

(No Model.)

2 Sheets—Sheet 1.

S. H. FISH.
BILL AND LETTER FILE.

No. 435,413.

Patented Sept. 2, 1890.

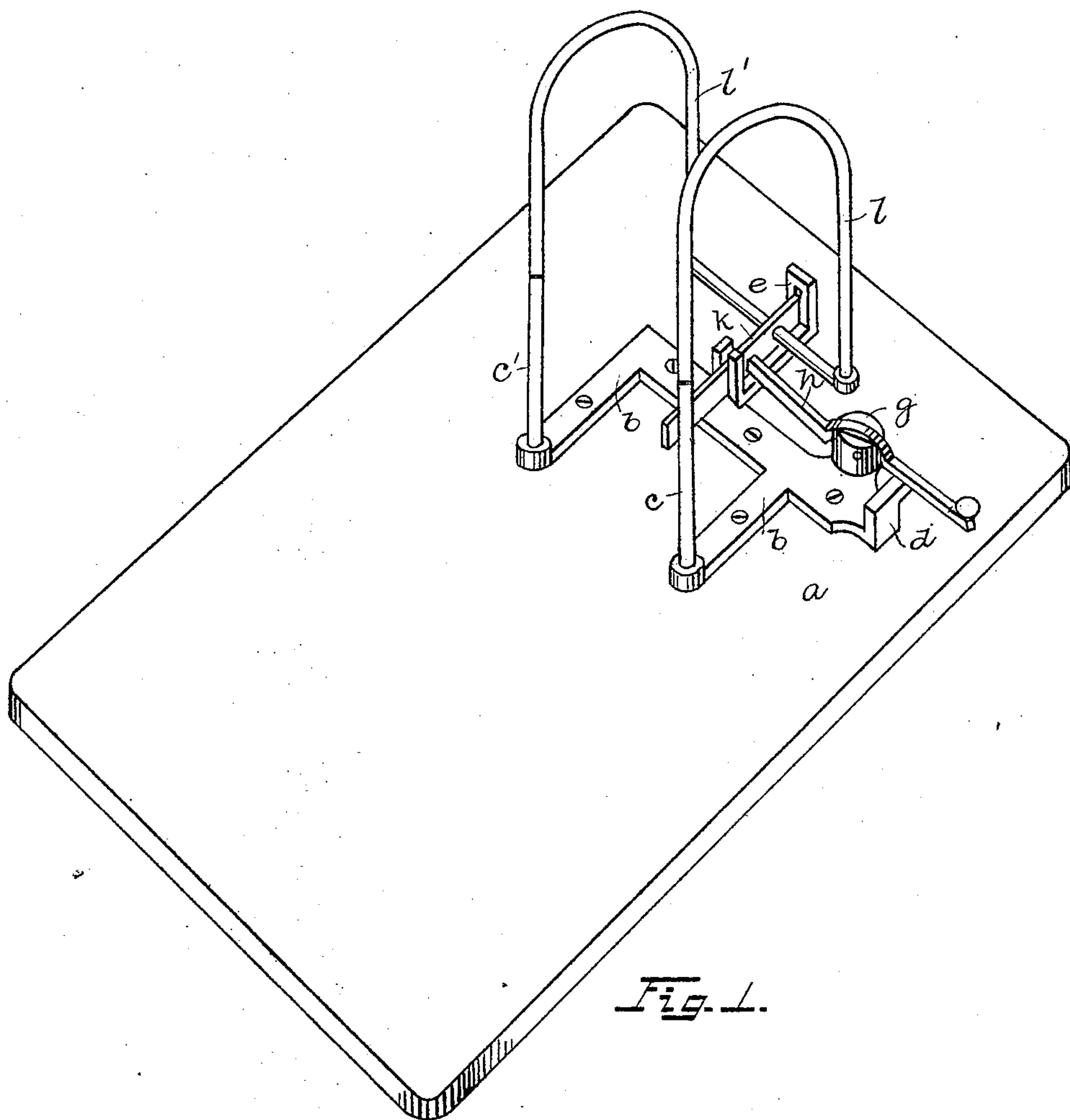


Fig. 1.

