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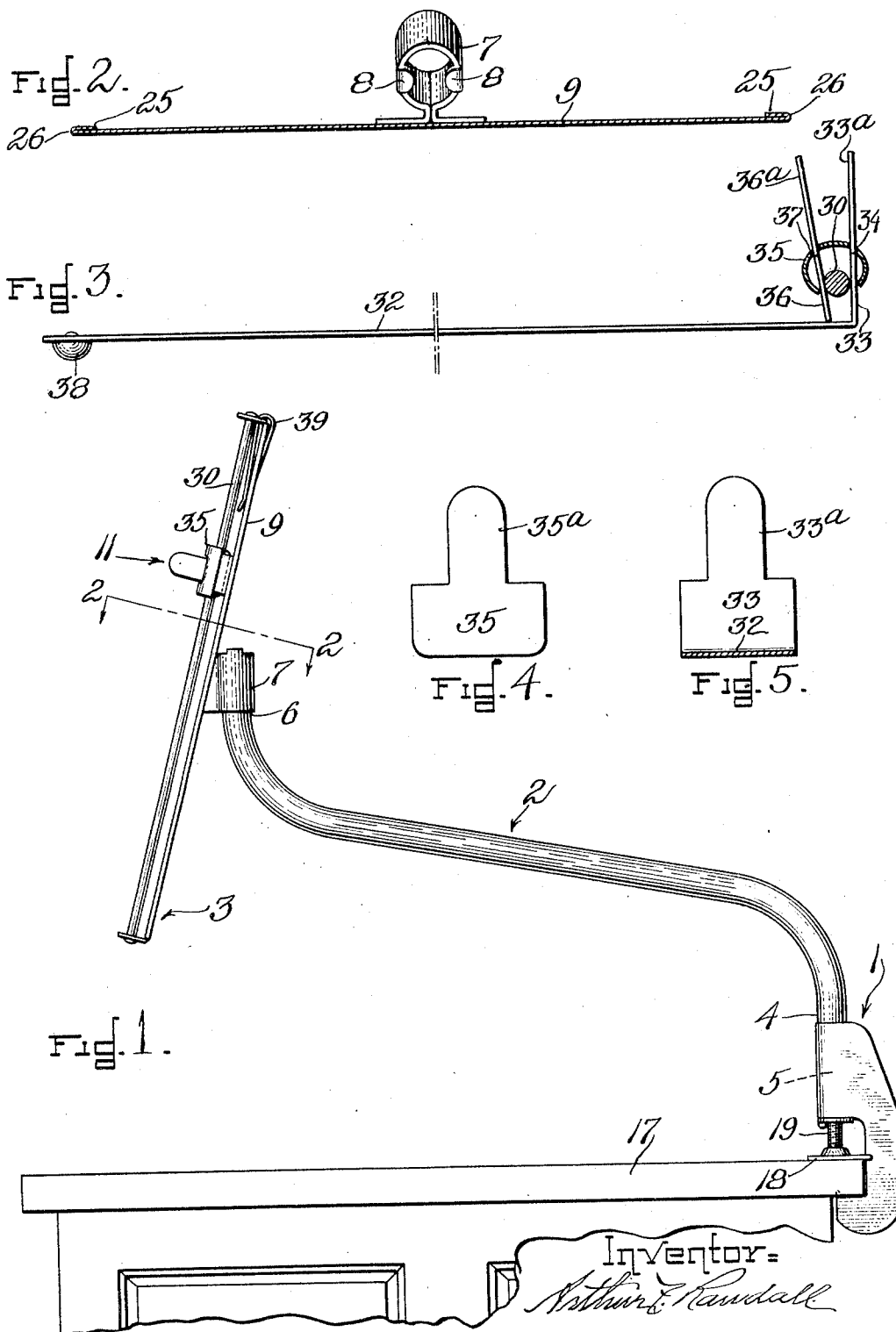
A. F. RANDALL

1,798,809

COPYHOLDING ATTACHMENT FOR DESKS AND THE LIKE

Filed May 22, 1930

4 Sheets-Sheet 1



Inventor:

