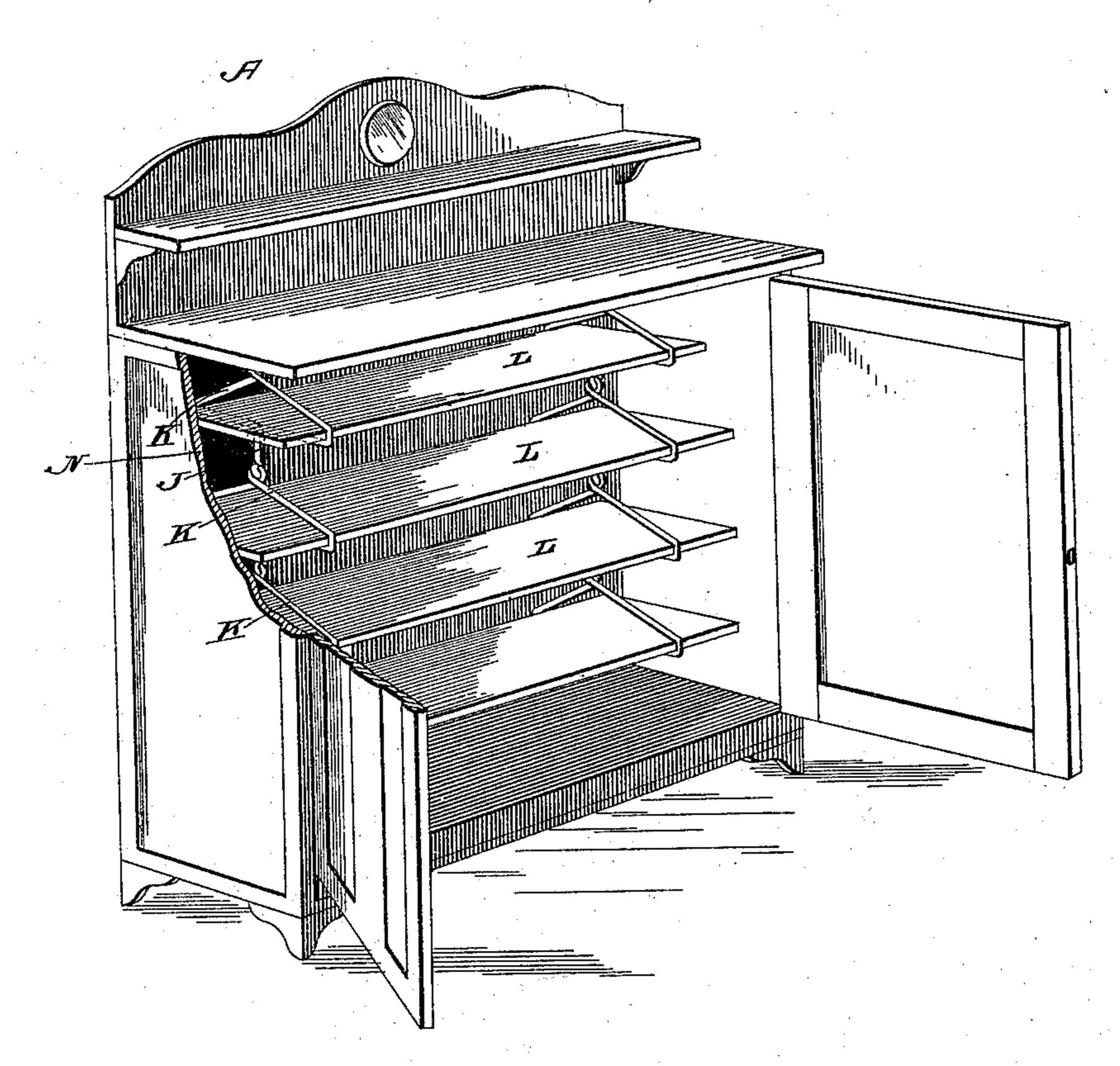
J. KUNKEL. SWINGING OR HANGING SHELF.

