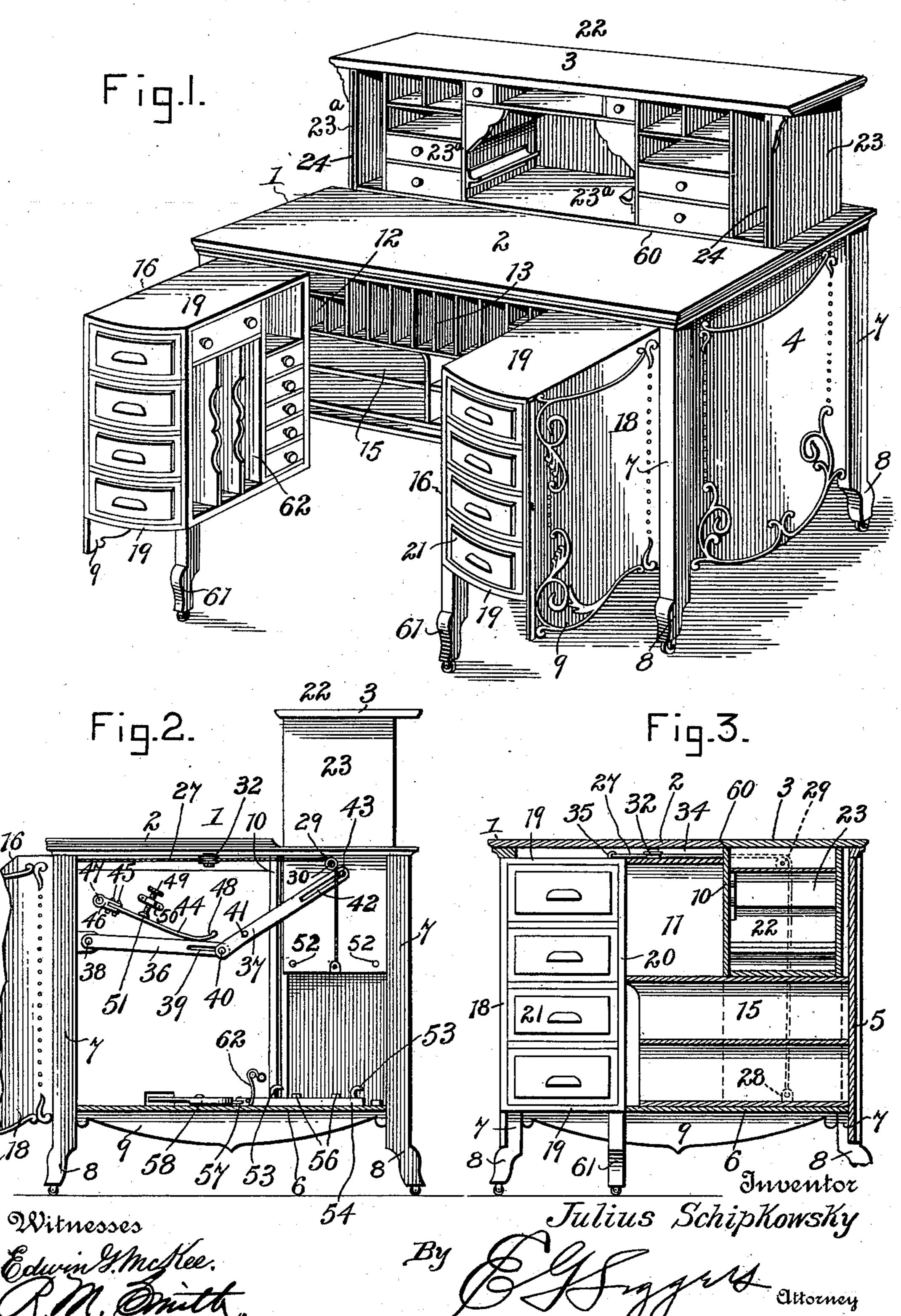
J. SCHIPKOWSKY. TABLE DESK.

(Application filed Sept. 21, 1899.)

(No Model.)