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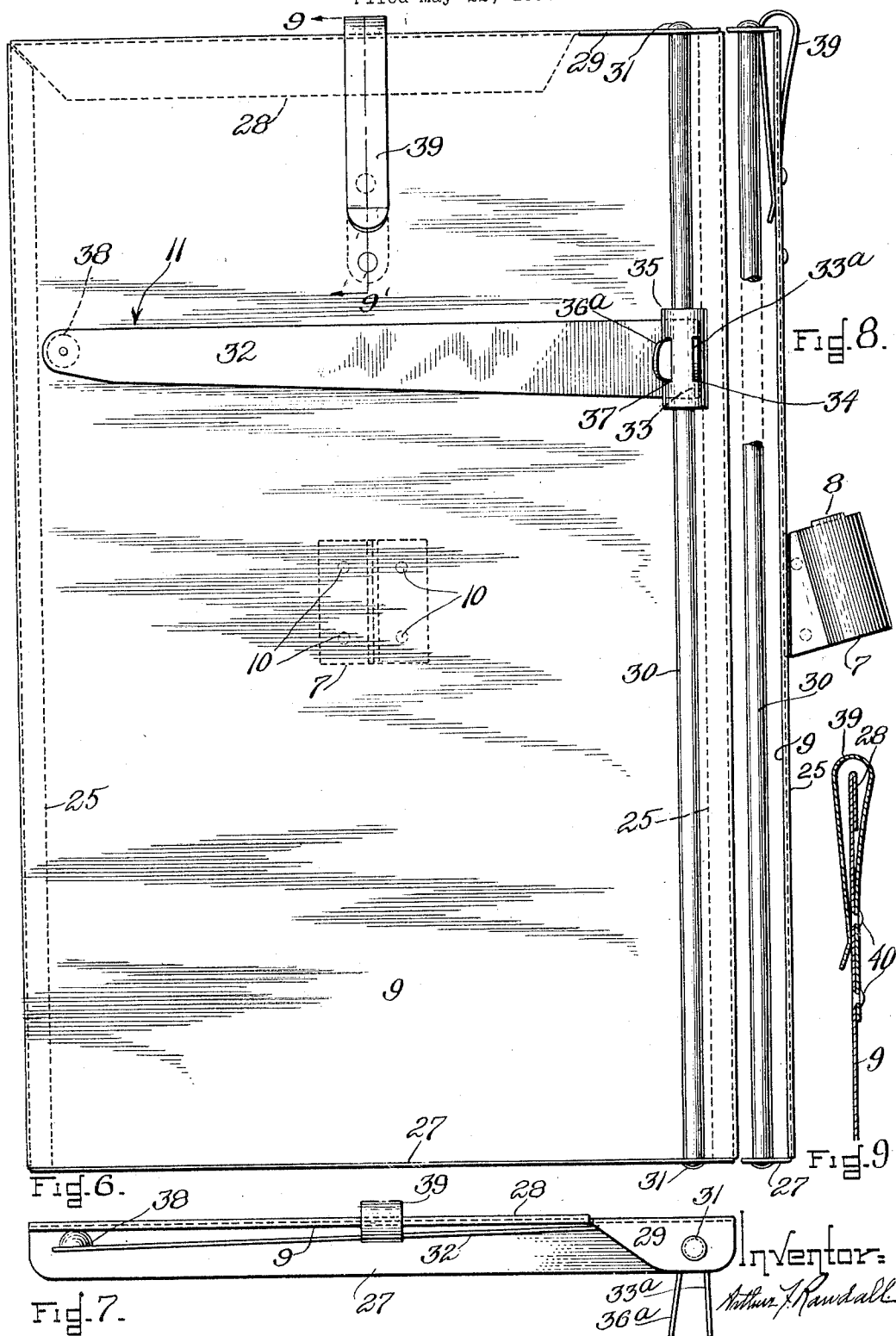
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COPYHOLDING ATTACHMENT FOR DESKS AND THE LIKE

