(No Model.) 2 Sheets—Sheet 1.

C. H. TYLER.

TYPE WRITER CABINET.

No. 410,470. Patented Sept. 3, 1889.

Fig. I.

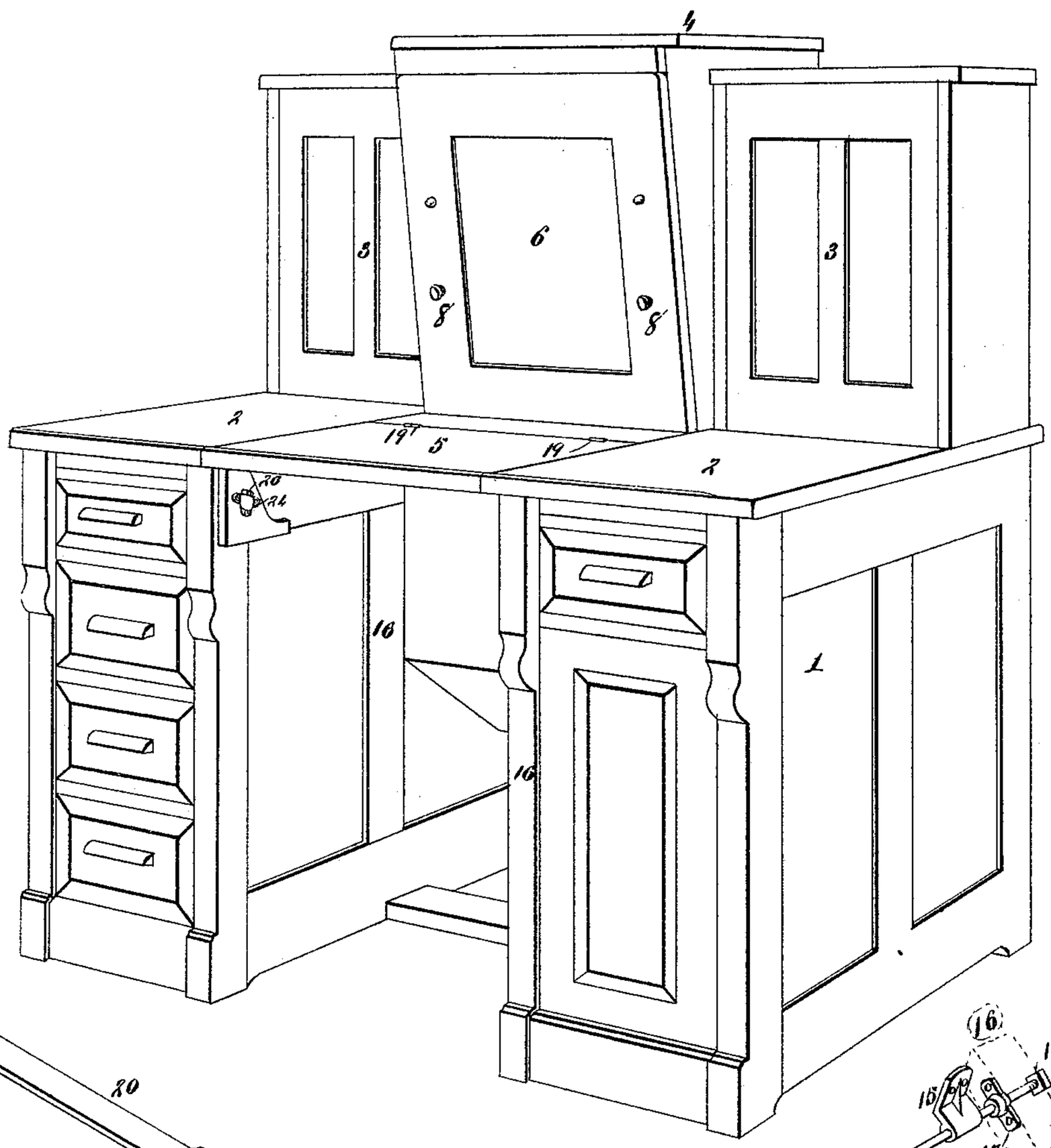

Fig. II.

