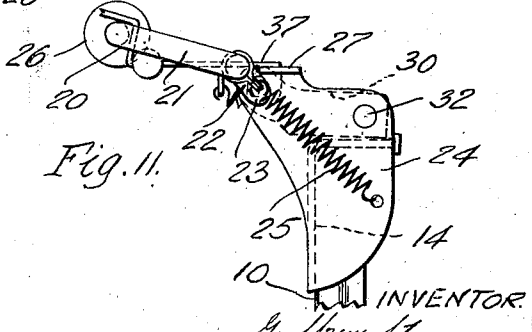


Fig. 11.



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Patented Apr. 1, 1930 1,752,399

UNITED STATES PATENT OFFICE

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COPYHOLDER

Application filed August 27, 1927. Serial No. 215,931.

This invention relates to improvements in copy holders such as are used by typists and others, and more particularly to clamping means for holding the work on such holders.

These copy holders generally comprise a copy support or plate against which the copy is releasably held by a clamping bar or rod which extends across the plate and bears yieldingly on the copy to clamp it against the plate. Ordinarily these copy holders are arranged to support note books and also letter sheets and other sheets or copy of a width such as can be inserted in an ordinary typewriter, and provision is not made for supporting relatively wide sheets on the copy holder.

One object of my invention is to provide a copy holder having improved clamping means, whereby relatively wide sheets or analogous elements as well as note books and sheets or copy of usual width can be firmly held on the copy support; and also to provide clamping means of relatively simple and inexpensive construction, which will be practical in operation and durable in use.

Other objects are to provide novel supplemental clamping means adapted to be used in conjunction with the usual or main clamp for the purpose of holding wide sheets on the copy holder; also to provide a supplemental clamp which is adjustable laterally relative to the copy support for the purpose of securing sheets or copies of various widths; also to provide a supplemental clamp which can be moved to an inoperative position when it is desired to use the main clamp without interference therewith by the supplemental clamp; also to provide a supplemental clamp cooperating with the main clamp which can be moved to release the copy by movement of the main clamp to releasing position, and which will return to clamping position with said main clamp when the latter is moved to its clamping position.

Further objects are to improve clamping means of copy holders in the other respects hereinafter described and set forth in the claims.

In the accompanying drawings:

Fig. 1 is a front elevation of the upper portion of a copy holder provided with clamping means embodying the invention, the supplemental clamps being shown in an inoperative position.

Fig. 2 is a similar view thereof on a larger scale, showing the main clamp and supplemental clamps in position for holding a wide sheet on the holder.

Fig. 3 is a plan view thereof, with the parts in the same positions as shown in Fig. 2.

Fig. 4 is a fragmentary, transverse section of the copy holder on line 4—4, Fig. 2, on an enlarged scale, showing a supplemental clamp in holding position in side elevation.

Fig. 5 is a similar view, but with the supplemental clamp in section.

Fig. 6 is a similar view showing the main clamp and supplemental clamp in copy-releasing position.

Fig. 7 is a view similar to Fig. 5, but showing the main clamp in holding position, and the supplemental clamp in an inoperative position.

Fig. 8 is a front elevation, on an enlarged scale, of one of the supplemental clamps and part of the main clamp in operative position.

Fig. 9 is a plan view thereof.

Fig. 10 is a perspective view of one of the supplemental clamps with adjacent parts of the copy holder shown in broken lines.

Fig. 11 is an end view of the upper portion of the copy holder showing the main and supplemental clamps in the same position as that illustrated in Fig. 6.

The copy holder or device shown in the drawings to illustrate an embodiment of my invention comprises the usual upright, intermittently movable copy supporting plate 10, which is arranged to travel up and down on a stationary frame or support of which the spaced stationary guide rod or members 11 form a part. The copy is held on the support 10 by the clamping means and moves with the support past a relatively stationary line guide 12 of any suitable construction, see Fig. 1.

