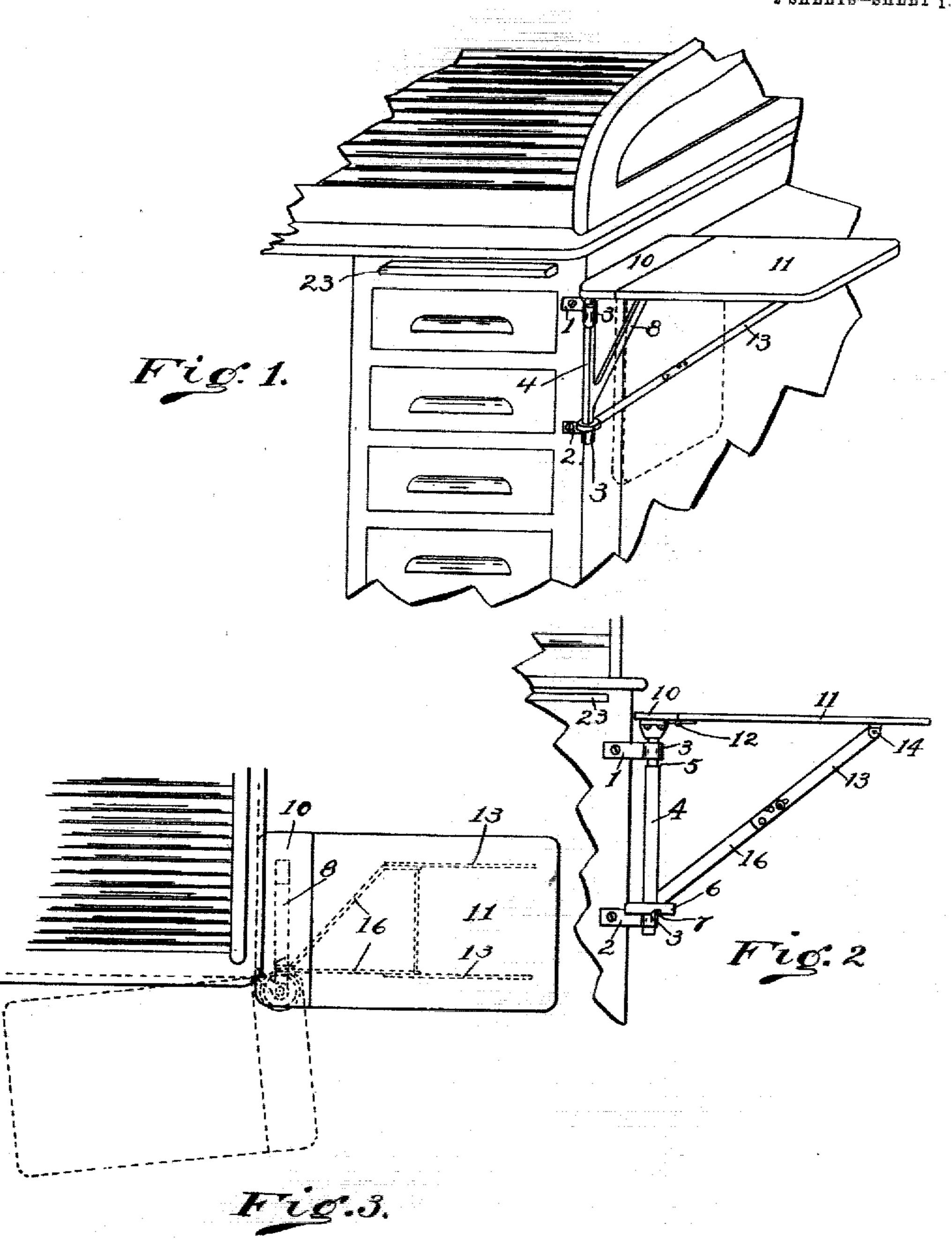
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SWINGING DESK SHELF.
APPLICATION FILED JAN. 26, 1905.

