(No Model.)

W. D. SLATON.

FILE OR BILL BOOK.

No. 522,860. Patented July 10, 1894.

Fig. 1.

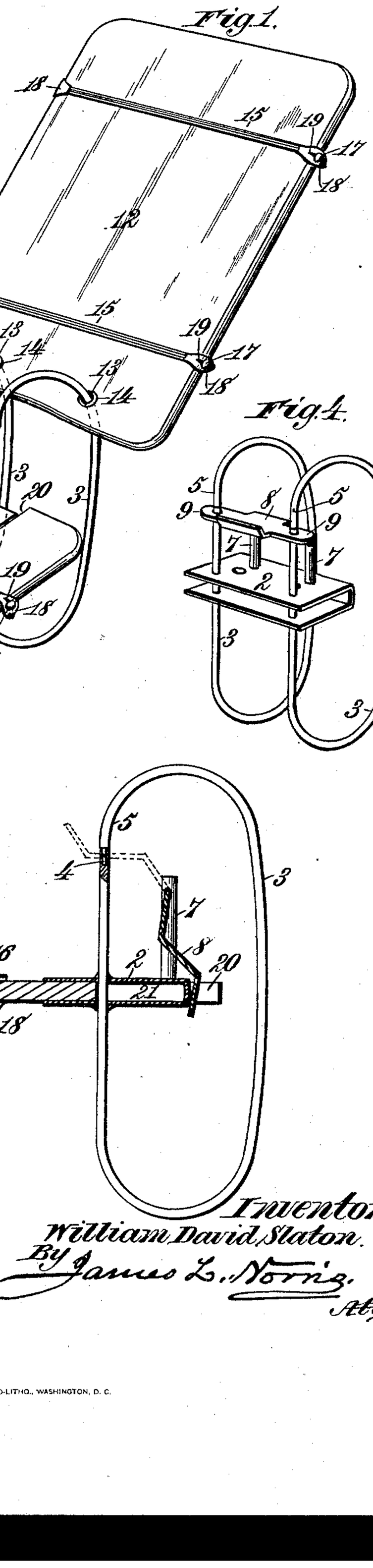

Fig. 3.

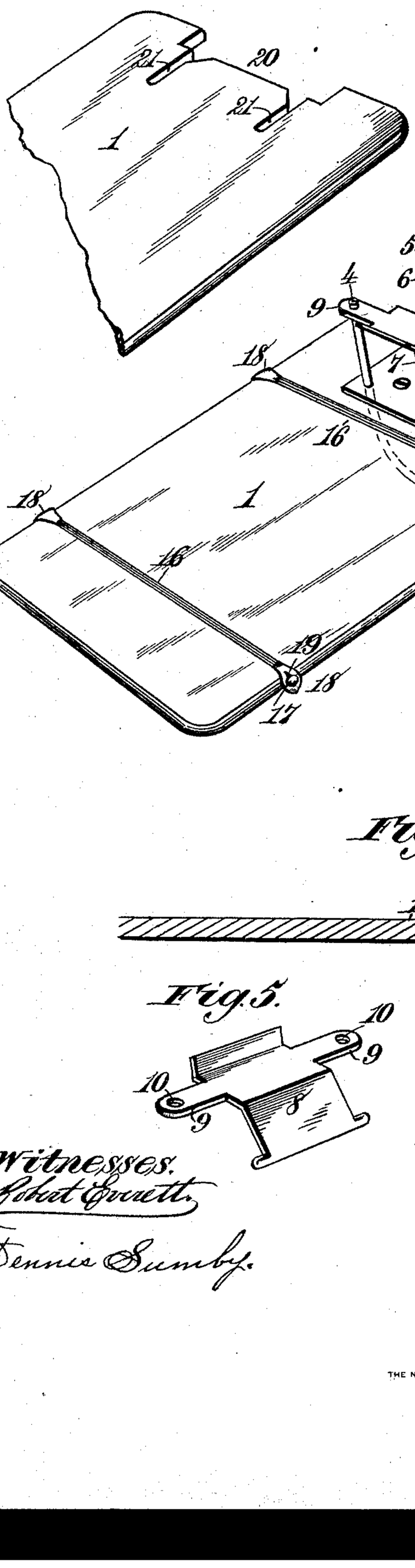

Fig. 4.

