

No. 657,754.

Patented Sept. 11, 1900.

R. W. BAYLOR, Dec'd.

M. C. BAYLOR, Executrix.

BARREL.

(Application filed Aug. 12, 1897.)

(No Model.)

Fig. 1.

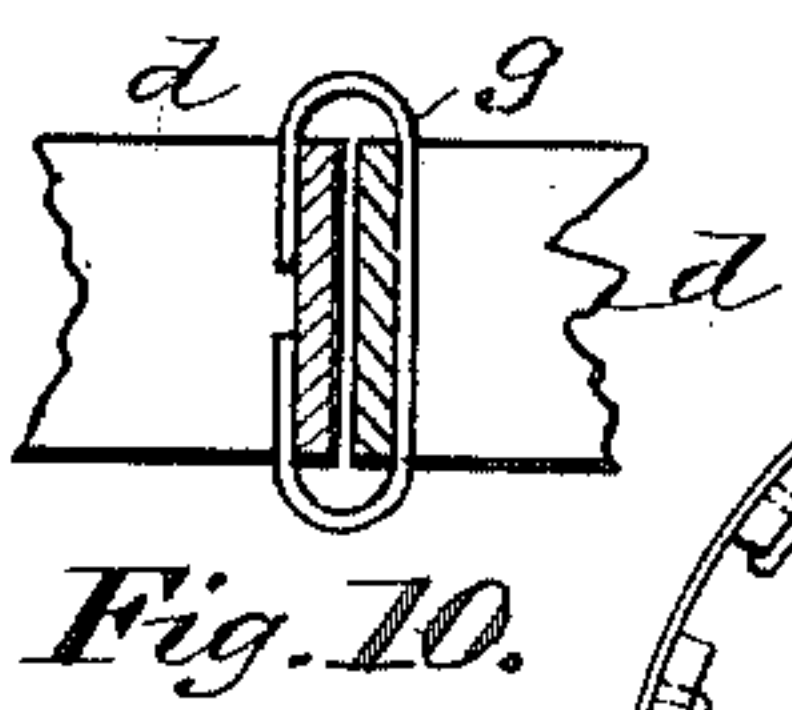
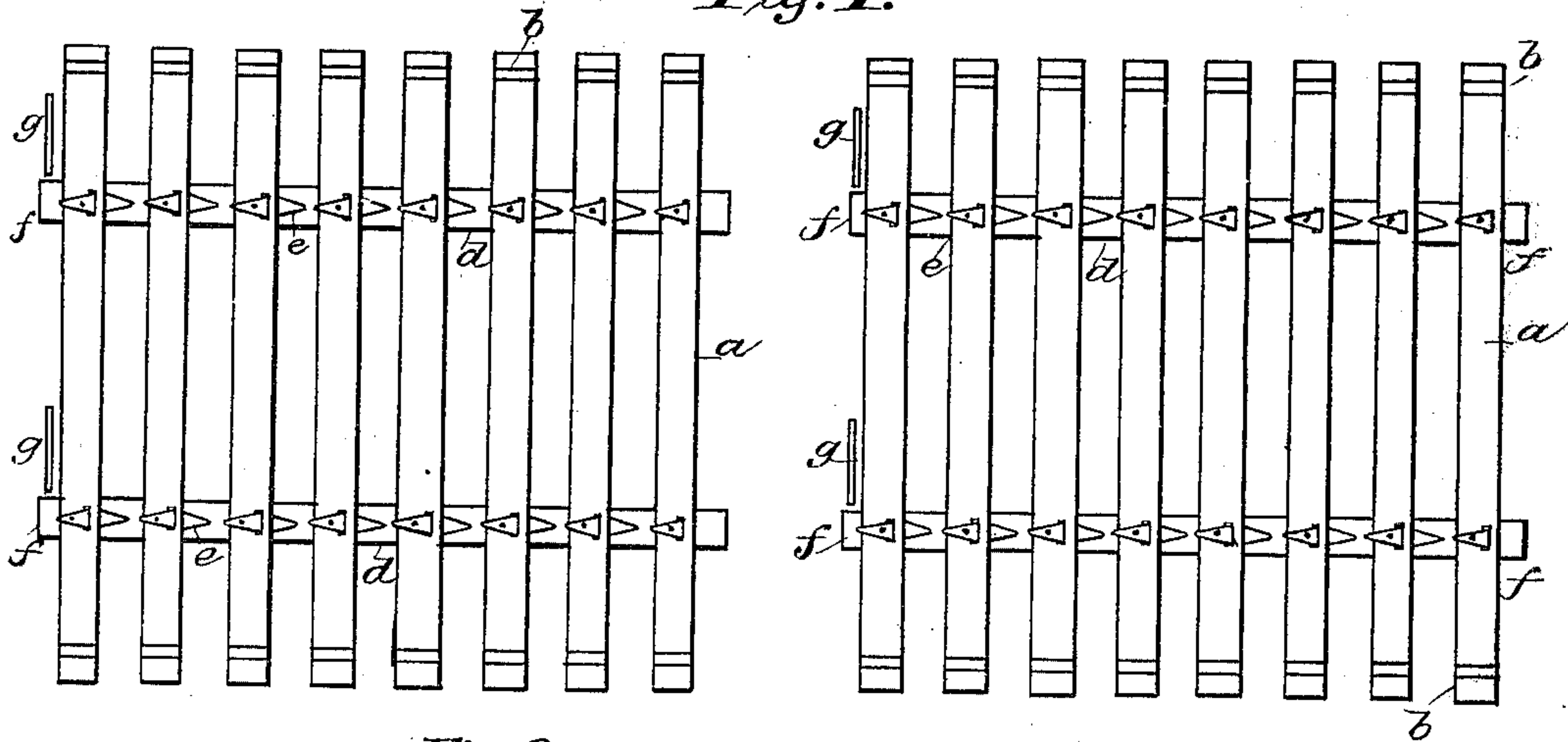