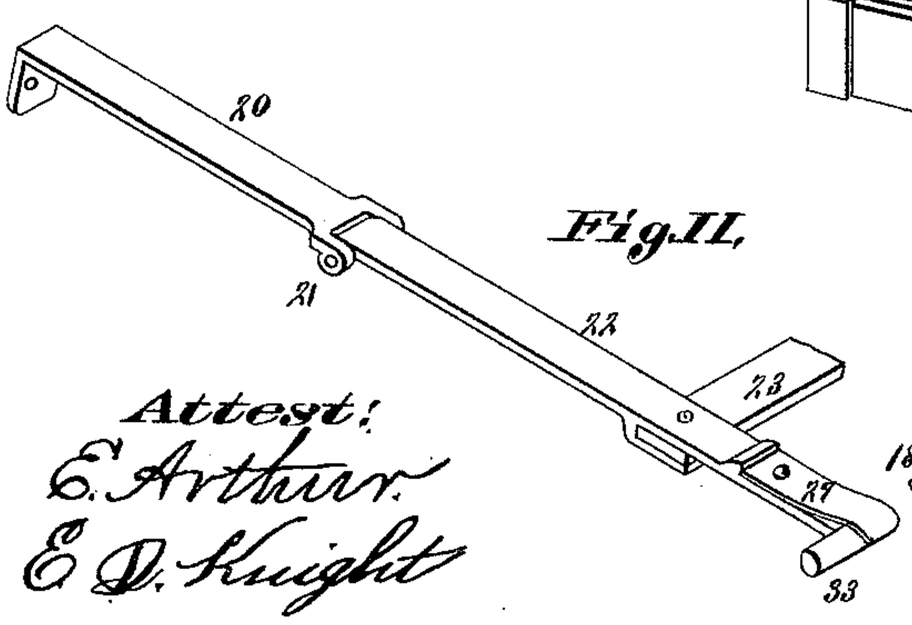

Fig. III.

Attest:
E. Arthur.
E. D. Knight

Inventor:
Charles H. Tyler
By Wright Bros
Attys

(No Model.) 2 Sheets—Sheet 2.

C. H. TYLER.

TYPE WRITER CABINET.

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Fig. V.

