

(No Model.)

2 Sheets—Sheet 1.

S. L. CONDÉ.
DUPLICATING APPARATUS.

No. 538,066.

Patented Apr. 23, 1895.

Fig. 1.

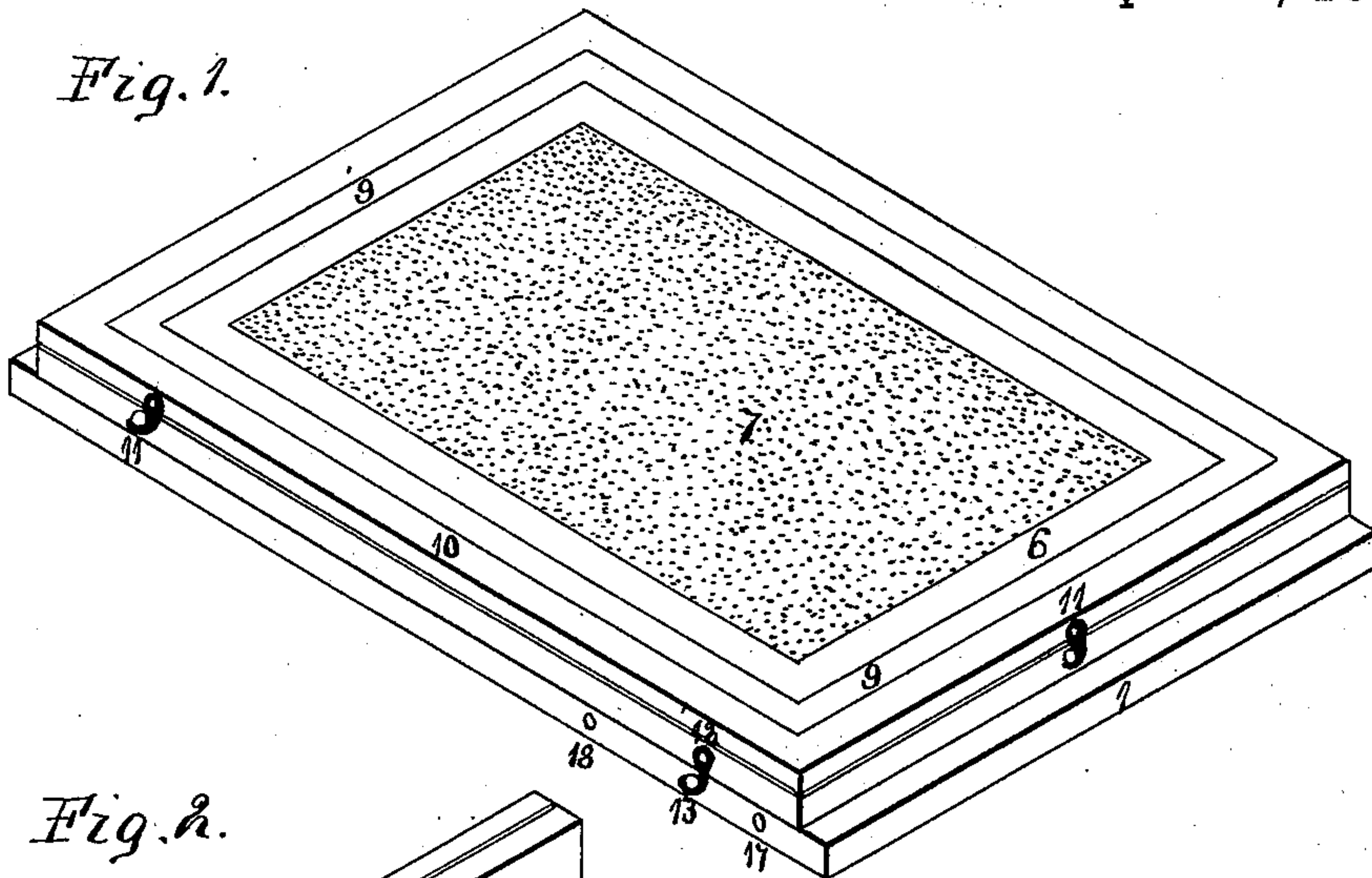


Fig. 2.