Fig. 2.

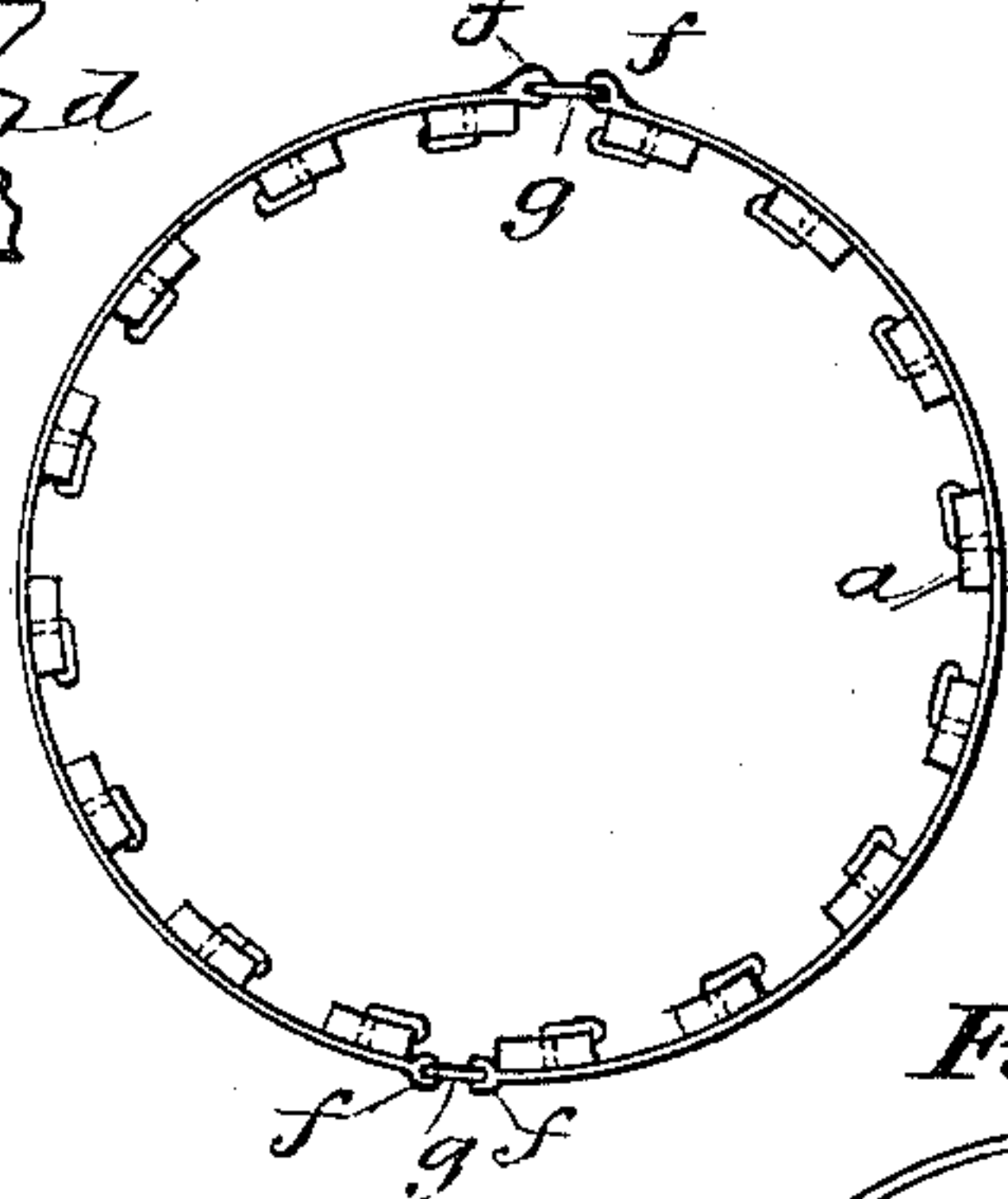


Fig. 3.

