

(No Model.)

C. LARSON.

DESK.

No. 379,232.

Patented Mar. 13, 1888.

Fig. 1.

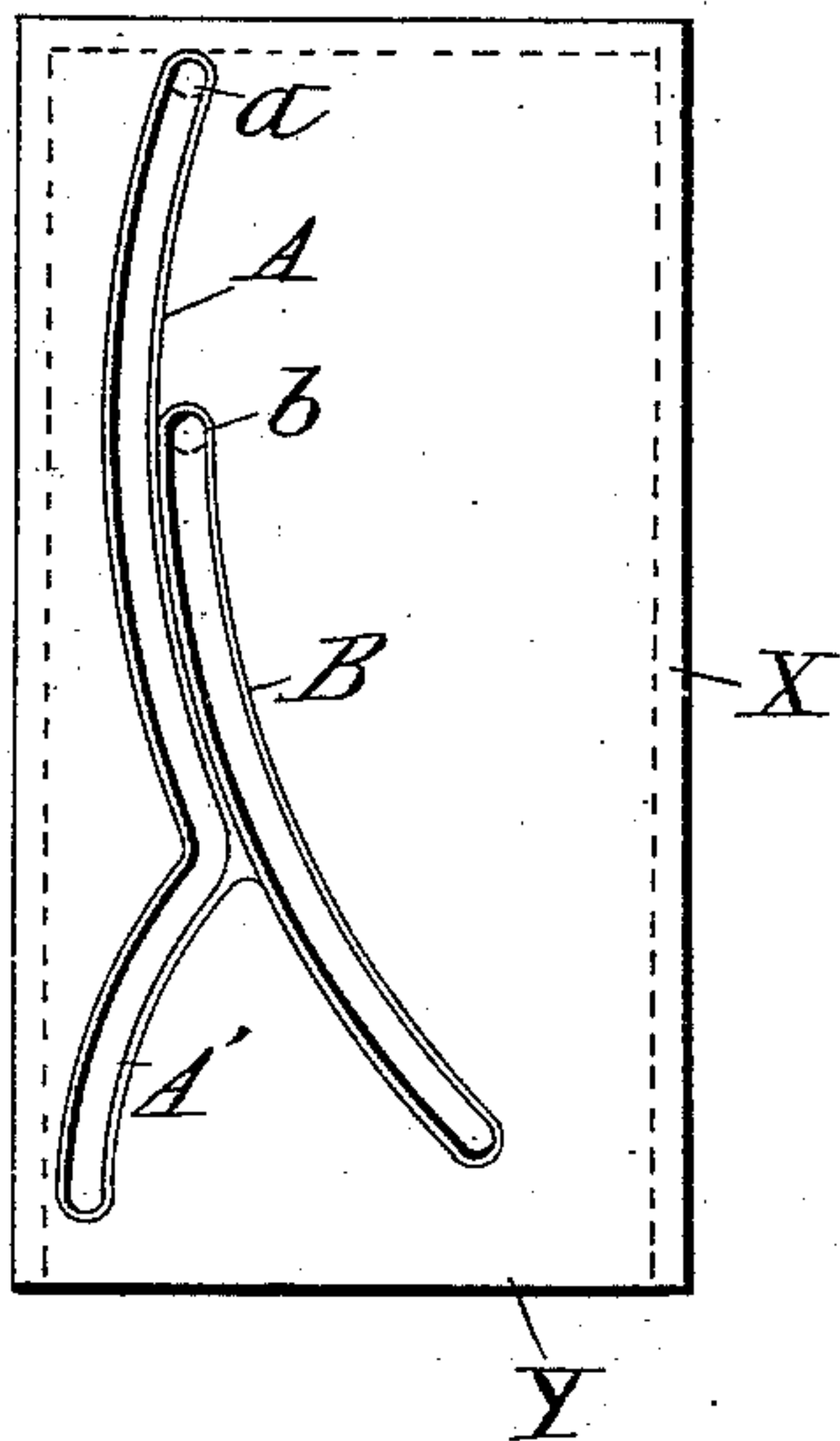


Fig. 3.

