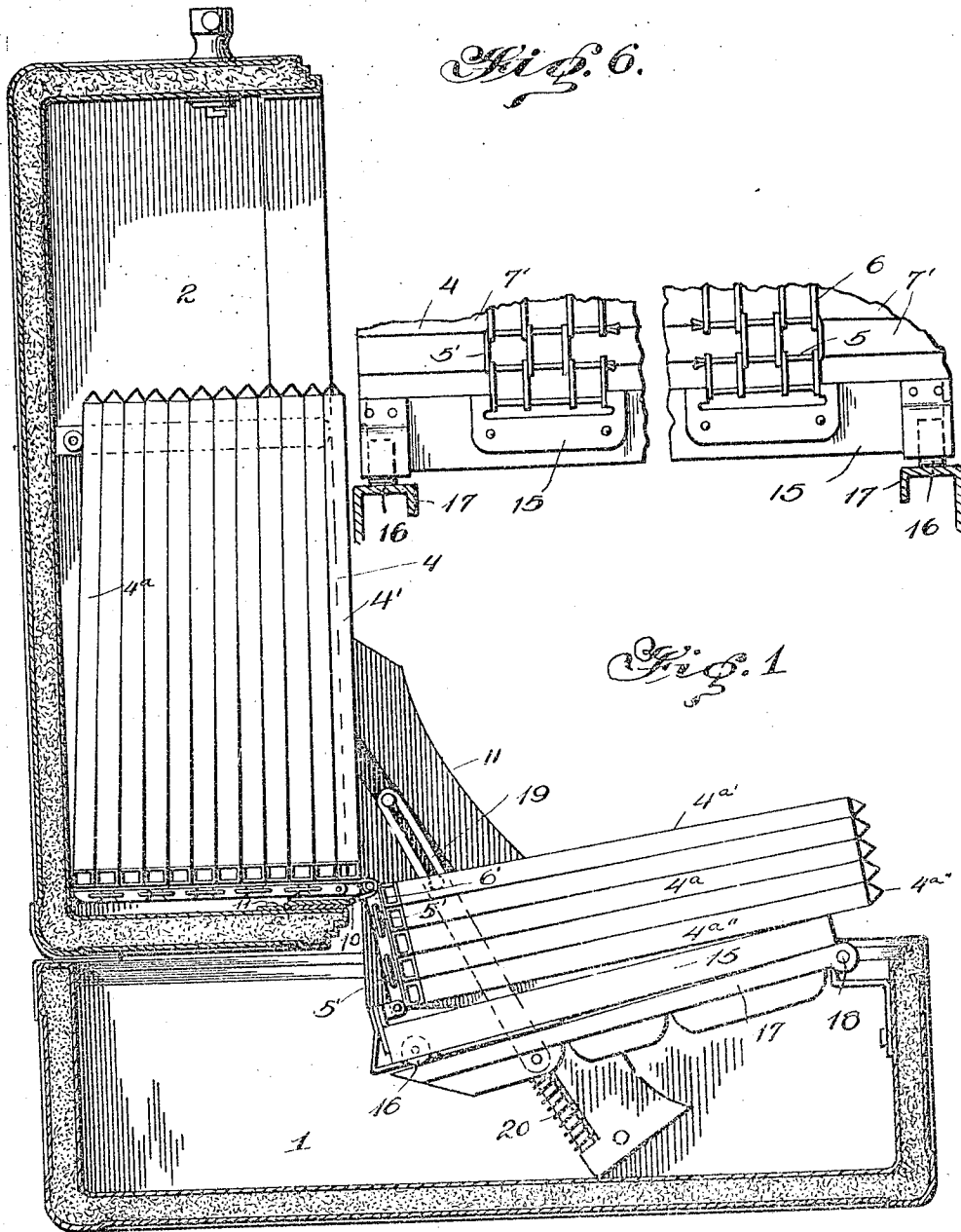


H. J. HICK.
 FILING APPLIANCE.
 APPLICATION FILED DEC. 15, 1916.

Patented Jan. 21, 1919.
 3 SHEETS—SHEET 1.

1,291,881.



Witness:

Ernest C. Crocker

Inventor:

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By *Harry J. Hick*
 Attorney.

