

(No Model.)

2 Sheets—Sheet 1.

J. GRAMELSPACHER.  
TYPE WRITER ATTACHMENT FOR DESKS.

No. 575,602.

Patented Jan. 19, 1897.

FIG. 1.

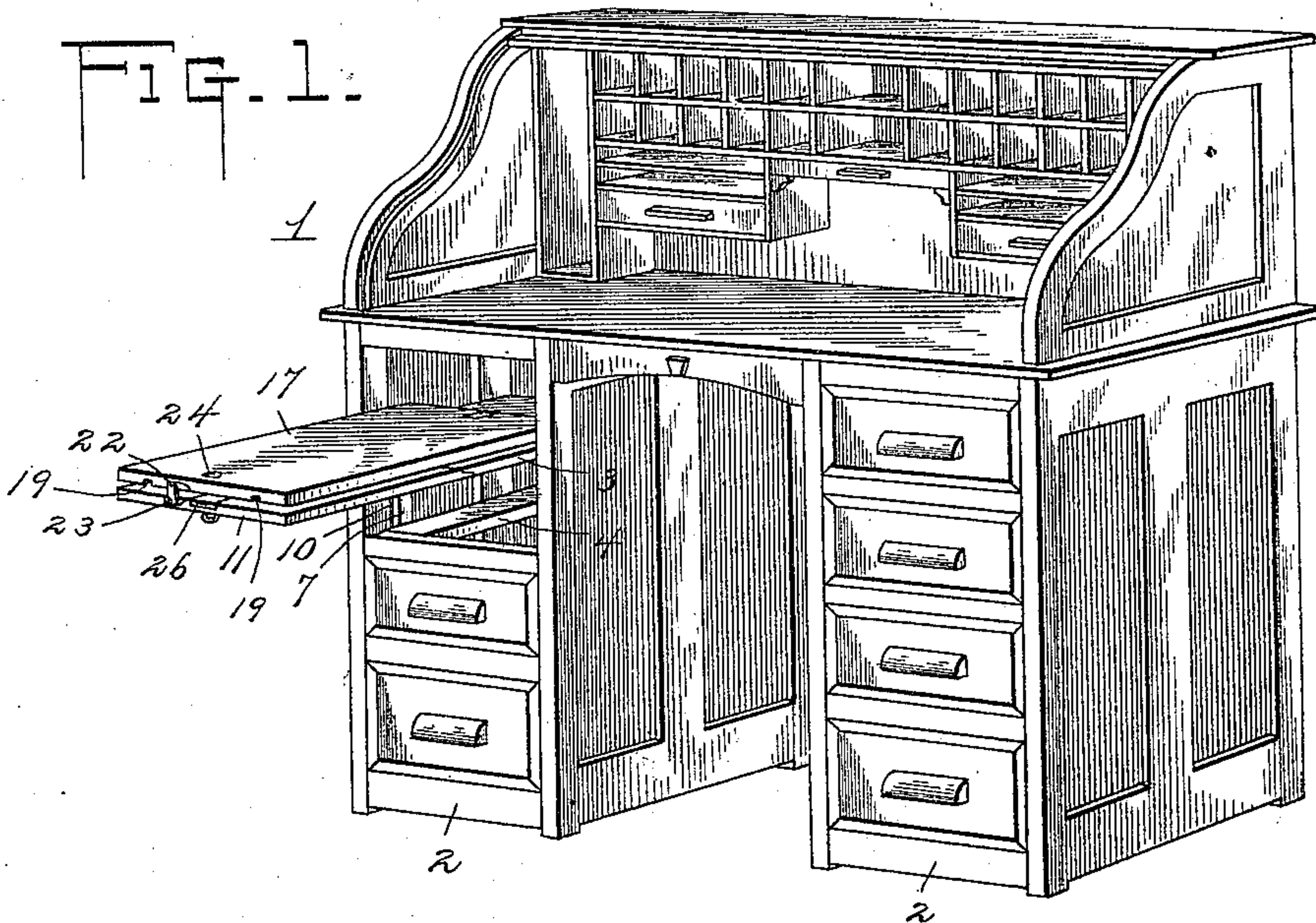


FIG. 2.