2 Sheets—Sheet 1.

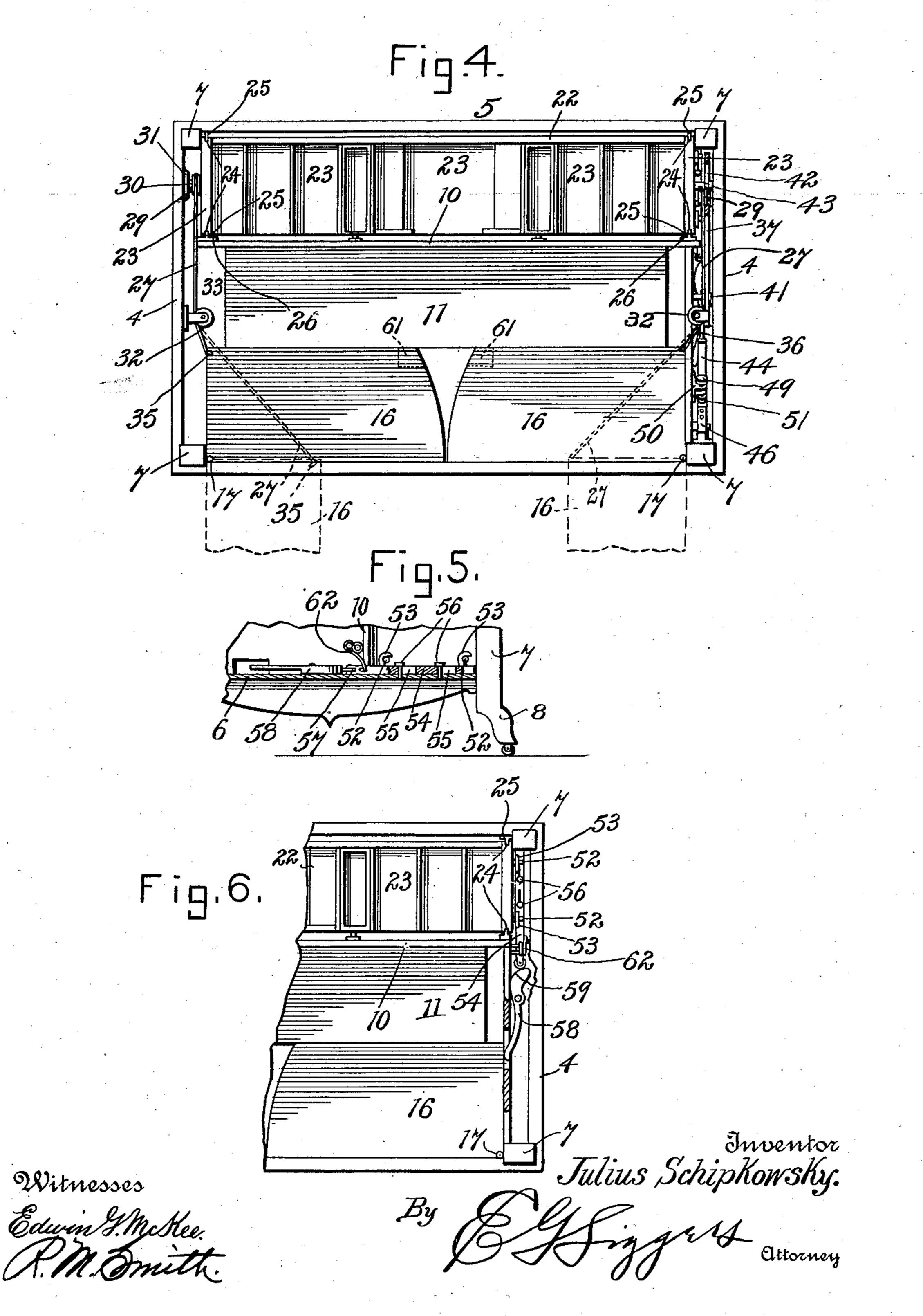


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(No Model.)

2 Sheets-Sheet 2.



United States Patent Office.

