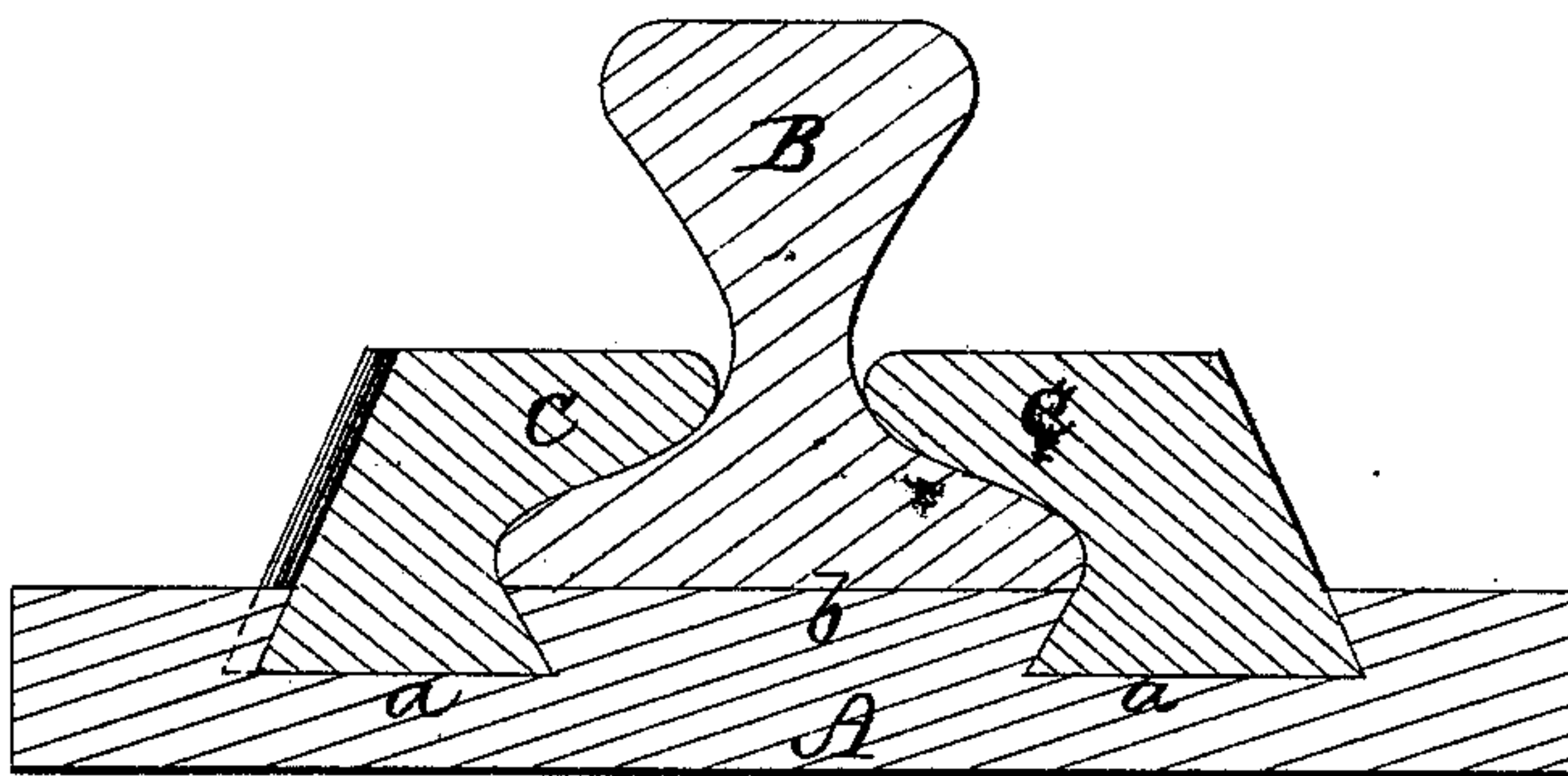


J. De PEW.  
RAILROAD RAIL-JOINT.

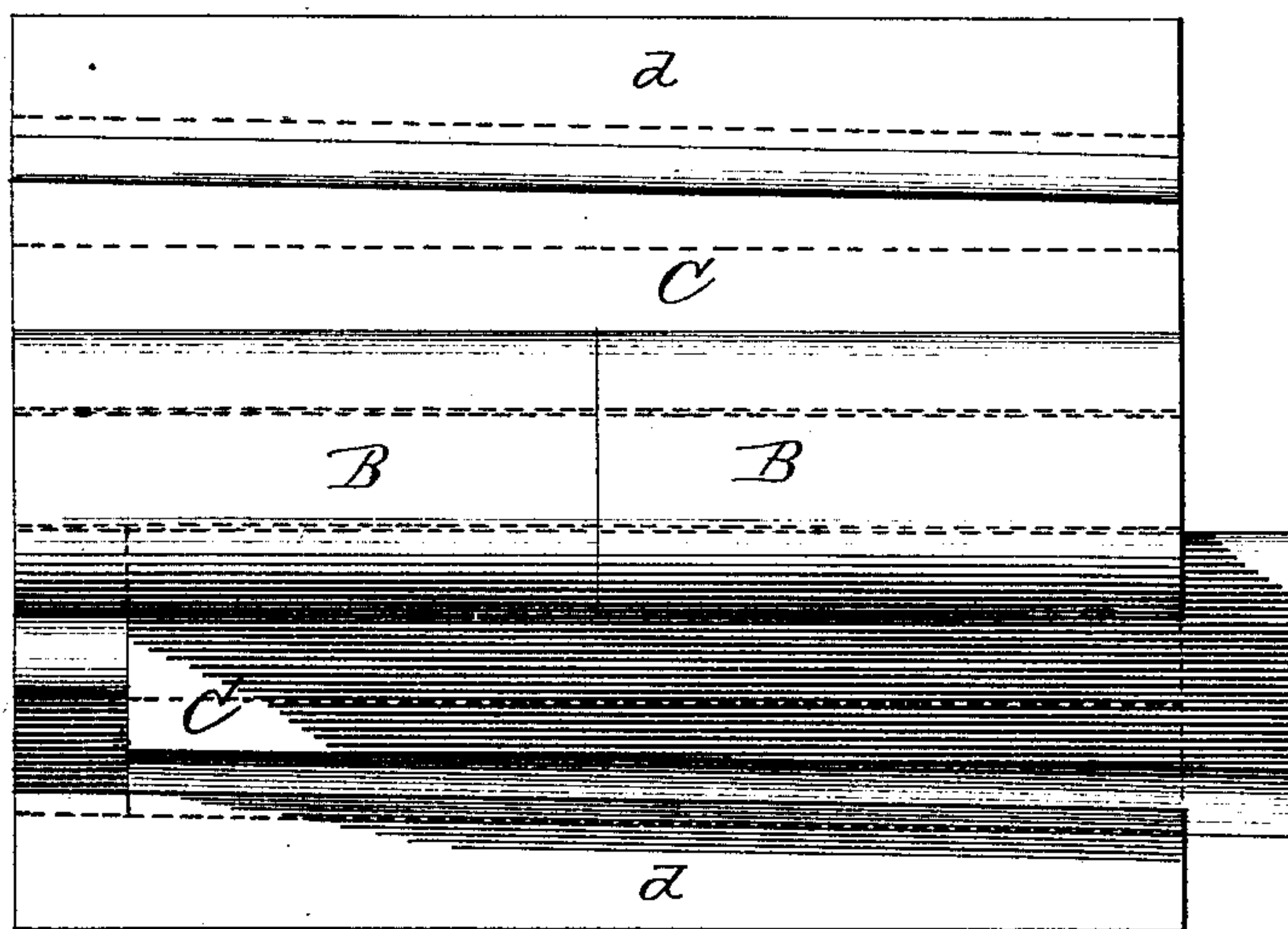
No. 180,994.

Patented Aug. 15, 1876.

*Fig. 1.*



*Fig. 2.*



*Attest:*

*C. L. Euerh.*

*W. E. Chaffee*

*Inventor:*

*John De'Pew*

# UNITED STATES PATENT OFFICE.

JOHN DE PEW, OF WHARTONSBURG, ASSIGNOR OF ONE-HALF HIS RIGHT  
TO HIRAM P. MARSHALL, OF WYANDOT COUNTY, OHIO.

## IMPROVEMENT IN RAILROAD-RAIL JOINTS.

Specification forming part of Letters Patent No. **180,994**, dated August 13, 1876; application filed  
July 31, 1876.

*To all whom it may concern:*

Be it known that I, JOHN DE PEW, of Whartonsburg, in the county of Wyandot and State of Ohio, have invented certain new and useful Improvements in Railroad-Joint Fastening; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a railroad-joint fastening or railroad-chair, as will be hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a transverse vertical section of my invention. Fig. 2 is a plan view of the same.

A represents the bottom part or base of my railroad-chair, made either of wrought or cast iron, of suitable length and width, and of thickness according to the material used.

In the upper side of the base A are made two dovetailed grooves, *a a*, which are made tapering in opposite directions, and are of a depth about one-half the thickness of the base. The inner edges of these grooves run parallel with each other, and the part *b* of the base between said grooves is just wide enough for the rails B B to rest thereon, letting the foot of the rail be perfectly even with the upper edges of the grooves.

C C represent two dovetailed tapering keys, of suitable size to enter the grooves *a a* in the base A, and so constructed as to grasp the feet of the rails B B, and they may be made to extend any desired distance up the web or sides of the rails.

The base A is first placed in position and fastened by one or more spikes on each side, driven through the holes *d*, made for that purpose, into the tie underneath. The rails B B are then placed on the part *b* of the base, with their ends close together, after which the keys C C are driven into the grooves *a a* from opposite directions, until they come even with the ends of the base, when the rails will be firmly and securely clamped in position, and yet have all the play necessary to allow for contraction and expansion.

It will be seen that, by my construction of the joint fastening or chair, I dispense with the use of all bolts and nuts or other devices that might become loose by jarring. The keys C C, being dovetailed, can not work out, and it is only by knocking on the ends that they will come loose.

The particular form or shape and size must, in a great measure, depend upon the kind of rails used; and hence I do not confine myself to the configuration shown.

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

The combination, with the adjoining ends of two railroad-rails, of the base A, provided with two dovetailed grooves, *a a*, tapering in opposite directions, and the dovetailed tapering keys C C, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN DE PEW.

Witnesses:

P. C. DIETERICH,  
WM. B. UPPERMAN.