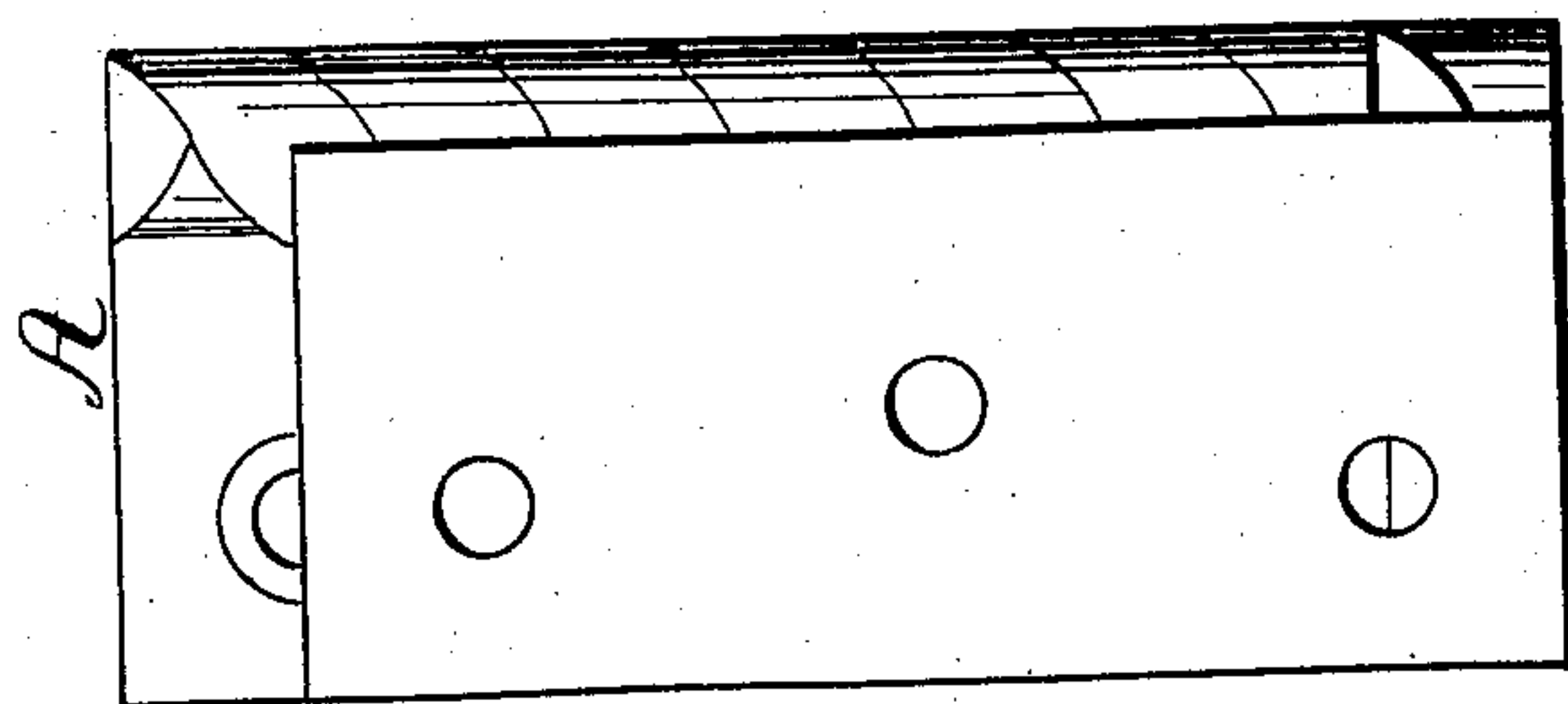
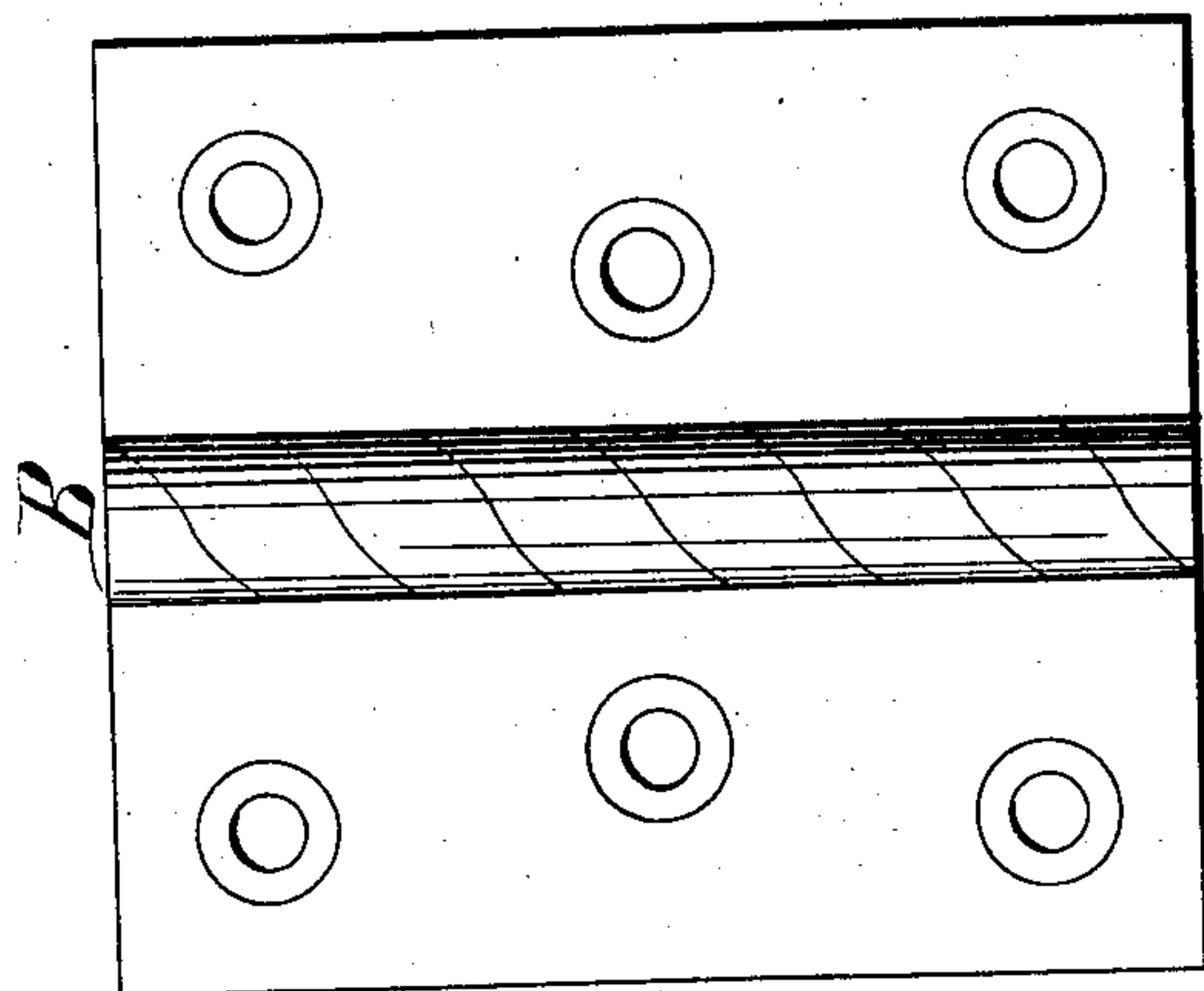