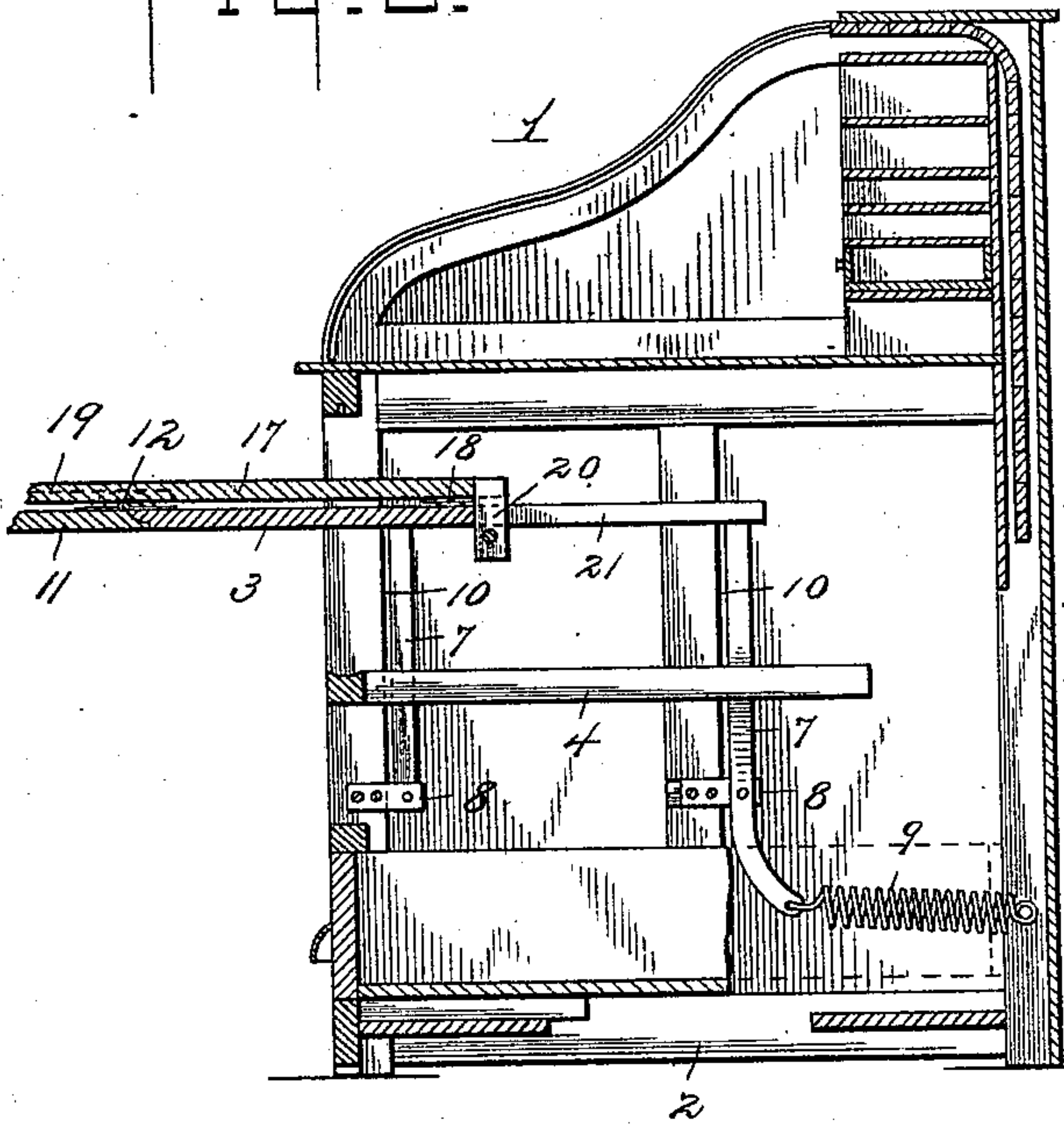
