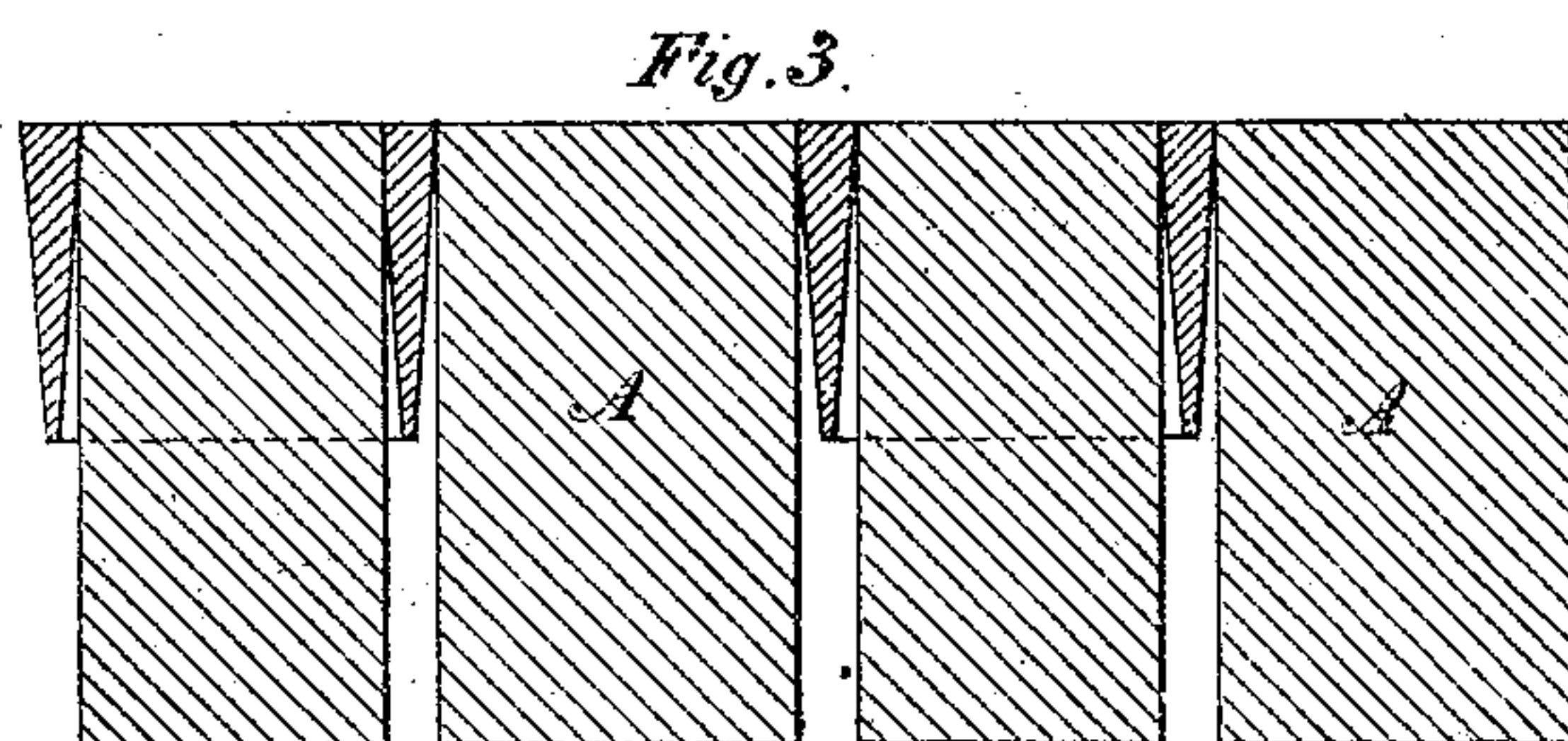
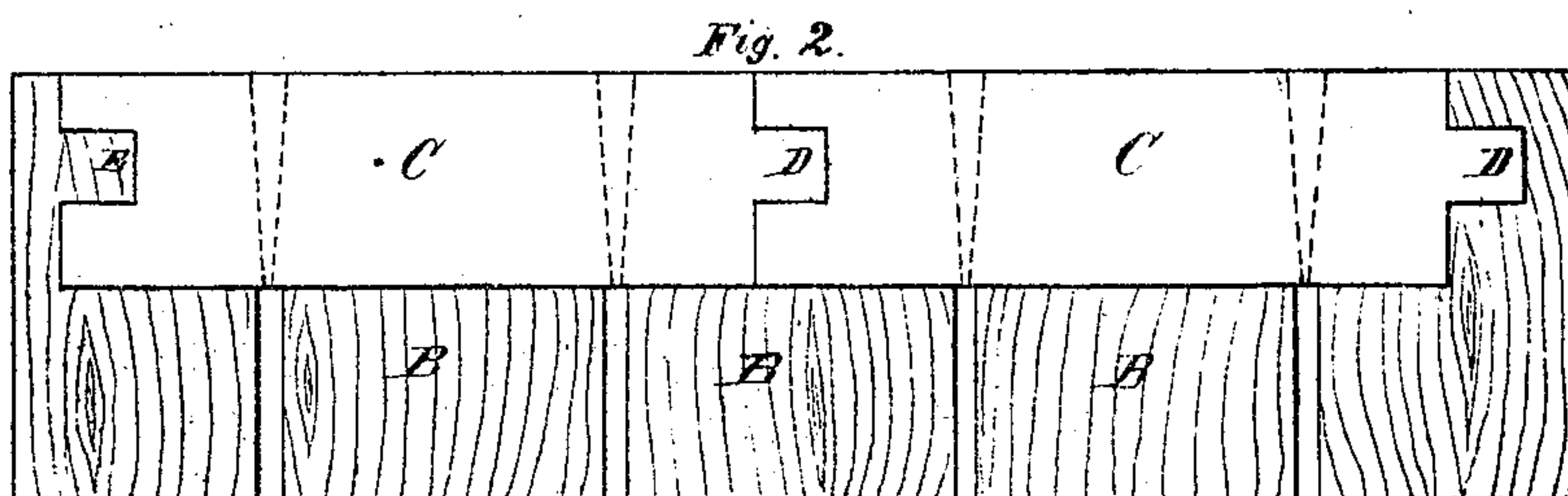