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Geo. R. Parker.

Inventor.
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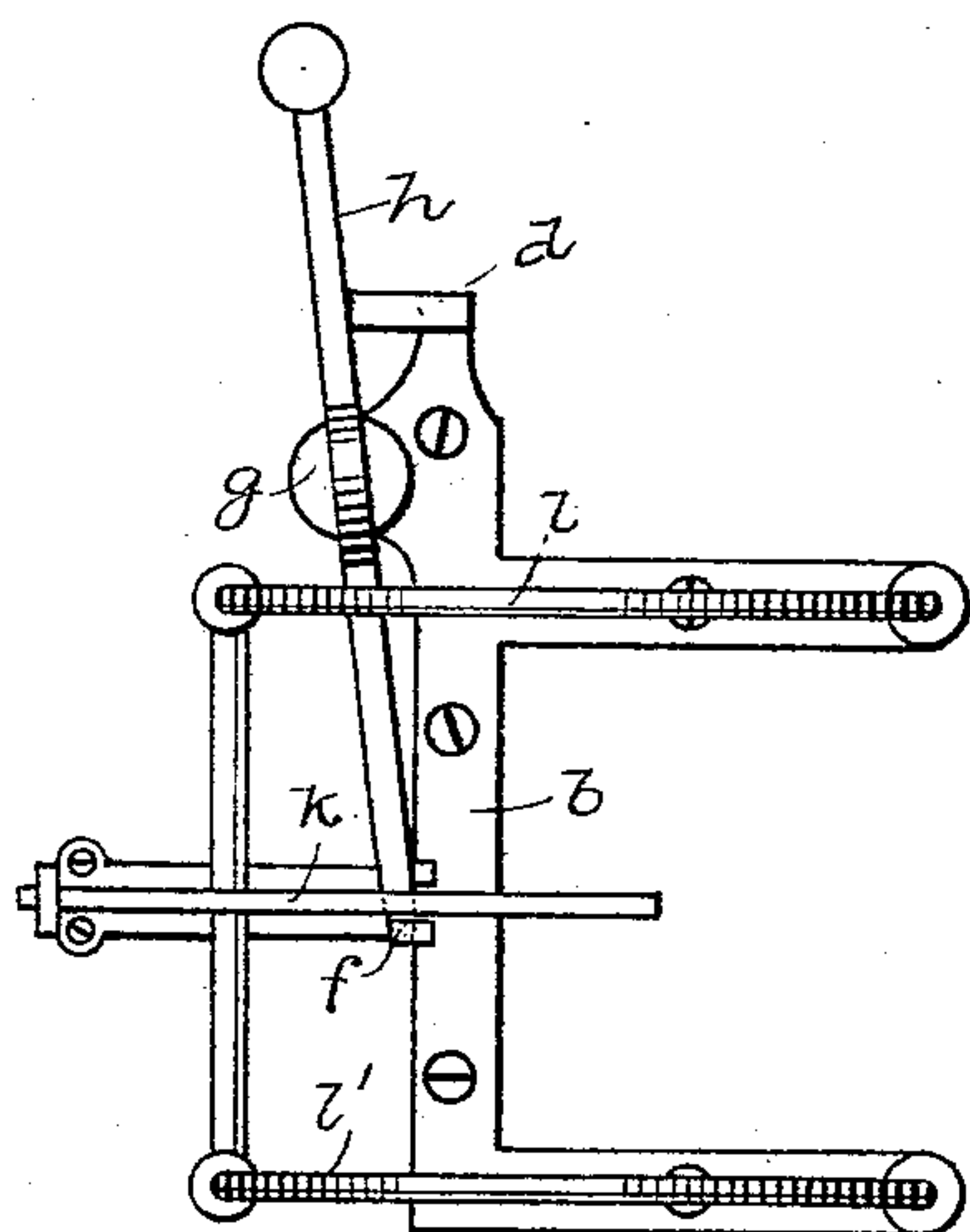


Fig. 2.