Fig. 2.

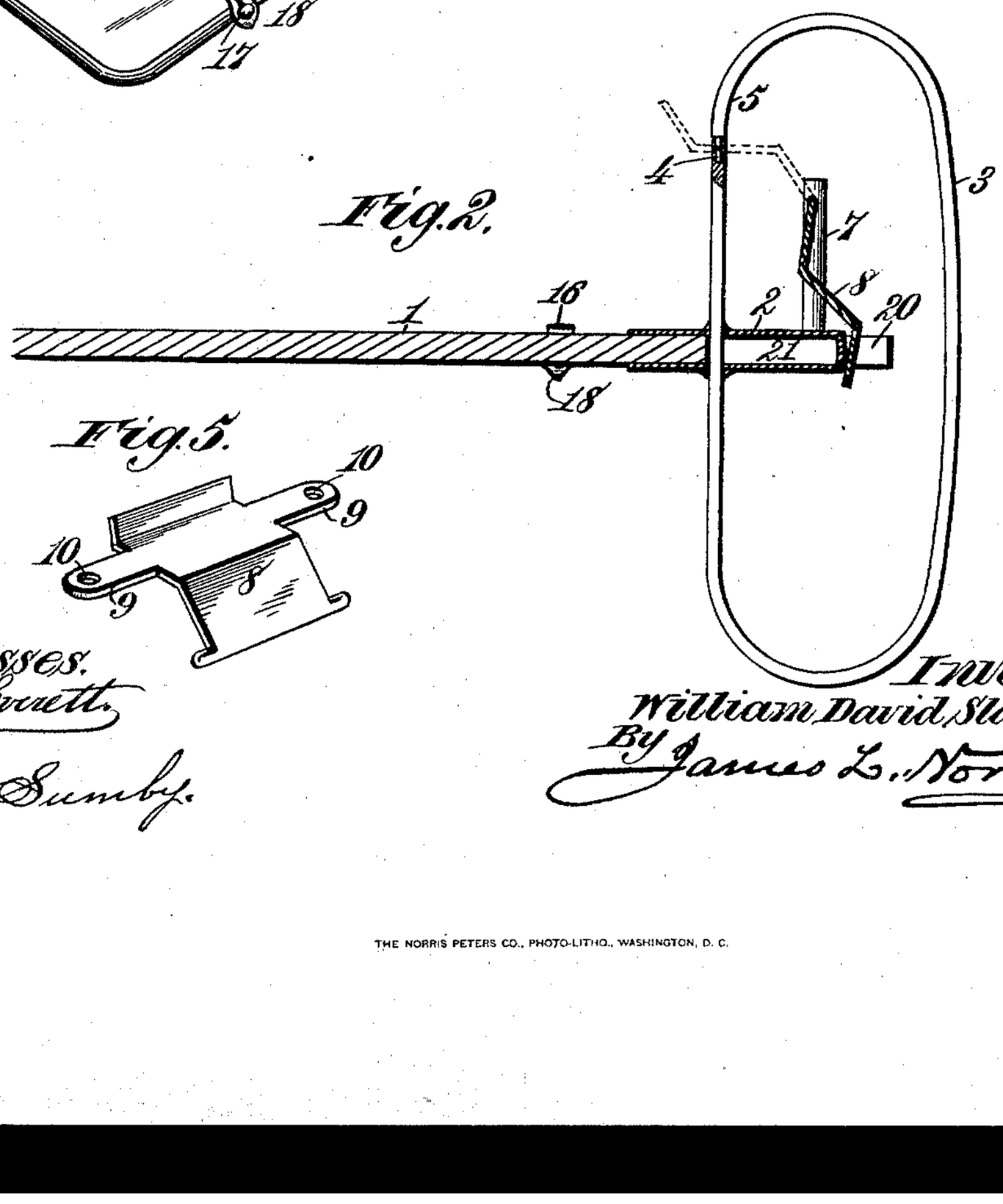

Fig. 5.