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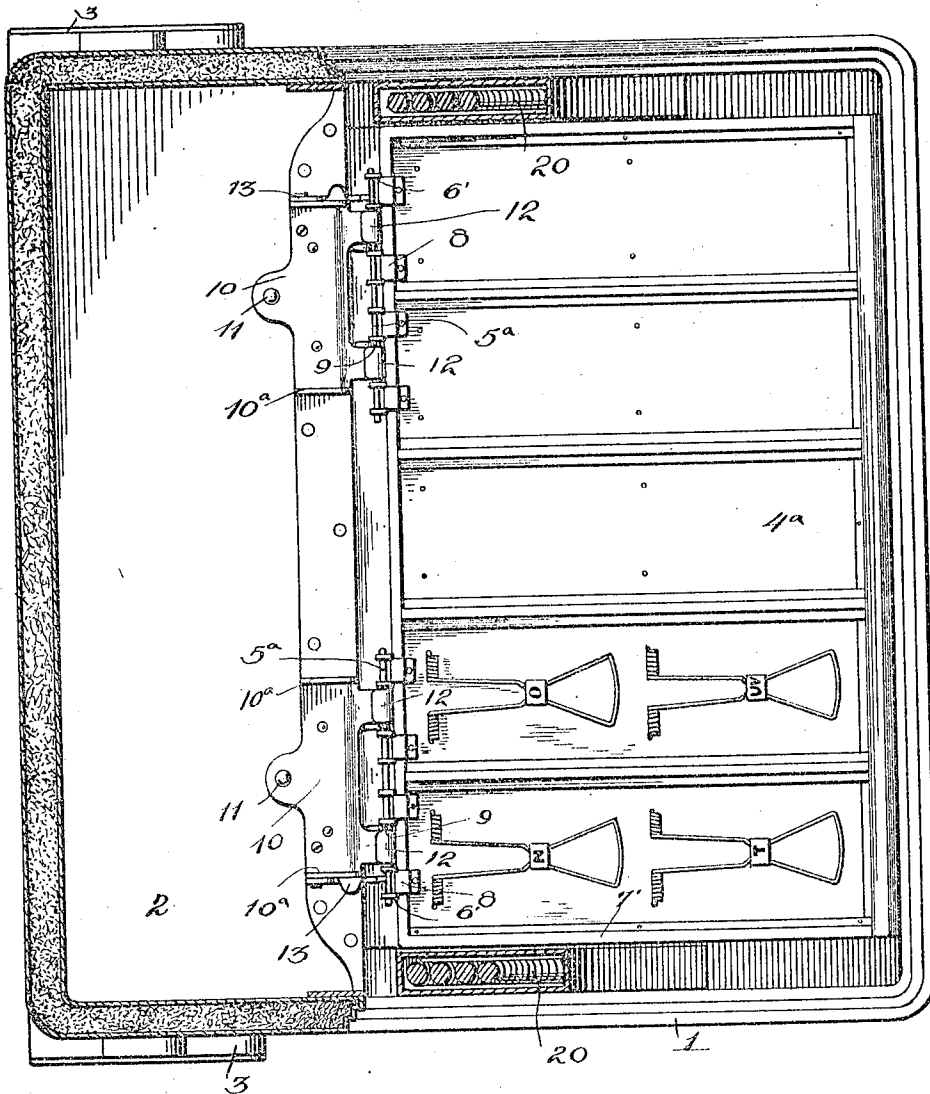


