Sept. 20, 1932. A. G. F. KUROWSKI 1,878,529

COPYHOLDER

Filed Feb. 5, 1932

FIG. 1.

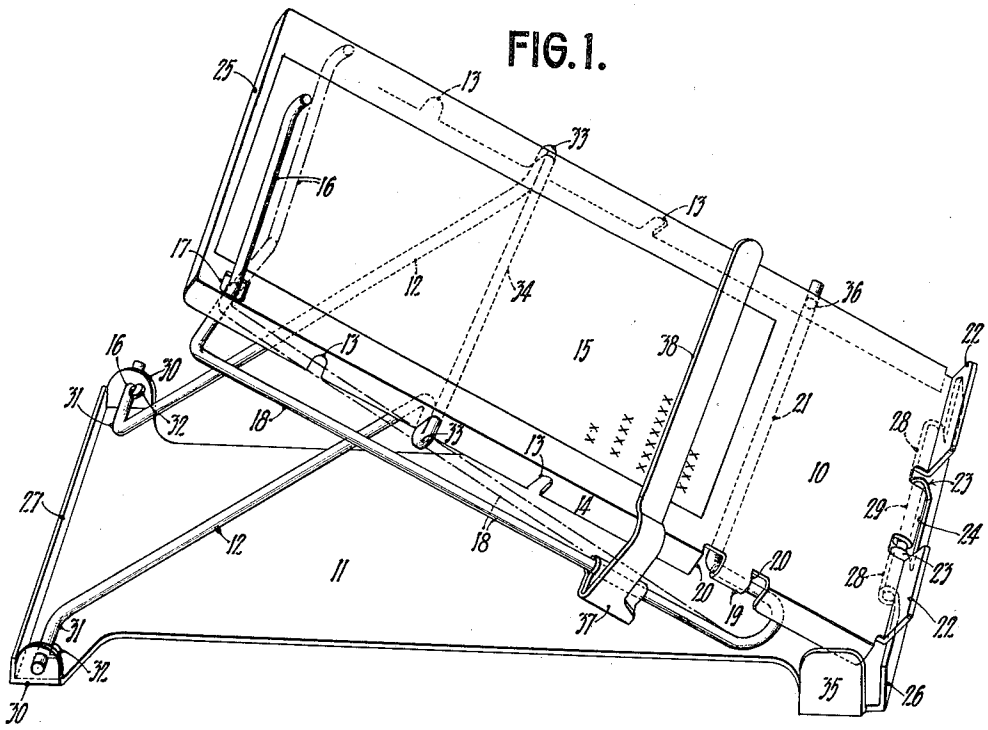


FIG. 2.

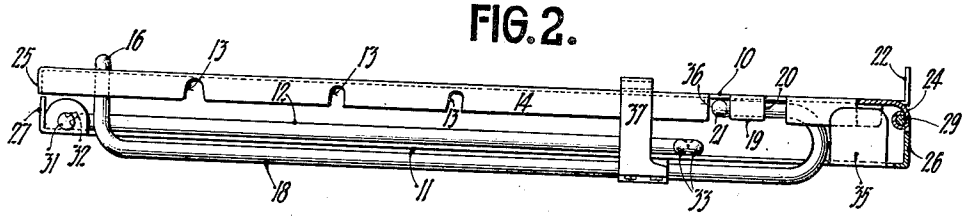


FIG. 3.

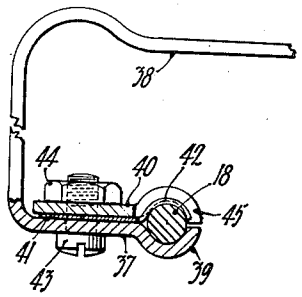
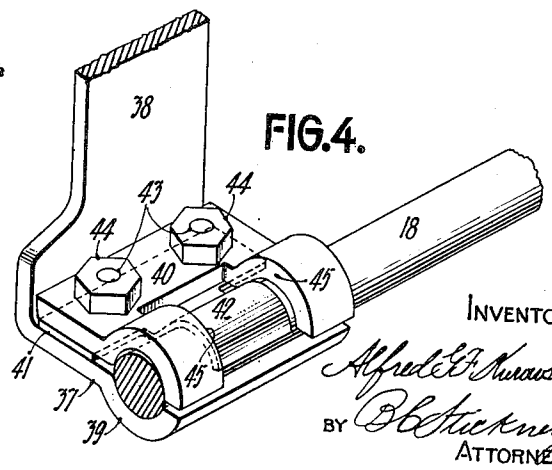


FIG. 4.