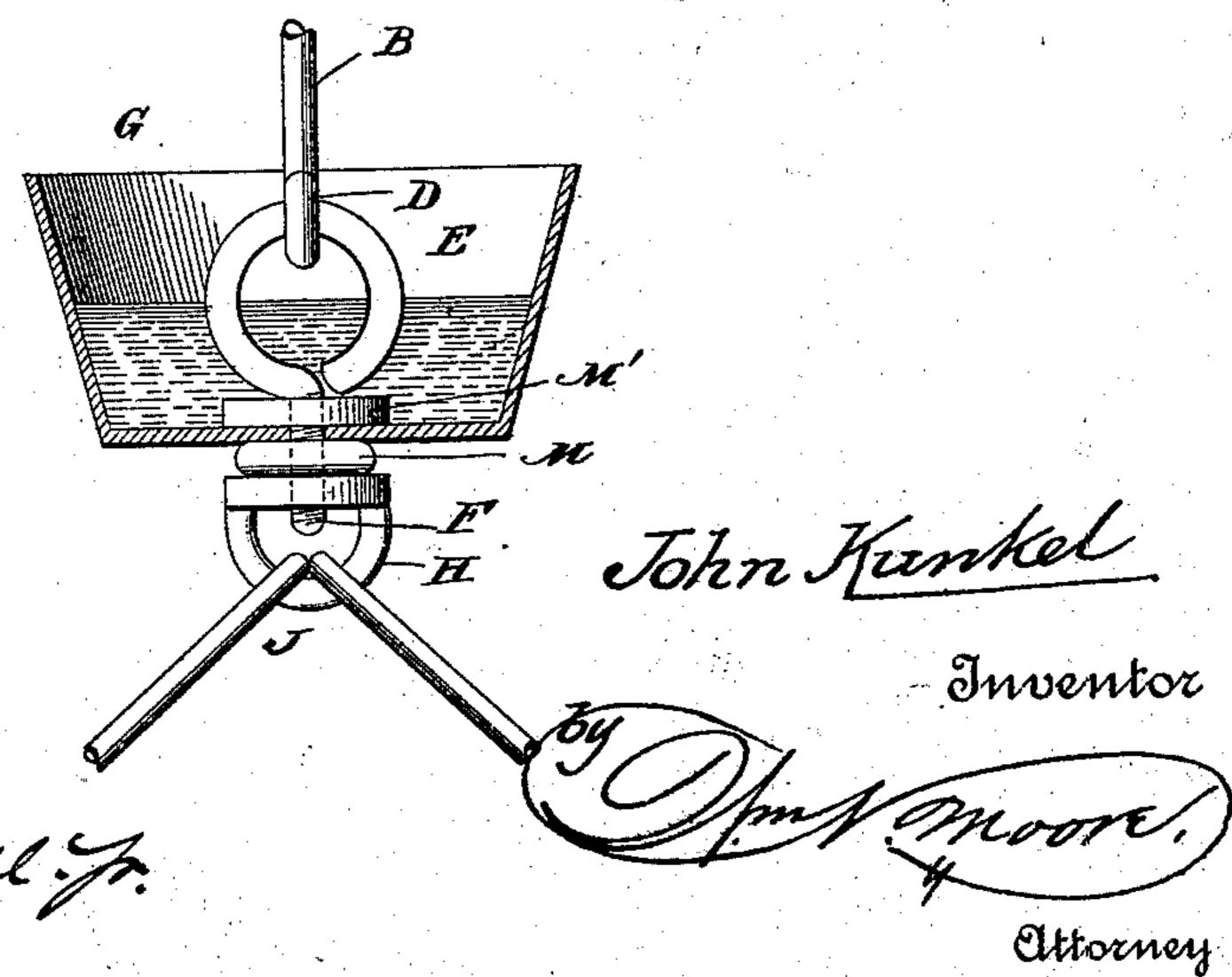
No. 550,830.