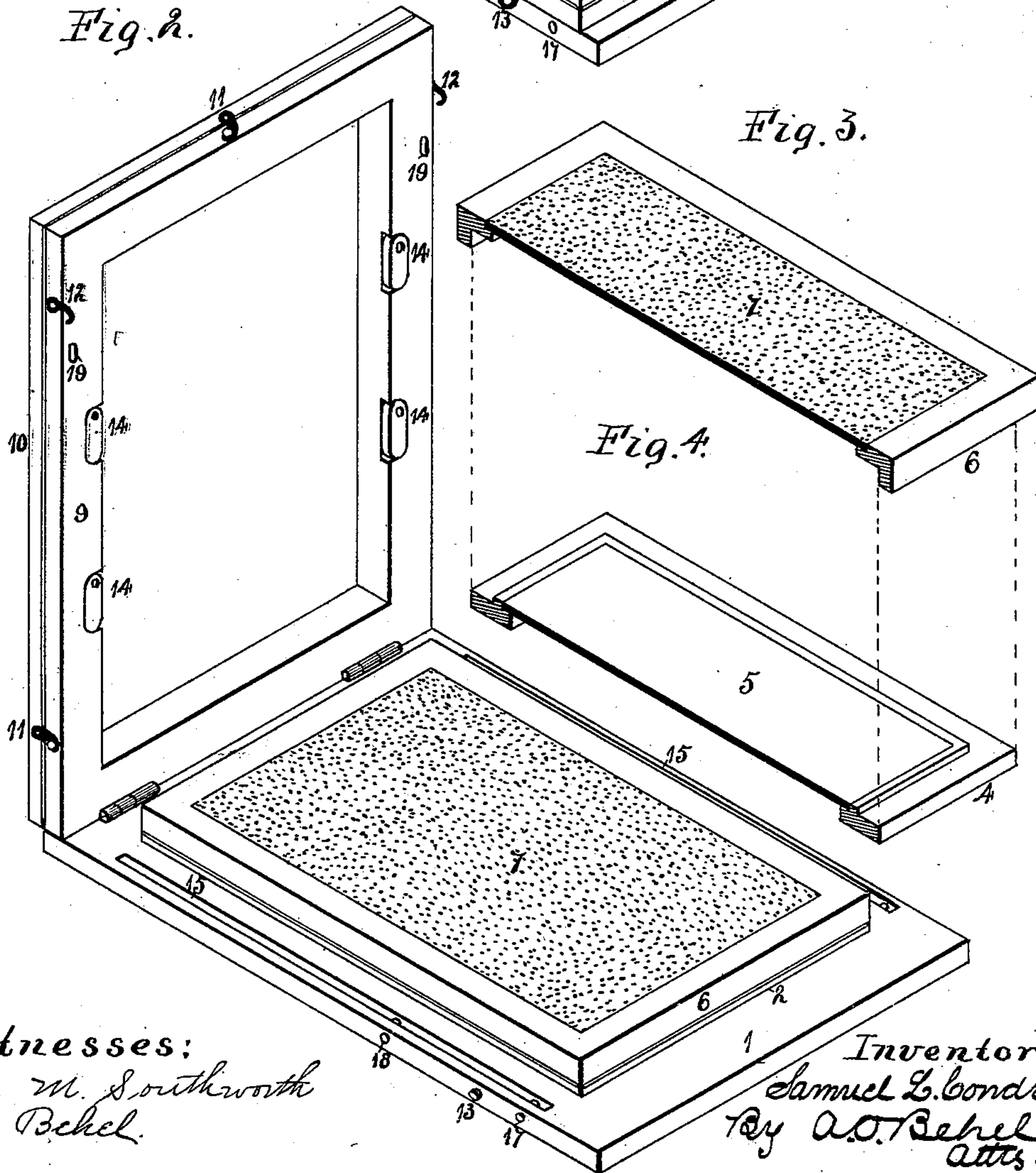


Fig. 3.