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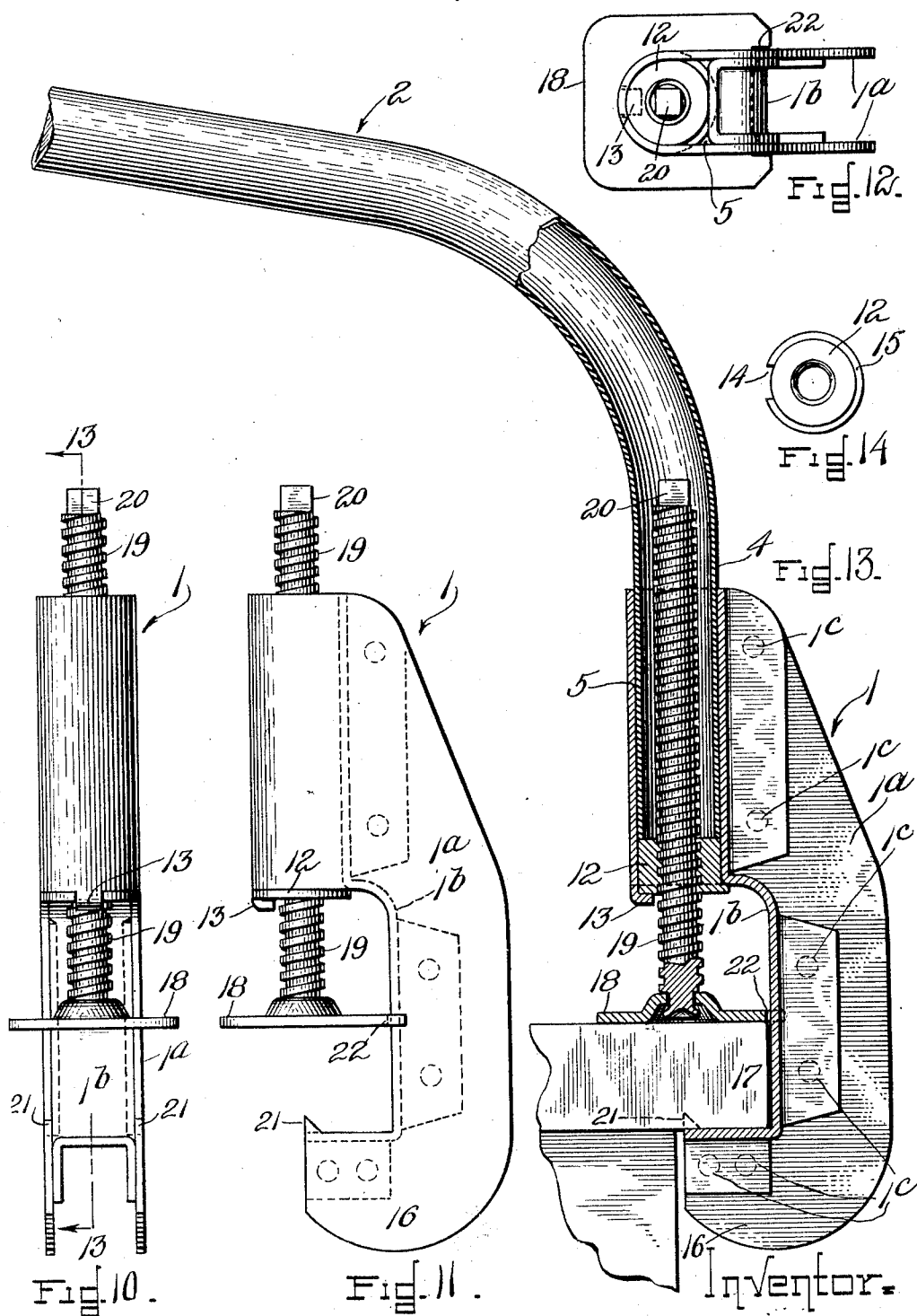
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COPYHOLDING ATTACHMENT FOR DESKS AND THE LIKE

