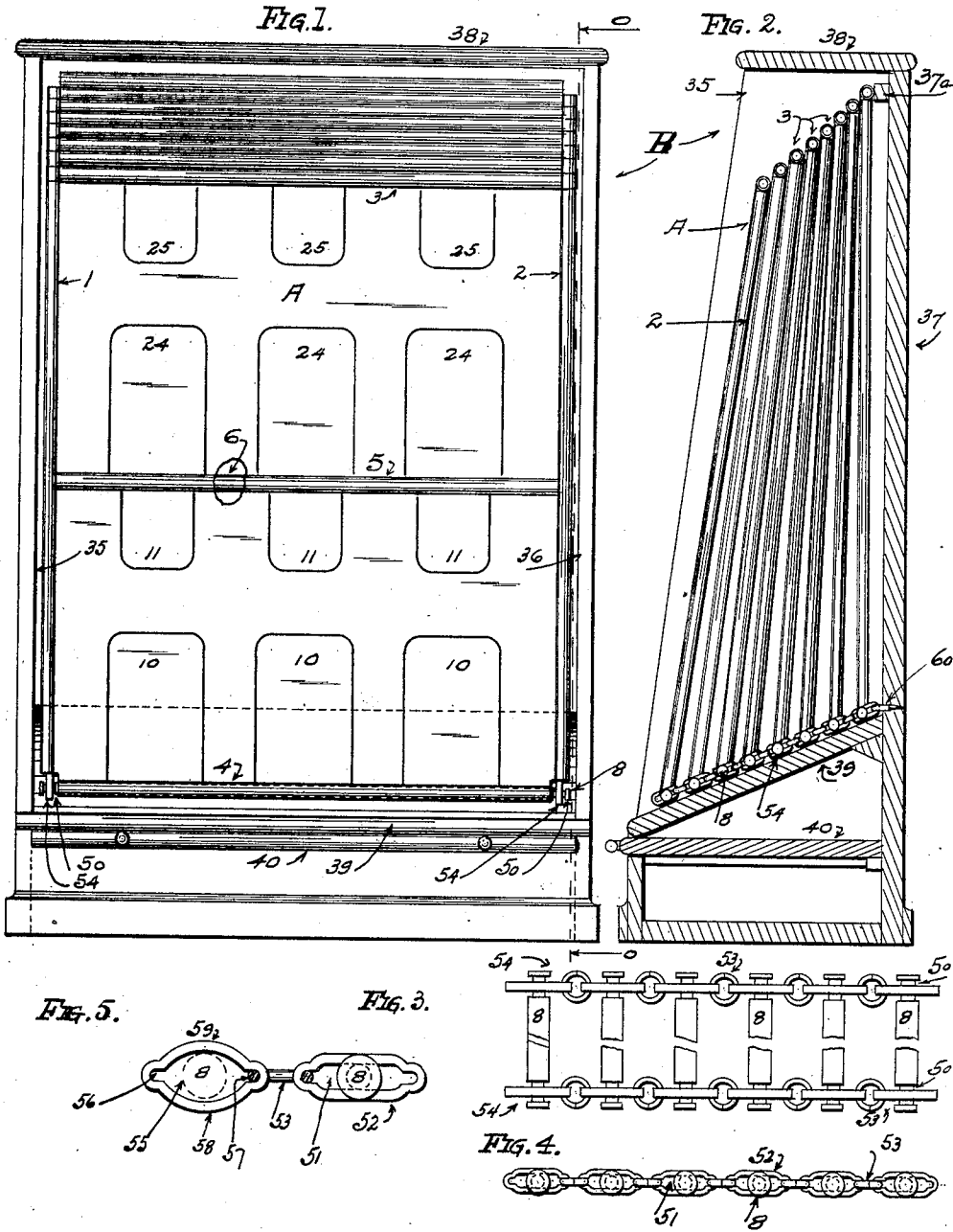


1,062,673.