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UNITED STATES PATENT OFFICE.

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FILE OR BILL-BOOK.

SPECIFICATION forming part of Letters Patent No. 522,860, dated July 10, 1894.

Application filed March 20, 1894. Serial No. 504,475. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DAVID SLATON, a citizen of the United States, residing at Henrietta, in the county of Clay and State of Texas, have invented new and useful Improvements in Files or Bill-Books, of which the following is a specification.

My invention relates to a paper file in which the opposite sides of a bottom board are connected by means of transfer wires on which there may be placed an index cover or top board movable along said transfer wires from one side of the bottom board to the other; the said transfer wires being extended around or beyond one end of the board or boards from one side to the other so as to form a continuous track for the transferring of papers from one side of the bottom board to the index board, or to the other side of the bottom board, thereby making it possible to easily fill out both sides of a blank form without removing it from the wires.

It is one of the purposes of my invention to so arrange an index board or cover that it can be moved along the transfer wires from one side of the bottom boards to the other, the same as papers and with or without papers attached to it, and so that when brought around on top of the bottom board and interposed papers it will form therewith a book in which the papers or blanks will be retained for ready reference or for such use as may be required.

It is also the purpose of my invention to provide certain improvements in construction and organization pertaining to this class of files, by combining with the transfer wires a punch having a simple and ready operation, and by which the several papers to be placed in, or upon, the file may be perforated at points corresponding to the location of the wires, the openings formed being of the same dimensions as the wires by which the papers are retained, and the punch being so arranged and constructed that it may co-operate with the retaining wires, which constitute the male portions of the perforating devices, whereby the paper, or papers, perforated thereby are forced upon the retaining-wires at the instant the perforations in the paper are formed.

It is my purpose, also, to simplify and improve this type of paper-files, to decrease the cost of production and increase their field of usefulness as well as the ease and rapidity with which they may be used.

My invention consists, to these ends, in the several novel parts and combinations of parts hereinafter fully described, and then particularly pointed out and defined in the claims which follow this specification.

Referring to the accompanying drawings,—Figure 1 is a perspective of my improved paper-file with the upper board or cover thrown back. Fig. 2 is a longitudinal section of the paper-file with the upper board or cover removed. Fig. 3 is a view of a portion of the the bottom board without the transfer wires and their attaching plates. Fig. 4 is a detached view of the transfer wires and punch with plate on which they are mounted. Fig. 5 is a perspective detail view of the hinged die plate for the punch.

The reference-numeral 1, in said drawings, indicates the base, or bottom-board of the file, which is made of any suitable material, such as wood, metal, cellulose, or any composition of matter which, in point of cost, weight, and durability, is fit for the purpose. Upon one end of this board is rigidly mounted a plate 2, of cast iron, or other suitable metal, and through this plate pass wires 3, parallel with each other and at right angles with the surface of the plate, to which said wires are soldered, or otherwise rigidly fastened. They extend several inches above the plate 2 and their upper ends are cut squarely off and provided with chambers 4, for a purpose presently to be described.

The wires 3, after passing through the plate 2 and board 1, extend upon the opposite side of the latter a distance about equal to that by which they rise above it, and are then curved, or bent, in parallelism, and throughout a half circle, or substantially so, and are then carried upward at substantially right-angles to the board and at a little distance from its end, and then curved, or bent, through a half circle until their ends can be brought to overhang the chambered ends of the upright retaining-wires 3. The ends of

the downwardly curved portions 5 are provided with nipples 6, which are adapted to engage the chambers 4 in the upper ends of the retaining wires 3.

At, or near, the edge of the plate 2 are erected posts 7, upon which is journaled, or pivoted, a plate 8, provided with laterally extending arms 9 in which are formed circular apertures 10, so located that when the plate is swung upward and then over upon the retaining-wires 3, the chambered ends of said wires will enter the apertures 10, and if a paper lies between the wires and the arms 9, it will be punched, or perforated at the points where the retaining wires enter, and the paper will be pushed down upon said wires and fully engaged therewith.