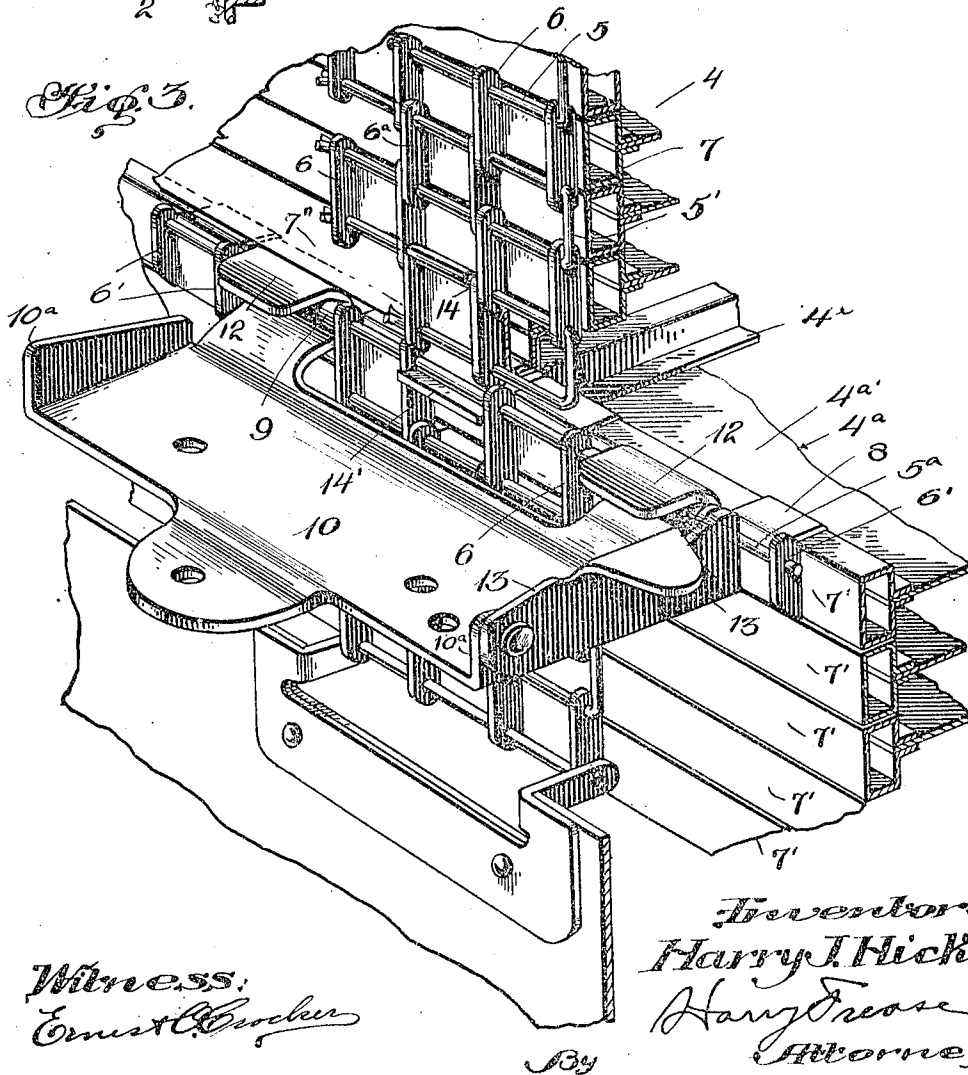
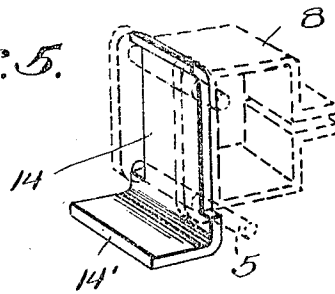
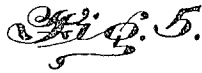
Fig. 2.

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1,291,881.



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UNITED STATES PATENT OFFICE.

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FILING APPLIANCE.

1,291,881.

Specification of Letters Patent.

Patented Jan. 21, 1919.

Application filed December 15, 1916. Serial No. 137,257.

To all whom it may concern:

Be it known that I, HARRY J. HICK, a citizen of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Filing Appliances, of which the following is a specification.

The invention relates to filing appliances for sales bills and other similar papers, in which a continuous series of bill holding frames or leaves are hinged together and operatively mounted in a case comprising a rectangular base section and a similar cover section, adapted to be swung and shifted upon the base section, to inclose the holders when closed, and to form a back for the same when open.

The general objects of the improvement are to provide a detachable hinge connection between two intermediate holders of the series, and to provide a pivotal bearing on the cover section of the case for the detachable hinge connection.

And the general purpose of the improvement is to divide the series of holders into two sections or divisions, for conveniently inserting and removing the holders from the case, during which operation one division is swung into reclined position in the base section of the case and the other division is positioned uprightly in the cover section of the case; and to provide means for detachably connecting the two divisions together, upon a pivotal bearing mounted on the cover section of the case, the holders of the two divisions being normally supported uprightly in the case when the cover section is swung open, for operation as a continuous series.

The objects and purpose of the improvement thus set forth in general terms, together with other and ancillary advantages, are attained by the construction and arrangement illustrated in the accompanying drawings forming part hereof, in which—

Figure 1 is a side elevation, showing the case in section, of a filing appliance embodying the invention;

Fig. 2, a plan view, showing the cover of the case in section and the upper or rearward division of holders removed, and disclosing the lower or forward division of holders mounted in the pivotal bearing;

Fig. 3, a fragmentary perspective view of

the hinged ends of the holders, showing the lower or forward division mounted in one of the pivotal bearings and the upper or rearward division pivotally engaged therewith;

Fig. 4, a fragmentary side elevation of the bearing bracket showing the locking dog elevated to permit a disengagement of the pivot rod or pintle, from the pivotal bearing;

Fig. 5, a perspective view of the L-plate for pivotally connecting the upper or rearward division of holders with the pivot rod or pintle; and

Fig. 6, a fragmentary rear elevation of the index frame showing the lower or forward division of holders pivotally mounted thereon. Similar numerals refer to similar parts throughout the drawings.