Patented May 27, 1913.



Witnesses:

John A. Greeney
Alfred Cooper

Inventor:

Edward Charles Ward
 By *Michael J. Stark & Sons*
 Attorneys

UNITED STATES PATENT OFFICE.

EDWARD CHARLES WARD, OF SIOUX FALLS, SOUTH DAKOTA.

FILING-CASE.

1,062,673.

Specification of Letters Patent.

Patented May 27, 1913.

Application filed July 5, 1912. Serial No. 707,771.

To all whom it may concern:

Be it known that I, EDWARD CHARLES WARD, a citizen of the United States, and a resident of the city of Sioux Falls, in the county of Minnehaha and State of South Dakota, have invented certain new and useful Improvements in Filing-Cases; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has general reference to improvements in filing cases, and it consists, essentially, in the novel and peculiar combination of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims.

In the drawings already referred to, which serve to illustrate my said invention more fully, Figure 1 is a front elevation of my improved filing case and Fig. 2, a vertical, transverse section in line O O of Fig. 1. Fig. 3 is a plan of the means employed for binding the leaves of my file case together and holding the same in proper position, and, Fig. 4, a side elevation of the same. Fig. 5 is a side elevation, on an enlarged scale, of several of the links comprising the binding means, parts being shown in section to better illustrate details of construction.

Like parts are designated by corresponding characters and symbols of reference in all the figures of the drawing.

My invention has particular reference to that class of filing cases provided with a plurality of leaves bound together, in which each of said leaves is possessed of a number of spring filing clips on each side thereof for the reception of sales slips, invoices, memoranda, or other papers, and its especial aim is the production of a cheap and efficient binding for such filing leaves as are described and claimed in a certain application for Letters Patent, executed and filed by me concurrent with this application, and designated for purposes of identification as Case A.

My filing case is especially designed for merchants and others doing a more or less credit business, in which the salesmen in the establishment are required to make duplicate charge slips of all sales, handing the

original thereof to the purchaser and retaining the duplicate for the merchant's records.

Each of the leaves in this filing case is provided with a suitable index tab for obvious purposes. Every one of the spring filing clips on each of the leaves represents some particular customer, and the copies of all sales slips issued to that customer are intended to be filed under that particular clip. Some of these clips, by reason of a greater number of purchases by one customer, will often contain a great many more sales slips than the clips on preceding and succeeding leaves, resulting in that leaf of the file case being much thicker than the adjoining ones. It is the essence of my invention, therefore, to provide a binding for the leaves which will allow a considerable degree of expansion between adjoining leaves, to allow for this increase in thickness, without otherwise affecting the relationship between the leaves or preventing the hinging of the same. To attain this desired result, I provide a filing case B, of any desired outline, with side walls 35 36, a rear wall 37, top 38, and an outwardly, downwardly, sloping partition 39, the whole producing an open front cabinet. Below the sloping partition 39, is arranged a horizontal slide 40, which, when withdrawn, may be used as a desk when the leaves A are closed together, but whose main purpose is to form a rest for said leaves when they are opened or swung outwardly for reference or filing purposes as hereinafter described.

Within the open front of the case B, a plurality of leaves A are adapted to be placed, which leaves have a multiplicity of spring clips 10 11 24 25 on both sides thereof, and are provided with side, marginal, stiffening beads 1, 2, central strengthening beads 5 6 on either side, and top and bottom hinge forming beads 3 and 4, respectively.

