

(No Model.)

D. J. LORD.

DEVICE FOR FORMING THE INTERIOR OF WELLS.

No. 314,387.

Patented Mar. 24, 1885.

Fig. 1

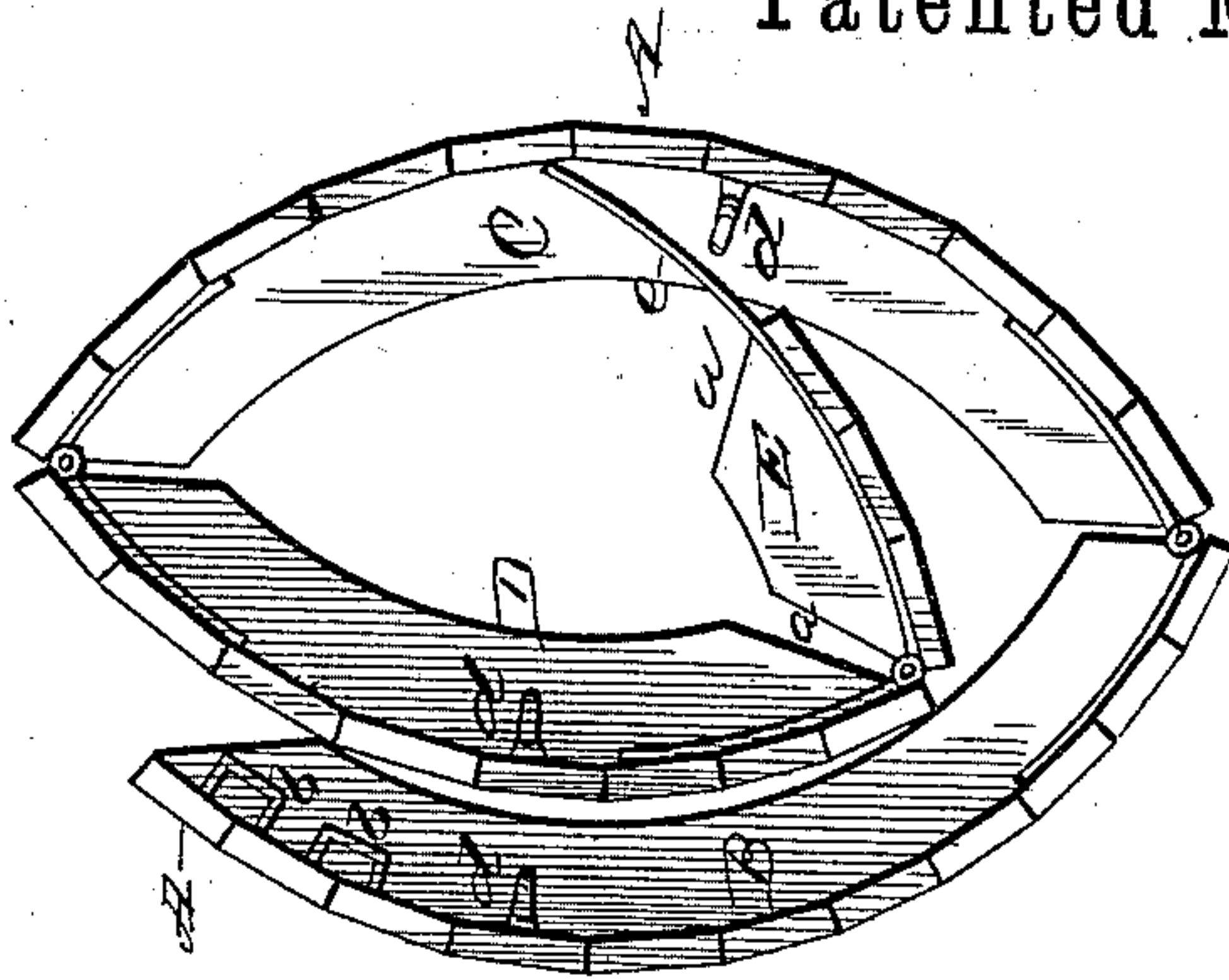


Fig. 2

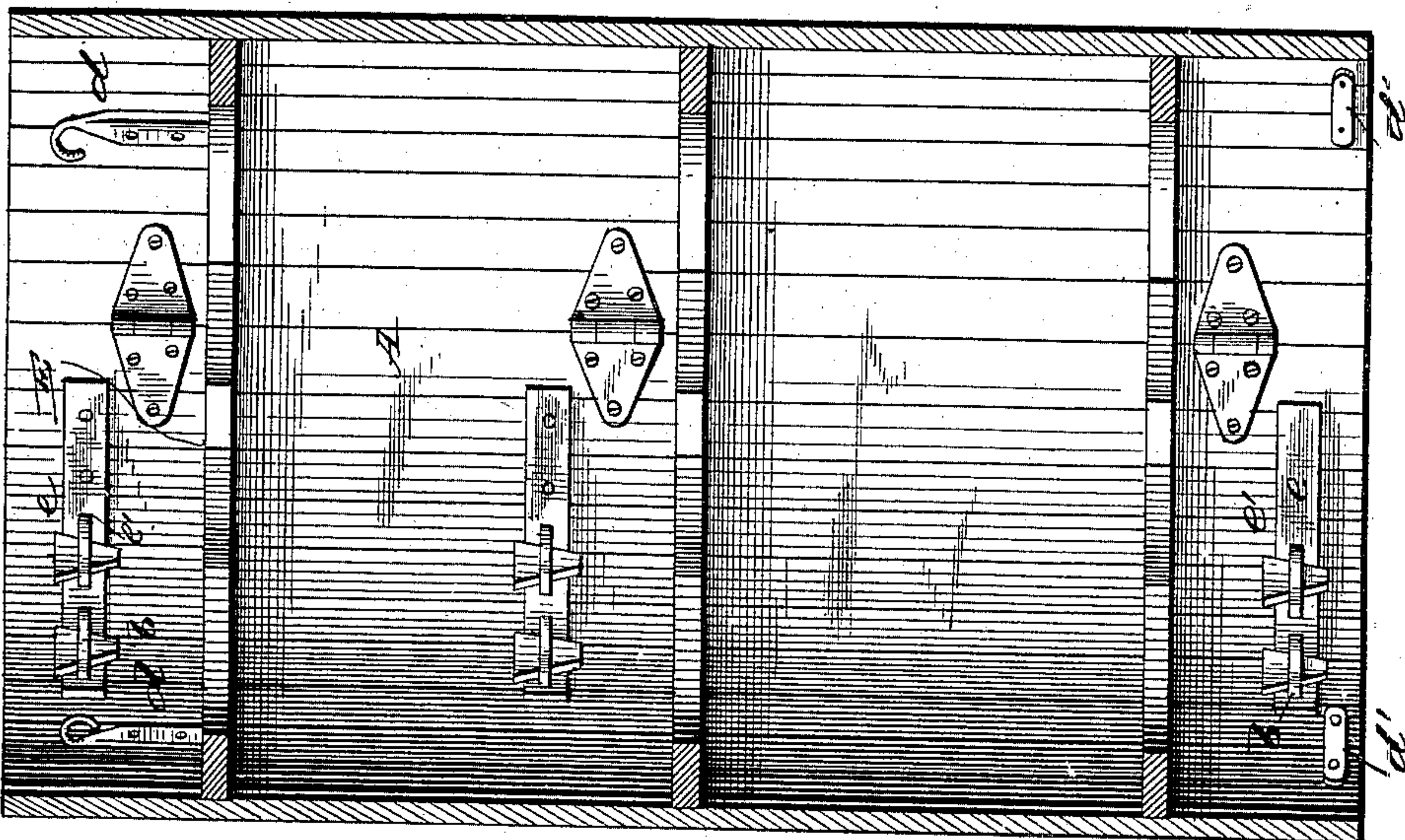
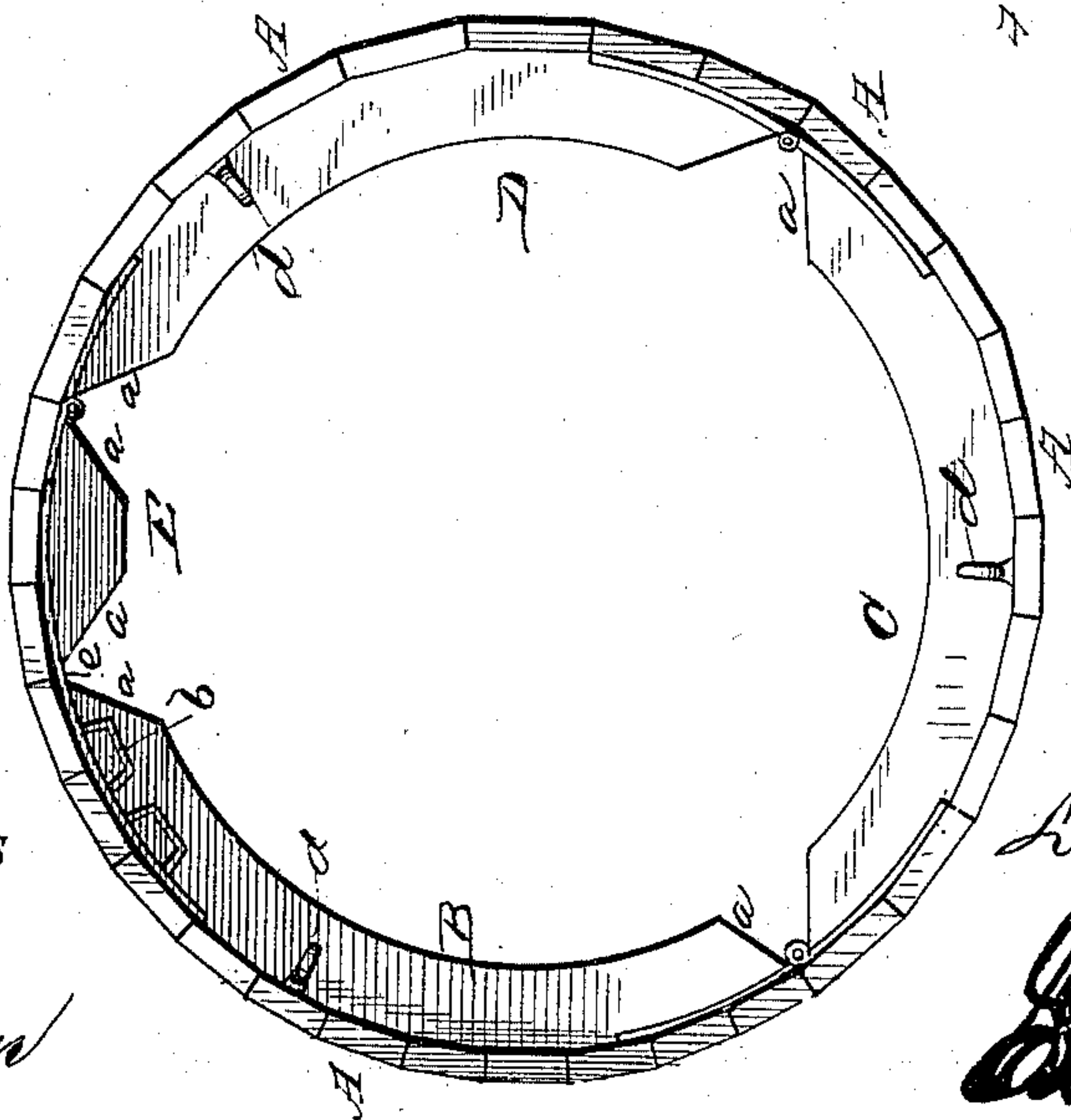