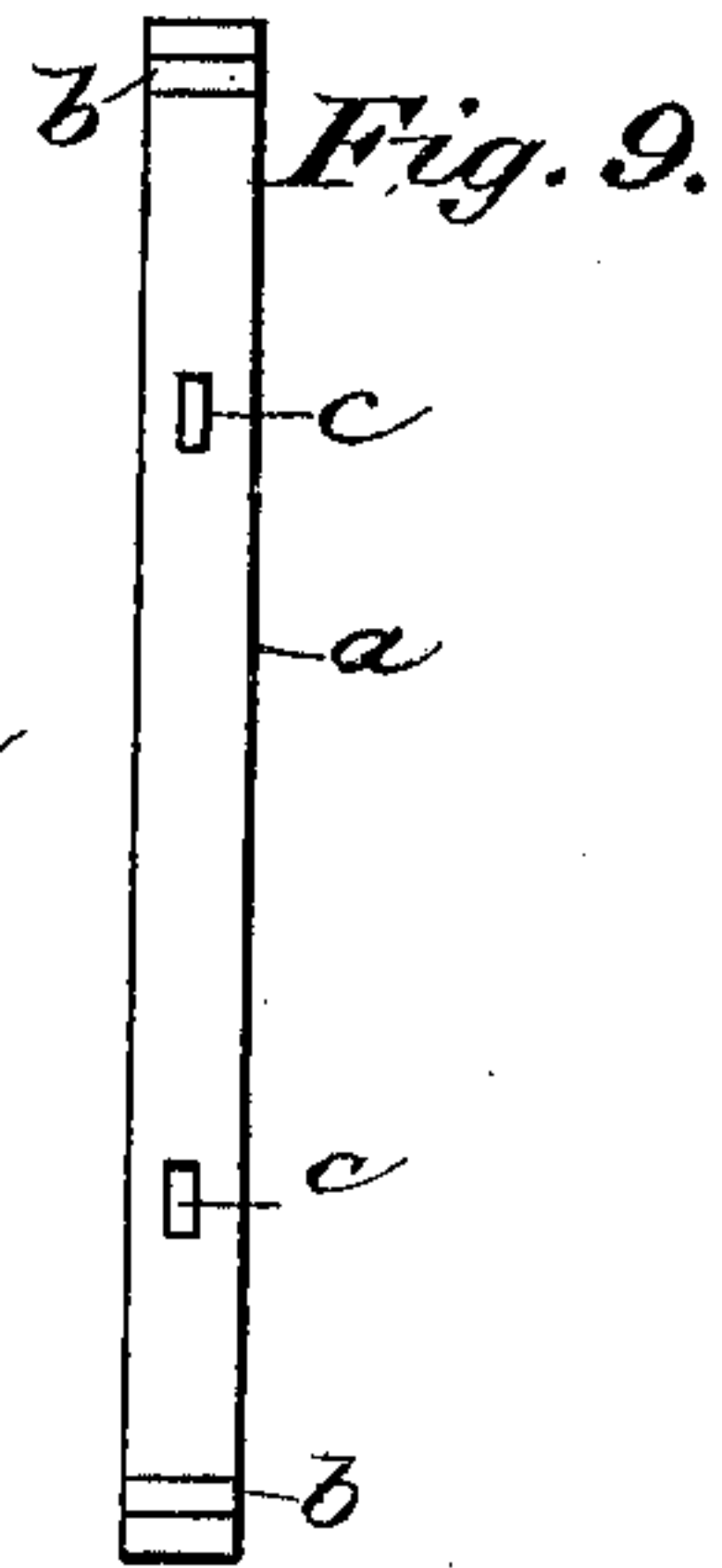