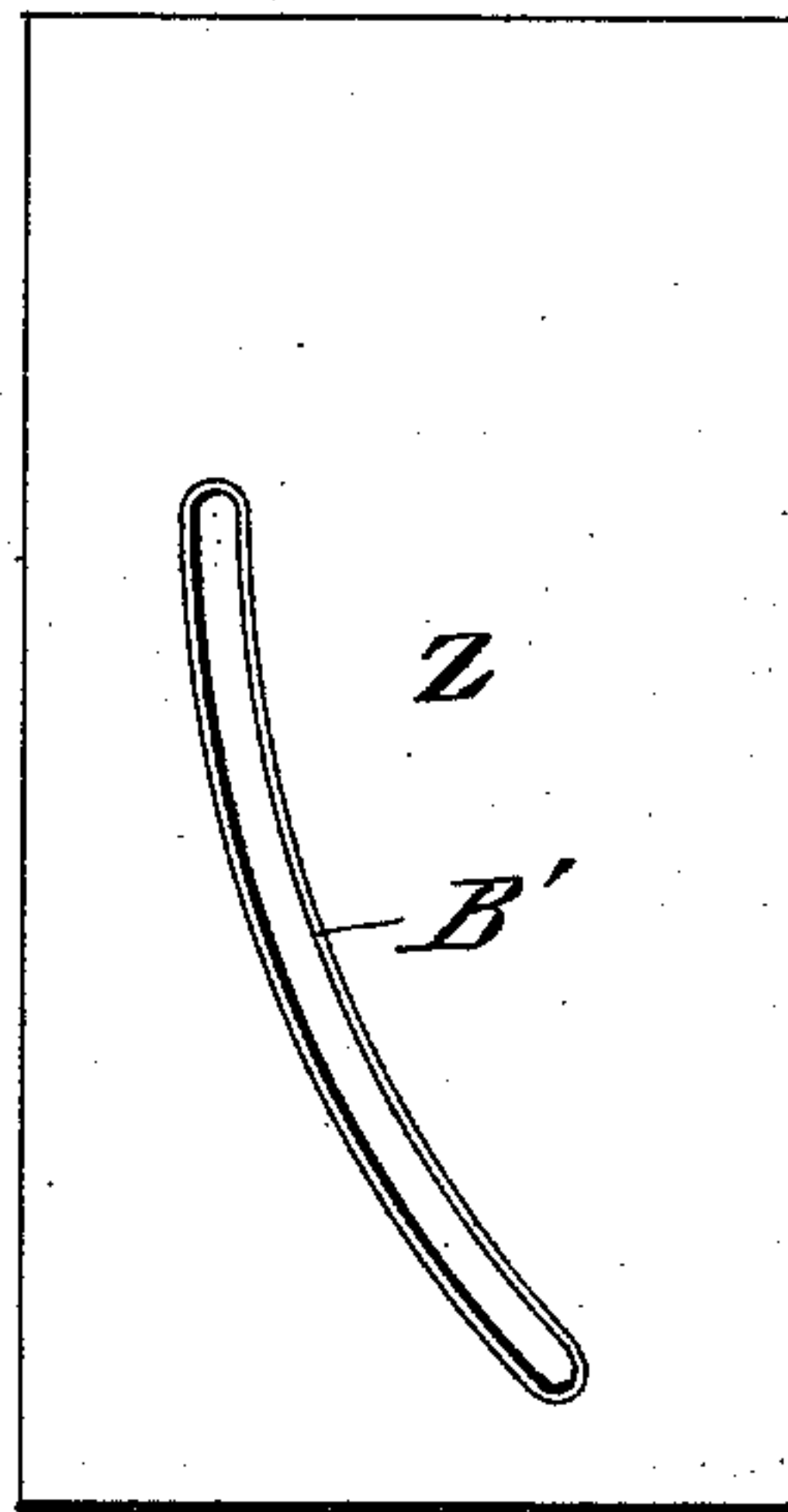