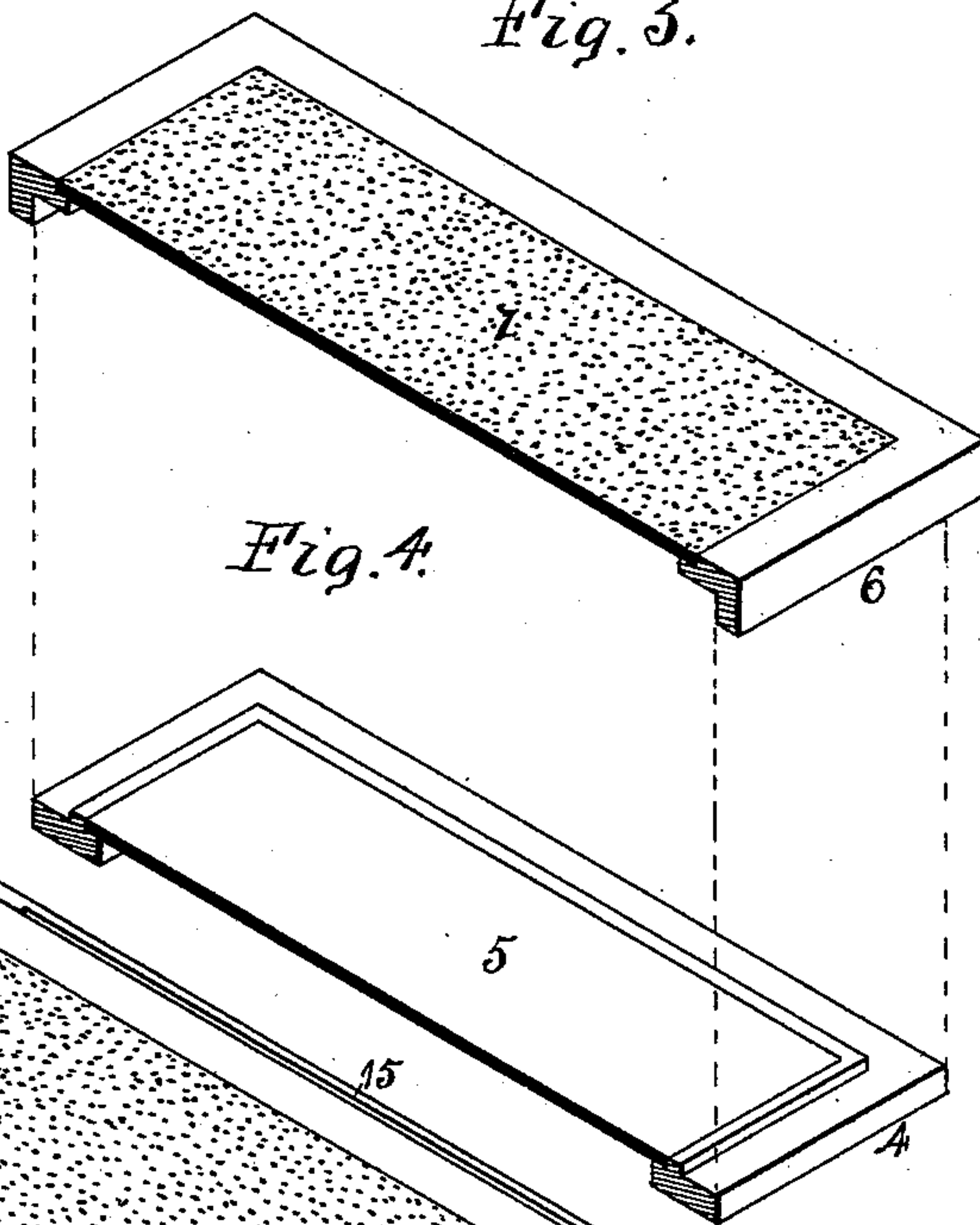