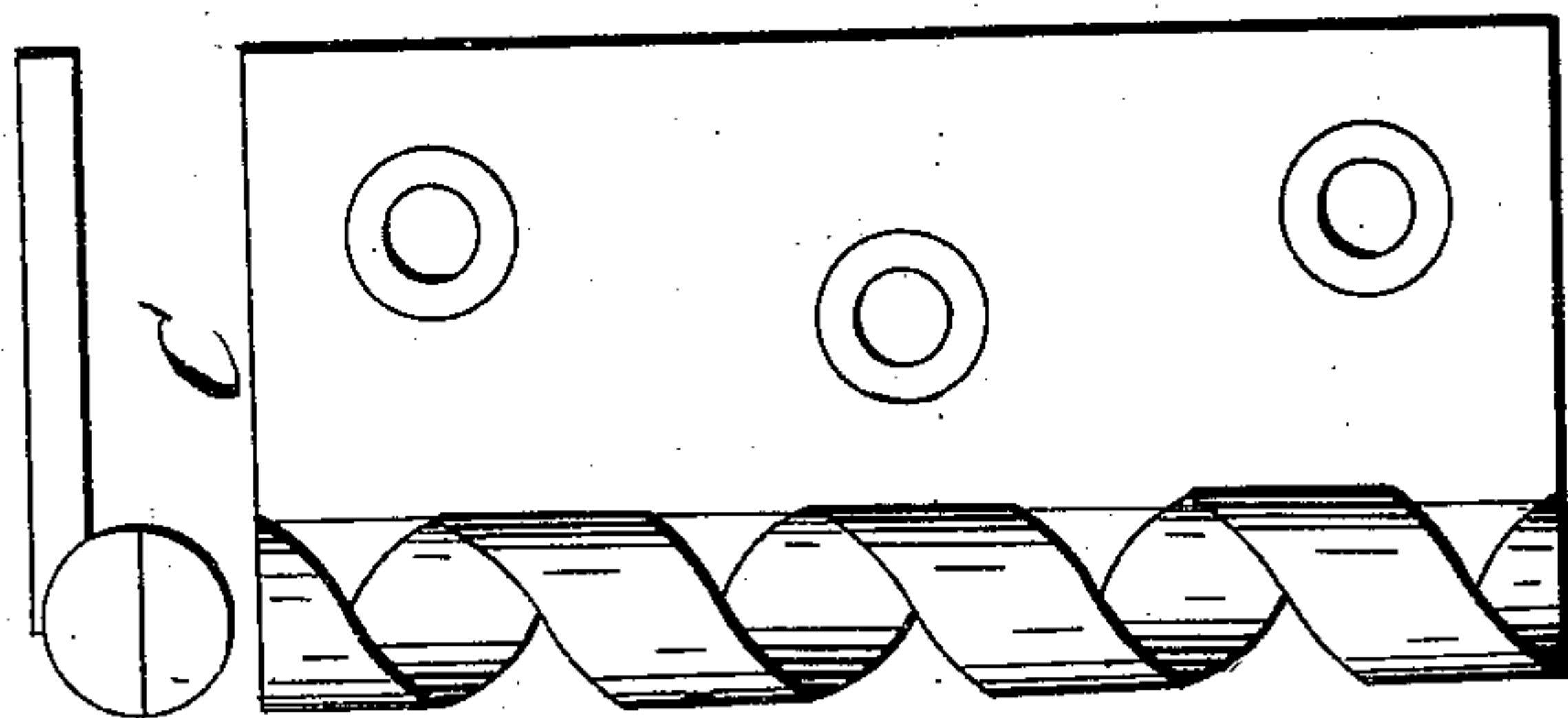