Fig. 3



WITNESSES
J. L. Ourand

E. W. Johnson

Dana J. Lord
INVENTOR

Attorney

UNITED STATES PATENT OFFICE.

DANA J. LORD, OF SOUTH FARMINGTON, WISCONSIN.

DEVICE FOR FORMING THE INTERIOR OF WELLS.

SPECIFICATION forming part of Letters Patent No. 314,387, dated March 24, 1885.

Application filed August 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, DANA J. LORD, a citizen of the United States of America, residing at South Farmington, in the county of Polk and State of Wisconsin, have invented certain new and useful Improvements in Devices for Forming the Interior of Wells; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in devices for assisting in the construction of wells; and it consists more especially in providing a means for placing the walls therein, and to this end my invention consists in a structure which is made up of longitudinal staves, which are attached at suitable intervals to segments, so that the structure may be folded upon itself, as will be hereinafter more fully set forth, and pointed out in the claim.

In the accompanying drawings, which illustrate my invention, Figure 1 is a plan view; Fig. 2, a sectional view. Fig. 3 is a plan view showing the parts folded upon themselves.

A represents a series of longitudinal slats, which are rigidly attached to segments B C D E, which segments are hinged to each other. These segments are of different sizes and have their ends beveled so that the parts may fold upon each other, so as to assume the position shown in Fig. 3. The beveled ends *a* of these segments may be hinged to each other, or the hinges may be located to one side of the segments, as shown in Fig. 2, and attached to the longitudinal staves. The sections E are provided with straps *e*, having openings *e'* through the same, through which pass the eyes *b*, which are secured at an opposite point upon the section B. The staves at their upper end are provided with hook-straps *d*, which serve as a means for attaching the device to a flexible connection or rope, when it is desired to lower or raise the same in a well. The staves at

their lower ends opposite the hooks *d* are secured to the adjoining staves by cleats *d'*.

From the foregoing it will be readily seen that I provide a collapsible cylinder, the parts of which when folded upon each other will occupy a space of less diameter than when folded and secured together to form a cylinder. The segments B C D E present rigid portions for the attachment of the staves without necessitating the connection of the staves to each other, as heretofore, and moreover, the arrangement, size, and beveled edges of the several segments are such that they serve to hold the different series of staves in relative rigid position when the device is collapsed, as shown in Fig. 3.

The manner of using my invention is as follows: After the well has been dug to the required depth, the device is lowered into the same in a folded position, as shown in Fig. 3, after which it is expanded, the straps *e* being passed over the eyes *b*, and wedges or other fastening devices inserted through the eyes to secure the parts to each other. The bricks are then laid between the earth sides of the well and the structure, and as the well is walled up the cylinder is raised. In this manner the walls are placed within the well, so as to provide a straight casing, and the earth is prevented from falling in while the bricks are being laid.

I claim—

In combination with a series of different sized segmental braces tapered at their inner ends, a series of longitudinal staves attached to the braces, and hinges and securing means for attaching the different sections to each other, so that they can be folded, causing the adjacent edges to contact and thereby brace the several series in their relative positions when the structure is collapsed, substantially as shown.

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

DANA J. LORD.

Witnesses:

JOHN L. ANDERSON,
EMILY COMBACKER.