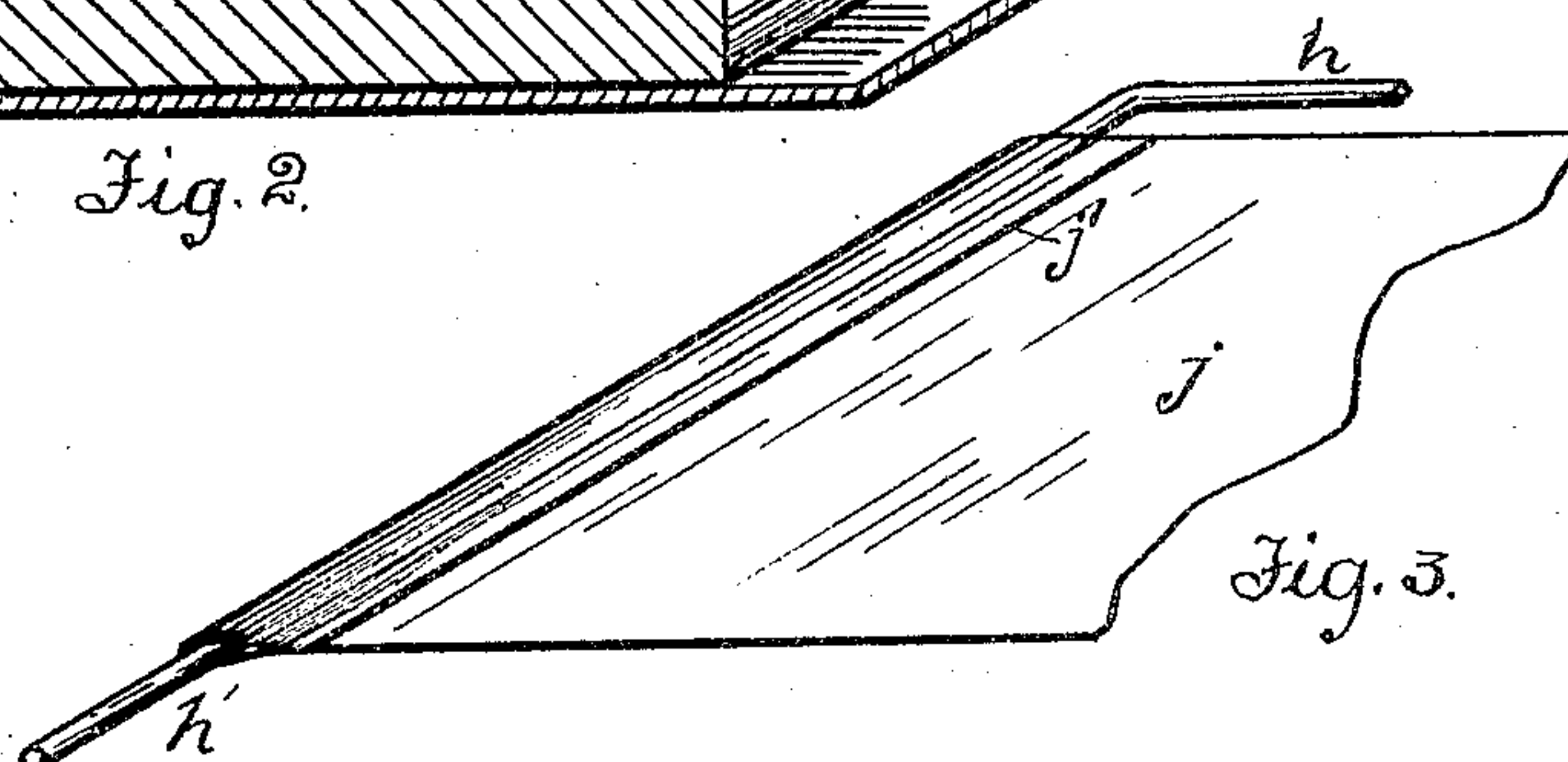
