(No Model.)

W. HORROCKS.

TYPE WRITER CABINET.

No. 571,765. Patented Nov. 24, 1896.

Fig. 1.

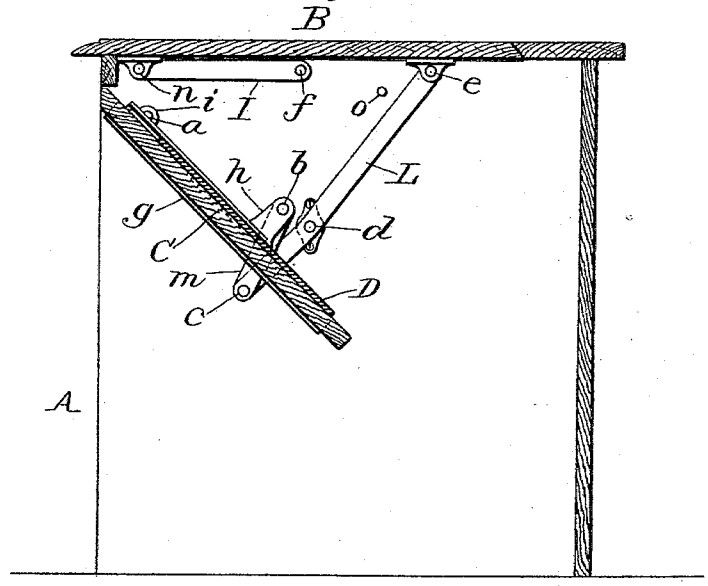


Fig. 2.

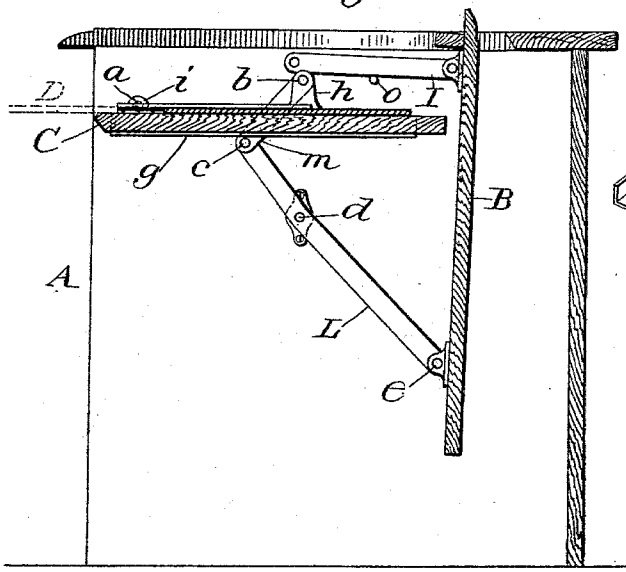
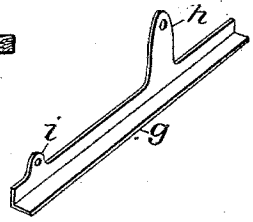


Fig. 3.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM HORROCKS, OF HERKIMER, NEW YORK, ASSIGNOR TO THE HORROCKS DESK COMPANY, OF SAME PLACE.

TYPE-WRITER CABINET.

SPECIFICATION forming part of Letters Patent No. 571,765, dated November 24, 1896.

Application filed November 29, 1895. Serial No. 570,453. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HORROCKS, a citizen of the United States, residing at Herkimer, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Type-Writer Cabinets, of which the following is a specification.

This invention relates to cabinets for type-writers in which the machine is supported by a swinging shelf; and the invention consists in the combination and arrangement of pivoted levers and links in connection with the lid and the swinging shelf, whereby the opening and closing of the lid operates the swinging shelf, as hereinafter more fully set forth.

Figure 1 is a transverse vertical section of a cabinet, showing the shelf depressed and the lid closed. Fig. 2 is a similar view showing the cabinet open and the shelf raised, and Fig. 3 is a perspective view of a part detached.

Type-writer cabinets may be divided into two classes, one in which the front edge of the swinging shelf on which the machine directly rests is thrown outward as it is raised to bring the machine into position for use, and the other class in which the front edge of the shelf is not thus thrown outward, but other means are used to bring the machine forward into working position. My present invention belongs to this latter class, and may be considered as an improvement on my patent of August 15, 1893, No. 503,418, the improvement consisting in dispensing with the toothed racks used in that, substituting a special arrangement of levers and links for raising and lowering the swinging shelf by the act of opening and closing the lid.

In the accompanying drawings, A represents the side wall of a cabinet, B the lid, and C the swinging shelf, on which latter may be secured the sliding base D on which the machine is fastened, so that it can be shoved in or drawn out, as occasion requires.