JULIUS SCHIPKOWSKY, OF MILWAUKEE, WISCONSIN.

TABLE-DESK.

SPECIFICATION forming part of Letters Patent No. 654,922, dated July 31, 1900.

Application filed September 21, 1899. Serial No. 731,189. (No model.)

To all whom it may concern:

Be it known that I, Julius Schipkowsky, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Table-Desk, of which the following is a specification.

This invention relates to desks; and the object in view is to provide a flat-top cabinetto desk comprising relatively-movable sections containing pigeonholes and other compartments, the several sections being so associated within the frame or body of the desk that they may be conveniently projected therefrom when the desk is in use and readily housed therein below the writing-bed when not in use, the desk as a whole when not in use resembling a flat-top table.

It is the purpose of this invention to construct the desk in such manner that it will be particularly desirable and useful in private dwellings, the desk when not in use as such differing in no wise from an ordinary ornamental parlor-table with a perfectly-flat top, which, if desired, may receive an ordinary table scarf or cover, upon which may be placed the usual parlor-ornaments, bric-abrae, &c.

The desk contemplated in this invention is 30 also constructed with special reference to convenience when in use as a desk, the several sections thereof being capable of being exposed and rendered accessible for use. The several sections are also combined in such 35 manner and certain sections are so connected that the adjustment of one or more sections will effect the adjustment of the remaining sections and in this way the several sections containing the pigeonholes and 40 other compartments may be simultaneously brought into their proper positions and as readily returned to their places within the body of the desk or table. The adjustment or operation of the movable sections does not 45 in any way affect their capacity for holding books, letters, papers, and other documents. The detailed objects and advantages of the invention will appear more fully in the course

of the ensuing description.

The invention consists in a desk embodying certain novel features and details of con-

struction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is 55 a perspective view of a desk constructed in accordance with the present invention, showing the doors or hinged sections thrown open and the sliding section elevated. Fig. 2 is an end view of the desk with the adjacent side 60 removed to show the counterbalance mechanism, the locking device for the slidable section, and the operative connection between the slidable section and one of the hinged sections. Fig. 3 is a vertical cross- 65 section through the desk, showing the several sections housed therein and also showing the operative connection between one of the doors or hinged sections and the sliding section. Fig. 4 is a plan view of the desk with 70 the top or writing-bed removed, the counterbalance mechanism and the locking device being omitted at one end to better illustrate the arrangement of the operative connection between the slidable section and one of the 75 hinged sections. Fig. 5 is a detail view showing the mechanism for locking the sliding section. Fig. 6 is a detail horizontal section through one end of the desk, illustrating the manner of operating the locking mechanism 80 for the sliding section.

Similar numerals of reference designate corresponding parts in all the figures.

The desk contemplated in this invention comprises a flat top 1, consisting of a station-85 ary section 2 and a movable section 3, the two sections forming the writing-bed of the desk and being located in the same horizontal plane when the sliding section, hereinafter described and which carries the movable sec- 90 tion 3, is housed. The desk also comprises stationary ends 4, back 5, and bottom 6. The ends and back are firmly connected to cornerposts 7, the lower ends of which are extended below the bottom to form supporting-legs 8, 95 which may be of any preferred ornamental design, and these legs are also preferably connected along the front, back, and ends of the desk by downwardly-extending ornamental pieces 9, which will give a finish to the desk 100 as a whole.

Extending longitudinally within the desk

is an intermediate partition 10, and arranged in front of said partition is what may be termed a "stationary section" 11, containing compartments in the form of pigeonholes 12, 5 catalogue-files 13, and letter and document files 15, although it will be understood that compartments or pigeonholes of any character and arrangement may be employed without departing from the principle of the invention. 10 The partition 10 terminates above the bottom 6, and the stationary section 11 is provided with a rearwardly-projecting extension 15, passing beneath the partition and extending as far back as the back 5 of the desk. Thus 15 the part 15 of the section 11 is of considerably greater depth than the upwardly-projecting portion thereof and adapted to contain papers and documents of large sizes. The stationary section 11 when in its proper place in the desk 20 is positioned by the contact of its upper portion with the partition 10 and the rear end of its extension 15 with the back 5 of the desk.

