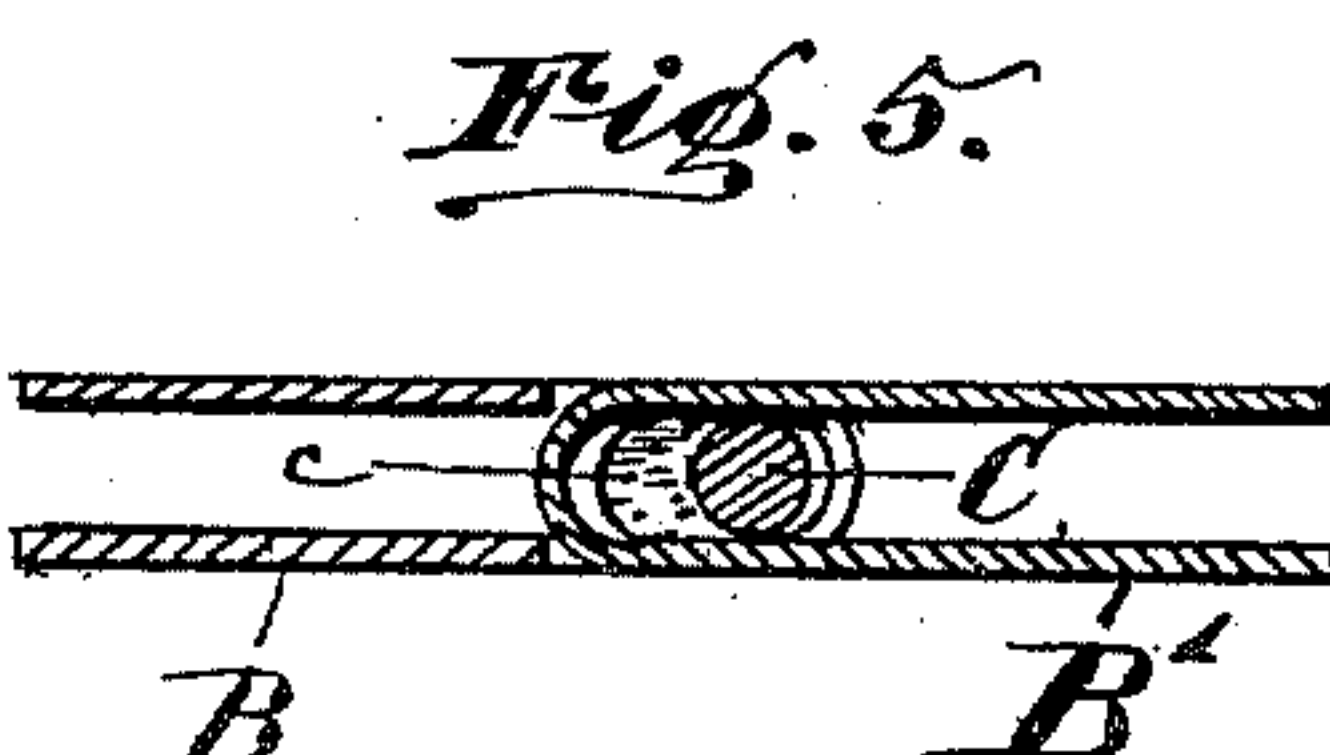