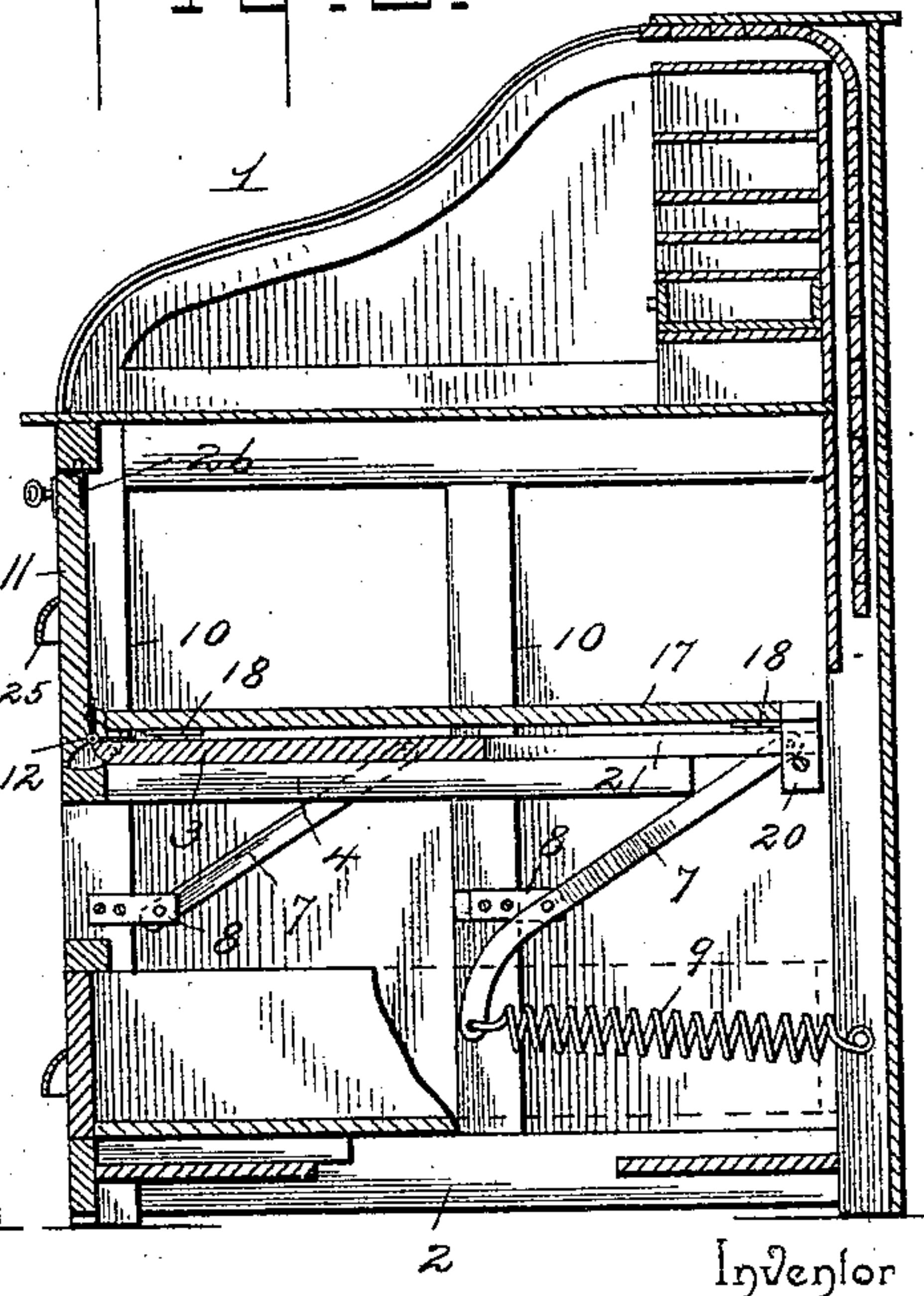