Arranged between the top 2 and bottom 6 and in front of the section 11 are hinged doors 25 16, the said doors being hinged to the front corner-posts at the points 17 and serving to close the front of the desk, as shown in Fig. 4. Each of the doors comprises a front panel 18, which may be ornamented in any preferred 30 manner, and extending backward therefrom is a casing comprising top and bottom pieces 19, connected at their inner edges by a back piece 20, thus forming a housing within which may be placed partitions or division-pieces 35 forming pigeonholes accessible from the ends 21 when the doors are thrown open, as shown in Fig. 1. These doors, together with the pigeonholes or compartments carried thereby, constitute the hinged sections of the desk.

40 Housed within the desk in rear of the partition 10 is a sliding flush-seating section 22, the height of which is equal to the distance between the top of the desk and the extension 15 of the stationary section, the sliding sec-45 tion 22 resting upon the extension 15 when lowered. The section 22 is divided up by suitable partitions or division-pieces to form pigeonholes and drawer-spaces 23, as shown in Fig. 1, and said sliding section constitutes 50 the top of the desk when elevated to its operative position, as shown in Fig. 1. The end pieces or boards 23 of the sliding section 22 are extended the entire height of the desk that is, the distance between the top and 55 bottom pieces thereof—and said ends pass downward outside of the extension 15 of the stationary section or between the extension 15 and the ends 4 of the desk. Each of the end pieces 23 has its front and rear edges

60 grooved, as shown at 24, to receive guides 25, preferably in the form of metal strips, secured one to the back 5 of the desk and the other to a cleat 26, secured to the rear side of the partition 10. In this manner the slidable sec-65 tion is adapted to slide with perfect freedom up and down, being properly guided and steadied in its movements, and this effect is

enhanced by reason of the end pieces 23 extending the entire distance from the top 2 to the bottom 6.

The slidable section 22 is connected to one or both of the hinged sections or doors 16, so as to be operated by said doors, by means of a chain, cable, or other flexible connection 27. This flexible connection is attached at one 75 end to a clip 28, secured to one of the end pieces 23 of the sliding section near its lower edge and about centrally of the depth of the slidable section. The connection 27 extends from the clip 28 upward in a vertical direc- 80 tion and over a guiding sheave or pulley 29, journaled on a stud-axle 30, carried by a bracket 31, secured to the inner surface of the end of the desk, or the axle 30 may be secured directly to the desk without the inter- 85 position of the bracket 30. The flexible connection 27 extends thence forward and around a second sheave or pulley 32, revolving on a vertical axis and mounted in one of the spaces 33 left at the opposite ends of the sta- 90 tionary section 11, the space being continued above and over the section 11, as indicated at 34, so as to allow the connection 27 free play without interfering with said stationary section. The connection 27 is finally at- 95 tached to one corner of the adjacent hinged section or door 16, as indicated at 35. It will now be seen that when the hinged sections or doors 16 are moved outward to the position indicated by dotted lines in Fig. 4 the 100 flexible connection 27 will be drawn forward and traveling around the sheaves 29 and 32 will operate to elevate the sliding section and carry it upward to the position shown in Figs. 1 and 2, thus bringing the 105 pigeonholes and other compartments thereof into position for use. In closing the hinged sections or doors 16 the slidable section 22 will be lowered to the position shown in Fig. 3, the operation being just the reverse of that 110 hereinabove described.