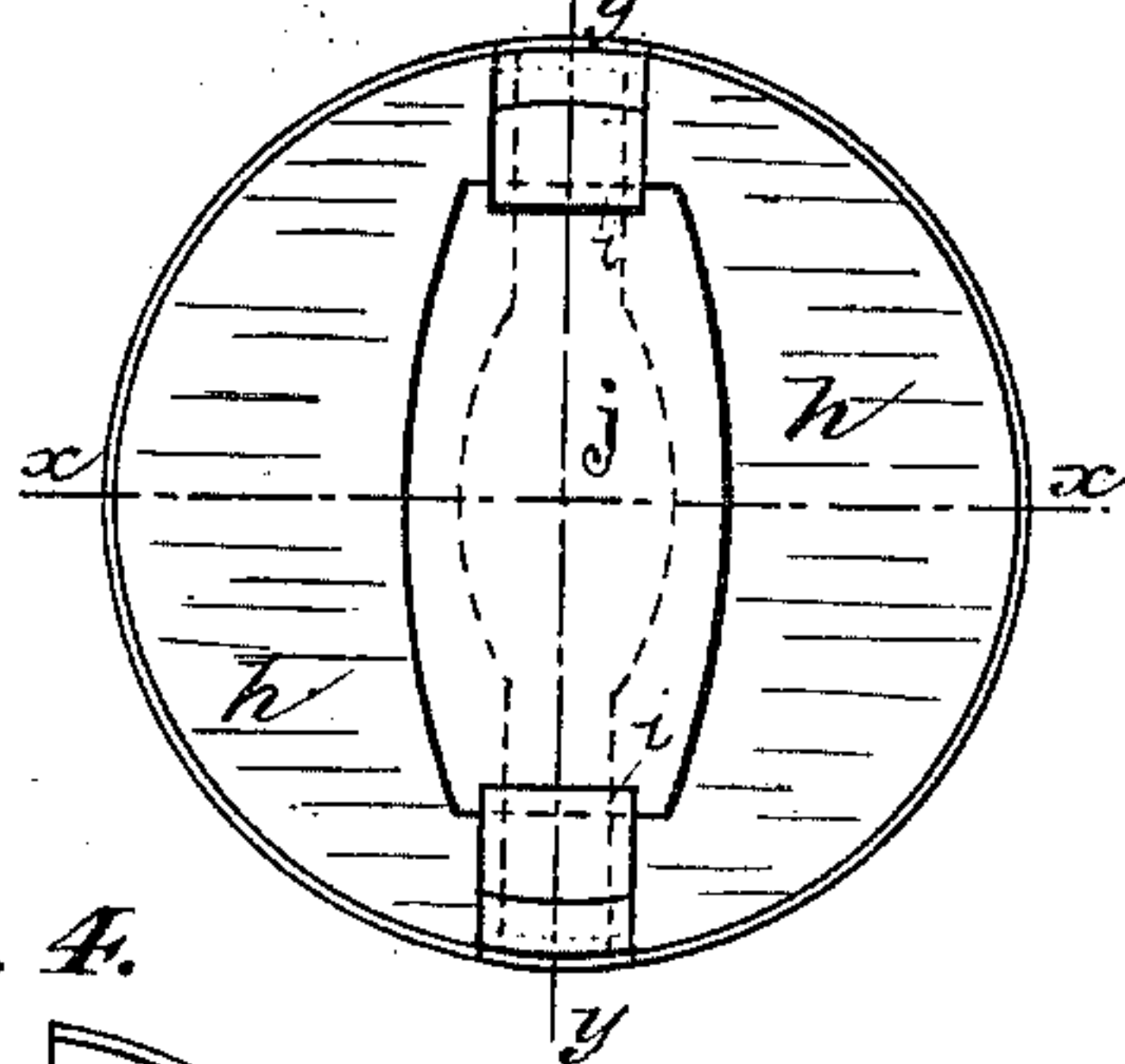


Fig. 4.

