

(No Model.)

2 Sheets—Sheet 1.

E. F. WESTON.
METHOD OF MAKING PULLEY BLOCKS.

No. 438,666.

Patented Oct. 21, 1890.

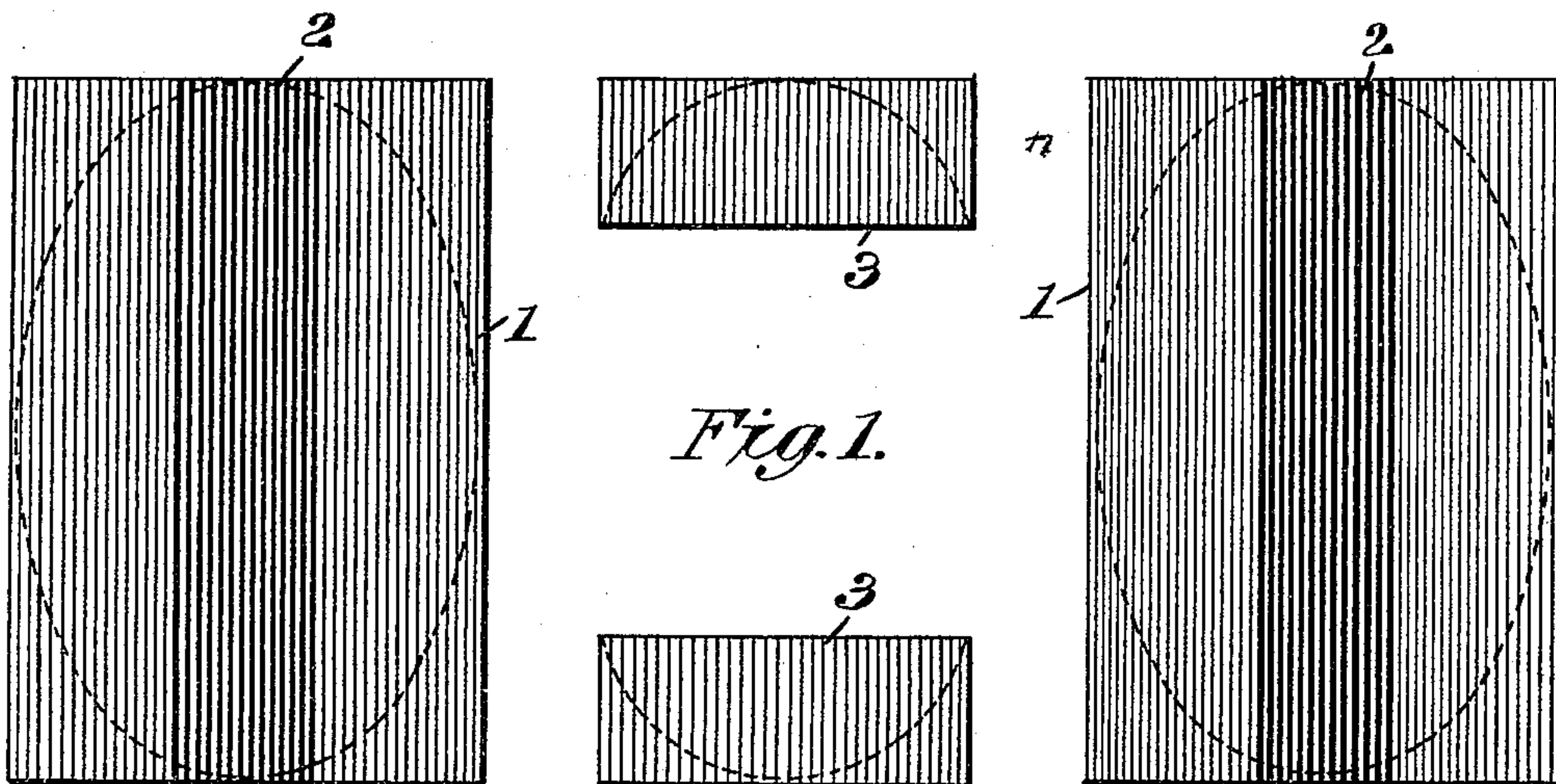
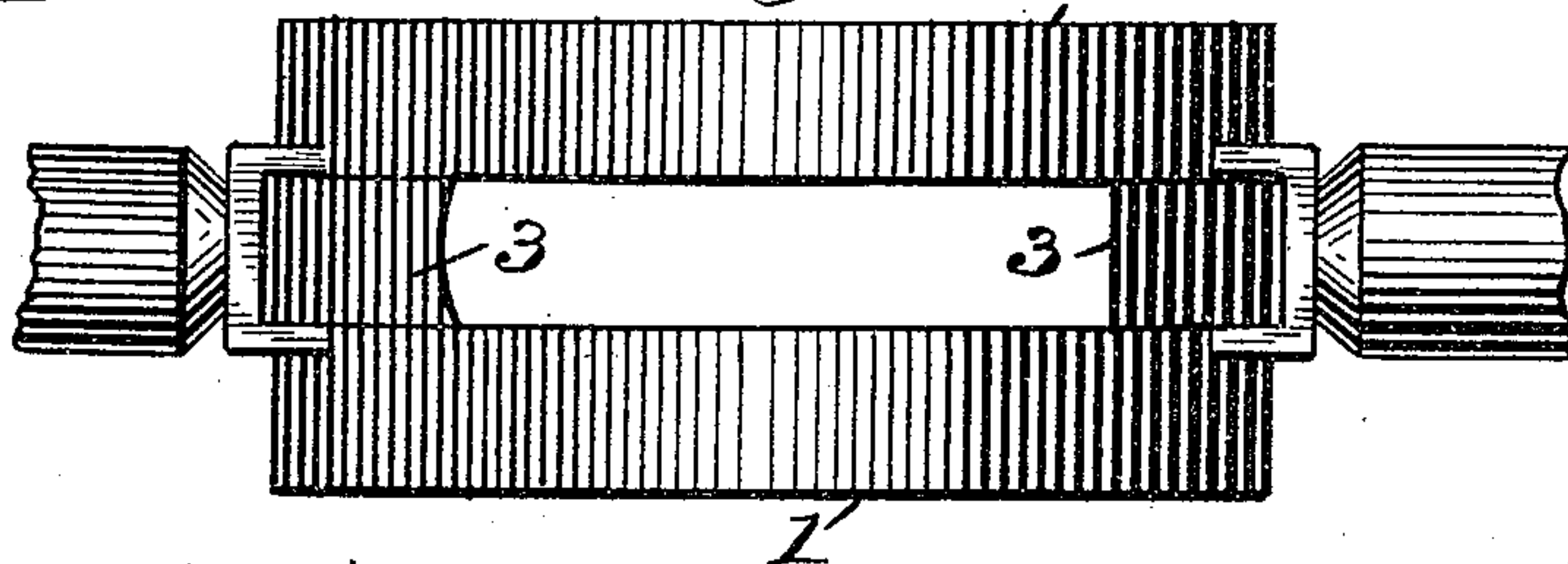
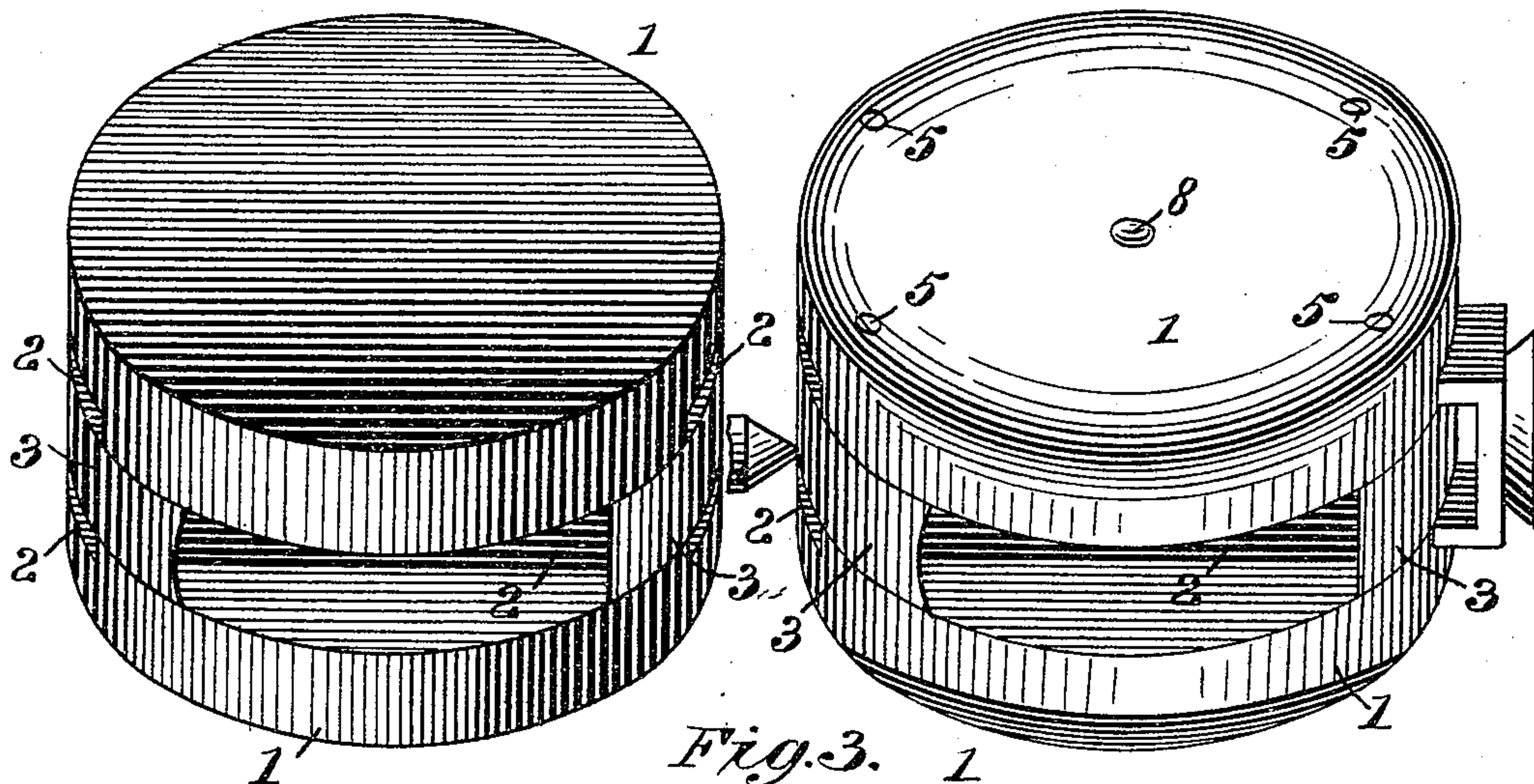