2 SHEETS-SHEET 1.



Witnesses 6.M. Halmestock

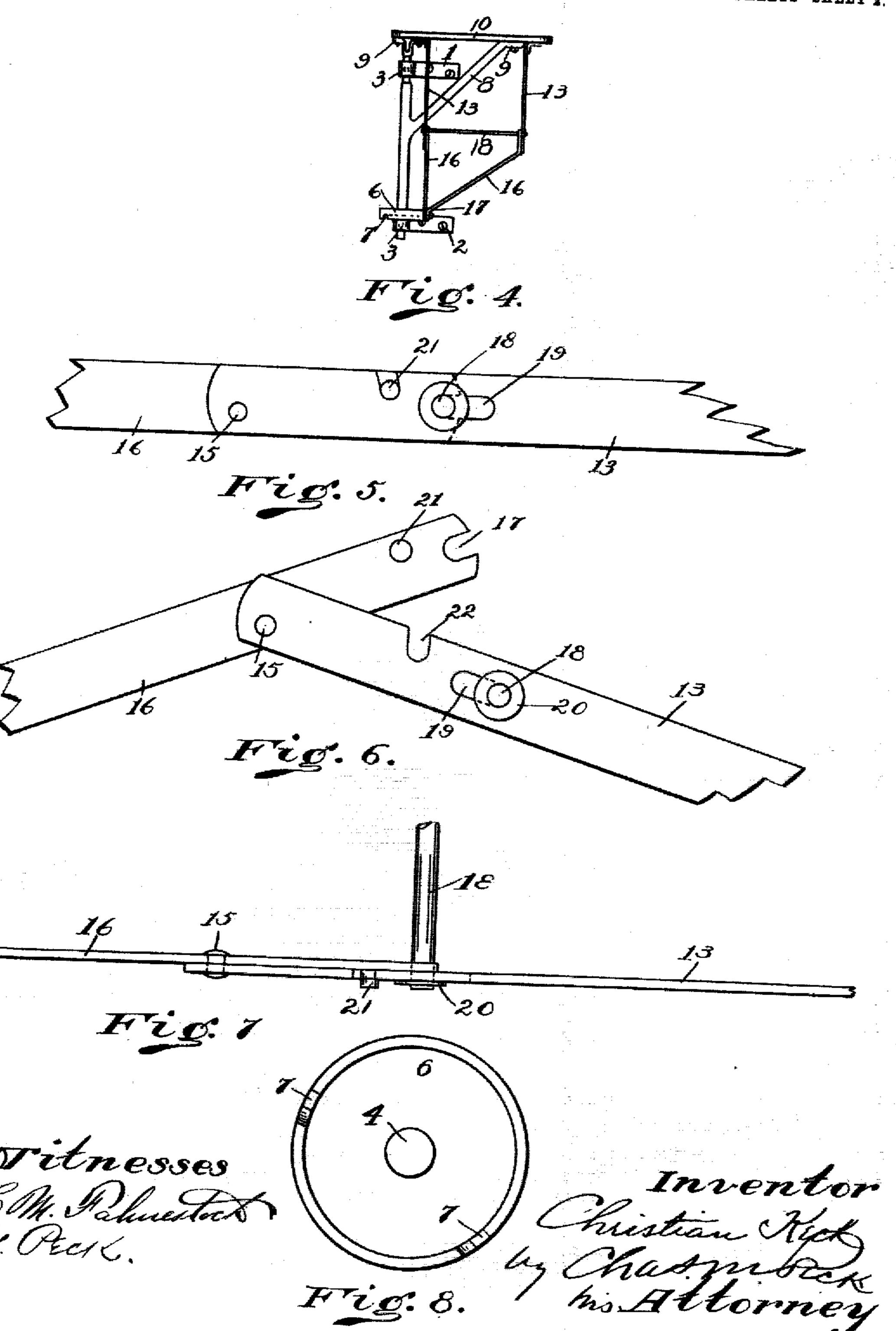
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2 SHEETS-SHEET 2



AMDREW B. CHARLE CO., PHCTO-LITHOGRAPHERS, WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

CHRISTIAN KECK, OF CRESCENT SPRINGS, KENTUCKY, ASSIGNOR TO THE GLOBE-WERNICKE COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

SWINGING DESK-SHELF.

No. 820,050.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed January 26, 1905. Serial No. 242,740.

To all whom it may concern:

Be it known that I, Christian Keck, a citizen of the United States, residing at Crescent Springs, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Swinging Desk-Shelves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of adjustable swinging shelves that can be applied to the corner of any ordinary desk and can be swung around to the end of the desk and let down out of the way when not in use and can be raised and locked to a horizontal position and be swung around to the front of the desk within easy reach of the person sitting at the desk. Such shelves are found very conventent as a supplemental device to a desk and serve a variety of purposes—such, for instance, as carrying a type-writer, a heavy book of reference, a ledger, card-index trays or cabinets, letter-files, or most anything that

The object of my invention is to provide a shelf of this character which shall be very simple in construction, strong without undue weight, cheap to manufacture, and which can be applied to any desk without time or trouble or the aid of a mechanic.

The novelty of my invention will be hereinafter set forth, and more specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the corner of a roll-top desk, showing the application of my improved shelf. Fig. 2 is a front elevation of the same. Fig. 3 is a plan view of the shelf and a corner of the roll-top desk with the shelf attached and swung up to a horizontal position at the side of the desk in solid lines and swung around to the front of the desk in dotted lines. Fig. 4 is a diminished end elevation looking to the left of Fig. 2. Fig. 5 is an enlarged side elevation of one of the knuckle - joints locked. Fig. 6 is a corresponding view with the joint unlocked and broken. Fig. 7 is a plan view of Fig. 5. Fig. 5 is a bottom plan view of the locking-ring.

The same numerals of reference are used to indicate identical parts in all the figures.