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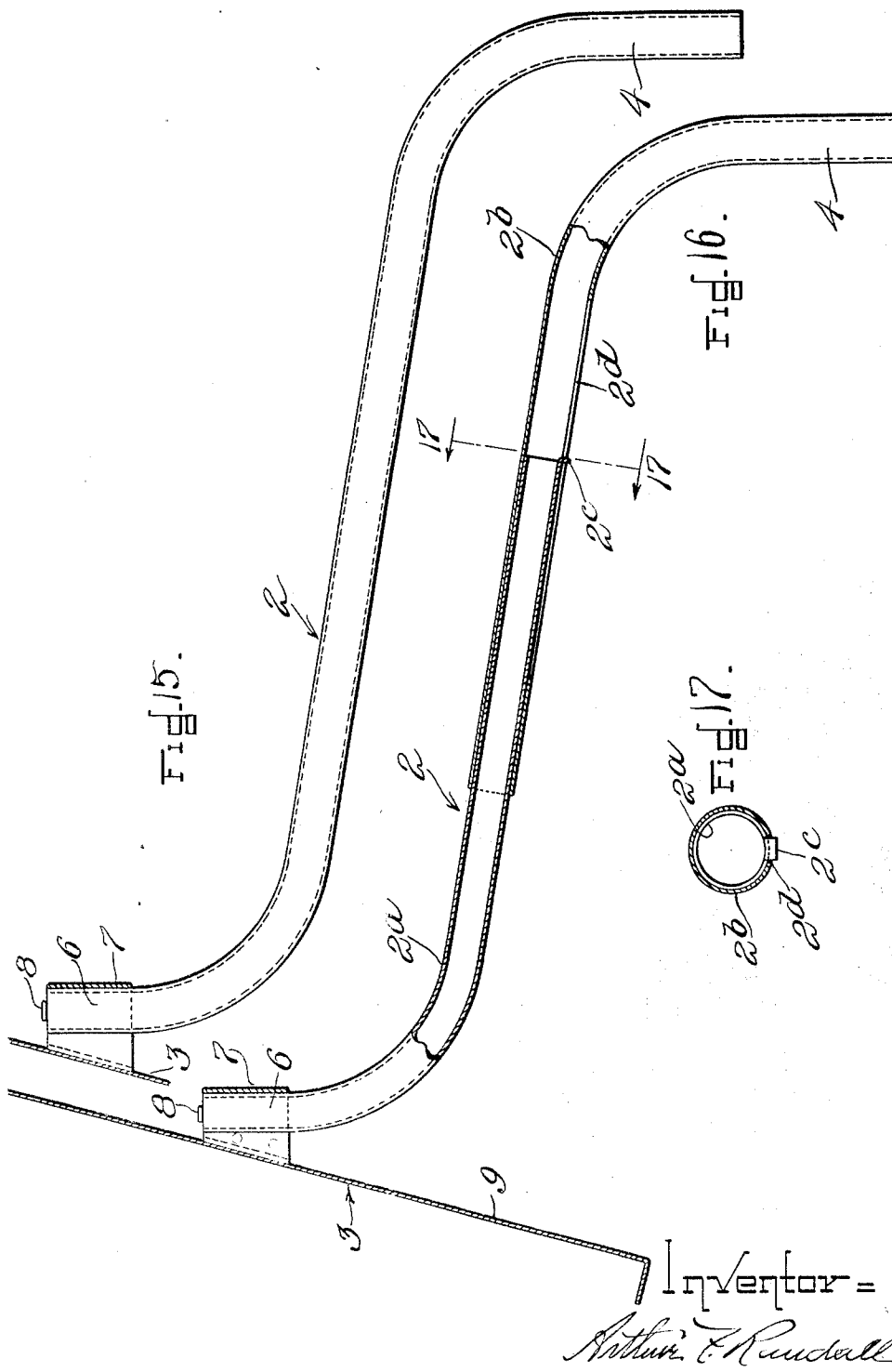
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COPYHOLDING ATTACHMENT FOR DESKS AND THE LIKE

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4 Sheets-Sheet 4



UNITED STATES PATENT OFFICE

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COPYHOLDING ATTACHMENT FOR DESKS AND THE LIKE

Application filed May 22, 1930. Serial No. 454,630.