FIG. 3.



Witnesses

Harry L. Amer.  
R. M. Smith.

By his Attorneys,

John Gramelspacher.

C. A. Snow & Co.

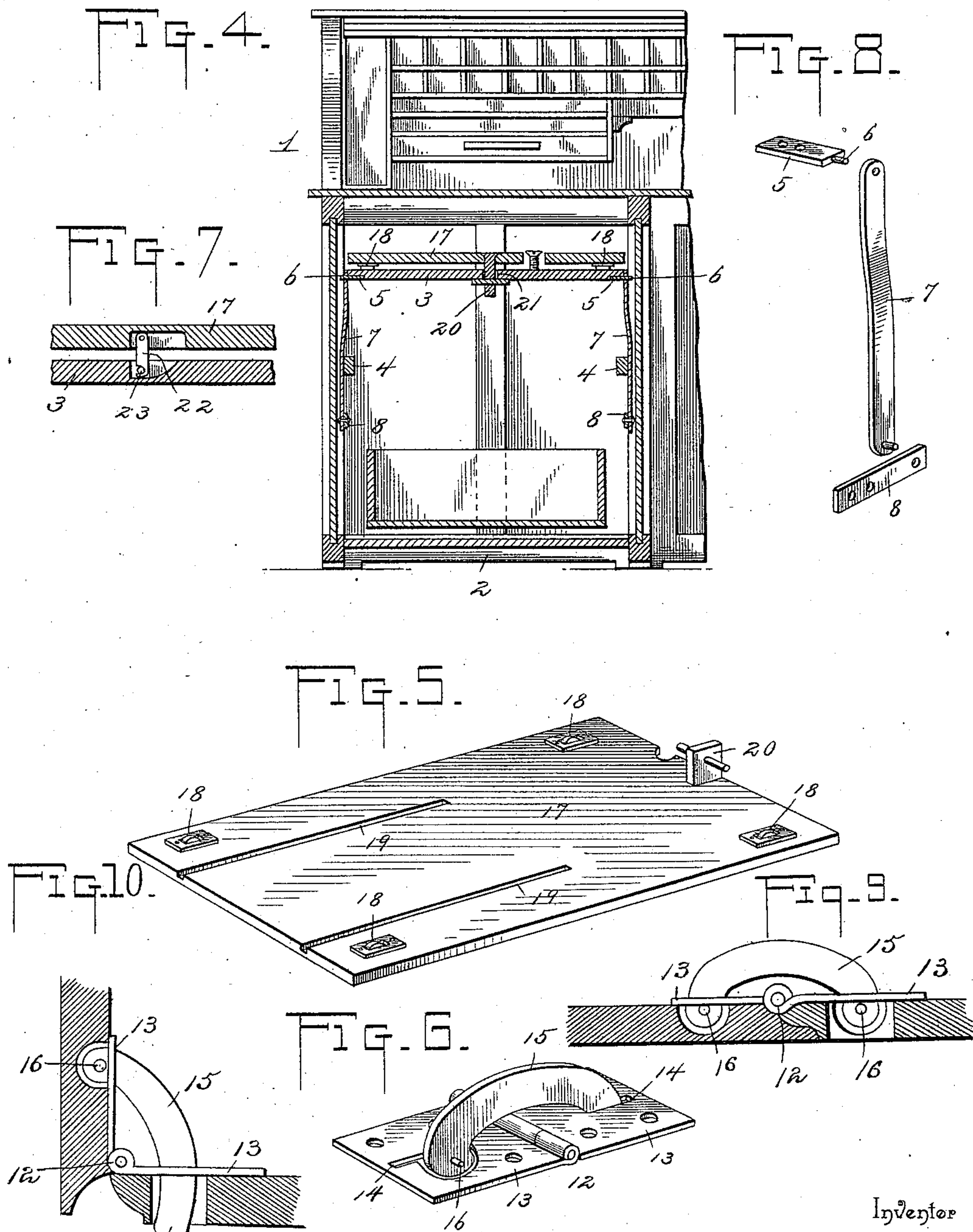
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2 Sheets—Sheet 2.

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# UNITED STATES PATENT OFFICE.

JOHN GRAMELSPACHER, OF JASPER, INDIANA.

## TYPE-WRITER ATTACHMENT FOR DESKS.

SPECIFICATION forming part of Letters Patent No. 575,602, dated January 19, 1897.