The reference-numeral 12 indicates an upper, or index board, or cover, somewhat shorter than the bottom board 1, but otherwise corresponding therewith in form and size. At, or near, one end of said upper board perforations or apertures 13 are provided, so located that the retaining wires 3 may enter them, said openings being preferably provided with eyelets 14. Elastic bands 15 are also stretched transversely across the face of the board 12 which lies adjacent to the base, said bands being detachably connected to studs 17, set in the edges of the board. Similar straps 16 are stretched in like manner over the face of the bottom board 1, and are secured in the same way, by studs 17. Upon the ends of the straps, or bands, 15 and 16, are attached tabs 18 of leather, or other suitable material, having slits, or button-hole openings 19, by which they may be readily attached to and detached from the studs, the latter being preferably in the form of headed tacks, or nails.

This improved paper-file is readily adapted to a great variety of useful purposes. By throwing back the upper board 12, as shown in Fig. 1, and lifting the nippled portions 6 of the wires 3 from the chambers or recesses 4 in the other ends of said wires the vertical portions of the wires attached to the plate or mounting 2 will be exposed in position to perforate and retain any papers or blanks that it may be desired to place in the file. In inserting such papers or blanks they will be held in position with one end over and in contact with the ends of the vertical portions of the wires and beneath the perforated arms 9 of the hinged die plate 8 which has been previously swung upward and forward. By now pressing down on the said arms 9 of the hinged die plate 8 so that the perforations 10 will engage the ends of the wires the paper or papers will be perforated or punched by the wires and will be forced down thereon and retained in the file. In this manner invoices, bills, receipts, letters or other papers that are to be preserved for ready reference can be quickly and neatly filed so as to be easy of access.

If desired the file may be conveniently filled with blank forms, such as assessors' or collectors' blanks, reports of railway freight conductors, blanks for use of express agents, bills of lading, &c., that are to be written up from time to time and detached or allowed to remain for a while longer in the file, as may be required.

After papers or blank forms have been placed in the file by aid of the hinged die plate 8 the said plate may be turned backward and downward where it will rest flush with the end of the bottom board 1 in such position that it will not interfere in any manner with the passing of papers along the wires 3 from one side of the board 1 to the other, the upper board 12 having been previously slipped off from the wires and their ends connected by means of the recesses 4 and nipples 6 so as to afford a continuous track for shifting the papers without detaching them from the file. It will thus be seen that when the upper board 12 is detached from the file, blank forms retained on the wires 3 can be written upon on either or both sides by shifting them from one side of the board 1 to the other. That is to say, while a number of blanks or papers are resting on one side of the board 1 the exposed face of the uppermost blank or paper can be written on or filled up and the said blank or paper can then be shifted along the retaining wires 3 to the opposite side of the board, thus exposing the under side of the paper so that it can be readily indorsed or written upon without detaching it from the file. In a similar manner when the board 12 is in position for use papers can be written upon on one side while resting on one of the boards and can then be shifted over onto the other board to expose the under side of the paper or blank in convenient position to receive any indorsements or writing that it may require.

The elastic straps or bands 15 and 16, on the boards 1 and 12 serve as means for holding down any or all of the blanks. When only one board is provided it may have such elastic straps on both sides.

I would have it understood that the wires 3 need not be extended through the base or bottom board 1 but may be simply soldered or otherwise secured to the plate or mounting 2 on said board; and the said plate 2 may be doubled and extended over the edge of the board onto both sides thereof, as shown, or it may be made as two plates secured to opposite sides of the board and arranged, preferably at a slight distance from its edge.

The dimensions of the file may obviously be varied according to the purposes to which it is to be applied and it may be provided with three or more wires when of large size.

The file, with attached blanks or paper sheets, may be used as a bill book or ledger, as a holder and writing pad when supplied

with proper blank sheets or forms, and is adapted to a great variety of uses that will readily suggest themselves to those in need of such appliances.

