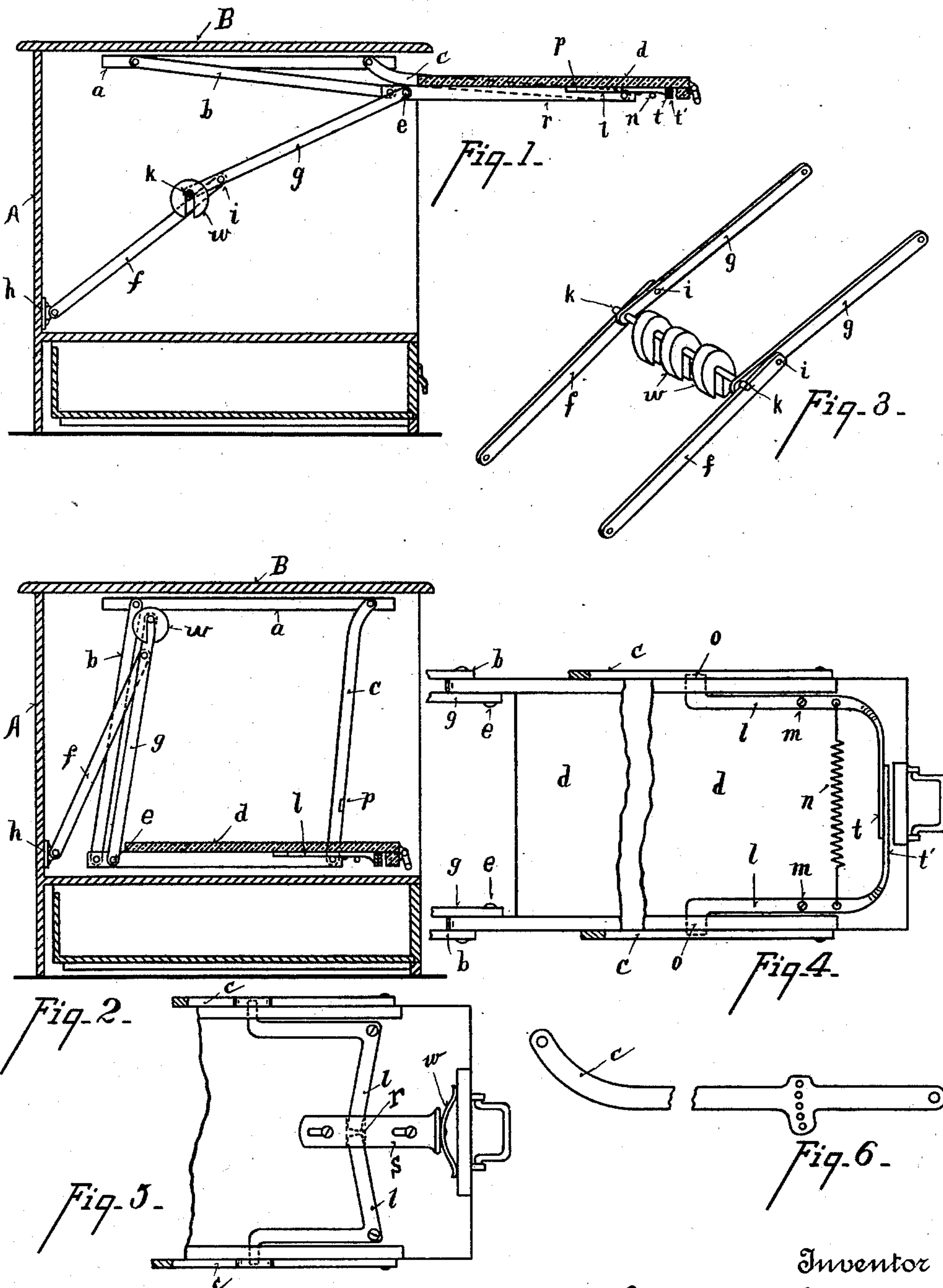


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Patented Oct. 25, 1898.

A. CARY.  
TYPE WRITER DESK.  
(Application filed Dec. 8, 1897.)

(No Model.)



Witnesses

W. B. Wood  
Oliver B. Spicer

Inventor

Alonzo Cary  
by Wood & Sons  
Attorneys



# UNITED STATES PATENT OFFICE.

ALONZO CARY, OF RICHMOND, INDIANA.

## TYPE-WRITER DESK.

SPECIFICATION forming part of Letters Patent No. 612,987, dated October 25, 1898.

Application filed December 6, 1897. Serial No. 660,867. (No model.)

*To all whom it may concern:*

Be it known that I, ALONZO CARY, residing at Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Type-Writer Desks, of which the following is a specification.

The object of my invention is to provide a swingingshelf supporting a type-writer, which can be extended from a compartment within a desk to a rigid support approximately on a level with the top of the desk, the said rigid support being formed by the construction of the extensible parts. Another object of my invention is to provide locking devices which automatically come into position when the shelf is extended.