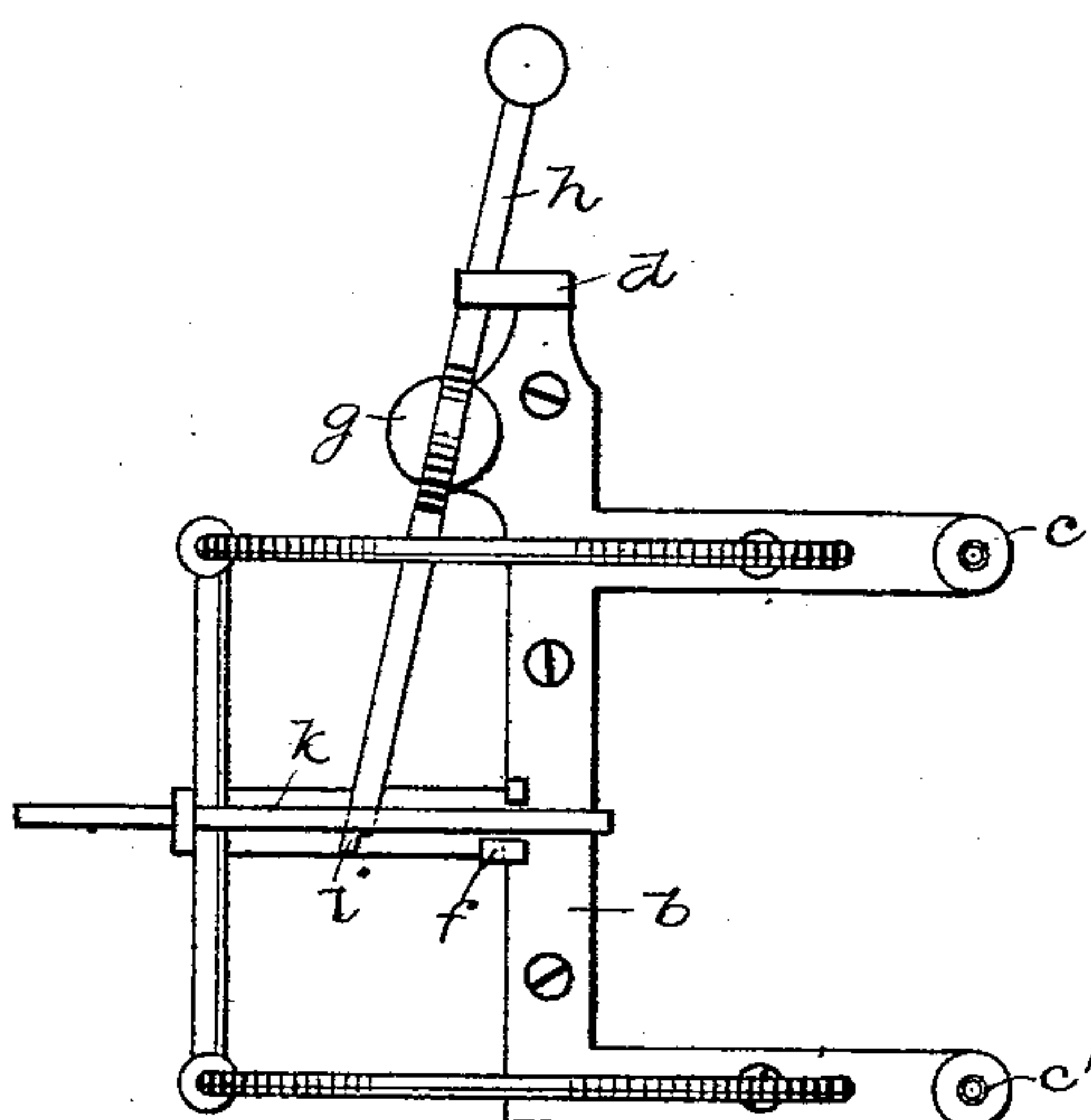


Fig. 3.