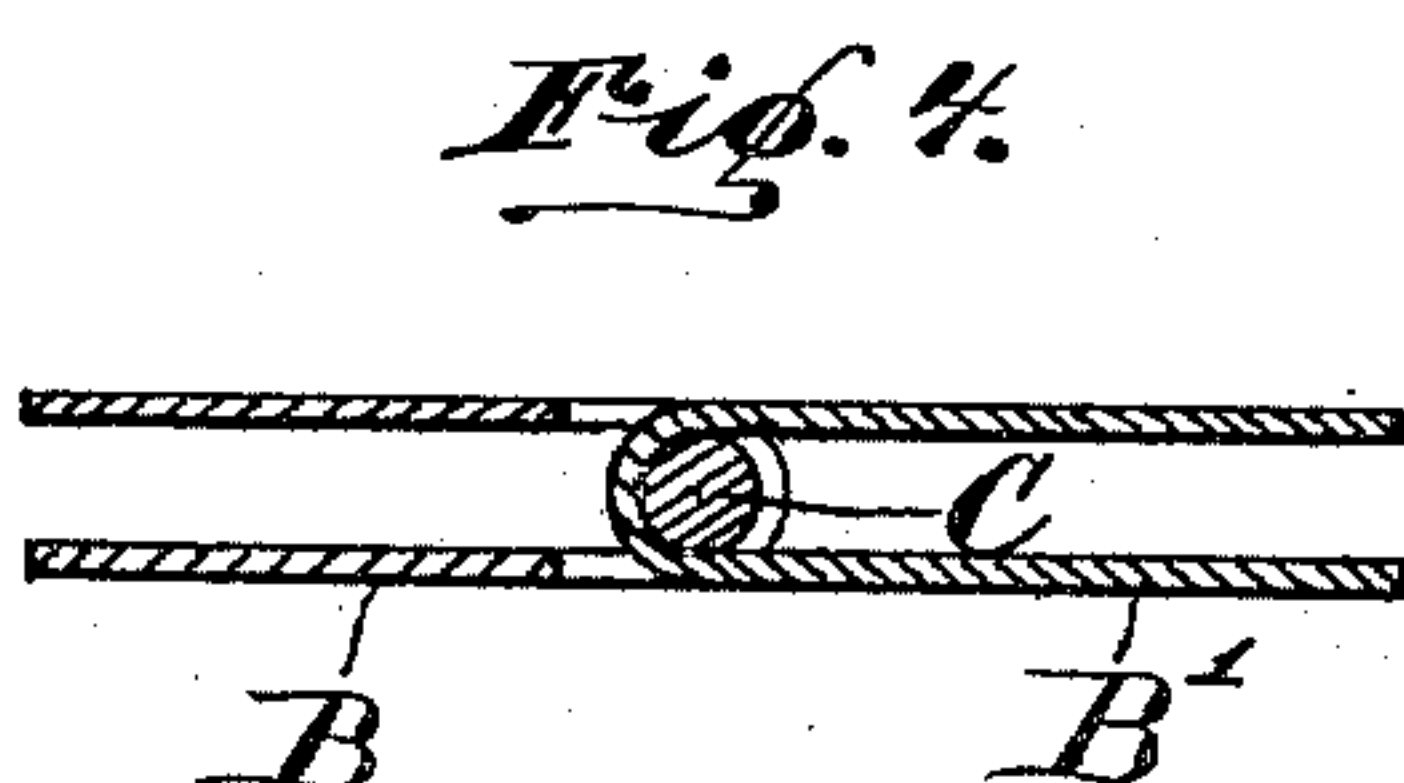
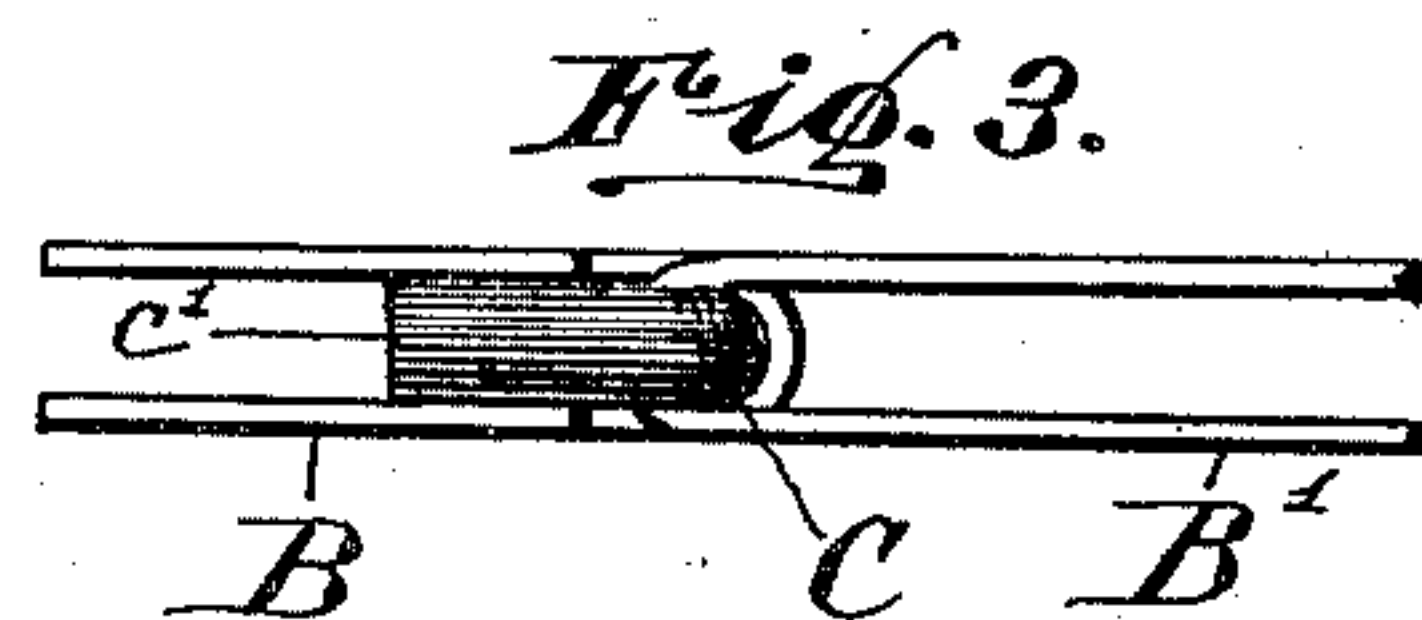