Application filed April 30, 1896. Serial No. 589,748. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN GRAMELSPACHER, a citizen of the United States, residing at Jasper, in the county of Dubois and State of Indiana, have invented a new and useful Type-Writer Attachment for Desks, of which the following is a specification.

This invention relates to desks, and the object in view is to provide in connection with a desk, either of the flat-top or roller-top pattern, having a pair of pedestals a folding and adjustable shelf adapted to support a type-writing machine and also adapted when not in use to be folded and moved into one of the desk-pedestals, the type-writing machine being carried or moved inward therewith and contained wholly within the said pedestal and concealed and protected from dust. The shelf or table upon which the machine rests is counterbalanced, so that it may be drawn outward or moved inward with the greatest possible ease, and it may be arranged in either pedestal, according to the desire of the purchaser.

Other objects and advantages of the invention will appear in the course of the subjoined description.

The invention consists in an improved type-writer attachment for desks embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a desk having the improved attachment applied thereto and shown folded outward in readiness for use. Fig. 2 is a vertical transverse section through the pedestal containing the attachment and showing the shelf or table moved outward into its operative position. Fig. 3 is a similar view with the shelf or table, &c., folded inward. Fig. 4 is a vertical section through the pedestal, taken at right angles to Figs. 2 and 3. Fig. 5 is a reverse perspective view of the slide on which the machine rests. Fig. 6 is a detail perspective view of one of the combined hinges and guides for the type-writer slide. Fig. 7 is a detail view showing the catch which locks the sliding shelf in operative position. Fig. 8 is a detail perspective view of one of the bars or links and the plates

by which it is connected to the movable table and pedestal. Fig. 9 is an enlarged detail section showing portions of the table and its hinged flap and the form of hinge connecting the same, the flap being folded down. Fig. 10 is a similar view with the flap folded up.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

In the drawings, 1 designates an ordinary office-desk having the usual writing-bed or top supported upon a pair of pedestals 2, spaced apart to make room for the knees. The attachment contemplated in this invention is applicable to either pedestal and occupies the space ordinarily appropriated to the upper drawer or drawers.

The attachment comprises a bed or table 3 of a size corresponding approximately to the inside dimensions of the pedestal, said bed or shelf being horizontally disposed therein and resting upon horizontal cleats 4. The bed or table 3 has secured to its under side, near its opposite side edges, plates 5, with laterally-projecting studs or pivots 6, which are received in bearing-openings in the upper ends of links or bars 7, two of which are arranged at each side of the pedestal and the bed or table 3. These links or arms incline downward and forward toward their lower ends when the shelf is folded inward and connect pivotally to plates or brackets 8, secured to the inner faces of the side portions of the pedestal. The rear arm or link 7 at each side of the pedestal is extended below its pivotal connection with the pedestal and has secured to it one end of a spring 9, preferably of spiral form, the other end of said spring being attached to a fixed point inside of the pedestal. The bed or table 3 is thus adapted to swing simultaneously upward and outward while preserving its horizontality, and the springs 9 act by their tension to counterbalance the weight of the bed or table and the type-writing machine placed thereon. The pedestal is also formed interiorly and at each side with one or more shoulders 10, against which the arms or links 7 abut when the bed or table is drawn outward, thus constituting the stops for limiting the outward movement of the table and steadying the same while in its operative position.



The bed or table 3 has at its front edge a hinged leaf or flap 11, forming a forward extension of the bed or table and also constituting the drop-front for that portion of the pedestal which contains the type-writer. This leaf or flap is connected to the table by means of a pair of hinges, arranged adjacent to the opposite sides thereof, as shown at 12. These hinges each comprise two leaves 13, connected by a common continuous pintle and each provided with a longitudinal slot 14 for the reception of the opposite ends of an arc-shaped guide and stay 15. The leaves of the hinge are prevented from moving out of alinement with each other in a downward direction by means of transverse pins 16, inserted through the ends of the guide and stay 15, the said pins forming stops which abut against the lower surfaces of the leaves of the hinge. The hinges thus formed are very strong and serve to effectively support the hinged leaf or flap 11 in horizontal position.