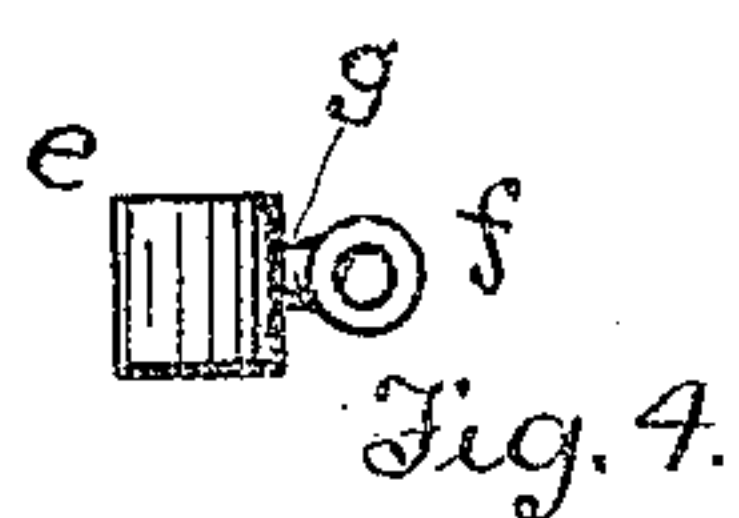
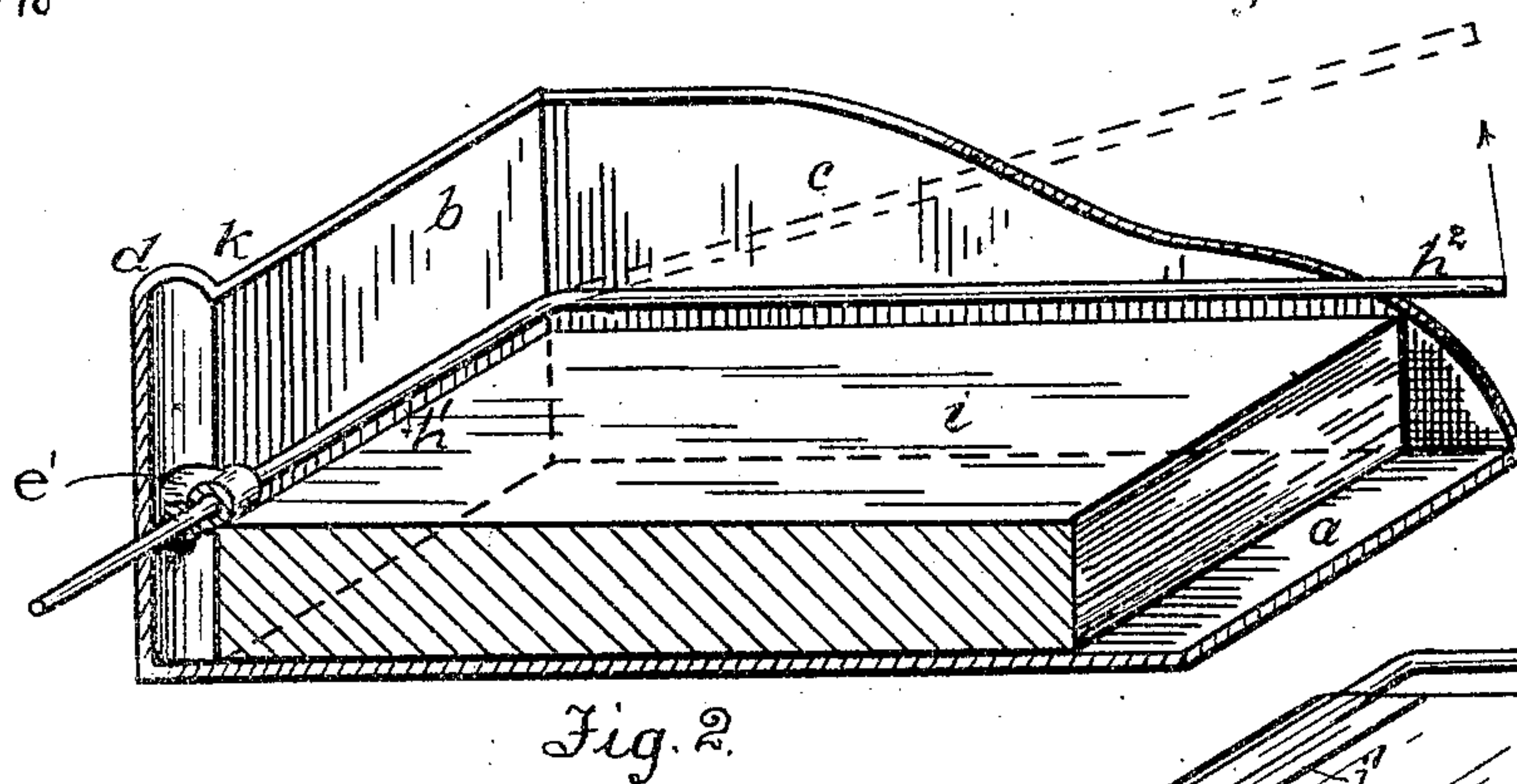