Patented Dec. 3, 1895.

Mig. 1.



Frig. 3.



Witnesses

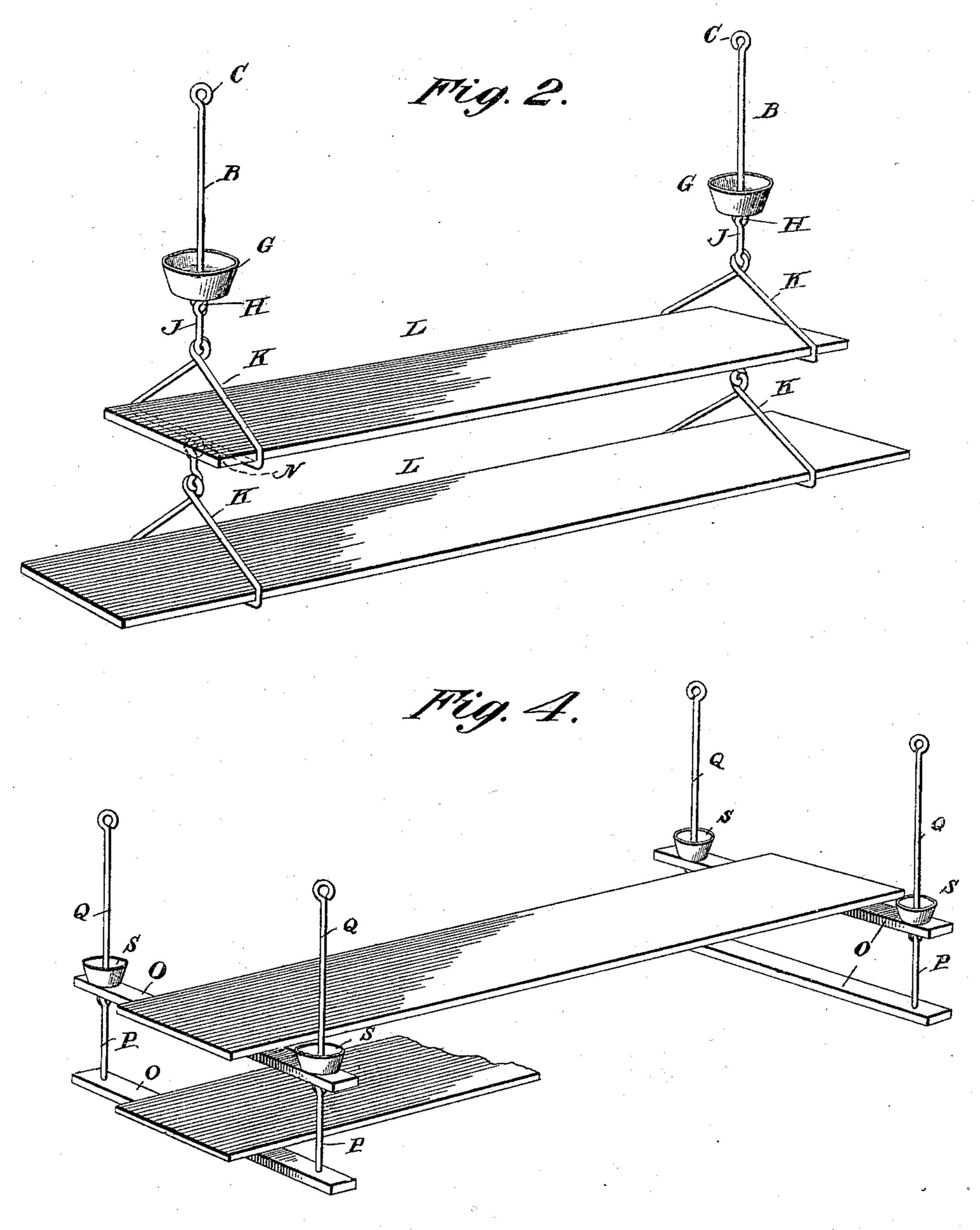
Edwid Durallip. may 6, moore.