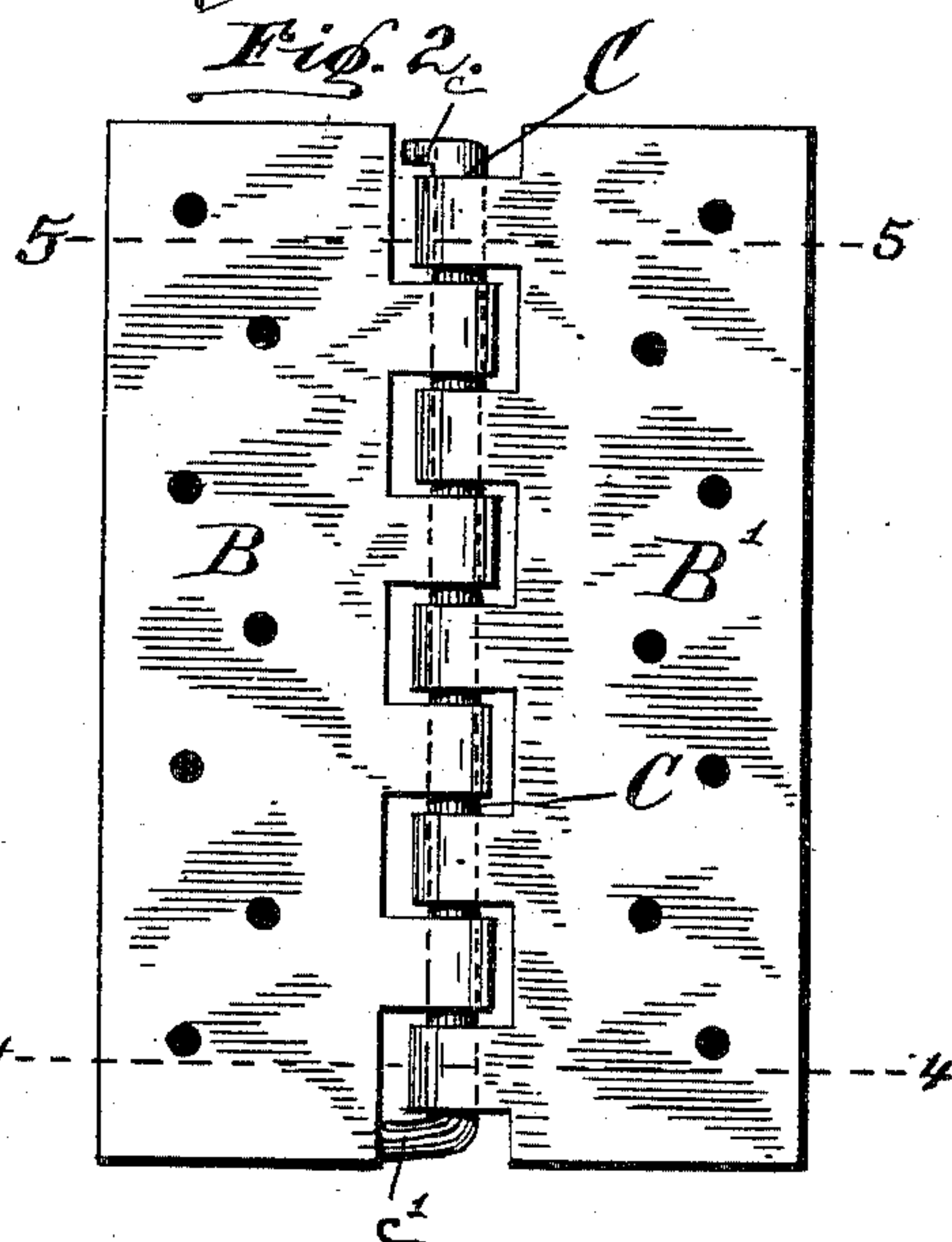