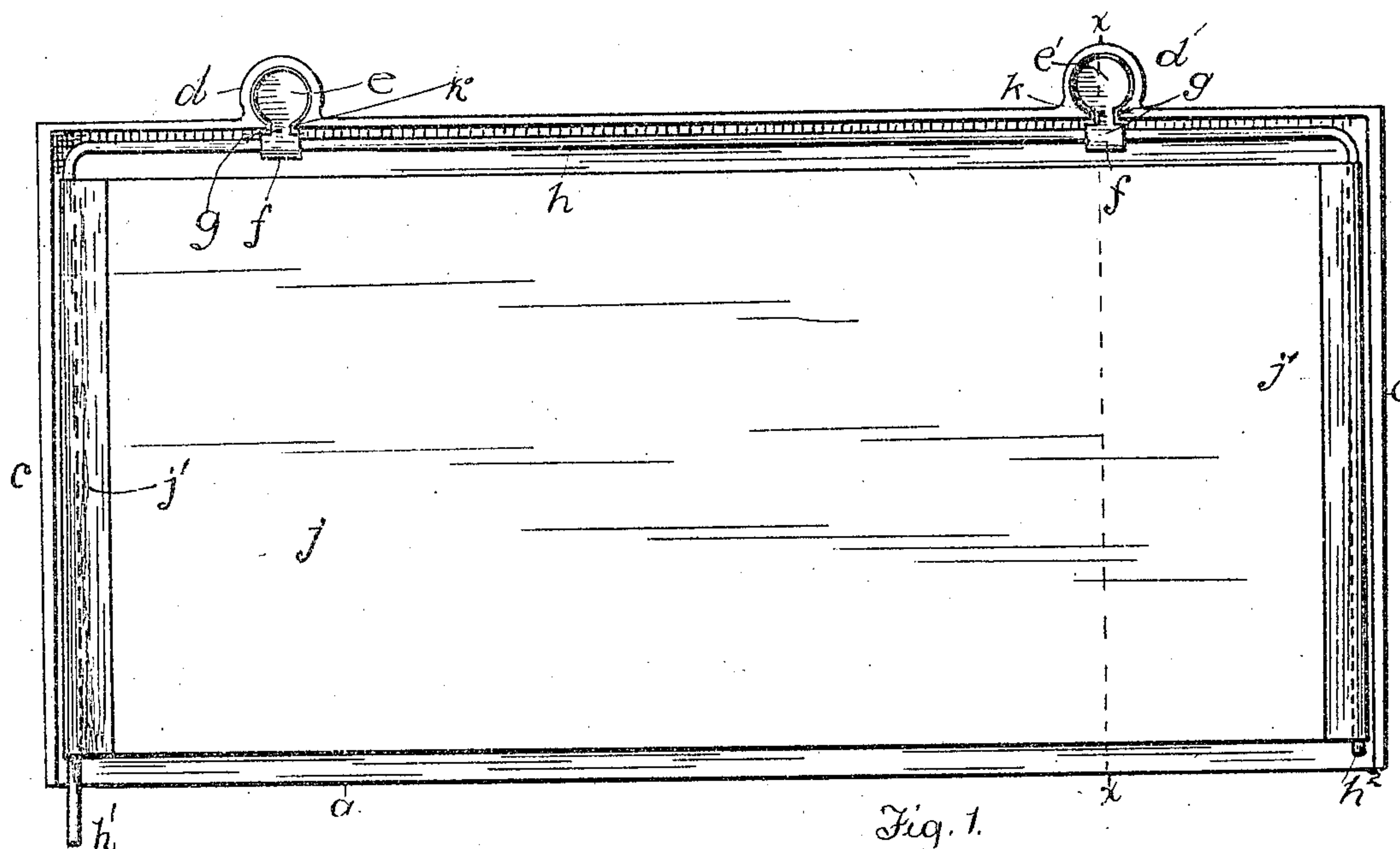