INVENTOR:
Alfred G. F. Kurowski
BY O. B. Stickney
ATTORNEY.

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UNITED STATES PATENT OFFICE

ALFRED G. F. KUROWSKI, OF BROOKLYN, NEW YORK, ASSIGNOR TO UNDERWOOD ELLIOTT FISHER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE

COPYHOLDER

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The invention relates to desk copy-holders to be used in connection with typewriting machines, and its main object is to provide a copy-holder which will be compact, simple and efficient.

The copy-holder is pliant or collapsible, and of neat appearance in both operative and folded conditions.

A flat and light work-table is hinged at its lower or front edge to the front of a flat base, the angle of the table being regulatable to suit the operator's line of vision by shifting a crutch or support into selected notches provided in rearwardly-projecting side flanges of said table. This crutch or support is made of a U-shaped piece of heavy wire having its end outwardly bent and pivotally mounted at the rear of said base.

Another feature is a yieldable clip for holding the work near the top of the table. This clip is a heavy wire, which bends down through a hole in the table and has a long stem extending down along the under side of the table; the lower end of the stem being fastened to the table and the stem being sufficiently long to make it limber, so that it may serve as a spring which normally holds the work-clip yieldingly pressed against the table. Said stem is sufficiently spaced from the under side of the table to permit the releasing of the clip by merely pressing up its free end toward the under side of the table.

To fasten the lower end of the stem to the work-table a knuckle is formed by rolling up a stamped-out portion of one of the side flanges of the table, and said lower end is bent up through said knuckle and then bent at right angles across the under side of the table so as to form the fulcrum of the spring clip.

Another feature of the invention is that the stem of said yieldable clip extends under one of the flanged side edges of the table and parallel therewith over substantially the entire height of the table, so that it may serve as a lateral guide for the usual line-finder.

Still another feature of the invention is that the line-finder is mounted with frictional engagement to slide up and down along the stem, means being provided for insuring said frictional engagement against accidental displacement, while permitting said sliding movement when the line-finder is manually raised or lowered along said stem.

A further feature of the invention is to provide the front end of the flat base with an upturned flange, serving as a support for the hinge of the work-table and as a reinforcing rib of the base, and with a pair of lateral upturned ears co-operating with the side flanges of the work-table to hold said latter centered on said base, while the rear end thereof is also provided with an upturned flange, acting as a reinforcing rib, and with two lateral upturned ears, serving as bearings for the pivot-ends of the crutch.

Other features and advantages will hereinafter appear.

In the accompanying drawing,

Figure 1 is a perspective view of a copy-holder, shown in operative position, and embodying the present invention.

Figure 2 is a side elevation, showing the copy-holder collapsed or folded for packing or carrying purposes, with parts broken away for clearness.

Figure 3 is a fragmentary sectional view of the line-finder head, and shows how the line-finder is frictionally mounted on the stem of the work-clip.

Figure 4 is a perspective view corresponding to Figure 3.

In the embodiment of the invention shown in the drawing, the desk copy-holder comprises essentially a work-table 10 hinged to the front edge of a base 11 and a U-shaped crutch or support 12 hinged to the rear edge of said base and co-operating with three pairs of notches 13 provided along two rearwardly-projecting side flanges 14 of the work-table.

The pliant or collapsible triple structure thus obtained forms, when folded (Figure 2), a compact flat box of neat and attractive appearance, while the work-table may be readily inclined in three different slant positions and held fast in the selected position by engaging the free end of the crutch 12 in either pair of notches 13.

A work-sheet 15 or a note-book may be held fast on the table 10 by means of a yield-

able or spring clip 16, arranged near the top of the table parallel with the top edge thereof. This clip is a heavy wire, which bends down through a hole 17, provided in the table, and has a long stem 18 bent at right angles down along the under side of the table. The lower end of said stem 18 is bent up through a knuckle 19, formed with a part of the left-hand side flange 14 by stamping out two clearances 20, and the stem is then bent at right angles so as to form a projection 21 extending across the underside of the table and through a hole 36 of the right-hand flange 14, and acting as the fulcrum of the spring clip 16.

The stem 18 is sufficiently spaced from the under side of the table 10 to permit the releasing of the spring clip 16 by merely pressing up the free end of said stem toward the under side of the table.