To the opposite ends of the shelf C, I secure two metal plates or brackets, one near the front, as indicated by *i* and *h*, about two-thirds of the width of the shelf from the front, as shown in Figs. 1 and 2. Preferably these ears or brackets are formed as parts of a continuous plate *g*, (shown detached in Fig. 3,) which has a flange at its lower edge to engage under the shelf, as indicated in the drawings, it being secured to the shelf by screws, thereby preventing the shelf from warping and at the same time retaining the ears or brackets securely in their proper relative positions, which is necessary to insure an accurate movement of the shelf and prevent it from catching or binding against the side walls of the cabinet, to which it should be fitted as closely as possible without touching, in order to exclude the dust when the machine is closed. It is, however, obvious that the ears or brackets *h* and *i* may be made and secured separately, each being provided with a flange, as above described; but it is simpler and better to make them all one continuous piece, either by casting or punching from wrought metal, as is most convenient.

The shelf C is pivoted to the sides of the cabinet at or near its front edge by pins *a*, which pass through holes in the ears *i*, as shown, while to the rear bracket *h* (and which, as shown, is considerably longer than the front one) is pivoted at *b* to the upper end of a link *m*, which extends below the shelf and has its lower end connected by a pivot *c* to the shorter arm of a lever L, pivoted at *d* to the wall of the cabinet and at *e* to the lid B, a short distance from its rear edge, as shown in Figs. 1 and 2. Another link I is pivoted at one end to the lid at *n*, near its front edge, and has its opposite end pivoted to the wall at *f*, as shown.

With the parts thus arranged it will be seen that to raise the shelf, with the machine thereon, it is only necessary to take hold of the front edge of the lid and swing it over back from the position shown in Fig. 1 to that shown in Fig. 2, the weight of the lid operating on the longer arm of the lever L being sufficient to hold the shelf up when raised, while the link *m* permits the end of the shorter arm of said lever to move in the arc of a circle around its fixed pivot *d* in raising and lowering the shelf. This construction dispenses with all racks or teeth and gives a very smooth and easy movement to the lid and shelf, and the links and levers being all simple straight bars can be easily

and cheaply made from thin bars by merely cutting them of the required length and punching or drilling the holes.

A pin *o* or other stop is secured to the side walls of the case, as shown in the drawings, upon which the link I rests when the lid is turned back, thereby limiting the movement of the lid and shelf. It is, however, obvious that a stop may be arranged so that either of the other moving parts, that is, the lid, the lever, or the shelf, will be brought in contact with it, and the result be the same, it being merely a matter of choice for the mechanic or manufacturer as to where the stop shall be located. It is also obvious that the link I may be omitted, as the shoving of the cover backward and downward is what raises the shelf, and that it will do whether the link I be used or not; but I prefer to use it, as it serves as a guide, in connection with the lever L, to the cover both in opening and closing, and less care is therefore required in holding the lid during its movements.

It will be seen that the front edge of the shelf is not thrust forward or outward when raised, and that when raised the sliding base D can be moved to bring the machine forward to a greater distance than when the machine is secured directly to a shelf arranged to be thrust outward, as the outward movement of such is but little.

I am aware that levers and links have before been used to give motion to the shelf and lids in type-writer cabinets; but I am not aware that any one has before combined or arranged them as in my case, and therefore

What I claim is—

1. In combination with the swinging shelf having its front pivoted to the case as shown whereby it is prevented from being thrust outward when the shelf is raised, the lever L pivoted to the wall of the case, with its longer arm pivoted to the cover near its rear edge and its shorter arm to one end of a link *m*, while the opposite end of said link is pivoted to the bracket *h* secured to the shelf, the combination and arrangement of the various parts being substantially as shown and described.

2. The combination in a type-writer cabinet, of the swinging shelf pivoted at its front edge to the case as shown whereby it is prevented from being thrust outward when the shelf is raised, the operating-lever pivoted to the wall of the case at a point below the shelf when raised, and having its longer arm pivoted to the cover near its rear edge and its shorter arm pivoted to one end of a link *m* which has its opposite end pivoted to the shelf by means of a bracket, and the swinging link I pivoted at one end to the cover near its front and at its opposite end to the wall of the case, substantially as shown and described.

3. The combination in a type-writer cabinet, of the swinging shelf C having a sliding machine-base D mounted thereon, the straight operating-lever L turning on a fixed pivot below the shelf when raised and having one end pivoted to the lid B and its opposite end pivoted to a swinging link *m* which has its opposite end pivoted to a bracket attached to the shelf, all arranged to operate as and for the purpose set forth.

In witness whereof I hereunto set my hand in the presence of two witnesses.

WILLIAM HORROCKS.

Witnesses:
JOSIAH A. STEELE,
ORREN GETMAN.