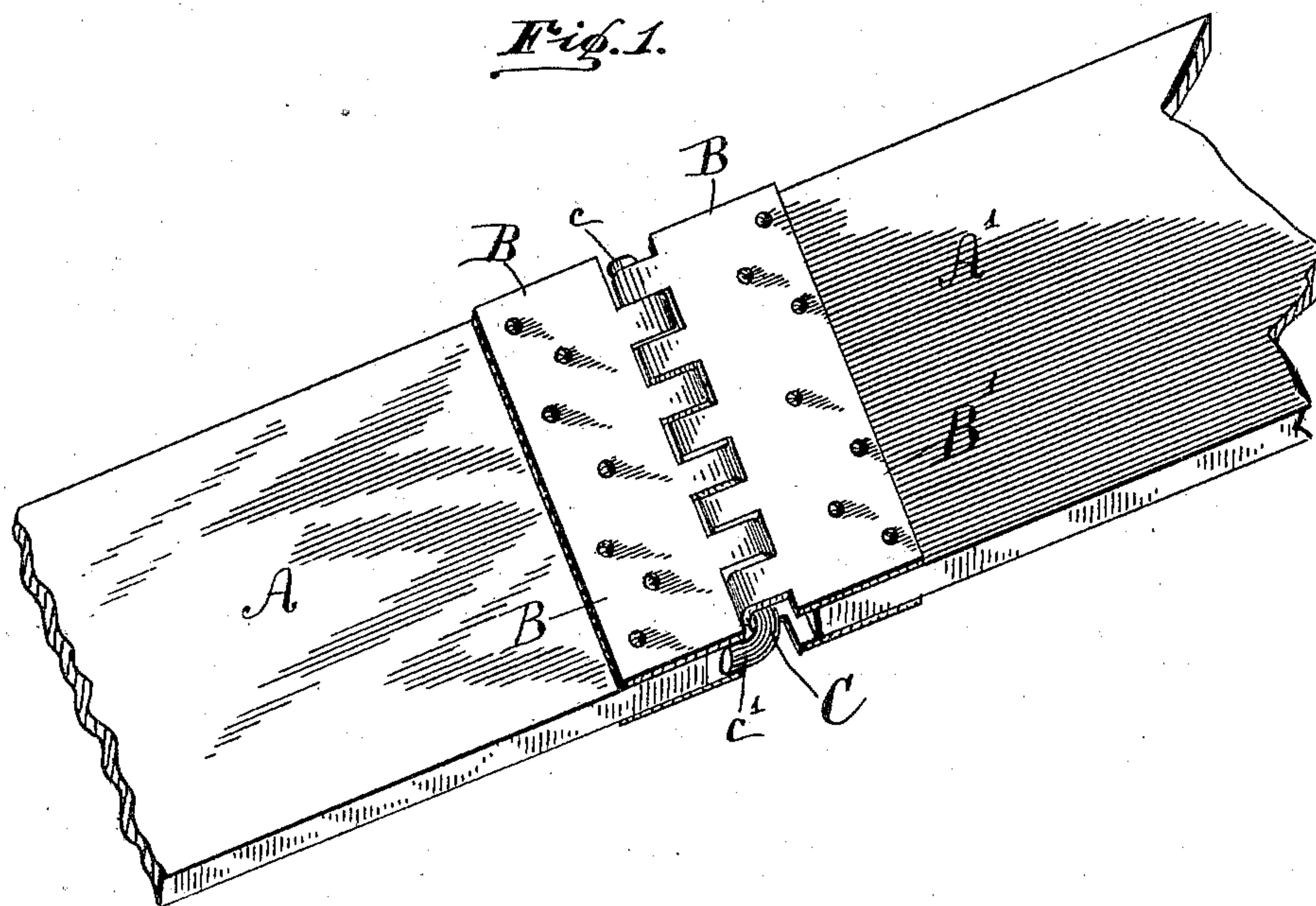