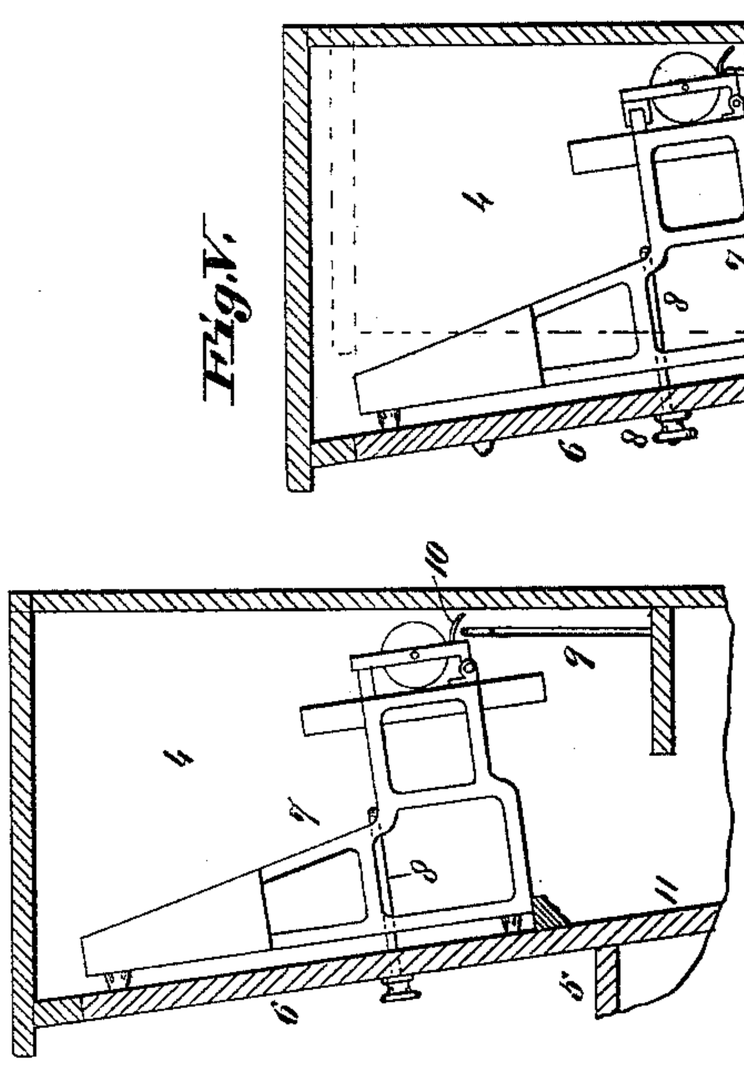

Fig. VI.

Fig. IV.