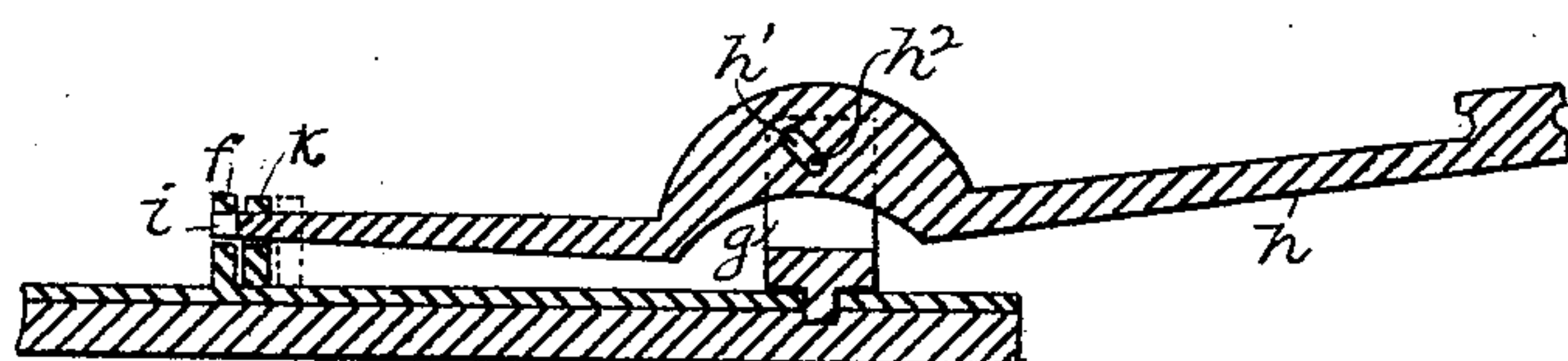


Fig. 4.

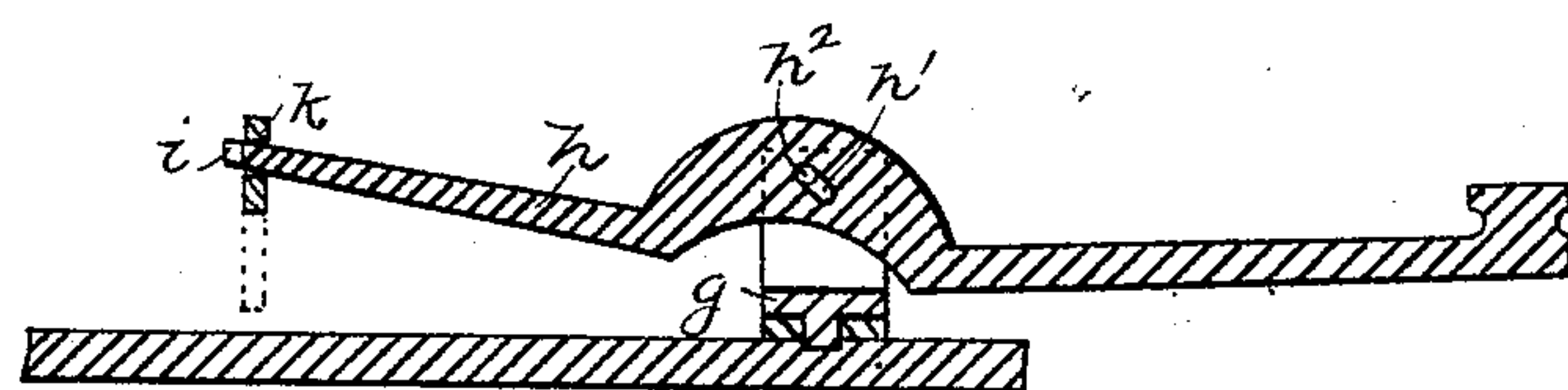


Fig. 5.