In order to properly support relatively wide sheets or copies, the upper portion of the copy support 10 is provided with extensions or parts 14 projecting laterally, prefer-

ably from both side edges of the support. In the construction shown, the extensions 14 are formed by an angle bar, one flange 16 of which is suitably secured, as by welding or otherwise, to the front of the plate 10, while the other flange 17 extends rearwardly over the top edge of the plate.

The main copy clamp comprises the usual horizontal rod or bail 20 which is bent at its opposite ends to form operating handles or loops 21. The ends of the rod 20 have offset crank portions 22 terminating in pivots 23 which are journalled in upwardly and forwardly extending bearings 24 which may be formed on or secured to the ends of the extensions 14. Tension coil springs 25 secured at opposite ends to the crank portions 22 and to the bearings 24 cause the clamp 20 to yieldingly bear against the face of the copy and clamp the same against the front of the support 10. Preferably the rod 20 is provided with the usual rubber or resilient sleeves 26 which are spaced as shown in Figs. 1–3, so as to grip note books or sheets of ordinary width and which are not substantially wider than the plate 10.

By swinging the main clamp or rod 20 upwardly about its pivots 23, see Fig. 11, it can be moved to an inoperative position, the cranks 22 passing across the dead center line between said pivots and the remote ends of the springs 25. The rod 20 is yieldingly held in this position by the springs 25, the cranks 22 abutting against suitable fixed stops 27 on the bearings 24. A slight downward pressure on the handle portions 21 will cause the clamp 20 to return to clamping position.

A spring pressed clip 28, carried on a transverse pivot 29 is preferably provided for holding the turned-over sheets out of the way at the back of the holder. This clip extends laterally above the top flange 17, with its free end disposed so as to engage and yieldingly hold said turned over sheets against the top of the holder.

A, A represent the supplemental clamps, which are illustrated in detail in Figs. 4–11. Any desired number of these clamps, one or more, can be provided, two being ordinarily sufficient. These are arranged, see Figs. 1–3, so that one may be above, or in operative relation to each of the lateral extensions 14 of the copy plate, and they are adjustably mounted so as to be positioned at any desired points along the top of the holder. As shown in Fig. 2, these clamps can thus engage the outer portions of a wide sheet and hold these portions against the front faces of said extensions, while the intermediate portions of the sheet are similarly held by the sleeves 26 of the main clamp.

The supplemental clamps A shown are in the form of spring clips, and as they are alike, a description of one will suffice.

Each clamp A, preferably formed of sheet metal, includes a U or channel-shaped shoe or member 30 slidable on or relatively to the top flange 17 of the copy support. For this purpose the upright side flanges 31 of the shoe are apertured to slidingly fit on a fixed guide rod 32, preferably of round cross section, disposed parallel to and above the top flange 17. The ends of said rod are secured in the bearings 24, and in order to prevent the rod from flexing between its ends, its intermediate portion preferably passes through a bearing 33 secured on the top flange 17 approximately midway between its ends.

Hinged to the forward ends of the flanges 31 of the shoe, as by pivots 36, is a clamp member or lever 37 having a pair of spaced lugs 38 through which said pivots pass. The lever 37, which extends downwardly when in copy-engaging position, terminates in a forwardly and downwardly offset finger piece 39. This finger piece and the adjacent lower portion 40 of said lever 37 are reduced in width, forming a shoulder 41. A rubber or other resilient block 42, preferably cylindrical in cross section and slotted at 43, is mounted transversely of said lever 37 on said reduced portion 40 between said shoulder 41 and the offset finger piece. The block 42 is held in yielding and frictional engagement with the copy on the copy support, see Figs. 4 and 5, by suitable means, such as a tension coil spring 44, connected at its ends respectively to an apertured lug 45 struck out of the lever 37, and a similar lug 46 struck out of the base of the shoe 30. A pair of bent hooks or shoulders 48 are formed at the rear of the base of said shoe 30 and so disposed as to extend into operative relation to the rear edge of the top flange 17 of the copy support.