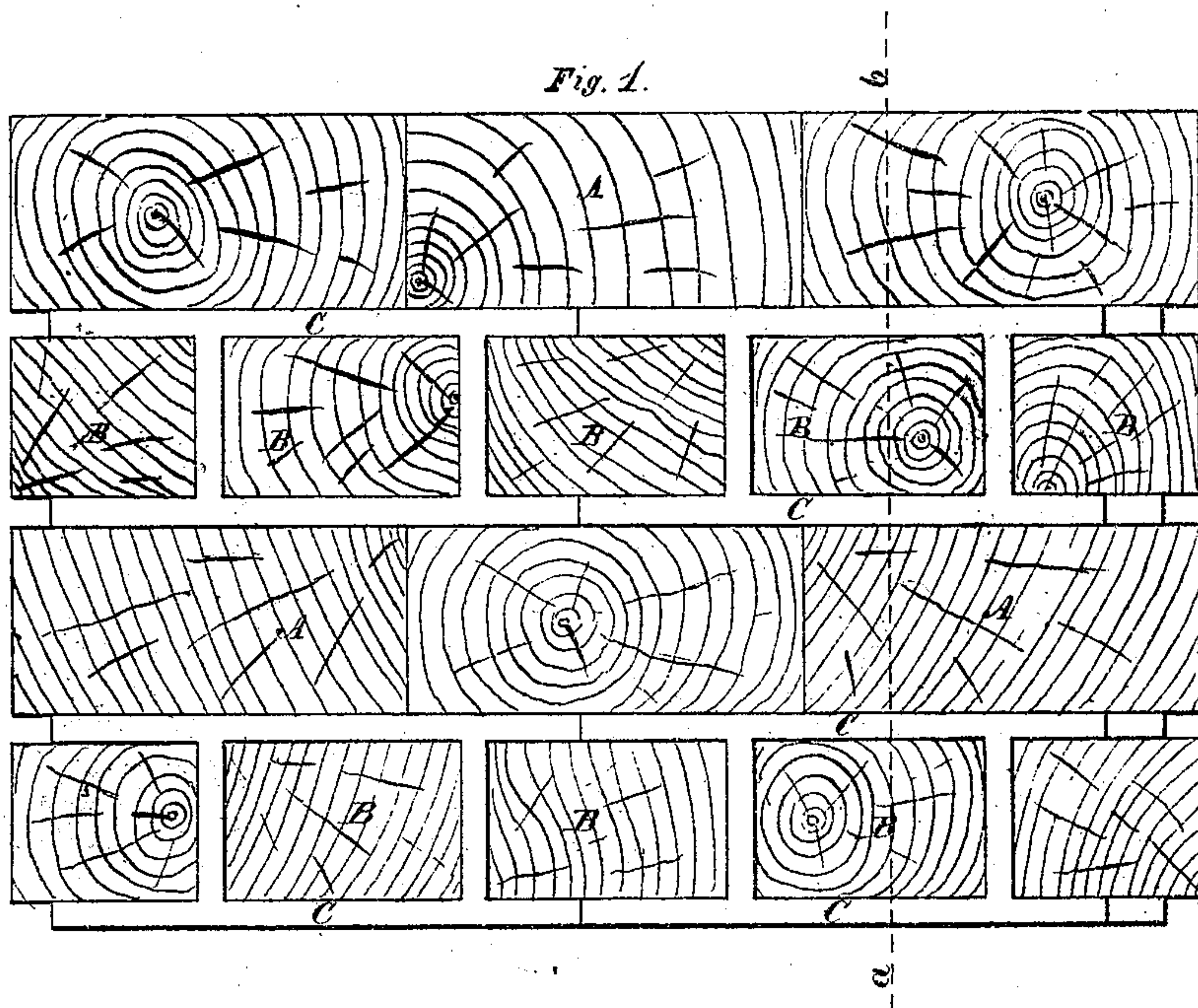