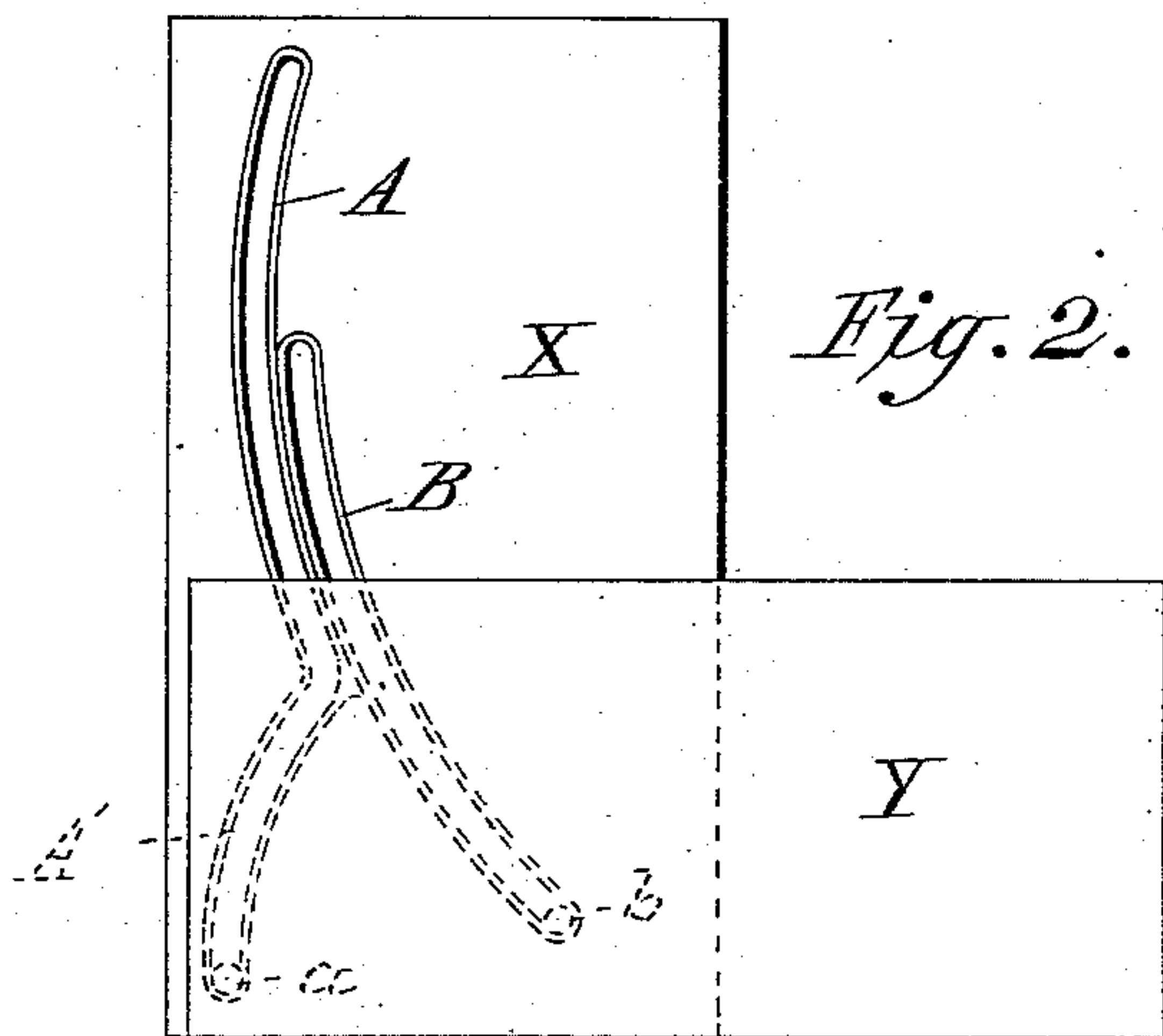