The features of my invention are more fully set forth in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 is a central vertical section of my improvement, showing the type-writer support in position for use. Fig. 2 is a similar view showing the shelf folded within the compartment. Fig. 3 is a perspective view of the locking and counterbalancing links. Fig. 4 is a bottom plan view of the locking mechanism and supporting-links when the shelf is extended. Fig. 5 is a modification of Fig. 4. Fig. 6 is a modification of the locking-arms.

A represents the rear side of the desk, and B the top.

The desk is preferably provided with a compartment in the pedestal and at one side of the central portion of the desk, so as to afford space for the seat of the occupant.

*a* represents a supporting-strip attached to the side wall of the compartment, a similar strip being upon the opposite side. *b c* represent swinging arms pivoted to said strips. *d* represents the swinging shelf hinged to the opposite ends of said arms. In their normal position they occupy the position shown in Fig. 2 within the compartment, and when extended they occupy the position shown in Fig. 1. In order to sustain the shelf in its extended position and make a rigid support for the same, I provide the following instrumentalities: *ff g g* represent pairs of links, links *f* being hinged to ears *h* at the rear and base of the compartment.

*i* represents centers to which the pairs of links are respectively hinged. Links *g* are hinged to the table or shelf at *a*. 55

*k* represents a rung passing through the rear end of link *g*, and it extends laterally beyond said link and across the link *f*, serving as a stop to limit the extension of the pairs of links *g f*, and thereby forms a rigid brace and support for the type-writer shelf when it is extended. 60

*w* represents weights placed on the rung *k*, and they perform two functions. They counterbalance the weight of the type-writer on the shelf. Suppose the center of the type-writer be at a point *r*. The distance from *r* to *e* is only one-half the distance from *e* to *i*. Hence one-half the weight of the type-writer on rung *k* will counterbalance it. Again, when the shelf is swung back into position the weights *w* are thrown forward of the vertical line drawn through the center of pivot *e*, and hence the weights hold the shelf and type-writer in position in the cabinet. The rung *k* acts as a lock to hold the shelf extended and, with the weights, forms a strong brace; but a small amount of force applied to the shelf will swing the parts back into normal position, as shown in Fig. 2. 80

In order to prevent the backward movement of the shelf except when desired, I provide a front locking mechanism, applied to the arm *c* and engaging with the shelf. It is preferably constructed as follows: *l* represents a pair of arms hinged to the under side of the shelf at *m*. *n* represents a spring stretched across the arms in rear of the pivot and strained so as to throw the rear ends of said arms normally outward. *o* represents catches formed on the inner ends of said arms, and they engage in notches *p* and normally lie in the same in the position shown in Fig. 1. These catches lock the shelf in its outward position against accidental displacement. In order to withdraw these catches and fold the shelf back, the forward ends of said arms are bent to pass each other, as shown at *t t*, and strain applied to these arms at *t'* causes them to swing on their pivots *m* and withdraws the catches from the notches *p*. When pressure is applied to the front end of the shelf, the links and arms will move backward into the position shown in Fig. 2, the weights *w* coun- 100



terbalancing the weight of the type-writer and preventing it from too sudden descent, and these weights, passing the center *e*, slow up the motion and bring the type-writer shelf gently to rest. It will thus be seen that the type-writer can be folded into a compartment of the desk either at the side or at any convenient part of the desk and brought into position whenever desired entirely independent of the top of the desk. I am thus enabled to use it with a desk employing a roll-top or curtain or with any form of desk commonly in use. The ordinary roll-top can of course be used to cover the compartment.

15 In the modification shown in Fig. 5 the inner ends of arms *l* rest in the slot *r* in the slide *s*. Slide *s* rests upon the elliptic spring *w*, which normally holds arms *l* locked to the arms *c* and is the equivalent of the devices shown in Fig. 4. The arms *c* (shown in Fig. 6) are provided with a series of holes which receive the lock *o*, so as to secure the shelf in different vertical positions.

Having described my invention, I claim--

25 1. In combination with a type-writer desk, two pairs of swinging arms hinged to each

side of the compartment within the desk and to a type-writer shelf, a pair of extension brace-links *f, g*, hinged together and to the desk and shelf respectively, and means for locking said links in their extended position, substantially as specified.

2. A type-writer support for a desk composed of a shelf suspended on two pairs of swinging arms, a pair of links hinged together and to the rear of the desk-compartment and to the shelf, the locking-rung *k* co-acting with said links and serving as a weight-support, substantially as specified.

3. In a type-writer support the combination with the shelf *b*, swinging arms *c*, arms *l* hinged to said shelf and having a locking engagement with said arms, a spring *n* for holding the catches *o* normally in engagement with the arms *c*, substantially as specified.

In testimony whereof I have hereunto set my hand.

ALONZO CARY.

Witnesses:

J. W. PHILLIPS,  
L. P. WIRTH.