The case of the filing appliance may be composed of a substantially rectangular bottom or base section 1 and a similar top or cover section 2, which are operatively connected together by means of guiding hinge brackets 3, one being located on each side of the rear end portions of the base section, by means of which the cover section can be swung and shifted upon the base section, to align either the top or rear end of the cover section, with the rear end of the base section, when the cover section is opened or closed thereon.

The bill holders, when mounted in the case, consist of a continuous series of frames, or leaves, and for the purpose of the present invention, the series when assembled is divided into an upper or rearward division of holders 4 standing uprightly in the cover section of the case, which has been swung into operative position, and a lower or forward division of holders 4^a resting or reclining in the base section of the case. For the purpose of operation, however, the two divisions are normally supported in upright position in a continuous series, but for convenience, they will be referred to hereinafter as upper and lower divisions.

The holders of each division may be hinged together at the lower or rear ends by the pivot rods or pintles 5 journaled in the overlapping ends of a plurality of bearing ears 6 secured edgewise on the hinge bars 7 of the holders, as by means of the plates 8 clamped around the hinge bars, substantially

as shown in my prior Patent No. 1,107,305, dated August 18, 1914.

The preferred form of such pivotal connection is made with two pairs of bearing ears 6 on every other hinge bar 7 and a single pair of bearing ears 6^a, on the intermediate hinge bars, located between the pairs of ears on the alternate hinge bars. For the purpose of requiring the two pairs of bearing ears 6 to rotate upon the pintles 5, the pair of pintles passing through the opposite ends of each single pair of bearing ears, are secured from rotation therein, which is preferably done by connecting this pair of pintles together at one end by a yoke 5'; and the free ends of the pintles are preferably split and separated or otherwise enlarged for securing them in place.

By securing the pintles in the single pair of bearing ears from rotation, it will be evident that the two pairs of bearing ears on the adjacent hinge bars will be caused to rotate upon the pintles. The increased bearing surface thus provided serves to distribute the wear on the parts and prolong the life of the pivotal connections.

The hinge bar 7' of the upper holder in the lower division is one of those provided with two pairs of hinge ears for the pivotal connection between it and the next lower holder, and for the purpose of the present invention, it is preferred to provide on this hinge bar, two pairs of additional bearing ears 6' spaced at a substantial distance each way from the two intermediate pairs of ears. The upper pivot rod or pintle 5^a on this hinge bar is extended through all of the four pairs of bearing ears, as shown in Figs. 2 and 3; and the bushing 9 is preferably mounted on the pivot bar between the intermediate pairs of ears 6 and the additional pairs of ears 6' spaced therefrom.

The bearing bracket 10 is secured to the rear rim of the cover section, as by the rivets 11 or other suitable means, and upon this bracket are formed the bearing hooks 12 which form rearwardly opening sockets adapted to receive the bushings 9 on the pintle 5^a to constitute the pivotal bearing for the upper holder 4^a of the lower division; and the locking dog 13 is pivoted on one end of the bracket and its free end is adapted to swing behind the pintle 5^a and lock it into pivotal engagement with the bearing hooks 12 after having been entered therein, as shown in Fig. 3.

The side edges of the bearing brackets are preferably provided with upright flanges 10^a, which are inclined toward their forward ends to provide a track upon which the bushings 9, due to the weight of the holders, will ride into engagement with the bearing hooks 12, the holders thus automatically assuming their position in the case. A slight space is provided between the inner edge of

the flange and the outer edge of the hook to form a guideway for the lower edge of the inner bearing ears 6, as the holders travel forward into position.

The L-plate 14 is secured to the hinge bar 7' of the lower holder of the upper division, preferably between the pintles 5 and the bottom wall thereof; and the protruding L-tongue 14' of this plate is adapted to be entered between the pintle 5^a and the upper hinge bar 7' of the lower division, when the upper division of holders 4 are placed in upright position in the cover section of the case, as shown in Fig. 1 and also in broken lines in Fig. 4.