In order to balance the weight of the slidable section and its contents and to enable the doors or hinged sections to be readily swung open without exertion, a pair of levers 115 36 and 37 are provided, the same being mounted at one or both ends of the casing between the ends of the several sections and the end piece of the desk. The lever 36 is fulcrumed at one end, as shown at 38, pref- 120 erably upon one of the corner-posts 7, and is provided at its opposite end with a longitudinal slot 39 to receive slidingly a pin or stud 40, connected to the short arm of the lever 37, said lever being fulcrumed on the pin 41, 125 which is considerably nearer one end than the other. The long arm of the lever 37 is provided with a longitudinal slot 42, which slidingly embraces a pin or stud 43 on the end of the sliding section 22. Bearing against 130 the lever 36 is an actuating-spring 44, one end of which is secured, by means of fasteners 45, to the hanger 46, mounted pivotally, as shown at 47, on the inner surface of the

end piece of the desk. The free end of the locking the sliding section 22 at the lower spring is curved or deflected away from the lever 36, as shown at 48, and exerts its pressure in a downward direction on the lever 36. 5 The tension of the spring 44 may be regulated and increased or diminished by means of the tension-screw 49, having a knurled head, whereby it may be operated by hand, the threaded shank of the screw passing 10 through an internally-threaded bracket 50 on the end of the desk and carrying at its bearing end a swiveled shoe 51, which bears against the adjacent side of the spring 44. By turning the screw 49 any desired pres-15 sure may be brought to bear on the spring 44, thus increasing the tension of the spring against the lever 36 and enabling the operator to compensate for the additional or diminished load carried by the sliding section 20 22, it being understood that the weight of the sliding section will vary according to the amount of contents placed therein.

From the foregoing description it will be seen that the tendency of the spring 44 is to 25 depress the lever 36, which in turn bears down on the short arm of the lever 37 and moves upward the long arm thereof, which acting through the stud 43 on the sliding section serves to elevate the latter. The ten-30 sion of the spring is so adjusted that the connections hereinabove described will just counterbalance the weight of the sliding section and its contents, and it will therefore be seen that in swinging the doors or hinged 35 sections outward at the front of the desk the sliding section will be simultaneously ele-

vated without any extra exertion.

In order to lock the sliding section when housed within the desk, one or more projec-40 tions 52 in the form of pins or studs are provided at one or both ends of the sliding section and near the bottom edge of the end piece 23 thereof. Coöperating with said projections 52 are hooks 53, connected fixedly to 45 a slide rod or bar 54, operating in a direction transversely of the desk. The rod or bar 54 (shown in Figs. 5 and 6) is provided with the longitudinal slots 55 to receive headed pins or studs 56, which engage the bottom of the 50 desk and the heads of which engage the slide rod or bar, so as to allow said bar to move longitudinally while guiding the same and holding it firmly in place. The rod or bar 54 is provided at its forward end with an anti-55 friction-roller 57, which comes in operative contact with a cam-lever 58, having a camsurface 59 cooperating with the roller. The lever 58 extends forward in the path of the adjacent doors or hinged sections 16, as clearly 60 shown in Fig. 6, and when said section is moved inward to its closed position the inner corner thereof comes in contact with the lever 58, producing a coöperation between the cam - surface 59 thereof and the roller 57, 65 thereby thrusting the sliding bar or rod 54 rearward and causing its hooks 53 to pass over and engage the projections 52, thereby

limit of its movement and preventing unauthorized persons from raising and gaining ac- 70 cess to the slidable section when the hinged sections or doors are locked, it being intended to provide a suitable lock for said doors. When the doors are thrown open, a retracting-spring 62 acts to thrust the rod or bar 54 75 forward, thereby disengaging the hooks 53 from the projections 52 and leaving the slidable section free to be moved upward.

In view of the foregoing description it will be seen that the desk when not in use as such So is in the form of an ordinary flat-top table with sides and ends which may be ornamented in any desired manner and that the device as a whole is admirably adapted to parlors and other private rooms in dwellings, the ar- 85 ticle giving no indication exteriorly that it is a desk. At the same time by unlocking and opening the front doors or hinged sections said sections are not only thrown into position to give access to the contents thereof, but 90 simultaneously therewith the slidable section is elevated above the plane of the desk-top to a position where ready access may be had to the pigeonholes and other compartments thereof. This is accomplished by the opera- 95 tive connections hereinabove described and is effected without undue exertion by reason of the counterbalancing mechanism herein set forth. The normally-stationary section 11 can be readily removed through the front of 100 the desk, when the doors or hinged sections are thrown open, by sliding the said stationary section outward in a forward direction, and when the stationary section is restored it is properly positioned by coming in contact 105 with the intermediate partition and the back of the desk. The sliding flush-seating section carries a section of the desk-top or writing-bed, and said movable section 3 of the writing-bed extends the entire length of the 110 desk, so that the joint between the sections 2 and 3 consists of a straight line at the point 60, the meeting edges of the sections 2 and 3 being in the same horizontal plane and correspondingly beveled or convexed and concaved, 115 thus making the joint scarcely noticeable. In order to support the free ends of the hinged sections 16 when they are swung outward, supporting-legs 61 are provided, the same extending downward from the inner corners of 120 the hinged sections, as shown in dotted lines in Fig. 4 and as also illustrated in Fig. 1. If desired, one of the door-sections may be provided with pigeonholes, book-stalls, and drawers accessible from the inner side thereof, as 125 shown at 63.