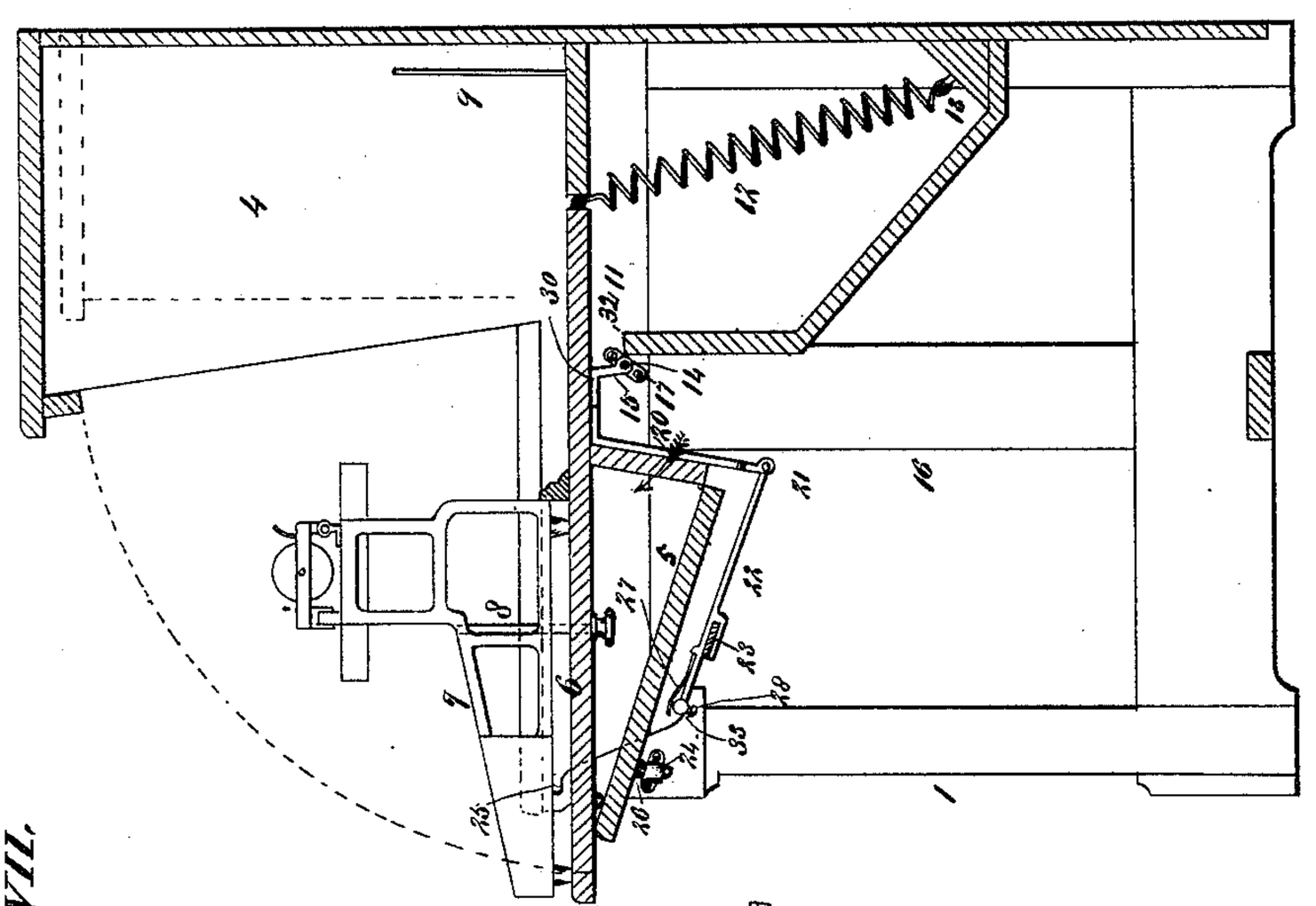

Fig. VII.

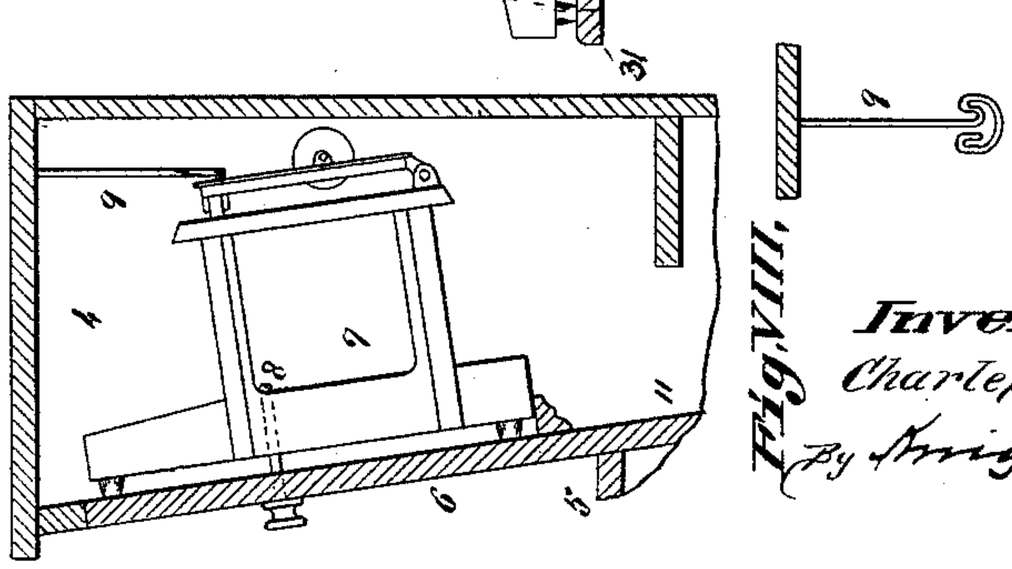

Fig. VIII.

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UNITED STATES PATENT OFFICE.

CHARLES H. TYLER, OF ST. LOUIS, MISSOURI.

TYPE-WRITER CABINET.

SPECIFICATION forming part of Letters Patent No. 410,470, dated September 3, 1889.

Application filed September 26, 1888. Serial No. 286,413. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. TYLER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Type-Writer Cabinets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure I is a perspective view of my improved cabinet in position for use as a desk. Fig. II is an enlarged perspective view of one of the jointed arms or bars. Fig. III is a similar view of the hinge-rod. Fig. IV is a vertical transverse section through the cabinet, showing the type-writer lowered into position for use. Fig. V is a similar view showing the type-writer in non-using position. Fig. VI is an enlarged detail view showing the receptacle for receiving the type-writer and showing the type-writer in its non-using position. Fig. VII is a similar view showing the general outline of a Remington type-writer, a Caligraph being shown in the other figures. Fig. VIII is a detail view showing the return-arm.

My invention relates to certain improvements in type-writer desks or cabinets; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, 1 represents the body of the desk or cabinet; 2, its table; 3, side cupboards, and 4 a central receptacle located between the cupboards 3.

5 represents the central portion of the table, which is brought into line with the parts 2 for use as a desk when the machine is moved to non-using position, and which falls to a lower elevation as the machine is brought into using position.