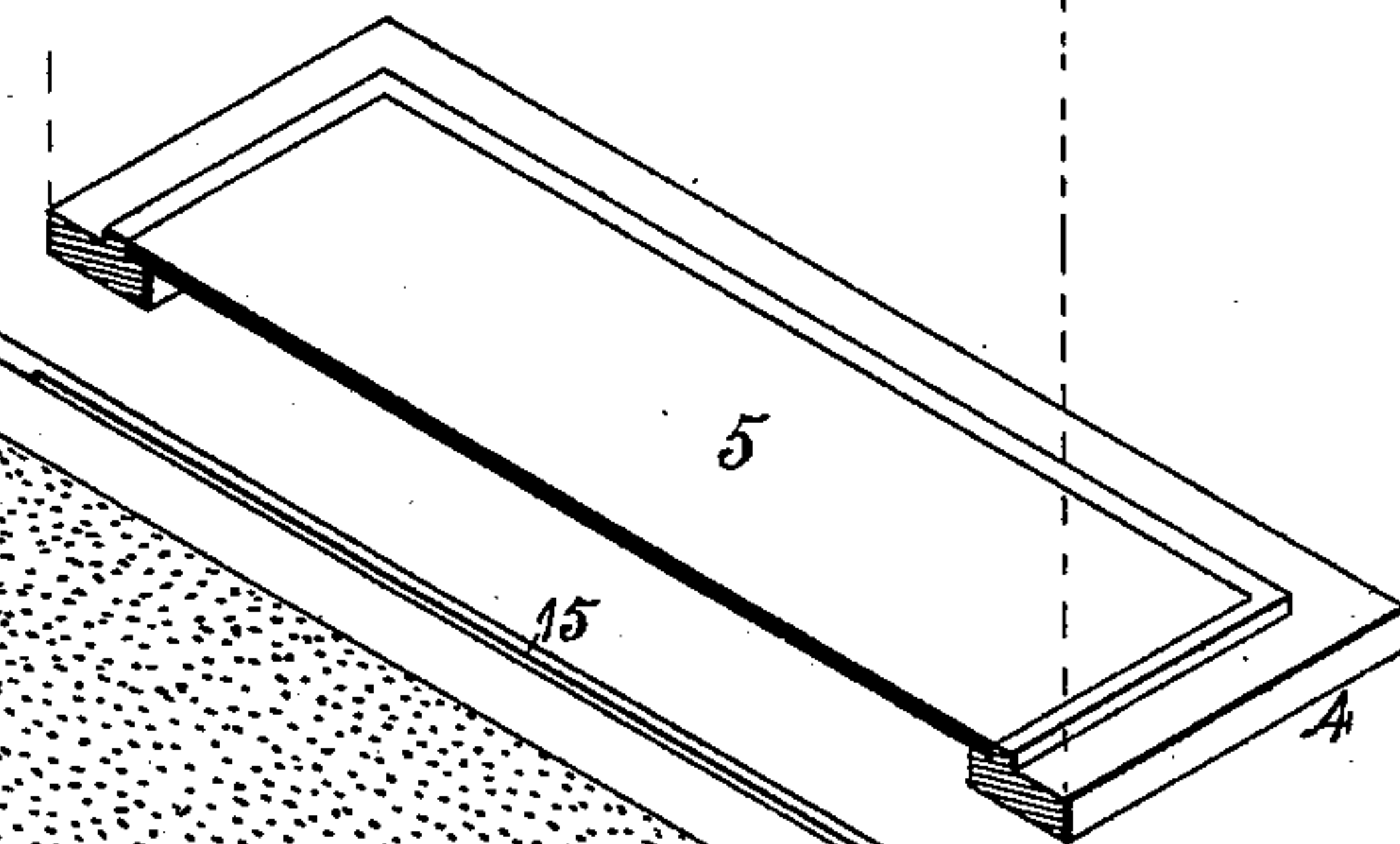