The lower or front edge of the table is upturned so as to form a ledge or rest 22, against which may rest the lower edge of a note-book. The center portion of said flange 14 is stamped out on both sides at 23, and is rolled, so as to form a hinge-knuckle 24. The top or rear edge of the table is turned downwardly, so as to form a reinforcing flange or rib 25.

The flat base 11 is likewise provided at both ends with upturned flanges 26, 27 acting as reinforcing ribs.

The flange 26 presents two rolled-up extensions 28, forming the lateral knuckles of the table hinge. A pintle 29 connects the aligned knuckles 24 and 28.

This flat base 11 presents furthermore a rear pair of upturned side ears 30, serving as bearings for the outwardly-bent pivot-ends 31 of the crutch 12.

A swaged or extruded lug 32 is stamped out of each of said pivot-ends, so as to serve as a stop or abutment, yieldingly held pressed against said ears 30 by the mere elasticity of the crutch 12, in order to prevent any side shifting of said crutch, and to center it with respect to the work-table 10.

In order to increase the elasticity of the side arms of the crutch 12 and to reinforce said latter, double folds 33 are formed at both ends of a cross-piece 34 of the crutch 12.

The flat base 11 is also provided at its front end with a pair of upturned side ears 35 which co-operate with the side flanges 14 of the work-table to center said latter with respect to the base 11, and prevent anv side shift of said table.

At the point where the clip-stem 18 is secured into the curled portion or knuckle 19 of the side flange 14, it will be noted that said stem extends downwardly for a short distance in a plane parallel with and adjacent to said flange, and then extends in this same plane parallel with said flange over substantially the entire height of the table. This is done for two reasons, first, in order to have a sufficient elasticity of the stem 18 for reliably holding the work-sheet 15 fast in position by means of the clip 16, and a sufficient play or release stroke of said latter for allowing the clamping of note-books of variable thickness, and, second, so that said stem 18 may be used as a lateral guide for the sliding head 37 of the usual line-finder 38. Said head 37 is mounted with frictional engagement to slide up and down along said stem 18 by means of a clamp, one jaw of which is formed by a channeled edge 39 of the head 37, while the opposite jaw is formed by a similarly channeled clamping piece 40.

A flat spring 41 with a channeled free end 42 is pressed in said clamp by means of bolts 43 and nuts 44 (Figure 3). A clearance 45 is provided in the portion for giving free play to the channeled edge 42 of said spring, which presses against the stem 18 opposite the channeled edge 39, so as to reliably retain the line-finder 38 in its adjusted position, though permitting it to be slid with ease along the stem 18, when desired.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described my invention, I claim:

1. A desk copy-holder comprising, in combination, a flat base, a flat work-table hinged at the front end of said base, a crutch or support pivotally mounted at the rear end of said base, a yieldable and releasable work-clip working near the top of said table and fastened thereto near the bottom thereof, and a line-finder operatively connected to said work-clip.

2. A desk copy-holder comprising, in combination, a flat base provided with a rear pair of lateral upstanding ears, a flat work-table hinged at the front end of said base, a crutch or support made of a U-shaped piece of heavy wire having its ends outwardly bent and pivotally mounted in said ears, a yieldable and releasable work-clip working near the top of said table and fastened thereto near the bottom thereof, and a line-finder operatively connected to said work-clip.

3. A desk copy-holder comprising, in combination, a flat base, a flat work-table hinged at the front end of said base and provided with rearwardly-projecting side flanges, pairs of notches provided in said flanges, a crutch or support pivotally mounted at the rear end of said base and having a reinforced cross-bar which may be shifted in either of said pairs of notches in order to adjust the inclination of said table, a yieldable and releasable work-clip working near the top of said table and fastened thereto near the bottom thereof, and a line-finder operatively connected to said work-clip.

4. A desk copy-holder comprising, in com-

bination, a flat base, a flat work-table hinged at the front end of said base and provided with rearwardly-projecting side flanges, a knuckle formed by stamping out and rolling up a portion of one of said flanges, a crutch or support pivotally mounted at the rear end of said base, a yieldable and releasable work-clip made of a substantially U-shaped heavy wire having a clamping arm projecting near and parallel to the top edge of said table across the upper side thereof, a long stem extending down along the under side of said table and up through said knuckle, and a fulcrum-arm fastened to said table near the bottom thereof, and a line-finder frictionally mounted to slide up and down along said stem.