No. 798,541.

PATENTED AUG. 29, 1905.

G. M. STROUD.
 DUPLICATING APPARATUS FOR BILLS, &c.
 APPLICATION FILED NOV. 21, 1904.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE M. STROUD, OF PORTLAND, OREGON.

DUPLICATING APPARATUS FOR BILLS, &c.

No. 798,541

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed November 21, 1904. Serial No. 233,767.

To all whom it may concern:

Be it known that I, GEORGE M. STROUD, a citizen of the United States, and a resident of Portland, county of Multnomah, and State of Oregon, have invented a new and useful Duplicating Apparatus for Bills, &c., of which the following is a specification.

My invention has for its object to obtain an apparatus or device of inexpensive construction by which copies of waybills, bills, and like papers may be made in a handy way.

I carry my invention into effect as illustrated in the accompanying drawings, hereby referred to as a part of this specification, showing the following views of my invention.

Figure 1 is a plan view of an apparatus embodying my invention. Fig. 2 is a sectional perspective, the section being taken on a line $x x$ of Fig. 1. Fig. 3 is a detail showing one of the members of the carbon-holder and the manner in which the carbon-sheet is affixed thereon, and Fig. 4 is a detail of one of the sliding hinge-blocks to which the carbon-holder is hinged.

Referring to the letters as designating the parts, the case of my apparatus is of the form shown in Figs. 1 and 2 and comprises a bottom a , a back b , and sides c , adapted to hold a pad of duplicating-sheets. The back is made with vertically-extending slots k , encompassed by vertically-extending cylindrical sockets $d d'$, in which to receive a pair of sliding hinge-blocks $e e'$. A detail of construction of the latter is shown in Figs. 1, 2, and 4, from which it will be seen that each thereof consists of a cylindrical piston-like block made with a shank g and on the end of such shank an eye or knuckle f , the whole being a single casting. The sliding hinge-blocks are inserted in the sockets $d d'$ and the shank g thereof in the slots k , so that the sliding hinge-blocks may freely move up and down in their sockets. In the eyes or knuckles f is hinged a frame on which to affix a carbon-sheet j . Such frame consists of a shank h and extremities $h' h^2$, bent at an angle, so as to be arranged parallel to the sides c of the case. The extremity h' is longer than the other and serves as a handle for lifting the carbon-holding frame on its hinge-bearings f within the sides of the case. The affixing of the carbon-sheet on the members $h' h^2$ of the carbon-holder may be done by folding the ends j' of the carbon-sheet back in the form of loops and fastening the ends so arranged

by an adhesive material. The extremities $h' h^2$ of the holder are then inserted in said loops, as shown in Figs. 1 and 3. In practice it is convenient to have carbon-sheets suitably made on hand for use in connection with my apparatus.