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UNITED STATES PATENT OFFICE.

SAMUEL H. FISH, OF HINSDALE, ILLINOIS.

BILL AND LETTER FILE.

SPECIFICATION forming part of Letters Patent No. 435,413, dated September 2, 1890.

Original application filed September 10, 1888, Serial No. 285,093. Divided and this application filed November 21, 1889. Serial No. 331,068. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL H. FISH, a citizen of the United States, residing at Hinsdale, in the county of Du Page and State of Illinois, have invented a certain new and useful Improvement in Bill and Letter Files, (Case 9,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification, this case being a division of my application, Serial No. 285,093, filed September 10, 1888.

The object of my invention is to provide a bill and letter file for temporarily holding miscellaneous papers, and so arranged that any one of the sheets on file may be removed without removing the others, while at the same time all the papers on the file are readily accessible for inspection without removal.

The bill-files now most generally in use include springs as a part of their operative mechanism. These springs frequently lose their proper tension or become broken after a short time, thus rendering the file inoperative. The transfer-wires in some cases have been hinged so as to swing together, this feature, in connection with the springs necessarily employed, rendering the files still more liable to injury, and resulting quite frequently in the transfer-wires becoming twisted to such an extent as to prevent their meeting the receiving-wires so as to form proper joints between them, as is desirable, in order that the papers, when once placed upon the receiving-wires, may be readily slipped over the joints onto the transfer-wires.

By the use of my invention all springs may be dispensed with, the hinging of the transfer-wires to cause them to rotate together is avoided, while the transfer-wires are made readily separable from the receiving-wires, and a locking device provided for holding the transfer-wires in position to form smooth joints between them and the receiving-wires, thus permitting the free passage of papers over the joints between the receiving-wires and the transfer-wires. The receiving-wires may be sharpened, so as to readily pierce the papers as they are placed thereon, after the manner of spindles now frequently used for holding memorandum-slips.

In my application, Serial No. 285,093, filed September 10, 1888, for bill and letter files, of which this application is a division, I have described and claimed as a part of my file a perforator coacting therewith in such manner that the sheets of paper may be readily perforated just before they are placed on the receiving-wires and, as it were, by the act of placing them thereon.

My invention as a whole is designed more especially for use in files containing twin vertical receiving-wires and corresponding arched movable transfer-wires. It will be observed, however, that certain features or parts of my invention, as herein claimed, may be usefully and advantageously employed in files having only one spindle and one corresponding arched wire. I therefore do not limit my invention to the particular form of file and the precise mechanism herein described.

The principal features of my invention herein claimed consist, briefly stated, first, in a fixed wire or twin wires and a corresponding arched wire or corresponding arched wires, in combination with lever mechanism for moving the arched wire or wires away from the fixed wire or wires and locking devices for holding them in position to register therewith and form a smooth joint or joints between the same; second, in a hand-lever mounted upon a vertical pivotal post, the connection between the post and lever being a pin resting in an inclined slot in the lever, a sliding bar with which the lever is connected, the guides for the sliding bar, and a catch or stop under which the lever may be inserted; third, in a lever pivoted to rotate horizontally, said lever being provided with an inclined slot, a pin passing through said slot, together with locking or retaining devices, so constructed and arranged that the lever, in addition to its horizontal rotary movement, may be rocked upon the supporting-pin and moved longitudinally and at the same time slightly raised thereon to thrust the end of the lever under the locking device at its extreme end.