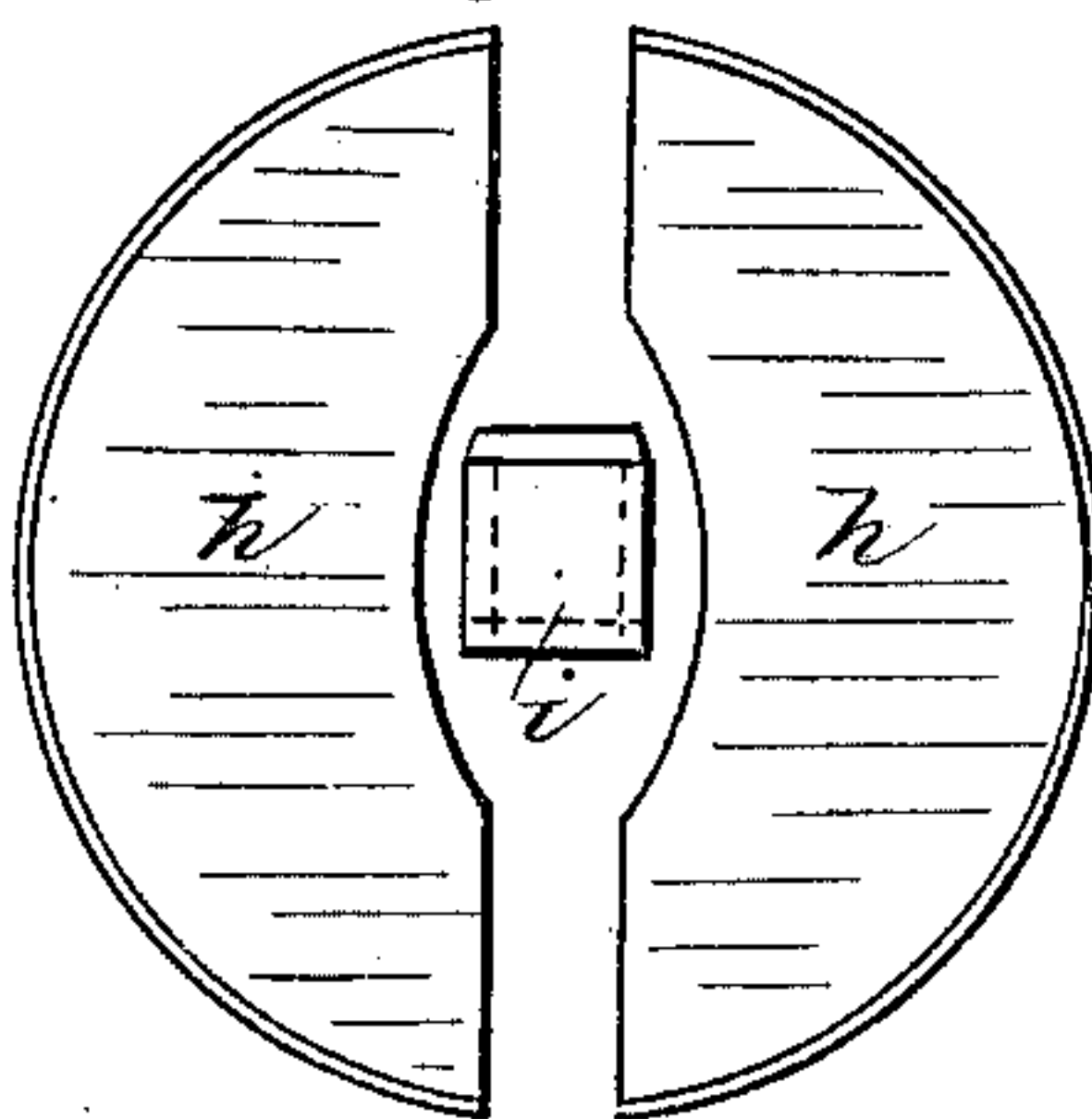


Fig. 5.