By this arrangement it is evident that the L-plate forms a pivotal bearing for the foremost holder 4' of the upper division, upon the upper pintle 5^a of the upper holder 4' of the lower division; and that when the upper holders are rotated forward upon this bearing, the L-plate 14 forms a bearing interlocking with said pintle, as shown in Fig. 3, and cannot be disengaged therefrom until the foremost holder of the upper division is swung into upright position as shown in Fig. 1.

Furthermore, it is evident that the L-shaped bearing plates 14 of the foremost holder 4' of the upper division, may be readily engaged and disengaged from the pintle 5^a of the upper holder 4^a of the lower division, when the holders of the upper division are in upright position; and when the upper division of holders is removed from the case, that the pintle 5^a of the upper holder 4^a of the lower division, may be readily engaged and disengaged in the bearing hooks 12 of the bearing bracket by swinging the dog 13 upward as shown in Fig. 4, and that the pintle may be locked in engagement with the bearing hooks by dropping the dogs into the position shown in Fig. 3, in which latter position the dogs are locked against upward movement by the upper division of holders resting thereon when in upright position.

The hinged end of the lower holder 4^a of the lower division, may be pivoted to the rear end of the index frame 15, which in turn may be provided with rollers 16, riding upon the rear ends of the guide tracks 17 which are pivoted at their forward ends 18 in the bottom section of the case, and are elevated and sustained at the rear ends by means of the pendent links 19 and the springs 20 for the operation of the holders in the lower division in substantially the manner set forth in my prior Patent No. 1,190,896, dated July 11, 1916.

I claim:—

1. A filing appliance including a plurality of bill holders, and hinges for connecting the holders together, including pairs of depending bearing ears on each holder, and pivot rods in the bearing ears of adjacent

holders for connecting them together, said rods being fixed against rotation in the bearing ears of the alternate holders.

2. A filing appliance including a plurality of bill holders, and hinges for connecting the holders together including a single pivotal connection carried by alternate holders, and a pair of pivotal connections carried by the remaining holders, each pivotal connection having a bearing ear, and pivot rods carried by the bearing ears of the single pivotal connections and fixed against rotation therein, and journaled in the bearing ears of the pairs of pivotal connections, for connecting them together.

3. A filing appliance including a plurality of bill holders, and hinges for connecting the holders together including a single pivotal connection carried by alternate holders, and a pair of pivotal connections carried by the remaining holders, each pivotal connection having a bearing ear, and pivot rods for connecting the bearing ears of adjacent holders together, the pivot rods in the bearing ears of the single pivotal connection being yoked together.

4. A filing appliance including two separable divisions of hinged holders, a pivot rod on the end holder of one division, a bracket having bearing hooks for engaging said pivot rod, and an L-plate on the end holder of the other division for pivotally and detachably connecting the same with said pivot rod.

5. A filing appliance including a case comprising a base and cover section hinged together, a series of bill holders hingedly connected together and comprising an upper and a lower division, a bearing bracket for pivotally and detachably connecting the lower division to the case, and a connecting plate for pivotally and detachably connecting the upper division to the lower division.

6. A filing appliance including a case, a series of bill holders hinged together and

comprising an upper and a lower division, a bearing in the case in which the upper rearward holder of the lower division is pivotally mounted, and a connecting device for pivotally and detachably connecting the lower holder of the upper division to the upper holder of the lower division.

7. A filing appliance including a case, a series of bill holders hinged together and comprising an upper and a lower division, a bearing bracket for pivotally connecting the upper holder of the lower division to the case, and a connecting plate carried by the lower holder of the upper division pivotally and detachably engaging the upper holder of the lower division.

8. A filing appliance including a case, a series of bill holders hinged together and comprising an upper and a lower division, a bearing in the case in which the lower division is pivotally mounted, a connecting device for pivotally connecting the upper division to the lower division, and means engaged by the holders of the upper division when in upright position for locking the lower division in operative position in the case.

9. A filing appliance including a case, a series of bill holders consisting of an upper and lower division, hinges connecting the holders of each division together including pivot rods, a bearing bracket in the case in which the pivot rod of the upper holder of the lower division is mounted, a connecting plate pivotally connecting the pivot rod of the lower holder of the upper division to the pivot rod of the upper holder of the lower division, and a locking dog on the bearing bracket adapted to be engaged by the holders of the upper division when in upright position for locking the pivot pin of the upper holder of the lower division in position in the bearing bracket.

HARRY J. HICK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."