Fig. 2.



Witnesses:

Geo. E. Merrill
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Inventor:

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UNITED STATES PATENT OFFICE.

CHRIS LARSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO HANNA LARSON, OF
SAME PLACE.

DESK.

SPECIFICATION forming part of Letters Patent No. 379,232, dated March 13, 1888.

Application filed April 27, 1887. Serial No. 236,355. (No model.)

To all whom it may concern:

Be it known that I, CHRIS LARSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have
5 invented certain new and useful Improvements in Desks, of which the following is a specification.

My invention relates to the class of desks in which the drawers, pigeon-holes, or other receptacles on the side or sides of the desk and below the writing-board thereof can be drawn forward and swung round, when desired, to right angles with the position said receptacles are in when the desk is closed.

15 My present invention is an improvement on inventions previously made by me, and fully described and set out in Letters Patent of the United States, No. 278,152, May 22, 1883, and No. 333,760, January 5, 1886, granted me for
20 said inventions; and it consists in the combination of the bottom of the desk having grooves therein or thereon with the bottom of the pigeon-holes or other receptacles having pins or projections on the under side thereof fitting into the grooves and guided thereby, so
25 that the movement of the receptacles is controlled and they may be drawn forward and swung around in line, or nearly so, with the front of the desk.

30 The purpose of my present invention is to still further reduce the friction resulting from the movement of the receptacles above named, and to reduce the tendency to uneven and jerky motion in operating the desk; and the
35 specific manner in which I have sought to accomplish these results is by so arranging and constructing the grooves used by me as to dispense or do away with one of the pins, stubs, or projections heretofore employed, as also
40 the groove specially adapted for said pin.

I have illustrated my invention by the drawings accompanying this specification and forming a part hereof, in which—

45 Figure 1 is a plan view of the bottom of the desk, showing the grooves therein or thereon in full lines with the bottom of the receptacles and pins therein in broken lines placed thereon in a closed position. Fig. 2 is a plan view of the bottom of the desk with the bottom of the
50 receptacles superimposed in an open position.

Fig. 3 is a plan view of the groove in the frame of the desk above receptacles and forms a guide in which a single pin or stud placed in the top of the receptacles or pigeon-holes moves.

Like letters refer to like parts throughout the several views.

X is the bottom of the desk.

Y is the bottom of the pigeon-holes or other receptacles.

Z is the part of the desk above the pigeon-holes.

A A' is a groove having a long curved part, A, and a short curved part, A'.

B is a long curved groove.

Grooves A A' and B may be cast in one piece of metal and placed on the bottom of the desk, or they may be cast separate—that is, in two pieces—and placed thereon or cut in the bottom of the desk and suitably lined with
70 metal.

a b are pins or studs projecting from and below the under side of bottom Y of the receptacles and fitting into grooves A A' and B, respectively.

B' is the groove in top Z.

A single pin or stud projects above the top of the pigeon-holes or receptacles into groove B', which forms a guide therefor.

80 Casters are placed by me in the ordinary manner in bottom X, which support the weight of the pigeon-holes and contents. When the desk is closed, pins a b are in the position illustrated in Fig. 1, and when the pigeon-holes or other receptacles are swung around
85 said pins are in the position illustrated in Fig. 2. Groove B' is a duplicate of groove B, and the pin or stud projecting above the top of the pigeon-holes has the same movement as has pin b. Grooves A and B are arcs of a
90 circle having practically the same radius, and prolongation A' of groove A is the arc of a circle having a radius equal to the distance apart of pins a b, the center of the circle being the end of the groove B, in which pin b is
95 illustrated in Fig. 2.

By having parallel and like, or nearly so, grooves A B, I avoid all liability of pin b entering prolongation A' of curve A unless a third pin be added, and although, as stated in
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my patent last above named, if groove A be continued beyond prolongation A', a working device, not materially different from said patented invention, is secured if but two pins or 5 studs are used. Yet in practice I have found some difficulties attending the working of the desk when so made, which are overcome by my present invention.

As in the operation of my device herein de- 10 scribed, the pin *b* is in groove B, near but not necessarily at the extreme end thereof. When pin *a* enters or commences to enter prolongation A' of groove A, it is evident that a very easy and gradual change may be made from 15 the direction of curve A to the direction of prolongation A', as is illustrated in Fig. 1, where the change forms a "reverse curve," so called, and all shock incident to a sudden change in the direction of the movement of 20 the comparatively heavy body, consisting of the pigeon-holes and contents, is avoided.

A decided advantage in the operation of the desks as herein described over that of desks constructed in the manner previously in- 25 vented by me is thus obtained.

Having thus described my invention, I claim—

In a desk, the bottom having curved groove B and groove A A', part A of said groove A A' being concentric with groove B, and part 30 A' thereof having for its center the end of said groove B, in combination with pigeon-hole case Y, provided with studs *a b*, fitting into said grooves, respectively, substantially as set forth.

CHRIS LARSON.

Witnesses:

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