My invention relates to copy-holding attachments for desks, tables and the like, and it has for its object to provide an efficient device of this class which shall be of simple and inexpensive construction.

More especially this invention is intended to provide a copy-holding attachment that is particularly adapted for use by typists while operating a typewriting machine and which will not be jarred or vibrated by the operation of the latter; which can be attached in any position desired to the marginal portion of the top of the desk or the like on which the typewriting machine is used; which will not materially interfere with the use, as heretofore, of the entire top of the desk or table to which it is applied, and which can be adjusted at will horizontally back and forth above the top of the desk or the like without interfering with papers, books or other things that may be upon the latter.

To these ends I have provided an attachment of the class described comprising three main parts, viz., a clamp member having means whereby it is fixedly but removably clamped to the overhanging marginal portion of the top of a desk or the like; an intermediate cantilever member extending laterally from said clamp member having one end thereof rotatably supported by said clamp member so that said cantilever member can be swung horizontally back and forth above said top on a vertical axis, and a copy-holding member pivotally connected with the opposite free end of said intermediate cantilever member so as to be rotatably adjustable horizontally around a vertical axis that is parallel with the axis on which said member is swung horizontally.

Other features of my invention are hereinafter pointed out.

In the accompanying drawings:

Figure 1 shows in side elevation the upper portion of a desk having applied thereto a copy-holding attachment constructed in accordance with my invention.

Figure 2 is a section on line 2—2 of Figure 1.

Figure 3 is an edge view of the adjustable liner element hereinafter referred to.

Figures 4 and 5 are details relating to the liner element hereinafter described.

Figure 6 is a front elevation of the copy-holding member hereinafter described.

Figure 7 is a top plan view of the copy-holding member shown in Figure 6.

Figure 8 is a side elevation of the copy-holding member shown in Figures 6 and 7.

Figure 9 is a section on line 9—9 of Figure 6.

Figure 10 is a front elevation of the clamp base member hereinafter described.

Figure 11 is a side elevation of the clamp base member shown in Figure 10.

Figure 12 is a top plan view of the clamp base member shown in Figures 10 and 11.

Figure 13 is a side elevation, partly in section, of the lower portion of the attachment shown in Figure 1, the clamp base member being shown as in section on line 13—13 of Figure 10.

Figure 14 is a top plan view of the nut element hereinafter referred to which forms part of the clamp member shown in Figures 10, 11 and 12.

Figure 15 is a side elevation of one form of intermediate member.

Figure 16 is a side elevation, partly in section, of another form of intermediate member and a part of the copy-holding member.

Figure 17 is a sectional view on line 17—17 of Figure 16.

My improved copy-holding attachment, as herein shown, comprises a base clamp member 1, an intermediate cantilever member or arm 2 and a copy-holding member 3.

At its lower end the intermediate member 2 is made with a depending vertically disposed trunnion end portion 4, Figure 15, that is rotatably supported within a socket or chamber 5, Fig. 13, provided at the top of the base member 1. From the end trunnion portion 4 the intermediate member 2 extends laterally and at its free end it is bent upwardly to provide a vertically disposed end trunnion portion 6 upon which is telescopically and loosely fitted a socket 7 provided upon the rear side, and at the middle of, the copy-holding member 3, said socket 7 being provided at its upper end with abutment lugs 8, 8, as

shown best in Figure 2, which rest and slide upon the top of the end trunnion portion 6 of the intermediate member.

It will thus be clear that the intermediate arm member 2 is free to swing laterally on base member 1 entirely around the vertical axis of the end trunnion portion 4 while the copy-holding member 3 is free to be swung around the vertical axis of the end trunnion portion 6 for the greater part of a complete revolution.

As shown in Figures 6, 7 and 8, the copy-holding member 3 comprises a body 9 consisting of a rectangular panel of thin sheet metal, to the rear side of which the socket 7 is affixed by spot-welding, as at 10, said socket being formed from sheet metal also, and being disposed obliquely with respect to the plane of the sheet metal panel 9, as shown in Figures 1 and 8, with the result that when the device is in use the panel 9 inclines rearwardly and the liner element 11, hereinafter described, is held or urged rearwardly by gravity against the front face of said panel, or against the copy or sheets of paper which may occupy position on said front face beneath said liner element 11.