Fig. 4.



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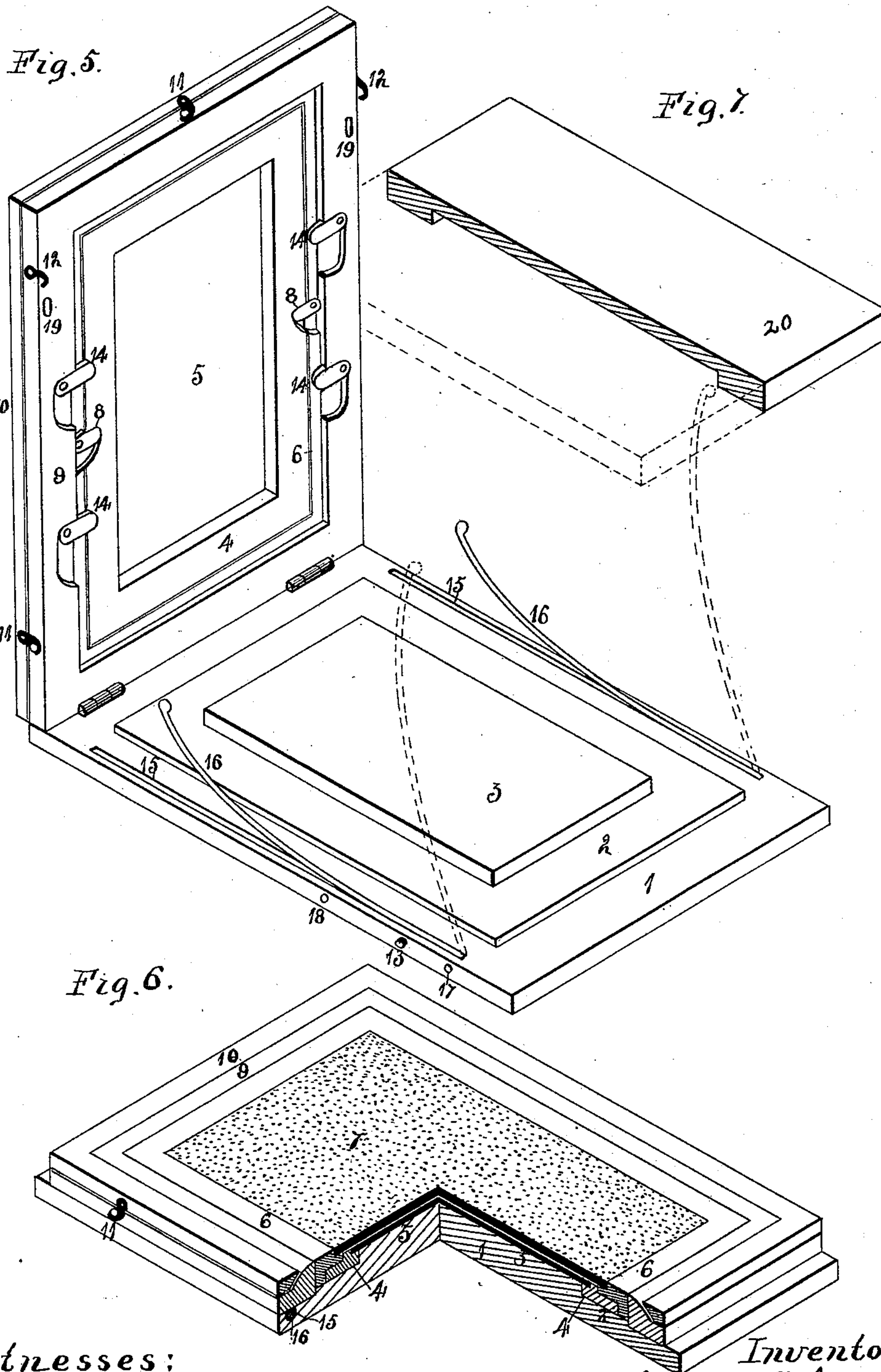
(No Model.)