The tendency of the spring 44 is to draw the members 30 and 37 of the supplemental clamp A towards each other about the pivots 36. This action, however, is resisted by the connection of the member 30 with the rod 32, and the engagement of the member 37 with the copy on the copy support 10, resulting in a slight upward tilting of the front end of the member 30 about said rod 32, in the manner shown in Figs. 4 and 5. This causes a binding or gripping action of the member 30 on the rod 32 and a firm, frictional engagement of the hooks 48 with the rear edge of the flange 17, and prevents lateral displacement of the clamp.

If, however, the lever 37 be swung upwardly about the pivots 36 to the position shown in Fig. 7, the front end of the spring 44 will move across the dead center line between said pivots and the rear point of connection of said spring and will be held up in this position by the engagement of the top edge of said member with said spring, which will arrest further movement. As the lever 37 is now out of engagement with the copy support,

the shoe 30 is free to turn about the rod 32 and will rest loosely, flat on the top flange 17, see Fig. 7. This results in a rearward movement of the hooks 48 and their disengagement with the edge of said flange. The binding action of the shoe 30 on said rod 32 will also be relieved, so that the supplemental clamp A can now be slid freely along the rod and adjusted to any desired position on the copy support.

In addition to the foregoing independent and individual manipulation of the supplemental clamps A, these clamps also coact with and can be operated to move to copy-clamping and releasing positions by the main clamp 20 as the latter is moved to its clamping and releasing positions.

For example, when the main clamp 20 is swung upwardly about its pivots 23 from its clamping position, Figs. 4, 5 and 8, to its inoperative position, as described, the rod 20 will engage the overhanging finger-pieces 39 of the supplemental clamps and swing the levers 37 about the pivots 36 to and hold them in a forwardly extending position, Figs 6 and 11, whereby the copy is released.

In this movement of the supplemental clamps, their springs 44 do not pass over their dead center lines, and when, therefore, the main clamp is returned to clamping position, the springs 44 will cause said supplemental clamp levers 37 to follow or return with the main clamp to clamping position.

When using copy of ordinary width, the supplemental clamps A are not usually required, and they can be moved to their inoperative position, thus permitting the main clamp 20 to be used independently, and relieving the user from the additional effort required in lifting both the main and supplemental clamps.

The improved copy clamping means described is inexpensive to manufacture and is practical and durable in use. The supplemental clamps are easily manipulated for lateral adjustment along the top of the copy holder to suit wide copy or sheets of different widths, and cooperate with the main clamp in firmly holding the copy. When moved to their inoperative positions they do not in any way interfere with the independent operation of the main clamp. On the other hand, after being once adjusted for work of a particular width, the supplemental clamps can be released and again returned to holding position by merely operating the main clamp to and from its releasing position.

While hereinbefore my clamping means have been described for connection with a copy holder designed for unusually wide copies, nevertheless the same is also desirable for copy holders of the more usual forms and dimensions, since the supplemental clamps would insure the secure holding of the copy in case the main clamp should not function properly because of unequal size or deterioration of the rubber sleeves 26, the bending of the clamp rod 20 or for other reasons.

I claim as my invention:

1. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp which is mounted to move towards and bear on said copy and also to move to release said copy, and a supplemental clamp which is mounted on said copy holder and is adjustable laterally thereof relatively to said main clamp and is constructed to engage said copy and cooperate with said main clamp in holding said copy on said support, said supplemental clamp being operable independently of said main clamp and having a part which is actuated by said main clamp to operate said supplemental clamp when the main clamp is operated.

2. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp extending across said support and which is mounted to move towards and engage the copy thereon, means for yieldingly urging said main clamp in the latter direction, and a supplemental clamp mounted on said copy holder and which is adjustable laterally thereof and relatively to said main clamp, said supplemental clamp having a movable part which yieldingly bears on said copy to cooperate with said main clamp in holding said copy on said support, said supplemental clamp being operable independently of said main clamp and having a part which is actuated by said main clamp to operate said supplemental clamp when the main clamp is operated.

3. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp extending across said support and which is mounted to move towards and engage the copy thereon, means for yieldingly urging said main clamp in the latter direction, and a supplemental clamp adjustably mounted on said support for movement laterally thereof in parallel relation to the plane of said copy, said supplemental clamp having a part which is movable to and from clamping relation with said copy independently of the clamping movements of said main clamp but arranged to be actuated also by the main clamp to release the copy.

4. In a copy holder, a copy support including a body portion having a side edge, and an extension projecting laterally beyond said edge, and means for holding a copy on said support including a main copy clamp which yieldingly bears on the copy opposite the body portion of the copy support, and a supplemental clamp mounted on said holder in operative relation to said extension and which yieldingly bears on a part of said copy out-

wardly beyond the edge of said body portion and holds said part of said copy against said extension, said supplemental clamp being operable independently of said main clamp and having a part which is actuated by said main clamp to operate said supplemental clamp when the main clamp is operated.

5. In a copy holder, a copy support including a body portion having opposite side edges, and extensions projecting laterally thereof beyond said side edges, and means for holding copy on said support including a main copy clamp which yieldingly bears on a part of the copy which is disposed opposite said body portion of the copy support, and supplemental clamps mounted on said holder adjacent said extensions and which are adjustable laterally relatively thereto for engaging portions of said copy outwardly beyond the side edges of said body portion of said copy support, said supplemental clamps being operable independently of said main clamp and having parts which are actuated by said main clamp to operate said supplemental clamps when the main clamp is operated.

6. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp which is mounted to move towards and bear on said copy and also to move to release said copy, and a supplemental clamp which is mounted on said copy holder and has a part which is operable to clamp and release said copy, whereby said supplemental clamp cooperates with said main clamp in holding said copy on said support, said movable part of said supplemental clamp being positioned so as to be moved by said main clamp to release the copy when the latter is moved to release the copy.

7. In a copy holder, a copy support, and means for holding a copy thereon comprising a main clamp mounted to move towards and bear on said copy and also to move to release said copy, and a supplemental clamp mounted on said copy holder and which has a part which is movable to clamp and release said copy, whereby said supplemental clamp cooperates with said main clamp in holding said copy on said support, said movable part of said supplemental clamp being arranged to be moved by the main clamp to release the copy and being also movable to an inoperative position in which it permits said main clamp to be independently moved to and from copy-holding position, and means for releasably holding said movable part of said supplemental clamp in said inoperative position.

8. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp which is mounted on the copy holder and is operable to clamp and release said copy, a guide on said support and extending in parallel relation to the front thereof, and a supplemental clamp slidably arranged on said guide so as to move laterally with respect to said support to place the supplemental clamp opposite different parts of the copy, said supplemental clamp being adapted to engage said copy and cooperate with said main clamp in holding said copy on said support, said supplemental clamp being operable independently of said main clamp and having a part which is actuated by said main clamp to operate said supplemental clamp when the main clamp is operated.

9. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp which is mounted on the copy holder and is operable to clamp and release said copy, a supplemental clamp having a shoe, a guide on said support on which said shoe is slidably mounted to move laterally relative to said support in parallel relation to the front thereof to place the supplemental clamp opposite different parts of the copy, a copy engaging member pivoted to said shoe, and a spring attached to said shoe and to said copy-engaging member for urging the latter yieldingly against the face of the copy on the front of said support, said spring permitting said member to be moved away from and release said copy, said supplemental clamp being operable independently of said main clamp and having a part which is actuated by said main clamp to operate said supplemental clamp when the main clamp is operated.