It is intended to provide counterbalancing devices at both ends of the desk and also to attach to both hinged sections means for operating the sliding sections. For conven- 130 ience, however, and in order to avoid confusion in the drawings I have illustrated but a single set of counterbalance-levers and a single operating device for the sliding sections.

In order to reduce friction, the pins 40 and 43 may be surrounded by antifriction-rollers working in the respective slots or grooves of the counterbalance-levers. It will also be un-5 derstood that the desk is just as useful for office purposes as for parlors and private dwellings.

From the foregoing it is thought that the construction, operation, and many advanto tages of the herein-described desk will be readily apparent to those skilled in the art without further description, and it will be understood that various changes in the form, proportion, and minor details of construction 15 may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured

20 by Letters Patent, is—

1. A flat-top cabinet-desk comprising a vertically-slidable flush-seating section forming a flush portion of the writing-bed, a plurality of vertically-hinged sections, and operative 25 connections between the slidable and hinged sections, whereby the operation of the hinged sections effects the operation of the slidable section, substantially as specified.

2. A flat-top cabinet-desk comprising a ver-30 tically-slidable flush-seating section, forming a flush portion of the writing-bed, a verticallyhinged section having an operative connection with the slidable section for raising and lowering the same, a lever connected to the 35 slidable section, a second lever connected

with the first-named lever, a lever-actuating spring, and a tension-adjusting device for the spring, substantially as specified.

3. A flat-top cabinet-desk comprising a ver-40 tically-slidable flush-seating section forming a flush portion of the writing-bed, a verticallyhinged section having an operative connection with the slidable section for raising and lowering the same, a lever operatively con-45 nected with the slidable section, a lever-actu-

ating spring pivotally mounted at one end on J

a fixed part and exerting its tension on said lever, and a tension-adjusting device for the

spring, substantially as specified.

4. A flat-top cabinet-desk comprising a ver- 50 tically-slidable section, a hinged section for raising and lowering the slidable section, said hinged section having an operative connection with the slidable section, and means actuated by the hinged section upon the lat- 55 ter resuming a normal position for locking the slidable section, substantially as specified.

5. A flat-top cabinet-desk comprising a vertically-slidable section, a hinged section having an operative connection therewith for 60 raising and lowering the same, a slide-bar actuated by the hinged section, and means on the slidable section engaged by the slidebar for locking the slidable section, substan-

tially as specified.

6. A flat-top cabinet-desk comprising a vertically-slidable section, a vertically-hinged section having an operative connection therewith for raising and lowering the same, a slide-bar actuated by the hinged section, and 70 hooks on the slide-bar engaging complemental devices on the slidable section for locking the latter, substantially as specified.

7. A flat-top cabinet-desk comprising a vertically-slidable section, a vertically-hinged 75 section having an operative connection therewith for raising and lowering the same, a lecking slide-bar arranged to be actuated by the hinged section, a cam-lever operatively related to the slide-bar and arranged in the 80 path of the hinge-section, engaging devices on the slide-bar coöperating with complemental devices on the slidable section for locking the latter, and a retracting-spring for the slide-bar, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

JULIUS SCHIPKOWSKY.

Witnesses:

RICHARD SCHMIDT, JOHN LIVER.