Fig. 2.

Fig. 4.



Witnesses
E. J. Tanner
W. J. Tanner.

Inventor
Ephraim F. Weston.
by his attorney
J. H. Hubbard.

(No Model.)

2 Sheets—Sheet 2.

E. F. WESTON.
METHOD OF MAKING PULLEY BLOCKS.

No. 438,666.

Patented Oct. 21, 1890.

Fig. 5.

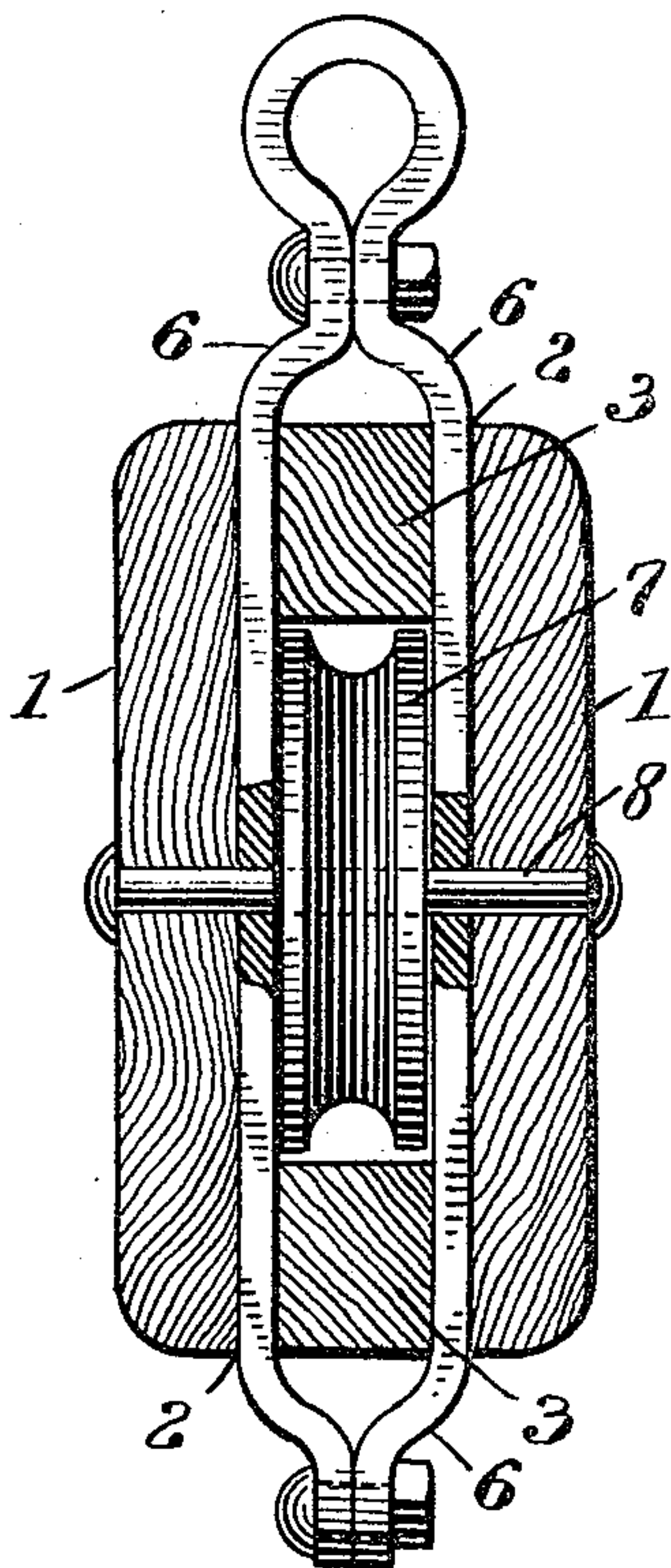
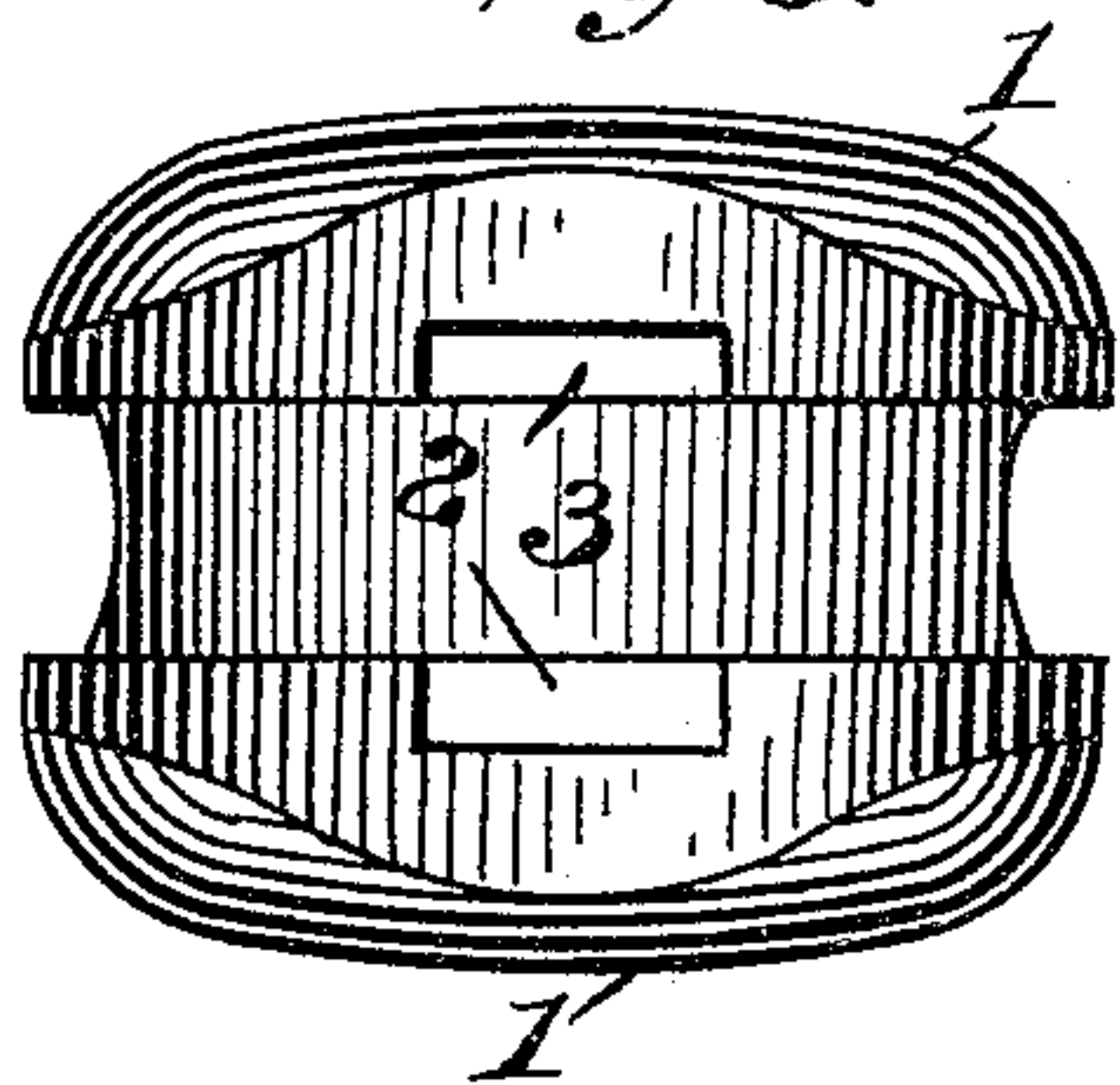


Fig. 6.