The wires 3 are preferably made of spring metal so that when the nipples 6 are disengaged from the chambers or recesses 4 the upper curved portions 5 of said wires will spring back, as shown in Fig. 1, and remain wholly out of the way while papers are being placed onto or removed from the vertical portions of said wires. By extending the retaining or transfer wires 3 beyond the end of the bottom board 1 and from one side thereof to the other, as shown, a continuous curved track is afforded on connecting the ends of said wires so that filed papers, blank forms, &c., can be readily transferred along the same from one side of the board to the other. If a top board or index cover is used it can be likewise readily moved along the transfer wires from one side of the bottom board to the other either alone or with papers attached thereto by means of the elastic bands, or otherwise. This arrangement of transfer wires connecting the opposite sides of a board affords great facility in writing on both sides of a paper or blank without removing it from the file.

I prefer to mount the wires 3 on a doubled metal plate 2 so formed that it may extend around one end of the board 1 and embrace both sides thereof, as shown. In the end of the board 1 is a recess 20, Fig. 3, that will permit the plate 2 to set back sufficiently far from the edge of the board to enable the hinged die plate 8 to rest flush with the end of the board where it will not obstruct the transfer of papers along the wires. Extended inward from the recess 20 or other recesses 21 that permit passage of the wires 3 in attaching or detaching the plate 2 which may be secured to the board 1 by means of screws, or otherwise.

What I claim is—

1. A paper-file consisting of a base, or bottom board, having a metallic plate upon one end, retaining-wires passing through said plate and board, and curved beneath and outside of the end thereof, the detached ends being adapted to engage the ends of the retaining-wires, and a plate mounted on posts near said wires and having arms provided with punching apertures adapted to engage the ends of the retaining-wires, substantially as described.

2. In a paper-file, the combination with a base having a metallic plate at or near one end, of retaining-wires passing through said plate and board and rigidly connected to the former, said wires being curved past the end of the base and brought over the ends of the retaining-wires to which they are attachable by means of nipples on the one, engaging with chambers in the other and a plate pivoted on posts and having arms provided with punching apertures adapted to receive the ends of the retaining-wires, substantially as described.

3. In a paper-file, the combination with a base having a suitable metallic plate mounted thereon at, or near, one end, of retaining-wires passing through said plate and board and rising above the former, the ends of said wires being curved around past the end and over the top of the base, their extremities being provided with nipples adapted to enter chambers in the ends of the retaining-wires, a punching plate pivoted on independent supports and having apertures which are adapted to receive the ends of the retaining-wires, and a covering board, substantially as described.

4. In a paper-file, the combination with a base having suitable mountings at or near one end, of retaining-wires rigidly connected to said mountings, said wires having ends which are curved past the end of the base and overhang the chambered ends of said retaining-wires, a punching-plate pivoted on independent supports, and elastic straps crossing the board and having their ends detachably connected thereto, substantially as described.

5. In a paper-file, the combination with a board or support, of wires extended around and beyond one end of the board from one side to the other and adapted for the filing of papers or blanks, the said wires forming a track along which papers may be transferred from one side of the board to the other to facilitate writing on both sides of a paper and for other purposes, substantially as described.

6. In a paper-file, the combination with a bottom-board of wires extended around and beyond one end of said board from one side to the other and connected with the opposite sides of said board, and an index board or cover adapted to be moved along said wires from one side of the bottom board to the other, the said wires being adapted to form a continuous track along which filed papers or blank forms may be transferred without removing them from the file and whereby writing on both sides of a paper is facilitated while it remains in the file, substantially as described.

7. In a paper-file, the combination with a bottom-board, of retaining or transfer wires mounted on one end of said board and extended around or beyond its end to form a track for transfer of filed papers from one side of the board to the other, a portion of said wires being adapted to form a punch, and a hinged die mounted adjacent to the punching portions of the wires, substantially as described.

8. In a paper-file, the combination with a plate or support, of spring-wires mounted on said plate and extended beyond its opposite sides, the ends of said wires being recessed or chambered on one side of said plate and the other ends of said wires being provided with

nipples to engage the opposite chambered ends of the wires and form a detachable connection therewith, whereby the wires are adapted for the filing of papers and their transfer from one side of the plate to the other without removal, substantially as described.

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

WILLIAM DAVID SLATON.

Witnesses:
ALVIN D. GOODENOUGH,
T. F. BERNER.