5. A desk copy-holder comprising, in combination, a flat base, a flat work-table hinged at the front end of said base and provided with rearwardly-projecting side flanges, a knuckle formed by stamping out and rolling up a portion of one of said flanges, a crutch or support pivotally mounted at the rear end of said base, a yieldable and releasable work-clip made of a substantially U-shaped heavy wire having a clamping arm projecting near and parallel to the top edge of said table across the upper side thereof, a long stem extending down along the under side of said table and up through said knuckle, and a fulcrum-arm fastened to said table near the bottom thereof, and a line-finder frictionally mounted to slide up and down along said stem, said stem of the work-clip being sufficiently spaced from the under side of the table to permit the releasing of said clamping arm by merely pressing up its free end toward the under side of the table, and its length being sufficient to make it limber so that it may act as a spring which normally holds said clamping arm yieldingly pressed against the work-table.

6. A desk copy-holder comprising, in combination, a flat base, a flat work-table hinged at the front end of said base and provided with rearwardly-projecting side flanges, a knuckle formed by stamping out and rolling up a portion of one of said flanges, a crutch or support pivotally mounted at the rear end of said base, a yieldable and releasable work-clip made of a substantially U-shaped heavy wire having a clamping arm projecting near and parallel to the top edge of said table across the upper side thereof, a long stem extending down along the under side of said table and up through said knuckle, and a fulcrum-arm fastened to said table near the bottom thereof, and a line-finder frictionally mounted to slide up and down along said stem, said stem extending under the left-hand side flange of the work-table and parallel therewith over substantially the entire height of said table, thus affording ample range of adjustment of the line-finder.

7. A desk copy-holder comprising, in combination, a flat base, a flat work-table hinged at the front end of said base and provided with rearwardly-projecting side flanges, a knuckle formed by stamping out and rolling up a portion of one of said flanges, a crutch or support pivotally mounted at the rear end of said base, a yieldable and releasable work-clip made of a substantially U-shaped heavy wire having a clamping arm projecting near and parallel to the top edge of said table across the upper side thereof, a long stem extending down along the under side of said table and up through said knuckle, and a fulcrum-arm fastened to said table near the bottom thereof, and a line-finder frictionally mounted to slide up and down along said stem, and resilient means for insuring said frictional engagement against accidental displacement, while permitting said sliding movement when said line-finder is manually raised or lowered along said stem.

8. A desk copy-holder comprising, in combination, a flat base, a flat work-table hinged at the front end of said base and provided with rearwardly-projecting side flanges, a knuckle formed by stamping out and rolling up a portion of one of said flanges, a crutch or support pivotally mounted at the rear end of said base, a yieldable and releasable work-clip made of a substantially U-shaped heavy wire having a clamping arm projecting near and parallel to the top edge of said table across the upper side thereof, a long stem extending down along the under side of said table and up through said knuckle, and a fulcrum-arm fastened to said table near the bottom thereof, and a line-finder frictionally mounted to slide up and down along said stem, by means of a clamp, one jaw of which is formed by a channeled portion of the head of the line-finder, while the other jaw is a removable channeled clamping piece in which is provided a clearance and a flat spring squeezed at one end between said jaws by means of bolts and nuts and having its opposite channeled free end working in said clearance and pressing against said stem of the work-clip for insuring said frictional engagement against accidental displacement, while permitting said sliding movement when said line-finder is normally raised or lowered along said stem.

9. A desk copy-holder comprising, in combination, a flat base provided with a front pair of lateral upstanding ears, a flat work-table hinged at the front end of said base and provided with rearwardly-projecting side flanges which co-operate with said ears so as to hold said table centered on said base, a crutch or support pivotally mounted at the rear end of said base, a yieldable and releasable work-clip working near the top of said table and fastened thereto near the bottom

thereof, and a line-finder operatively connected to said work-clip.

10. A pliant desk copy-holder comprising, in combination, a flat base provided with upstanding front and rear reinforcing flanges, a pair of knuckles formed by stamping out and rolling up portions of said front flange, a flat work-table provided with a top or rear downturned reinforcing flange and with a bottom or front upturned reinforcing flange or ledge, a knuckle formed by stamping out and rolling down the center portion of said flange or ledge, a pintle connecting said three knuckles, so as to hinge said table to said base, a crutch or support pivotally mounted at the rear end of said base, a yieldable and releasable work-clip working near the top of said table and fastened thereto near the bottom thereof, and a line-finder operatively connected to said work-clip.

ALFRED G. F. KUROWSKI.