6 represents a door to the receptacle 4. This forms the base or support for the machine 7, and to it the machine is secured by suitable clamps 8.

A receptacle similar to that shown at 4 of this application is shown, described, and claimed in an application filed by me on the 19th day of July, 1887, Serial No. 244,744, the difference between the device shown in this application and that shown in the application referred to being that the door or base 6 in this application is, when closed, on an incline from the vertical, instead of being vertical, as in the other application. The object of this is to prevent the tipping over of the carriage of the type-writer when the door is closed, thus avoiding the necessity of placing anything within the receptacle that will prevent the tilting of the carriage, as when the door is closed the carriage will remain in its normal position. In case the door should be closed with a slam, the carriage might tilt or turn on its hinge, and to meet contingencies of this kind I place within the receptacle an arm 9, which (when a Caligraph machine is used) is located as shown in Figs. IV, V, and VI, and which acts to receive the guard or clip 10 of the carriage. If the carriage should start to tip, the arm would cause it to fall back to its normal position. If a Remington machine is used, the arm 9 will depend from the top of the receptacle, as shown in Fig. VII.

The door 6 has an extension 11, and to this one end of a torsion-spring 12 is secured, the other end of the spring being made fast to the body of the cabinet, as shown at 13. This spring is double-acting—that is, as the door, carrying with it the machine, is lowered into using position, or into the position shown in Fig. IV, the spring pulls upon the lower end 11 of the door, counteracting the weight of the machine and letting the door down gently. Then, as the door closes, the spring pulls on the lower end 11, causing the door to close gently. As the door is opened the spring is expanded beyond its normal length, and as the door is closed the spring contracts and then expands to give the effect described. The door is hinged to a rod 14 by means of brackets 15, which are made fast to the door at their upper ends, and which have eyes fitting loosely on the rod 14. The rod is secured to the inner walls 16 of the part 1 of the desk by means of clips 17, through which it passes, and which are secured to the walls 16, and the ends of the rod pass through the walls and have nuts 18 on their outer ends, which serve to connect the respective walls 16 together and hold them from movement, and thus insure an equal distance between the

walls at all times for the parts to work in. As stated, the bracket-hinges 15 fit loosely on the rod 14, and the object of this is to allow the door to shift slightly in either direction laterally, so that it will never bind between the top 2 of the desk as it is raised or lowered. Should it have a tendency to bind on one side or edge, the hinges will slip on the rods and relieve this binding. The central part 5 of the table is made with a joint or in two parts hinged together at 19. Secured to the inner part are arms or plates 20, which preferably extend slightly beyond the joint, as shown in Figs. IV and V. To the outer ends of these arms are hinged at 21 arms or plates 22. The outer ends of the arms or plates 22 are connected by a strip 23. (See Figs. II, IV, and V.) On the outer ends of the arms 22 are projections 33. These projections fit and bear on brackets 24, (forming inclined ways,) secured to the walls 16 of the desk. The upper ends of these inclined ways are made with a short horizontal portion 25, (see Fig. IV,) in which the projections rest when the part 5 of the top of the desk is raised to using position, or, in other words, when the door 6 is closed. The inner portion of the part 5 of the top is rigidly secured to the door 6. It will thus be seen that as the door is opened the inner portion of the part 5 of the top will be turned downward from the position shown in Fig. V to the position shown in Fig. IV. This causes the outer ends of the arms 22 to be drawn slightly inward, releasing the projections from the horizontal portions 25 of the inclined ways, and then, as the door is further opened, the projections slide downwardly on the inclined ways, allowing the outer portion of the top to fall to the position shown in Fig. IV, where it is received by rubber bumpers 26, secured to the brackets 24. As the door 6 is closed the inner portion of the top 5 is raised in the direction indicated by the arrow in Fig. IV, and this causes the arms 20 and 22 to be brought into line, the projections 33 riding upward on the inclined ways. As the projections thus travel upward on the inclined ways the arms 22 come against the outer part of the top 5 and lift it into line with the part 2 of the top. I prefer to secure springs 27 to the arms 22, which bear against the outer part of the top 5, instead of the arms bearing directly against the part, and to compensate for any slight wear that there may be of the springs upon the wood of the part I place set-screws 28 through the outer ends of the arms, and which jam against the under sides of the springs 27. By turning these set-screws the free ends of the springs may be adjusted upwardly to compensate for such wear. It will thus be seen that with this improved construction the part 5 of the top of the door will be lowered (as the door 6 is opened) beneath the line of the part 2 of the top, thus allowing the door 6 to be brought on a lower elevation than the top 2 for convenience in operating the machine. Then, as the door is closed, the part 5 of the top is brought into line with the part 2 to make a complete and continuous top for use as a desk.