In the drawings, Figure 1 is a perspective view of a bill and letter file embodying the features of my invention claimed herein. Fig. 2 is a plan view thereof, showing the file closed. Fig. 3 is a plan view showing the

file open. Fig. 4 is a detail sectional view of the lever, the supporting-pin being shown in the lower outside portion of the slot, as is the case when the end of the lever is thrust under the stop or catch, as shown. Fig. 5 is a detail longitudinal sectional view showing the lever in the position illustrated in Fig. 3.

Like parts are indicated by similar letters of reference throughout the different figures.

My file is mounted after the manner of paper-clips upon a base *a*. A fixed casting *b* serves as a support for the receiving-wires *c*. This casting is provided with the projecting lug *d*, against the end of which the side of the lever may rest, as shown in Figs. 1 and 2, or under which the lever may be retained, as shown more clearly in Fig. 3. If desired, the guide *e* may be cast in the same piece with the supporting-piece *b*. To this guide *e* is secured, as shown at *f*, a catch under which the end of the lever may be thrust. The pivotal post *g* is mounted upon the casting *b*, and in the upper end of this post is provided a seat or bearing for the lever *h*. In this lever *h*, I have provided the angular slot *h'*. The pin *h²* passes through the sides of the post, as shown. The slot *h'* being at an angle and of greater length than the diameter of the pin, the lever may be raised and thrust forward so as to bring the pin in the lower portion of the slot, as clearly illustrated in Fig. 4. Thus, as shown in Figs. 1 and 2, the lever may be locked in position.

A finger *i*, provided upon the end of the lever *h*, rests in a slot provided in the sliding bar *k*. This slot is of sufficient length to receive the lever when thrust longitudinally through the same under the catch *f*. When the lever *h* is moved longitudinally about its pivot *g*, the sliding bar *k* is reciprocated back and forth in the guide *e*. It is to this sliding bar *k* that the arched wires *l l'* are attached, and thus when the lever *h* is moved forward under the lug *d*, as shown in Fig. 3, the finger *i*, engaging with the slide *k*, carries said slide back and with it the transfer-wires *l l'*, connected therewith, thus opening the file. When thus opened, the papers may be placed upon the receiving-wires *c c'*. When it is desired to close the file, the lever *h* is thrown back by hand and lifted so as to be locked in the position shown in Figs. 1, 2, and 4. In this position, as before stated, the ends of the arched wires *l l'* are brought opposite the ends of the

wires *c c'*, respectively, and the sheets of paper previously placed upon the receiving-wires may be slipped over the arched wires or divided between the receiving-wires and the arched wires.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a fixed receiving-wire, of an arched transfer-wire, a lever in engagement with a sliding bar *k* for moving said arched wire away from said fixed wire, and a catch near the end of the said lever under which the lever is adapted to be longitudinally inserted, whereby the file may be opened or the two wires locked in position to form a smooth joint between them, substantially as and for the purposes specified.

2. A duplex file consisting in the combination, with the receiving-wires, of movable arched wires, said arched wires being rigidly joined to a sliding bar, a guide for said sliding bar, a pivoted lever having its end inserted in a slot provided in said bar, and a catch under which the lever is adapted to be longitudinally inserted, whereby on moving the lever in one direction the file is opened, while on moving the file in the opposite direction and raising the same the file is closed and held closed, substantially as and for the purposes specified.

3. The support for the fixed receiving-wires provided with the projecting lug and a guide for the reciprocating bar, the transfer-wires rigidly secured to said bar, and the lever mounted upon a pivotal post, the connection between the lever and post being a pin passing through an angular slot in the lever, in combination with a catch under which the lever is adapted to be inserted, substantially as and for the purposes specified.

4. A mechanical device consisting of the lever *h*, mounted upon the pivotal post *g*, an angular slot *h'*, provided in said lever, a pin *h²*, passing through the upper portion of said post and through said slot, a fixed lug *d*, and a catch *f*, combined substantially as shown and described.

In witness whereof I hereunto subscribe my name this 16th day of November, A. D. 1889.

SAMUEL H. FISH.

Witnesses:

ELLA EDLER,
GEO. R. PARKER.