*When applied to the hinge, the spiral is to be used in the following manner.*

P. G. BATES.  
SPIRAL OR WORM JOINT HINGE.

No. 10,425.

Patented Jan. 17, 1854.



# UNITED STATES PATENT OFFICE.

PERRY G. BATES, OF WATERBURY, CONNECTICUT.

## SPIRAL OR WORM JOINT HINGE.

Specification of Letters Patent No. 10,425, dated January 17, 1854.

*To all whom it may concern:*

Be it known that I, PERRY G. BATES, of Waterbury, in New Haven county and State of Connecticut, have invented a new and  
5 Improved Mode of Constructing Hinges or Butts; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in a spiral or worm jointed hinge or butt con-  
10 structed of iron or other suitable metal cast together in a dovetailed form so that when one half or side of the hinge is fixed or made fast, the other side when caused to move or open rises or advances as a screw  
15 advances when turned in a stationary nut, as shown at A, in the accompanying drawing. Or when applied to a common door, as the door is made to open it gradually rises or advances upon the half of the  
20 hinge made fast to the casing and when fully open and left to itself the weight thereof will cause the door to close.

My invention obviates the necessity for a central pin on which hinges of the com-  
25 mon form turn, besides being stronger and more durable than they are.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction.

I first prepare a grooved spiral pin highly  
30 polished made of cast steel or other metal shown at D in the accompanying drawing, which I use as a core around which to cast the one half of the hinge or butt. I then  
35 mold a suitable pattern in sand or otherwise, place the pin or core in the proper position and cast the metal around the same, after withdrawing the pin or core the cast-  
40 ing appears as shown at C, in the accompanying drawings. I then proceed to coat over so much of the hinge so cast as above  
45 described as is intended for the joint thereof with a wash composed of black lead pulverized, and vinegar, mold the same in the common way and cast the other side of the  
50 hinge or butt into and around the first, as shown at B, in the accompanying drawing. I then dress off the surface and the operation is complete as is shown at B, in the accompanying drawing.

What I claim as my invention and desire to secure by Letters Patent is—

The spiral or worm joint hinge constructed as herein described.

PERRY G. BATES.

In the presence of—

GEORGE L. FIELDS,  
JAMES SCARRITT.