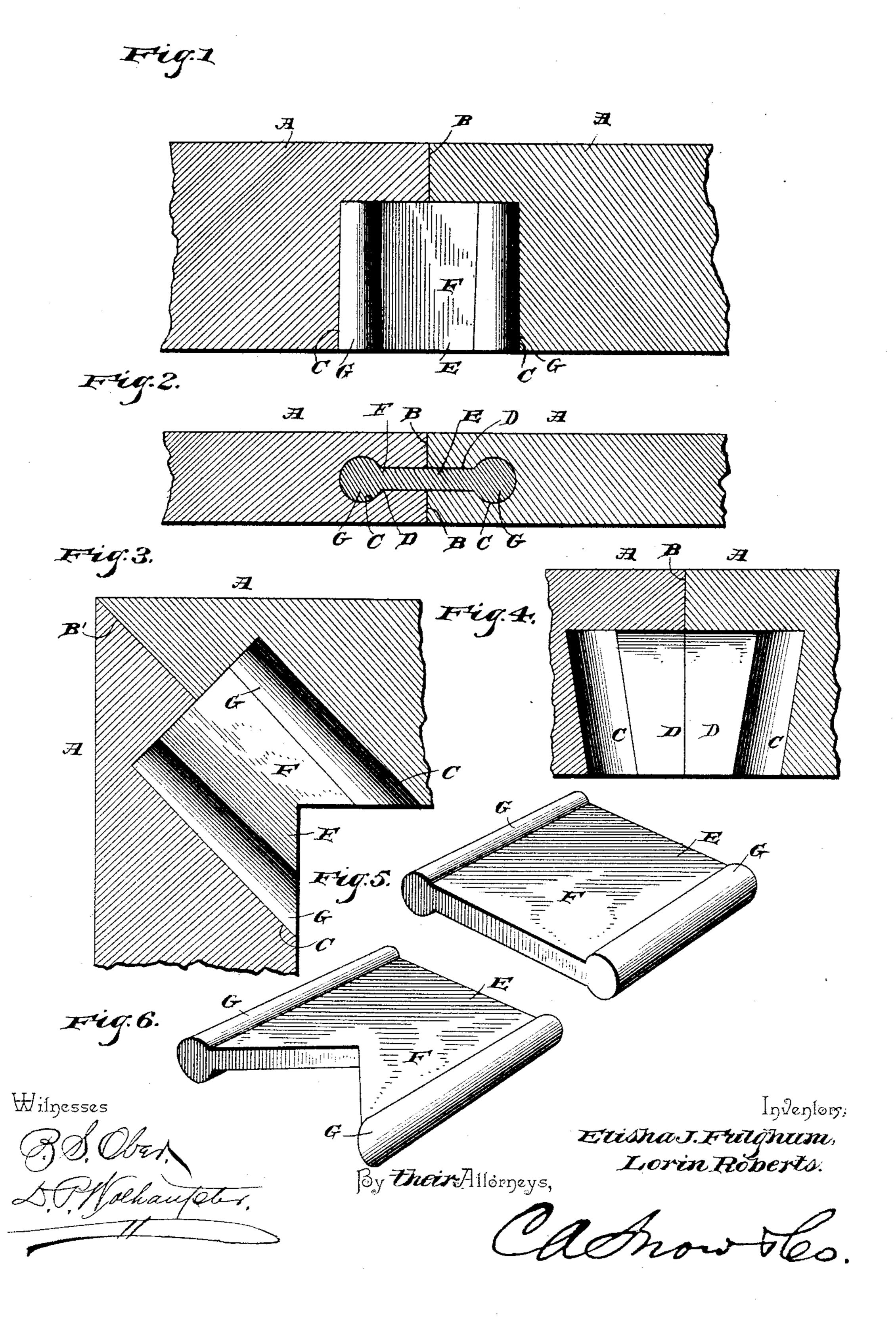
## E. J. FULGHUM & L. ROBERTS. WOOD JOINT.

No. 497,915.

Patented May 23, 1893.



## United States Patent Office.

ELISHA J. FULGHUM AND LORIN ROBERTS, OF TRAVERSE CITY, MICHIGAN.