(No Model.)

N. H. ROBERTS.  
BELT COUPLER.

No. 457,012.

Patented Aug. 4, 1891.



WITNESSES.

G. W. H. Brown,  
J. Walsh.

Nate H. Roberts,  
per E. W. Bradford.  
INVENTOR.  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

NATE H. ROBERTS, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE E. C. ATKINS & COMPANY, OF SAME PLACE.

## BELT-COUPLER.

SPECIFICATION forming part of Letters Patent No. 457,012, dated August 4, 1891.

Application filed July 1, 1889. Renewed July 8, 1891. Serial No. 398,760. (No model.)

*To all whom it may concern:*

Be it known that I, NATE H. ROBERTS, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Belt-Couplers, of which the following is a specification.

My said invention relates to that class of devices for uniting the ends of belts which are hinge-like in their general construction; and it consists in certain means whereby the pintle uniting the two halves of such a device may be readily removed and replaced and at the same time held securely in place when the device is in operative condition, as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of two fragments of a belt united by a coupler embodying my said invention; Fig. 2, a top or plan view of said coupler separately on an enlarged scale; Fig. 3, an end elevation of the same; Fig. 4, a sectional view on the dotted line 4 4 in Fig. 2, the parts being shown in the position they are when under strain; and Fig. 5, a similar view on the dotted line 5 5, when the parts are forced together, as they are just before the pintle is removed in uncoupling the device.

In said drawings, the portions marked A A' represent the two fragments of belt, B B' the two halves of the hinge-like coupler, and C the pintle thereto.

The hinge parts B and B' are formed by cutting slots in the center of two properly-formed pieces of sheet metal and bending said pieces over in the form shown in the drawings, which leaves loops which pass between each other in the spaces left by cutting the slots. The slots are cut long enough, so that there is enough looseness between the parts when put together to permit them to be forced toward each other, as shown in Fig. 5, far enough to permit the pintle, including the small head upon one end of it, to pass through said loops, and thus unite the two parts.

The pintle C is a piece of rod or wire having a small head *c* upon one end and a longer

head or bend *c'* upon the other. As just described, the small head is adapted to pass between the portions of the hinge when they are in the position shown in Fig. 5, but is large enough to prevent it from being withdrawn when the parts are in the position shown in the other figures. In order that this result may be secured and not have too great an amount of looseness between the parts, this head should be formed upon one side only, and therefore it is desirable to have means which shall prevent it from turning, because if it should turn the engagement between it and the outer loop of the hinge part would cease and the pintle be free to work endwise until it reached the next loop, and so on, thus endangering the entire separation of the coupler. To obviate this I have turned the other end of the rod at right angles, leaving the longer head *c'* thereon, which is so located that when the hinge-pintle is pushed entirely into place it will rest between the two sides of one of the hinge parts, as shown, and thus prevent the pintle from turning as well as from sliding in the other direction. By this means a very simple and effective belt-coupler is provided and one which can at any time be readily uncoupled by simply bringing the two ends of the belt carrying the halves of the coupler slightly closer together and withdrawing the pintle, and can be coupled by bringing them into the same position and inserting the pintle, when by letting the natural strain come upon the belt said pintle is securely locked in position.

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

1. A belt-coupler consisting of two hinge-halves and a pintle having a small head formed upon one end, which, when the halves are brought close together, can be slipped through the opening formed by the loops, and a longer head upon the other end adapted to rest between the sides of one of the hinge parts and prevent the pintle from turning, substantially as set forth.

2. The combination of two loosely-jointed hinge-halves, the loops whereof are arranged to pass between each other and are formed longer than the diameter of the pintle, and a pintle having a small head upon one end of

less diameter in one direction than the size of the aperture through the loops when they are forced toward each other, and a head also upon the other end of said pintle, substantially as and for the purpose set forth.

3. The combination of two loosely-jointed hinge-halves, the loops whereof are arranged to pass between each other and are formed longer than the diameter of the pintle, and the pintle having a short eccentric head upon one end of less size than the aperture through the loop, and a head upon the other end

longer than said aperture, the extreme length of said pintle being substantially the same as the width of the hinge-halves, substantially as set forth. 15

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 26th day of June, A. D. 1889.

NATE H. ROBERTS. [L. S.]

Witnesses:

C. BRADFORD,  
J. WALSH.