JOHN STAFFORD KELLY.  
Improvement in Pavements.

No. 121,524.

Patented Dec. 5, 1871.



Witnesses:

Rich. H. Clarke  
James S. Swanton

Inventor:

John S. Kelly



# UNITED STATES PATENT OFFICE.

JOHN STAFFORD KELLY, OF NEW YORK, N. Y.

## IMPROVEMENT IN PAVEMENTS.

Specification forming part of Letters Patent No. 121,524, dated December 5, 1871.

*To all whom it may concern:*

Be it known that I, JOHN STAFFORD KELLY, civil engineer, of the city, county, and State of New York, have invented an Improvement on my Improvement in Pavements patented August 30, 1870, and numbered 106,832; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification:

My invention relates to combined wood and iron pavements as patented, as aforesaid; and consists in certain improvements thereof, viz., in forming flanges by extending both sides of the cast-iron band containing the wooden block at both ends with lugs or tangs at one end and sockets or grooves at the other end, so that when two or more of such iron bands are fitted together the said lugs fit into said sockets, thus coupling the mounted paving-blocks together, enabling two iron bands to inclose practically four wood blocks instead of two blocks, as in my original patent. The extended sides themselves form the coupling. The mounted blocks are coupled together by two couplings instead of one, and each of the couplings is stronger than the one coupling in the original patent. There is a great reduction in the quantity of iron required. Less iron surface is presented to the foot of the horse without diminishing the complete protection of the wooden blocks. The pavement is less liable to be slippery and a better foothold is presented. The blocks and whole pavement are more firmly held together, and less space for filling is left under the surface. Between the ends of each mounted block there is but one thickness of iron in this improvement, whereas in the original there are two thicknesses.

Figure 1 represents a plan of my improved pavement, in which alternate rows of mounted and unmounted blocks are laid down, A A representing

the unmounted blocks, B B the mounted blocks, and C C the iron bands.

Fig. 2 is a vertical view of mounted blocks, showing the shape of the iron bands, the extensions, and mode of interlocking, in which C C represent the iron bands, E the socket in one end thereof, D D the lugs or tangs in the other end, and B B the wooden blocks.

Fig. 3 represents a cross-section through the line *a b* of Fig. 1. A represents the unmounted block. The extensions of the sides of the iron band are about half the length of the original band. The lugs are one and a half inch long and one inch wide; the socket of a size to receive the lugs.

The iron bands and wooden blocks may be of any required size; and it is desirable, in order to secure a firm foundation, to have the pavement laid on a double layer of about half-inch boards, the first layer to be laid across the street and the second on the length; all to be about one inch apart to allow the water to percolate freely; all blocks and boards to be saturated with coal-tar or some other preservative; the spaces below the surface to be filled in with wooden strips and composition; the surface top-dressed with fine sand.

What I esteem as new, and desire to protect by Letters Patent, is—

1. The extension of the iron bands C C, forming flanges and lugs, and the double interlocking by the lugs or tangs D D and socket or groove E, for the purposes herein set forth and described.

2. A pavement formed of wooden blocks and iron bands, with extensions, constructed as aforesaid, and held together by lugs and sockets, as exemplified in drawing and specification.

JOHN S. KELLY.

Witnesses:

RIEB H. CLARKE,  
JAMES F. SWANTON.

(110)