Witnesses
Wm. J. Tanner
C. J. Tanner

Inventor
Ephraim F. Weston
by his attorney
D. H. Hubbard

UNITED STATES PATENT OFFICE.

EPHRAIM F. WESTON, OF TORRINGTON, CONNECTICUT, ASSIGNOR TO THE UNION HARDWARE COMPANY, OF SAME PLACE.

METHOD OF MAKING PULLEY-BLOCKS.

SPECIFICATION forming part of Letters Patent No. 438,666, dated October 21, 1890.

Application filed May 26, 1890. Serial No. 353,148. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM F. WESTON, a citizen of the United States, residing at Torrington, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in the Method of Making Pulley-Blocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in the manufacture of pulley-blocks; but more particularly does it appertain to the construction and method of formation of the shell which forms a base, in which the sheave is journaled and adapted to revolve.

It is one of the principal objects of my invention to so construct this shell that the sheave shall be central relative thereto and the block thereby be perfectly balanced. Another object is to so arrange the shell that the insertion of the straps and the assembly of the completed block may be as simple as possible. Furthermore, by turning the shell while held by its ends I am enabled to leave the stock in the block-cheeks at about its original thickness where the fastening-pins pass through the shell.

In order that such persons as are skilled in the art to which my invention appertains may fully understand its operation, I will describe the same in detail, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 represents the four pieces of which the shell is made, the cheek-blocks being routed longitudinally for the purpose presently explained. Fig. 2 shows the pieces built up and sawed into the desired outline. Fig. 3 represents the shell of Fig. 2 supported by lathe-dogs for the purpose of shaping the exterior. Fig. 4 shows the shell after the turning operation. Fig. 5 is a vertical section through a finished block; Fig. 6, an end elevation of the turned shell.

Like numerals refer to the same parts in all the figures of the drawings.

As the first step in the construction of a

block in accordance with my invention, I take two pieces of wood, which presently form the cheek-blocks of the shell and are designated in the drawings by 1, and rout them, as at 2, by means of a suitable plane or routing-machine. When so routed, these blocks are separated by end blocks 3, so as to leave an open space for the accommodation of the sheave, the parts being glued firmly together in their assembled position. This structure is then cut into the shape shown at Fig. 2 by means of a saw. It will be observed that this sawed composite block has at each end two holes formed by the routed grooves in the cheek-blocks and the outer surfaces of the interposed end blocks. As the cheek-blocks were routed on the same router, these holes will comprise between them the longitudinal centers of the block, unless the end blocks vary in thickness, which should not be the case. Taking advantage of the location of these holes, the sawed blank is next supported either by two-pronged dog at each end, which is preferred, (see Fig. 3,) or by a dog and a co-operating center, as is shown at Fig. 4. While so supported the shell is turned by means of a Blanchard lathe or similar machine for turning irregular forms to the oval contour desired for its exterior surface. This turning operation produces two very beneficial results. In the first place, the cheek-blocks are reduced to exactly the same shape and thickness, so that the block is accurate and graceful in form, and, second, the ends of the cheek-blocks where the fastening pins or rivets pass through them are diminished in thickness only to a very small degree, so that their strength is substantially unimpaired.

After the formation of the shell, as hereinbefore set forth, the block is completed by the insertion of the straps 6 through the holes 2 and securing them and the mounting of the sheave 7 within the shell by means of a journal-pin 8, passed through the cheek-blocks and straps, and preferably headed down on its outside ends. The block may then be finished in any desired manner, as by painting or varnishing.

I claim—

1. The method of making pulley-block

shells, which consists in first routing the cheek-blocks, then assembling the pieces of the shell, and then turning the shell, using the strap-holes to center it, substantially as
5 set forth.

2. The method of making pulley - block shells, the same consisting in first routing the cheek-blocks, then assembling the composite shell, and then turning the same while centered longitudinally, substantially as specified.
10

3. The method of making pulley-blocks, the

same consisting in first routing the cheek-blocks for the accommodation of the straps, then building up the composite blank, then
15 shaping the outline of the block, and then turning the block while hung on its longitudinal centers, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EPHRAIM F. WESTON.

Witnesses:

ISAAC W. BROOKS,
JOHN N. BROOKS.