In the bottom hinge forming bead 4, just referred to, is adapted to fit a pintle 8, the ends of which project beyond the ends of said bead 4. Near each end of said pintle 8 is formed a groove 50, which groove is embraced by a longitudinal slot 51 in a pintle link 52, one of which links embraces each end of every pintle 8 employed in connection with the plurality of leaves A, and each of which links 52 is connected to the

one next preceding and succeeding it, by an annular wire connecting link 53. In this manner each end of every pintle is connected together by a chain, so called, 54, Figs. 3 and 4. There are two of such chains, as seen in Fig. 3, to retain said pintles in parallel relation to each other. These chains are attached to the back 37 of the case, at a point adjacent to where the sloping partition 39 meets said back, by means of staples 60. It will now be observed that these chains 54 will normally rest upon said sloping partition 39, near and parallel to the side walls 35 36 of the case, and, between them, embracing the pintles 8, will be the hinge forming beads 4 of the various leaves A, which leaves occupy a practically vertical position between said side walls, with the first of said leaves resting with its top edge against a projection 37^a of the back 37. When it is desired to open the leaves, they can easily be swung into a practically horizontal position, the slide 40 being drawn out to provide a support for the outer ends of the leaves, when it is an easy matter to insert additional slips under any of the spring clips 10 11 25 25.

Each link 52 is formed in the process of punching from sheet metal with an elliptical central aperture 55, as seen to the left in Fig. 5. This aperture has notches 56 57, diametrically opposite, at its larger diameter, the depth of which notches is slightly greater than the diameter of the wire of the annular connecting links 53. The smaller diameter of the opening 55 is made sufficiently greater than the diameter of the pintle 8, so that the same can freely pass therethrough. In assembling the various parts, I first connect the proper quota of links 52 for each chain 54 by means of the annular connecting links 53. Then I insert one of the ends of the pintles 8 into the elliptical openings 55, after which I pinch the side walls 58 59 of said openings together, to form the longitudinal slots 51, which embrace the grooves 50 of those ends of said pintles 8. These side walls are pinched together sufficiently to prevent the withdrawal of the pintles 8, yet not so tightly but that the pintles may freely be moved the entire length of said slots 51. The hinge beads 4 are next passed over the pintles 8, and then the other chain 54 is assembled in like manner. These chains are now fastened in position to the back 37 and the file case is ready for use.

Should it be desired to remove any of the leaves, it is an easy matter to spread the side walls 58 59 to permit the withdrawal of the pintles and leaves.

In providing the longitudinal slots in the

links 52, considerable longitudinal movement of the pintles and leaves is permitted without crowding the remaining leaves.

Having thus fully described my invention, I claim as new and desire to secure to me by Letters Patent of the United States:—

1. In a file case, a plurality of leaves each having a hinge forming bead at one edge, pintles in said beads extending exteriorly thereof, a binding chain for each end of said pintles, comprising alternate pintle links and connecting links, means in said pintle links engaging said pintle ends, whereby individual longitudinal movement of each of said pintles, independently of the other, is provided for in their respective pintle links.

2. In a file case, a plurality of leaves, each having a hinge forming bead at one edge thereof, pintles in said beads, said pintles projecting beyond said beads, grooves in said pintles near the ends thereof, a binding chain for each end of said pintles, comprising alternate pintle links and connecting links, and longitudinal slots in said pintle links embracing said grooves in said pintles, whereby individual longitudinal movement of each of said pintles, independently of each other, is provided for in their respective pintle links.

3. In a file case, a plurality of leaves each having a hinge forming bead at one edge, pintles in said beads extending exteriorly thereof, grooves in said pintles near their outer ends, a binding chain for each end of said pintles, said chains comprising alternate pintle links and connecting links, said pintle links being formed with enlarged openings to pass over the pintle ends, and adapted to be swaged together to form longitudinal slots embracing the grooves in said pintles.

4. In a file case, a plurality of leaves each having a hinge forming bead at one edge, pintles in said beads extending exteriorly thereof, a binding chain for each end of said pintles comprising alternate pintle links and connecting links, longitudinal slots in said pintle links engaging said pintle ends, and notches at each end of said slots, into which said connecting links are adapted to fit, whereby the entire length of said slots is available for longitudinal movement of said pintles.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

EDWARD CHARLES WARD.

In the presence of—

ROBERT HALL,
REED McKAY.