The table 3 and its flap 11 are suitably mortised, as shown, to receive the ends of the stay 15 when the flap is folded into the position shown in Fig. 3. When the flap is folded down into alinement with the table 3, so as to form a horizontal continuation thereof, as shown in Fig. 2, the stop-pins 16 rest against the under sides of the leaves 13 of the hinge and support the flap 11 in the position indicated.

17 designates a sliding shelf arranged on the bed or table 3 and provided upon its under side with small rollers 18, by which it may be easily rolled forward upon the hinged flap or leaf 11. This sliding shelf is provided in its under side with grooves 19, in which the upwardly-projecting arc-shaped guides 15 are received, the said guides thus serving to keep the shelf in proper alinement and prevent the same from shifting to one side or the other as it is being drawn outward. The outward movement of the shelf is limited by means of a pendent stop 20, located about centrally of the rear edge thereof and working in a slot 21, beginning at the rear edge of the bed or table 3 and extending far enough forward to allow the front edge of the sliding shelf to be carried to the corresponding edge of the hinged leaf 11, when the stop arrests the further movement of the shelf in a forward direction. The sliding shelf may be secured in this its operative position by means of a pivoted catch 22, preferably mounted upon the front edge of the shelf and having a hooked swinging end which engages with a stud 23 on the front edge of the hinged leaf 11. The sliding shelf 17 carries the type-writing machine upon it and is provided at its front edge with a finger-socket 24, by which it may be drawn forward, and the hinged leaf or flap 11 is provided upon its under side with a handhold 25, whereby the bed or table may be manipulated, and said flap or leaf may be further provided with a suitable lock 26 for holding the flap or drop-front closed.

In operation the drop-front or flap 11 is thrown downward, after which the sliding shelf with its type-writer is drawn forward, thus moving the type-writer to a position in front of the pedestal, and the bed or table 3 is then drawn forward and upward until it assumes the position illustrated in Figs. 1 and 2, the person sitting at the desk swinging around in his chair, so as to face the machine. In returning the machine into the pedestal the bed or table 3 is pushed inward and downward. The sliding shelf is then moved inward and the hinged leaf or flap 11 closed, thus leaving no evidence that a type-writer is contained within the desk. The attachment embodies simplicity and strength, renders it unnecessary to cut the writing-bed of the desk, and may be used in connection with either pedestal.

It will be understood that the invention is susceptible of various changes in the form, proportion, and minor details of construction, which may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a desk or cabinet, the combination with a movable bed or table, of a hinged leaf or flap connected to the front edge thereof and adapted to be folded upward to constitute a drop-front for the space immediately above said bed or table, and to be folded downward into the plane of said bed or table to form a continuation or extension thereof, and a sliding shelf on said table adapted to recede inside of the plane of the flap when up and to slide outward on said flap when in its horizontal position, substantially as described.

2. In a desk or cabinet, the combination with a movable bed or table mounted on arms or links so as to swing upward and forward while remaining horizontal, of a hinged leaf or flap connected to the front edge of the bed or table and adapted to be folded upward, said flap or leaf constituting a drop-front for the space immediately above the movable bed or table, substantially as described.

3. In a desk or cabinet, the combination with a movable bed or table mounted on arms or links and adapted to swing upward and forward, of a hinged leaf or flap attached to the front edge thereof, a sliding shelf arranged on said bed or table and adapted to be drawn forward upon the leaf or flap, means for limiting the forward movement of the sliding shelf, and a catch for holding said shelf in its operative position, substantially as described.

4. The combination with a movable supporting-table, of a flap or leaf connected thereto, an arc-shaped stay connecting the inner edge of said flap or leaf to said table and adapted to permit the same to fold, and a sliding shelf arranged on said table and adapted to slide outward on said flap when the latter is extended, substantially as described.



5. The combination with a movable supporting-table, of a flap or leaf hinged thereto, a hinge having an arc-shaped stay the ends of which are movable through slots in the leaves of the hinge, and the sliding shelf arranged on said table and grooved in its under side to engage said stay which also constitutes a guide for the shelf, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN GRAMELSPACHER.

Witnesses:

EDWARD A. BOHNERT,  
WM. A. MAYLOR.