By the use of the brackets 15 it will be observed that the door 6 will be thrown forward as it is opened—that is to say, the connection at 30, Fig. IV, between the bracket-hinges and the door will move on the arc of a circle, of which the rod 14 is the center, from the position shown in Fig. V to the position shown in Fig. IV. This throws the door forward and brings the machine over the lap of the operator.

To better illustrate the forward movement of the door 6 in the present machine, as contradistinguished from the movement of the door shown in my aforesaid application, an arc of a circle has been dotted in in Fig. IV, showing the curve in which the outer edge 31 of the door would move were the latter connected at 32 by the usual hinges on which it moves as a fixed center; but it will be seen from said figure that the outer edge of the door, when it is hinged by the devices now shown and described, will be caused to move forward away from the dotted arc, or on a curve which has no center—*i. e.*, it will move eccentrically.

I claim as my invention—

1. In a type-writer cabinet, the combination of a receptacle and a door for the receptacle which serves as a base or support for the machine when the latter is in using position, said door being on a forward incline when closed, substantially as and for the purpose set forth.

2. In a type-writer cabinet, the combination of a receptacle for receiving the machine when not in use, a door to the receptacle which serves as a base or support for the machine when the latter is in use, and a double-acting spring connecting the door to a fixed object, substantially as and for the purpose set forth.

3. In a type-writer cabinet, the combination of a receptacle for receiving the machine when not in use, a door to the receptacle which serves as a base or support for the machine when the latter is in use, a lower extension on the door, and a double-acting spring secured by one end to the extension of the door and by the other to the body of the cabinet, substantially as and for the purpose set forth.

4. In a type-writer cabinet, the combination of a receptacle for receiving the machine when not in use, a door to the receptacle, a jointed table secured to the door, arms 20 and 22, connected to the table and hinged together, and inclined ways upon which the outer ends of the arms 22 move as said door is opened and closed, substantially as and for the purpose set forth.

5. In a type-writer cabinet, the combination of a receptacle for receiving the machine when not in use, a door to the receptacle

which serves as a base or support for the machine when the latter is in using position, a table secured to the door and made in two portions hinged together, arms 20 and 22, and brackets 24, forming inclined ways having horizontal extensions 25, substantially as and for the purpose set forth.

6. In a type-writer cabinet, the combination of a receptacle for receiving the machine when not in use, a door to the receptacle which forms a base or support for the machine when the latter is in using position, a table secured to the door, arms 20 and 22, inclined ways for receiving the outer ends of the arms, springs 27, and set-screws 28, substantially as and for the purpose set forth.

7. In a type-writer cabinet, the combination of a receptacle for receiving the machine when not in use, a door to the receptacle which serves as a base or support for the machine when the latter is in using position, a jointed table secured to the door, arms 20 and 22, hinged together, connecting-bar 23, securing the bars 22 together, projections 33 on the outer ends of the arms 22, and brackets 24, forming inclined ways, substantially as and for the purpose set forth.

8. In a type-writer cabinet, the combination of the receptacle for receiving the machine when not in use, a door to the receptacle which serves as a base or support for the machine when the latter is in using position, a jointed table secured to the door, arms 20, arms 22, pivoted to the latter, brackets 24, and stops 26, fixed to the brackets, substantially as and for the purpose set forth.

CHARLES H. TYLER.

In presence of—
GEO. H. KNIGHT,
EDW. S. KNIGHT.