Since the pivotal support for the inclined copy-holding member 3 is disposed vertically and parallel with the axis of the trunnion end portion 4, it will be clear that no matter how the two members 2 and 3 may be adjusted relatively to the clamp base member 1 and relatively to each other, the inclined median line of the panel 9, as viewed in Figure 6, will always occupy a vertical plane within which the axis of the trunnion portion 6 of the intermediate member is disposed.

Thus the base member 1 may be fixed to the back, either side or to the front of the desk top and however it may be applied the copy on the member 3 is always properly presented to the view of the user seated at the front of the desk.

It will also be clear that when the copy-holder is not in use the intermediate member 2 and the copy-holding member 3 may be swung on the axis of trunnions 4 and 6 into positions at one side, or at the back, of the desk where they are out of the way. Also, the copy-holding member 3 may be adjusted on trunnions 4 and 6 to accord with changes in the source of light.

The socket 5 is closed at its lower end by a nut element 12, Figures 13 and 14, which is fixed in position within the lower end of the socket 5 by means of an inwardly bent lug or tang 13 occupying a notch 14 in a flange 15 at the lower end of the nut element 12, said lug also serving to hold said nut element against rotation, as will be clear.

The base member 1 is constructed with a lower fixed jaw 16 adapted to occupy a position beneath the marginal portion of a desk top or the like 17, as shown in Figures 1 and

13, and with a movable or adjustable jaw 18 rotatably connected with the lower end of a screw 19 which extends upwardly through nut element 12, with its upper end terminating above the top of the socket 5 so that it is accessible, said upper end being made square as at 20 thereby to adapt it to be operated by a wrench.

The base member 1 is applied to the desk top by positioning the fixed jaw 16 below the marginal portion thereof as shown in Figure 13 after which the screw 19 is operated so as to firmly grip the desk top between the two jaws 16 and 18. The lower end of the intermediate member 2 is then inserted within the socket 5 after which the socket 7 of the copy-holding member 3 is fitted telescopically on to the upper end of said intermediate member 2.

The intermediate member 2 is conveniently made from a length of metal tubing and when its lower end is inserted within the socket 5 the upper portion of the screw 19 occupies a position within said tubing where it is not only hidden from view, which is desirable, but also inclosed so that there are no projecting portions on the base member 1 liable to become entangled with clothing, or to injure a person's body through contact therewith.

Preferably the desk-engaging portion of the fixed jaw 16 is provided with a pair of spikes or teeth 21 which are driven into the material of a wooden desk top when the clamp base is applied to the latter as described. These spikes hold the base clamp 1 fixedly in position against displacement on the axis of the screw 19 and they also serve to hold the base clamp against displacement in any direction laterally with respect to the desk top.

As shown in Figures 11, 12 and 13 the movable or adjustable jaw 18 of the base clamp is notched as at 22 so as to straddle the body of the base clamp whereby said movable or adjustable jaw is held against rotative displacement relatively to said body and yet is free to move longitudinally thereof.

In the best form of my invention the body or frame of the base clamp 1 is made from two pieces of sheet metal 1a and 1b fastened together by spot-welding as at 1c.

The panel 9 of the copy-holding member 3, Figures 2, 6, 7 and 8, is constructed at its opposite sides with intumed marginal flaps 25, which not only stiffen and reinforce the panel longitudinally but also provide the same with rounded side edges 26 which is desirable in order to avoid cutting edges.

At its bottom the panel 9 is provided with an integral forwardly extending flap 27 which not only provides a shelf on which various things may be supported but which

also serves to stiffen said lower end transversely.