2 Sheets—Sheet 2.

S. L. CONDÉ.
DUPLICATING APPARATUS.

No. 538,066.

Patented Apr. 23, 1895.



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UNITED STATES PATENT OFFICE.

SAMUEL L. CONDÉ, OF ROCKFORD, ILLINOIS.

DUPLICATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 538,066, dated April 23, 1895.

Application filed November 16, 1894. Serial No. 529,050. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL L. CONDÉ, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Duplicating Apparatus, of which the following is a specification.

The object of this invention is to construct a duplicating apparatus in which a waxed stencil sheet is employed in connection with a roughened glass stencil-making plate.

In the accompanying drawings, Figure 1 is an isometrical representation of a duplicating apparatus in its closed position. Fig. 2 is an isometrical representation of the duplicator in which the pivoted frame is raised, and the springs for raising the pivoted frame have been omitted. Fig. 3 is an isometrical representation of a portion of the stencil making plate. Fig. 4 is an isometrical representation of a portion of a lower glass plate. Fig. 5 is an isometrical representation of the duplicator in which the pivoted frame, stencil making plate and lower glass plate are in position for tracing. Fig. 6 is an isometrical representation of the duplicator in its closed position in which a portion is broken away to show the construction of the parts. Fig. 7 is an isometrical representation of the base board which may be used in place of the stencil making plate and lower glass plate during the process of making copies.

The construction of duplicators heretofore constructed are substantially the same, excepting the base or stencil making plate, which is made of metal and differing in size, and in certain makes the plate is stationary, and is used for making a stencil and a table upon which the paper is placed when making copies, and the use of these devices was limited to such matter as might be written or drawn upon the waxed stencil sheet from a copy or from memory, and two like stencils could not be made.

It is the purpose of this invention to construct the stencil making plate of translucent roughened glass in order that a copy may be placed beneath it which may be traced upon the waxed stencil sheet, and any number of stencils can be made, the fac-simile of each other, and in writing, a ruled sheet may be placed beneath the stencil plate forming

guides for the writing, and in tracing very fine designs the stencil plate may be moved to allow light to pass through the design, stencil making plate and waxed stencil sheet.

Another object of this invention is the location of a spring so that the frame carrying the waxed stencil sheet may be moved on its pivotal connection with the base board and held elevated a sufficient distance to allow placing of a sheet of paper upon the table and its removal therefrom, also having pivoted legs for holding the translucent stencil making plate at an angle for the purpose of tracing a design.

The duplicating apparatus consists of a base plate 1, of rectangular form having a central raised portion 2, and a further raised portion 3. Upon the raised portion 2, is seated a frame 4, supporting a plate of glass 5, the glass resting upon the upper surface of the raised portion 3, and upon the raised portion 2, outside of the frame 4, is located a frame 6, supporting a plate of ground glass 7, its roughened surface being upward forming a stencil making plate. These two frames 4, and 6, may be united by means of the buttons 8.

A frame 9, has a pivotal connection with the base board 1, at one end and has its upper outer edge recessed within which is placed a frame 10. The last two mentioned frames are detachably connected by the hooks 11, and the frame 9, may be connected to the base board 1, by the hooks 12, engaging the pins 13. The under face of the frame 9, is recessed within which are placed buttons 14.

The upper face of the base board 1, along its sides is provided with lengthwise recesses 15, within which are located springs 16, having a pivotal connection at one end with the base board by the pins 17, and the pins 17, and the pins 18, located some distance from the pivotal ends of the springs form a stop for the center portion of the spring. The free ends of the springs are curved upward.