In using my apparatus the pad of duplicate sheets i , on which the carbon duplicate of the waybill or other writing is to be made, is placed in the bottom of the case, as shown in Fig. 2, and the sliding hinge-blocks $e e'$ and carbon-holder are then arranged so that the sheet of carbon will rest on top of the pad i . The bill or writing of which a duplicate is to be made is placed on top of the carbon-sheet, and the face of the bill or writing is then filled out by means of a pencil or other convenient instrument in the usual way, simultaneously with which filling out a carbon duplicate of the writing is made on the uppermost sheet of the pad i . By then lifting the carbon-holder on its hinge the uppermost sheet of the pad may be removed and the device rearranged for further work. As the pad i diminishes in use the sliding hinge-blocks will gradually work down in their sockets, so as to maintain the carbon-holder and the carbon-sheet thereby supported in the proper position until the last sheet in the pad i has been used, after which my device is to be provided with a fresh pad of duplicate sheets and the carbon-holder arranged to overlie the same, as above described. The sides and the back of the case serve as guides to hold the original sheet and the pad of duplicates in proper position, and to this end the case is to be made of a size adapted to conveniently serve such purpose.

Among the advantages of my apparatus are to be noted there is no handling of the carbon by the fingers after the carbon has been affixed on the members $h' h^2$ of the carbon-holder. Furthermore, the sheets of paper on which the original and duplicates of way-bills and other writings are written are frequently printed in the form of blanks. When of this form, my apparatus insures that the duplicate leaves of the pad i will be relatively positioned with regard to the printed matter and blank spaces on the original sheet, and vice versa, will insure that the carbon is properly positioned with respect to the pad underlying the carbon-sheet.

Having fully described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. A duplicating apparatus comprising a case consisting of a bottom, a back and sides, adapted to hold a pad of duplicating-sheets, a carbon-holder frame having bent extremities $h' h^2$, a carbon-sheet secured by its ends on such extremities of the holder, and means by which the carbon-holder is hingedly held in place; said means being adapted to allow the holder to be vertically moved within the case, substantially as set forth.

2. A duplicating apparatus comprising a case consisting of a bottom, a back and sides, adapted to hold a pad of duplicating-sheets, a carbon-holder frame, consisting of a shank h and bent extremities $h' h^2$, a carbon-sheet secured by its end to such extremities of the holder, vertically-slidable hinge-blocks to which said carbon-holder is hinged, and means on the back of the case by which such hinge-blocks are movably secured in place.

3. A duplicating apparatus comprising a case consisting of a bottom, a back made with vertical slots and sockets $d d'$ encompassing such slots, and sides, arranged to hold a pad of duplicating-sheets, hinge-blocks $e e'$, each made with a shank g and eye f , slidably arranged in said slots and sockets of the back, a carbon-holder frame hinged in said eyes of the hinge-blocks, and having bent extremities $h' h^2$, and a carbon-sheet affixed on said extremities.

4. In a duplicating apparatus, the combination of a case consisting of bottom, a back

and sides, adapted to hold a pad of duplicating-sheets, a carbon-holder frame consisting of a shank h and bent extremities $h' h^2$, for holding a carbon-sheet, vertically-slidable hinge-blocks to which said carbon-holder is hinged, and means on back of the case by which such hinge-blocks are movably secured in place.

5. In a duplicating apparatus, the combination of a case consisting of a bottom, a back made with vertical slots and sockets $d d'$ encompassing such slots and sides, arranged to hold a pad of duplicating-sheets, hinge-blocks $e e'$, each made with a shank g and eye f , slidably arranged in said slots and sockets of the back, and a carbon-holder frame hinged in said eyes of the hinge-blocks and having bent extremities $h h'$ for holding a carbon-sheet.

6. A duplicating apparatus comprising a case, consisting of a bottom, a back and sides, adapted to hold a pad of the duplicating-sheets, a carbon-holder frame, and means by which said frame is hingedly held in place, and which means are adapted to allow the said carbon-holder frame to be vertically moved within the case, substantially as set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

GEORGE M. STROUD.

Witnesses:

T. J. GEISLER,
ELLA ANDERSON.