At its top the panel 9 is made with two integral flaps 28 and 29, the former being folded rearwardly and inwardly against the back side of the panel not only to reinforce and stiffen the greater portion of the top of panel 9 but also to provide a rounded top edge at the junction of said flap with the panel 9. The other flap 29 is relatively short in length and bent sharply forward into perpendicular relationship with the panel 9, said flap 28 being formed with an aperture which is longitudinally alined with an aperture provided through the shelf flap 27 at the bottom of the panel. The apertures of the two flaps 27 and 29 are occupied by the reduced end portions of a rod or bar 30 whose extremities are upset or headed as at 31 thereby to rigidly fasten the opposite ends of the rod or bar to said flaps.

As shown in Figure 6, the rod or bar 30 is disposed adjacent, and parallel with, the right-hand side edge of panel 9 and has adjustably mounted upon it the liner element 11.

The liner element 11 comprises a straight-edge bar of sheet metal 32 provided at one end with an integral perpendicular post 33, see Figures 3, 4, 5 and 6, having a reduced end finger grip portion 32a extending through a slot 34 provided in a sheet metal bow-spring 35. The post 33 constitutes one jaw of a clamp which embraces the rod or bar 30, the other jaw of said clamp being shown at 36 and having a reduced outer end portion 36a extending through another slot 37 formed in the bow-spring 35. The rod or bar 30 occupies a position between the two jaws 33 and 36 of the liner clamp, and, as will be clear, the bow-spring operates through said two jaws to hold the liner element frictionally clamped in position on the rod or bar 30 so that it is normally held against movement longitudinally thereof.

It will be clear that by pressing together the two finger portions 32a and 36a the liner element 11 can be unclamped from the bar 30 when it is desired to adjust said liner lengthwise thereof. Thus, the liner clamp, including the bow-spring 35, serves to hold the liner in adjusted position on the rod or bar 30.

At its free end the straight-edge bar 32 is provided upon its inner side with a rubber button 38, Figures 3, 6 and 7, which serves as a cushion and also prevents the straight-edge bar 31 from scratching the face of the panel 9.

At the top of the panel 9 there is provided a paper-holding bow-spring 39 which embraces the top portion of the panel and has its rear leg fastened by rivets 40 to said panel whereby its other front leg is caused to bear yieldingly against the front side of the panel, the lower end portion of said front leg being

obliquely disposed with respect to the panel 9 as shown in Figs. 8 and 9, so that papers or the like can be slid edgewise into position thereunder.

By constructing the panel 9 with marginal flaps 25, 27, 28 and 29 disposed as described, said panel may be made from very thin sheet metal and at the same time it is so reinforced that it is stiff and strong. Also sharp cutting edges are, in most part, avoided.

The straight-edge bar 32 and the clamp jaw 36 are preferably made from sheet metal as shown. Also the socket 7 is preferably made from a single piece of sheet metal.

Figs. 16 and 17 illustrate an alternative form of intermediate radius-arm member 2 which is longitudinally extensible and contractible, said member comprising two tubular sections 2a and 2b with the section 2a fitted telescopically within the section 2b and splined thereto by means of a lug or tang 2c on section 2a which is slidable within a longitudinal slot 2d formed in section 2b.

What I claim is:

1. An attachment for desks and the like comprising a base clamp-member having a pair of jaws to embrace the overhanging marginal portion of the top of a desk or the like and operable to fixedly grip the latter, said base clamp-member being made at its top with a vertical socket that is above and axially alined with said jaws; an intermediate cantilever member made adjacent one end with a depending trunnion rotatably supported within said socket thereby to permit said cantilever member to swing horizontally above the top of the desk or the like, and a copy-holding member pivotally supported above the plane of said top by the free end of said cantilever member so that it is angularly adjustable independently on a vertical axis.

2. An attachment for desks and the like comprising a base clamp-member having a pair of jaws to embrace the overhanging marginal portion of the top of a desk or the like including a lower fixed jaw and an upper movable jaw, said base clamp-member being made adjacent its top with a vertical socket and having a threaded aperture adjacent the bottom of said socket, and a screw for operating said movable jaw, said screw being mounted within said threaded aperture and having its upper portion disposed within said socket; an intermediate cantilever member made adjacent one end with a depending tubular trunnion rotatably supported within said socket thereby to permit said cantilever member to swing horizontally above the top of the desk or the like, said tubular trunnion surrounding the upper portion of said screw, and a copy-holding member pivotally supported above the plane of said top by the free end of said cantilever member so that

it is angularly adjustable independently on a vertical axis.