In preparing the stencil the pivoted frame 9, is in its closed position and the top frame 10, is removed. The waxed stencil sheet is placed over the upper surface of the pivoted frame and when the top frame is placed in position the stencil sheet will be stretched and firmly held, and lies in contact with the roughened surface of the stencil-making plate.

The pivoted frame is made fast in connection with the base plate, and with a stylus writing or other designs may be produced upon the waxed stencil sheet. The roughened surface
5 of the translucent stencil making plate will receive the wax on that side of the paper loosened by the stylus, and a seemingly continuous line may be produced.

When the stencil has been completed the
10 pivoted frame is released from its connection with the base plate at the end opposite the pivot, the paper to be printed upon is placed upon the upper surface of the translucent stencil making plate, the pivoted frame is lowered so that the stencil will overlie the blank
15 sheet of paper, and by the usual method ink is forced through the stencil upon the sheet of paper placed beneath it when the pivoted frame is again raised, the printed sheet of paper removed and another blank sheet of paper
20 inserted when the printing process is again repeated. By the use of the springs 16, the pivoted frame will be raised to a proper angle to permit the insertion or withdrawal of the
25 sheet of paper to be printed upon or printed, and when it is desired to bring the stencil in contact with the sheet of paper to be printed upon the frame must be depressed against the action of the spring, and held in its depressed
30 position until the sheet of paper has printed, when upon releasing it the springs will raise it and hold it at the proper angle. These springs operate upon the under face of the pivoted frame near its pivot, and their released
35 position is shown at Fig. 5, in solid lines.

When it is desired to copy a design, the design is placed between the lower face of the translucent stencil making plate and the upper face of the lower glass plate, and when
40 the waxed stencil sheet is placed in contact with the upper surface of the translucent stencil making plate the design may be clearly seen and correctly traced upon the waxed stencil sheet forming a stencil, and copies may
45 be produced therefrom as above described.

In some makes of duplicators the waxed stencil sheet is ruled to form lines for writing, but I propose to locate a sheet of paper ruled in the proper manner below the translucent stencil making plate which can be distinctly
50 seen through the translucent stencil making plate and waxed stencil sheet.

If the design to be traced cannot be seen

when the translucent stencil making plate is in a horizontal position the frame supporting
55 the lower glass plate may be united to the frame supporting the translucent stencil making plate by the buttons 8, and the two frames may be united to the pivoted frame by the buttons 14, and the pivoted frame may be
60 held at an angle by the springs acting as legs, their free ends entering depressions 19, in the under face of the pivoted frame. The position of the springs is shown in dotted lines at Fig. 5, and by allowing the light to pass upward
65 through the lower glass plate, design, translucent stencil making plate and the waxed stencil sheet, the design may be plainly seen and traced.

In place of using the translucent stencil
70 making plate as a table upon which to place the sheet of paper to be printed upon the frames supporting the two glass plates may be removed and a table of wood placed in their stead, being of the same dimensions as
75 the combined frames, a section of this table being shown at Fig. 7.

By the employment of the translucent stencil making plate a very cheap and efficient
80 surface is produced, and the degree of roughness of the plate may be varied to suit the purpose for which it is intended, and should it become broken it can be renewed at a very small cost.

I claim as my invention—

1. In a duplicating apparatus a frame for holding a stencil sheet and a stencil making
85 plate of translucent roughened glass.

2. In a duplicating apparatus a frame for holding a stencil sheet, a stencil making plate
90 of translucent roughened glass, and a transparent glass plate located beneath the stencil making plate.

3. In a duplicating apparatus, a frame for holding a stencil sheet, a stencil making plate
95 of translucent roughened glass having a pivotal connection with a base plate, a transparent glass plate located beneath the stencil making plate and detachably connected to the frame supporting the stencil making plate,
100 and legs supporting the frame at an angle to the base plate.

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