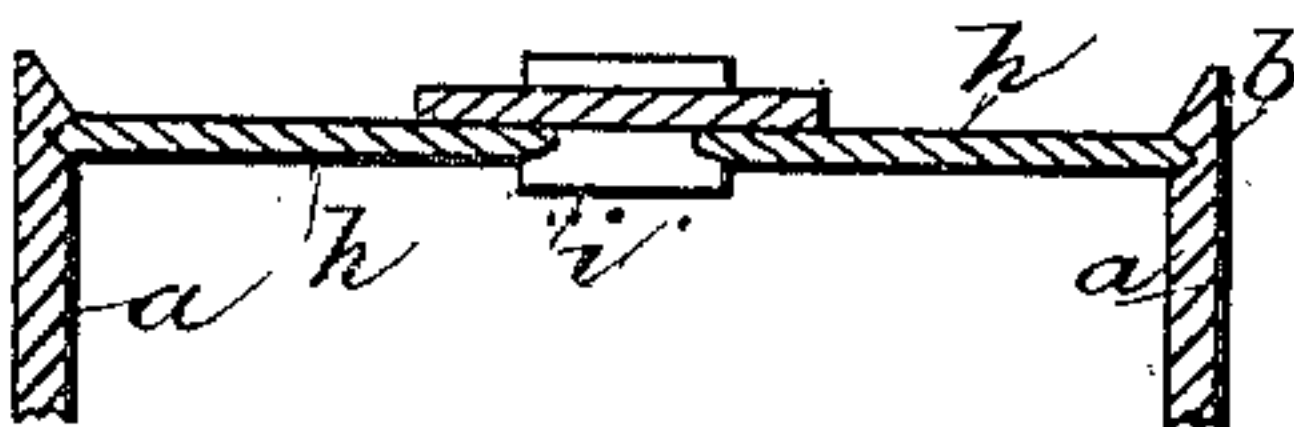


Fig. 6.

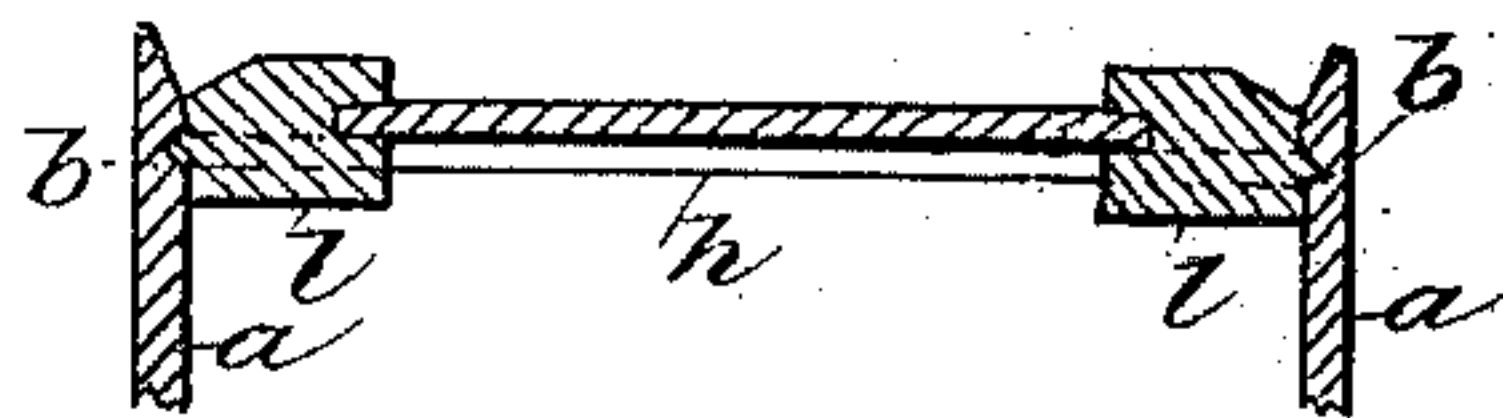


Fig. 8.