Suitably secured to the front and side of

the desk at its corner are two horizontal supports 1 and 2, Figs. 1, 2, and 4, and ordinary 55 screws may be employed for this purpose. The ends of these supports, which standat an angle to the corner of the desk, as seen by the dotted lines in Fig. 3, terminate in tubular sockets 3, in which is journaled, so as to turn 60 freely, a vertical spindle 4, having a shoulder 5 to limit its upward movement, and a cupshaped disk 6, resting upon the lower support 2, with which it engages by means of notches 7, Figs. 2 and 8, the notches strad-65 dling the support and being beveled on one side and the disk being preferably integral with the spindle 4.

Extending upward at an angle from near the lower end of the spindle 4 is a brace-arm 70 8, and the tops of both the spindle and the brace-arm, which are on a level, are provided with perforated ears 9, by which they may be screwed to the under side of a hinging-support, or what I call the "stub-shelf"—a nar-75 row board 10, to which the main shelf 11 is securely hinged, as at 12, Fig. 2.

To brace and securely hold up the shelf 11, so that its surface shall be in line with the surface of the stub-shelf 10, I provide a pair 80 of arms 13, pivoted, as at 14, to the under side of the shelf 11 on each side and near its outer edge, as seen in Figs. 2 and 4. These arms are parallel, and their lower ends are pivoted, as at 15, Figs. 5 and 6, to two other 85 similar arms 16, the one farthest from the spindle being bent inward toward the spindle and both being pivoted at their lower ends to the disk 6, as seen in Fig. 4. The upper ends of the arms 16 project beyond their 90 pivotal points 15, so as to overlap the arms 13, and their ends are slotted, as at 17, Fig. 6, to receive a sliding bar 18, guided in a slot 19, extending longitudinally in each of the bars 13 and held in place by washers 20 upon 95 its outer ends, and which bar when the arms 16 and 13 are brought into alinement by the lifting of the table 11 is slipped down into the slots 17 and forms a lock, the whole structure comprising what I call a "knuckle-joint," 100 and as a limit to prevent the arms 13 from being raised too high pins 21 on the arms 16 enter and engage slots 22 in the arms 13, as seen in Figs. 5 and 6.

It will be observed that the spindle 4 is 105 stepped in the socket of the support 2 through

the interposed disk 6, and the weight of the shaft when one of the disk-notches engages said support serves to hold the shelf locked in either of its adjusted positions—namely, that shown by the solid lines in Fig. 3, where the shelf is parallel with the front of the desk, or that shown by the dotted lines in the same figure, where the shelf is swung around for the use of the occupant of the desk.

It will be observed that the top of the shelf is slightly below the usual sliding shelf 23, which fits in a socket in the body of the desk.

It will be seen from the foregoing description and the illustrations that I have provided an adjustable swinging shelf which is exceedingly simple in construction, is cheap, and very durable, and to operate it in swinging it is only necessary to lift it very slightly till the locking-notch is disengaged from the bracket 2, when it may be turned freely, and to lower the shelf 11 out of the way at the side of the desk it is only necessary to slide the rod 18 out of the notches 17, when the knuckle-joint will be broken and the shelf can be lowered to the position indicated by the dotted lines in Fig. 1.

Having thus fully described my invention, I claim—

1. In a swinging desk-shelf, the combination of a vertical spindle, with a horizontal extension, journaled at the corner of the desk, a stub-shelf secured to the top of said horizontal extension, a shelf hinged to said stub-shelf, means for locking said hinged shelf when raised to a horizontal position and for permitting the shelf to be lowered, and locking means between said spindle and one of its journals, substantially as described.

2. In a swinging desk-shelf, the combination of a supporting-spindle journaled to the 40 corner of the desk and having longitudinal as well as rotary movement, a horizontal stubshelf secured to the top of said spindle, a shelf hinged to said stub-shelf, means for locking said hinged shelf when raised to a horizontal 45 position and for permitting the shelf to be lowered, and locking means between said spindle and one of its journals, substantially as described.

3. In a swinging desk-shelf, the combination of a supporting-spindle journaled to the corner of the desk and having longitudinal as well as rotary movement, a horizontal stubshelf secured to the top of said spindle, a shelf hinged to said stub-shelf, means for locking 55 said hinged shelf when raised to a horizontal position and for permitting the shelf to be lowered, and a disk fast upon said spindle with notches to engage a locking member on the desk, substantially as described.

4. The herein-described swinging desk-shelf comprising the supports 1 and 2, the spindle 4 journaled therein with slight longitudinal movement, the arm 8 projecting from said spindle, the notched disk 6 fast upon 65 said spindle and engaging the support 2, the stub-shelf 10 fast upon the top of the spindle and arm 8, the shelf 11 hinged to the stub-shelf 10 and the knuckle-jointed arms 13 and 16 hinged at their upper ends to the shelf 11 70 and at their lower ends to the disk 6, substantially as and for the purpose specified.

CHRISTIAN KECK.

Witnesses:

EDWARD SUSSDORF, BESSIE K. LAVAN.