## WOOD-JOINT.

SPECIFICATION forming part of Letters Patent No. 497,915, dated May 23, 1893.

Application filed December 13, 1892. Serial No. 455,072. (No model.)

To all whom it may concern:

Be it known that we, ELISHA J. FULGHUM and LORIN ROBERTS, citizens of the United States, residing at Traverse City, in the county of Grand Traverse and State of Michigan, have invented a new and useful Wood-Joint, of which the following is a specification.

This invention relates to wood joints; and it has for its object to provide certain improvements in joints for frame-pieces of wood so that the meeting edges of the pieces shall be tightly and permanently wedged together.

To this end the invention primarily contemplates improved means for joining sections of wood together and particularly the frame-pieces of chair seats and similar articles of furniture.

With these and other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a horizontal sectional view of a square joint formed in accordance with the present invention. Fig. 2 is an enlarged detail cross sectional view thereof. Fig. 3 is a view similar to Fig. 1 of a miter joint. Fig. 4 is a horizontal sectional view of a square joint, as contemplated by our invention, showing the joint before the dowel key is placed in position. Figs. 5 and 6 are details in perspective of the dowel key employed for the square and miter joints respectively.

Referring to the accompanying drawings, A represents opposite sections or pieces of wood designed to be joined together and having the squared meeting edges B, as shown in 40 Figs. 1 and 2, and 4 or the beveled edges B', as shown in Fig. 3, and which edges are designed to be held clamped together. In each of the sections or frame pieces A, are drilled the circular holes or recesses C. The circular 45 holes or recesses C, are formed in the pieces A, from one side thereof and extend from their outer open ends at the edge of the wood at a divergent or receding angle to the squared or beveled edges Bor B', which are to be joined 50 together. Short grooves or slots D, are cut in the edges B, or B', and lead therefrom into the diverging or receding holes C, and are designed

to accommodate the flat web E, of the dowel key F. The dowel key F, is formed in a single piece and is provided with the flat web E, and 55 the enlarged circular beads G, at the opposite edges of said web, and which are designed to register with the receding holes C, of the sections of wood. As clearly shown in the drawings, the opposite circular beads G, are 60 parallel with each other so that the same have a wedging entrance into the holes C. Now, it will be readily seen, that after the edges B, or B', have been placed together so that the slots D, align, the dowel key can be driven 65 into position, it being seen that one of the beads enters the hole of one section or piece of wood, and the other bead enters that of the other section or piece of wood. Inasmuch as the holes or recesses diverge from the meet- 70 ing edges, they necessarily diverge or recede from each other, so that as the key is driven home the parallel beads thereof necessarily wedge very tightly in the non-parallel holes of the sections or pieces and consequently 75 bring the edges tightly together in a secure, close joint.

From the above, it is thought, that the construction and many advantages of the herein-described wood-joint, will be apparent to those 80 skilled in the art, and it will also be understood that the same is applicable in use in joining any two pieces of wood together.

Having thus described our invention, what we claim, and desire to secure by Letters Pat- 85 ent, is—

1. In a joint, the combination of the opposite members having holes or recesses formed in one side thereof, and diverging or receding from their meeting edges, and slots leading 90 from said holes to said meeting edges, and aligning, and a dowel key having a flat web adapted to register with the aligned slots, and opposite parallel beads at its edges adapted to wedge into the diverging or receding holes, 95 substantially as set forth.

2. In a wood joint, the opposite members or sections having circular holes formed in one side thereof, and diverging inwardly from their meeting edges, and short slots leading 100 from said holes to said meeting edges and aligning with each other, and a dowel key having a flat web adapted to register with the aligned slots, and opposite circular parallel

beads at its edges adapted to wedge into the diverging holes, substantially as set forth.

3. In a wood joint, the combination of the opposite members or sections having holes diverging from their meeting edges, and a dowel key joining said members or sections and having parallel beads wedging into said holes, substantially as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures to in the presence of two witnesses.

ELISHA J. FULGHUM. LORIN ROBERTS.

Witnesses:
O. C. MOFFATT,
ALICE. B. LINDLEY.