3. An attachment for desks and the like comprising a base clamp-member having a pair of jaws to embrace the overhanging marginal portion of the top of a desk or the like including a lower fixed jaw and an upper movable jaw, said base clamp-member being made adjacent its top with a vertical socket and having a threaded aperture adjacent the bottom of said socket, a screw for operating said movable jaw, said screw extending upwardly from said movable jaw through said threaded aperture and socket with its upper end disposed above the latter so that it is accessible; an intermediate cantilever member made adjacent one end with a depending tubular trunnion rotatably supported within said socket thereby to permit said cantilever member to swing horizontally above the top of the desk or the like, said tubular trunnion surrounding the upper portion of said screw, and a copy-holding member pivotally supported above the plane of said top by the free end of said cantilever member so that it is angularly adjustable independently on a vertical axis.

4. An attachment for desks and the like constructed in accordance with claim 2 wherein said threaded aperture is formed through a nut element occupying a position within the lower end portion of said socket and wherein said clamp-member includes a body made from sheet metal formed with a lug that is engaged with said nut element so as to hold the latter in position within the lower end of said socket and against rotation with the screw.

5. An attachment for desks and the like comprising a base clamp-member having a pair of jaws to embrace the overhanging marginal portion of the top of a desk or the like including a lower fixed jaw and an upper movable jaw, said base clamp-member being made adjacent its top with a vertical socket and having a threaded aperture adjacent the bottom of said socket, and a screw for operating said movable jaw, said screw being mounted within said threaded aperture and having its upper portion disposed within said socket; an intermediate cantilever member consisting of a length of metal tubing having its end portions bent in opposite directions to provide a depending tubular trunnion at one end that is rotatably supported within said socket thereby to permit said cantilever member to swing horizontally above the top of the desk or the like, said depending tubular trunnion surrounding the upper portion of said screw, and also to provide a vertical upstanding trunnion at the free end of said intermediate cantilever member, and a copy-holding member having a socket telescopically fitted upon said upstanding trunnion portion so that it is supported above the plane of said top and

angularly adjustable independently on said upstanding trunnion.

6. An attachment for desks and the like comprising a base clamp-member having a pair of jaws to embrace the overhanging marginal portion of the top of a desk or the like and operable to fixedly grip the latter; an intermediate cantilever member supported adjacent one end by said base clamp-member so as to swing horizontally thereon above the top of the desk or the like on a vertical axis, said intermediate cantilever member being extensible and contractible longitudinally whereby its length may be varied, and a copy-holding member pivotally supported above the plane of said top by the free end of said cantilever member so that it is angularly adjustable independently on a vertical axis.

7. The combination with a base clamp-member having a pair of jaws to embrace the overhanging marginal portion of the top of a desk or the like including a body made with a lower fixed jaw and an upper movable jaw, said body being made adjacent its top with a vertical socket and having a threaded aperture adjacent the bottom of said socket, and a screw for operating said movable jaw mounted within said threaded aperture and having its upper portion disposed within said socket, of a cantilever member having a depending tubular trunnion rotatably supported within said socket thereby to permit said cantilever member to swing horizontally above the top of the desk or the like, said trunnion surrounding and enclosing the upper portion of said screw.

8. The combination with a base clamp-member having a pair of jaws to embrace the overhanging marginal portion of the top of a desk or the like including a body made with a lower fixed jaw and an upper movable jaw, said body being made adjacent its top with a vertical chamber and having a threaded aperture adjacent the bottom of said chamber, and a screw for operating said movable jaw mounted within said threaded aperture and having its upper portion disposed within said chamber, of a cantilever member having a depending tubular trunnion telescopically and rotatably engaged with the upper portion of said body so as to inclose the upper portion of said screw.

Signed by me at Boston, Suffolk County, Massachusetts, this 17th day of May, 1930.

ARTHUR F. RANDALL.