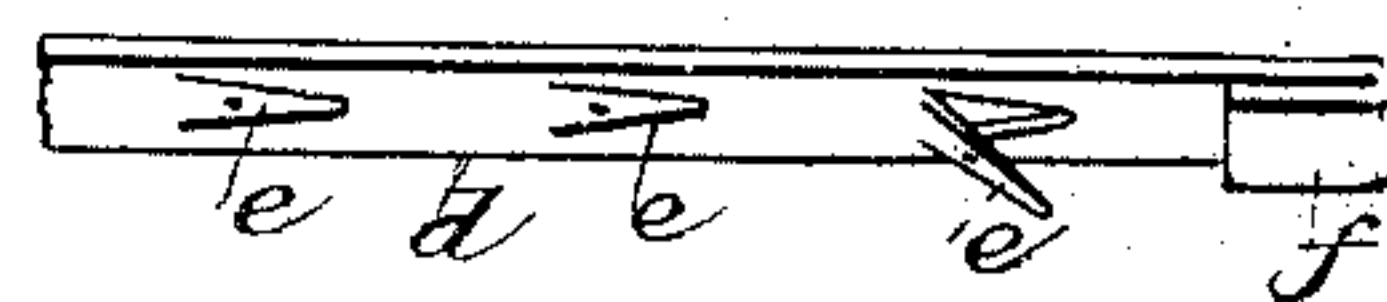
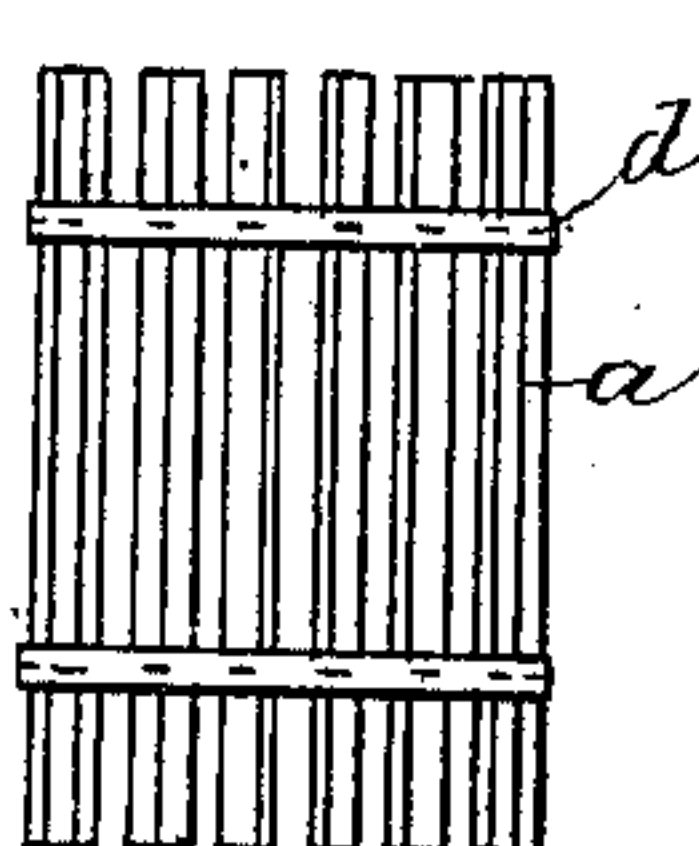


Fig. 7.



Fig. 11.



Witnesses:

*F. C. Barry*  
*C. E. Duffy*

Inventor:

*R. W. Baylor*  
of *Ad. Baylor*  
By *C. E. Duffy*  
Attorney.



# UNITED STATES PATENT OFFICE.

MARY C. BAYLOR, OF ATLANTIC CITY, NEW JERSEY, EXECUTRIX OF  
ROBERT W. BAYLOR, DECEASED.

## BARREL.

SPECIFICATION forming part of Letters Patent No. 657,754, dated September 11, 1900.

Application filed August 12, 1897. Serial No. 648,086. (No model.)

*To all whom it may concern:*

Be it known that I, MARY C. BAYLOR, of Atlantic City, in the county of Atlantic and State of New Jersey, (executrix of the estate of ROBERT W. BAYLOR, deceased,) say that the said ROBERT W. BAYLOR has heretofore invented certain new and useful Improvements in Barrels; 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 part of this specification.

This invention relates to certain improvements in knockdown barrels or crates.

One object of the invention is to provide an improved crate or barrel very cheap, simple, and durable in construction, which can be easily and quickly constructed or built, and also quickly knocked down and packed in a small space for storage and transportation.

A further object of the invention is to provide an improved barrel-head very cheap, simple, and easily put together. The parts are firmly and rigidly fitted in the croze-grooves, and yet in such a manner that the heads can be easily removed and replaced.

A further object of the invention is to provide an improved sectional barrel-head in which is formed a central hand-hole for access to the interior of the barrel and means for closing said hand-hole, which means forms a section of the barrel-head when in position.

The invention consists in certain novel features of construction and in combination of parts, more fully described hereinafter and particularly pointed out in the claim.