J. KUNKEL.

SWINGING OR HANGING SHELF.

No. 550,830.

Patented Dec. 3, 1895.



John Kunkel

Witnesses Edw. Durace. 7. May 6, Moore Juventor Jem Moore, Attorney

United States Patent Office.

JOHN KUNKEL, OF UNION CITY, INDIANA, ASSIGNOR OF TWO-THIRDS TO RUBEN B. KUNKEL AND HENRY H. HECKMAN, OF SAME PLACE.

SWINGING OR HANGING SHELF.

SPECIFICATION forming part of Letters Patent No. 550,830, dated December 3, 1895.

Application filed May 9, 1895. Serial No. 548,640. (No model.)

To all whom it may concern:

Be it known that I, John Kunkel, a citizen of the United States, residing at Union City, in the county of Randolph and State of Indiana, have invented certain new and useful Improvements in Swinging or Hanging Shelves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in swinging or hanging shelves; and the main or principal object of my invention is the provision of a hanging shelf which can be constructed at an extremely low price and hung in any kind of a closet or safe, or, in fact, in any desired place, and which will prevent insects from tampering with the provisions supported on the shelves, and thus produce a practical and very useful device.

To attain the desired objects, the invention consists of a hanging shelf embodying novel features of construction and combination of parts for service, substantially as disclosed herein.

In order that the details of construction of my invention may be readily understood and its peculiar advantages be fully appreciated, so I have shown in the accompanying drawings an embodiment of my improvements.

Figure 1 represents a portion of an ordinary safe, with my improved hanging shelf arranged in position therein, the shelf being shown in perspective. Fig. 2 represents a perspective view of the shelf detached. Fig. 3 represents a detail view of a portion of my invention, and Fig. 4 represents a perspective view of a modified construction of my improved shelf.

In the drawings, A designates a safe or cabinet of ordinary or common construction in which, if desired, I may hang or support my improved shelf, although the shelf may be hung in any desired place—such as a closet, small room, pantry, or cellar, as found desirable and convenient.

B designates two arms formed with an eye C at the upper end to attach the arms and at their lower ends with an eye D for engagement 50 with the eye or hook E, having the threaded stem F, which passes through the insect-trapping cups or vessels G, the stem being engaged by the eye or bail H, which in turn is engaged by the hooks J, on the upper ends 55 of the triangular-shaped supporting devices K, on which are supported the shelves or strips L, and to prevent leakage of the liquid (preferably glycerine or other oil) placed in the cups or vessels, I interpose the washer or 60 gasket M and the nut M', and also use solder at the joint, as most clearly seen in Fig. 3.

It will be seen that any number of the supporting devices may be employed according to the number of shelves used, and when the 65 triangular bail-supports are used in a series the said bails are provided with the eye N, with which engages the hooked ends of the next support, as clearly seen in Fig. 1.

As shown in the modified form of my shelf, 70 if desired, I may use the wood strips O, and connect to each the arms P and Q, the latter having the hanging hooks R and the cups or vessels S thereon, as is evident.

The hanging shelf herein described consisting of the rods having the hook on their lower ends, the eyes connected to said hooks and having a threaded stem, the insect trapping cups arranged around said stems, the 80 nuts engaging said stems and having a bail, the tri-angular shelf supports having the upper hooked ends engaging the bail on said nuts and having the central depending eye, the contiguous series of tri-angular shelves 85 having the upper hooked ends and the central eyes whereby the supports are connected together, and the shelves on said supports.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN KUNKEL.

Witnesses:
John A. Shockney,
Geo. Wells Smith.