10. In a copy holder, a copy support, and means for holding a copy thereon, comprising a clamp having a shoe, a guide on said support on which said shoe is slidably mounted to move laterally relative to said support in parallel relation to the front thereof, a copy-engaging member pivoted to said shoe, and a spring attached to said shoe and to said copy-engaging member for yieldingly holding said member in a position to engage and hold said copy and which also permits said member to be moved to an inoperative copy-releasing position and yieldingly holds the same in such position.

11. In a copy holder, a copy support, and means for holding a copy thereon, comprising a clamp having a shoe, a guide on said support on which said shoe is slidably mounted to move laterally relative to said support and in parallel relation to the front thereof, a copy-engaging member, a pivot connecting said shoe and said member, a spring having its ends attached respectively to said shoe and to said member, and which urges said member yieldingly against said copy, said member being movable away from said copy against the resistance of said spring to a position in which it is held by said spring in inoperative relation to said copy.

12. In a copy holder, a copy support and

means for holding a copy thereon, comprising a clamp having a shoe, a guide on said support on which said shoe is slidably mounted to move laterally relative to said support and in parallel relation to the front thereof, a copy-engaging member pivoted to said shoe, means to cause said shoe to frictionally engage said guide to hold said clamp in stationary relation thereto, said means also acting to hold said member in a position to bear on the face of the copy and hold the latter against said support, said means being also adapted to permit said copy-engaging member to be moved away from said copy to an inoperative position and to relieve the frictional engagement of said shoe and guide, whereby said clamp may be moved freely along the latter.

13. In a copy holder, a copy support, and means for holding a copy thereon, comprising a clamp having a shoe, a guide on said support on which said shoe is slidably mounted to move laterally relative to said support and in parallel relation to the front thereof, a copy-engaging member pivoted to said shoe, means acting to hold said member in a position to bear on the face of the copy and hold the latter against said support, said means also acting to move a part on said shoe into frictional engagement with said support, and said means being also adapted to permit said copy-engaging member to be moved away from said copy to an inoperative position and to relieve the frictional engagement of said shoe with said support, whereby said clamp may be moved freely along said guide.

14. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp extending across said support and which is mounted to move towards and bear on said copy and also to move in an opposite direction to release said copy, a supplemental clamp having a shoe, a guide on said support on which said shoe is adjustable laterally relative to said support and in parallel relation to the front thereof, a copy-engaging member pivoted to said shoe, and a spring attached to said shoe and said copy-engaging member for urging the latter yieldingly against the copy, said copy-engaging member having a part extending adjacent said main clamp and which when the latter is moved to release said copy, is engaged and moved thereby against the action of said spring to disengage said member from said copy.

15. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp extending across said support and which is mounted to move towards and bear on said copy and also to move in an opposite direction to release said copy, a supplemental clamp having a shoe, a guide on said support on which said shoe is adjustable laterally relative to said support and in parallel relation to the front thereof, a copy-engaging member pivoted to said shoe, and a spring attached to said shoe and said copy-engaging member for urging the latter yieldingly against the copy, means for holding said main clamp in an inoperative copy-releasing position, and said copy-engaging member of said supplemental clamp having a part extending adjacent said main clamp and which, when the latter is moved to said inoperative position is engaged and moved therewith against the action of said spring, and is returned to copy-engaging position by said spring when said main clamp is moved to copy-engaging position.

16. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp which is mounted on the copy holder and is movable to clamp and release said copy, and a supplemental clamp which is mounted on said copy holder and is movable independently of said main clamp to clamp and release the copy, said supplemental clamp being arranged to be moved also by the main clamp to release the copy when the main clamp is actuated to release the copy.

17. In a copy holder, a copy support, and means for holding a copy thereon, comprising a main clamp mounted on said holder and extending across the copy, and a supplemental clamp mounted on said holder and which is adjustable laterally to different positions relatively to said main clamp, said supplemental clamp being arranged to be moved by said main clamp to release the copy.

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