Referring to the accompanying drawings, Figure 1 is a detail elevation showing the staves and hoops detached and straightened before being rolled and secured to form the cylindrical barrel. Fig. 2 is an end view of a barrel without its head. Fig. 3 is a plan view of the improved head closed. Fig. 4 is a plan view of the section of a barrel-head separated, showing one of the expanding or locking blocks about to be inserted between the sections to expand the same into the croze-

grooves of the staves. Figs. 5 and 6 are sectional views taken, respectively, in the planes of lines  $xx$  and  $yy$ , Fig. 2. Fig. 7 is a detail perspective view of one of the expanding-blocks. Fig. 8 is a detail perspective of a section of the improved hoop. Fig. 9 is a view in elevation of a stave. Fig. 10 is a detail sectional view illustrating the manner of fastening together the ends of the hoop-sections. Fig. 11 is a view of the barrel in elevation.

In the drawings the reference-letter  $a$  indicates the staves, having the croze-grooves  $b$  at the inner sides of their ends and also having the transverse slots or openings  $c$  near their ends. The croze grooves and slots of course are correspondingly located in all the staves of a barrel, so that the staves will not project unevenly at the ends of the barrel.

The reference-letter  $d$  indicates the hoops. These hoops are formed of metal bands or straps having the metal tongue  $e$  cut therein at suitable intervals. These tongues are formed or stamped by angular cuts extending longitudinally of the hoop, as more clearly shown in Fig. 8, and the tongues are then bent inwardly. The distance between the staves is regulated by the distance between these tongues.

In building the barrel two hoops are usually employed and each stave is placed on the hoops, with the bent-up tongue extending through the respective openings  $e$  in the staves. The ends of the tongues are then bent down on the inner faces of the staves, with the points thereof bent down on the sides thereof, as shown, thereby most firmly and securely fastening the staves to the hoops in a very durable and economical manner. The ends of the hoops are reinforced and bent to form hooks or eyes  $f f'$ , and the ends of the hoops are secured together by pins or wire loops  $g$ , passed through one hook and having its end bent over into the other hook to be locked thereto. Of course it is evident that any suitable means for securing the ends of the hoops together can be employed. When it is desired to knock down the barrel, the wires or pins  $g$  can be easily cut. They are usually and preferably formed in two sec-



tions, as shown; secured together at the ends, as indicated. By having the hoops in sections they can be easily bent to form the cylindrical barrel and can be easily straightened out and packed.

The barrel-heads are formed in two sections *h*, each section having the central portion of its inner edge recessed or cut in, as shown, to form hand-holes for access to the interior of the barrel.

*i i* indicate expanding-blocks, which are inserted between the sections of the heads at the enlarged central or hand-hole portions thereof and force the sections apart and their outer edges into the croze-grooves of the staves and firmly hold them in this position. When the heads are to be removed, the blocks are forced to the central portion of the head and withdrawn at said hand-hole or central opening. These blocks have edge grooves *i'*, which fit the inner edges of the sections of the head, and the outer edges of the blocks are beveled to fit the croze-grooves of the staves at the ends of the openings between the sections of the heads. The rear ends of the expanding-blocks are also provided with grooves *i''* on a higher plane than the groove *i* for the reception of the plate which covers the hand-hole and which plate forms a section of the barrel-head.

*j* indicates a locking and hand-hole plate which is inserted between the two blocks of each head in the grooves *i'* thereof after the said blocks have been forced home to completely expand and secure the head. This locking hand-hole piece can be removably secured in position by suitable means.

It is evident that the heads described can be easily removed when desired and that they

can be packed in a small compass and can be easily and quickly inserted.

The entire structure is simple, cheap, and durable and easily operated to knock down or build. Of course it is evident that the barrel can be provided with any desirable number of hoops.

It is evident that various changes might be made in the forms, constructions, and arrangements of the parts described without departing from the spirit and scope of the invention. Hence it is not desired to limit the invention to the precise construction herein set forth.

Having fully described the invention, what is claimed as new, and desired to be secured by Letters Patent of the United States, is—

In a knockdown barrel, the combination of the hoops provided with metal tongues *e*, and connected at their ends by wire loops, the staves provided with slots *c*, adapted to receive said tongues, the barrel-heads adapted to receive expanding-blocks, provided with edge grooves which fit the inner edges of said barrel-heads, beveled to fit the cross-grooves of the staves, and also provided at their rear ends with grooves, on a higher plane than the side grooves for the reception of the locking-piece, substantially as described.

In testimony that I claim the foregoing as the invention of the said ROBERT W. BAYLOR I hereto append my signature as executrix in the presence of two witnesses.

MARY C. BAYLOR,  
*Executrix of Robert W. Baylor, deceased.*

Witnesses:

ALLEN B. ENDICOTT,  
E. A. HIGBEE.