

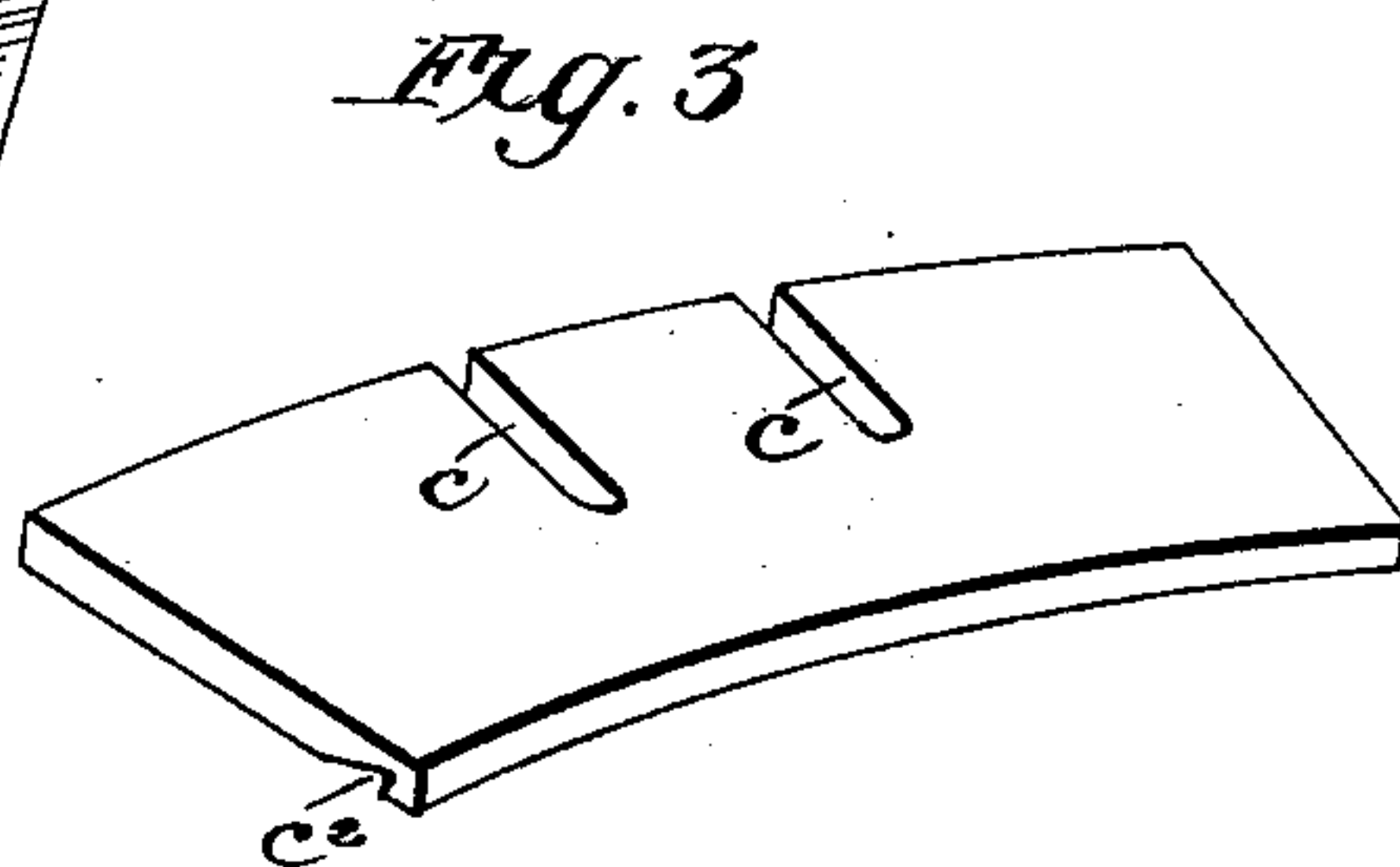
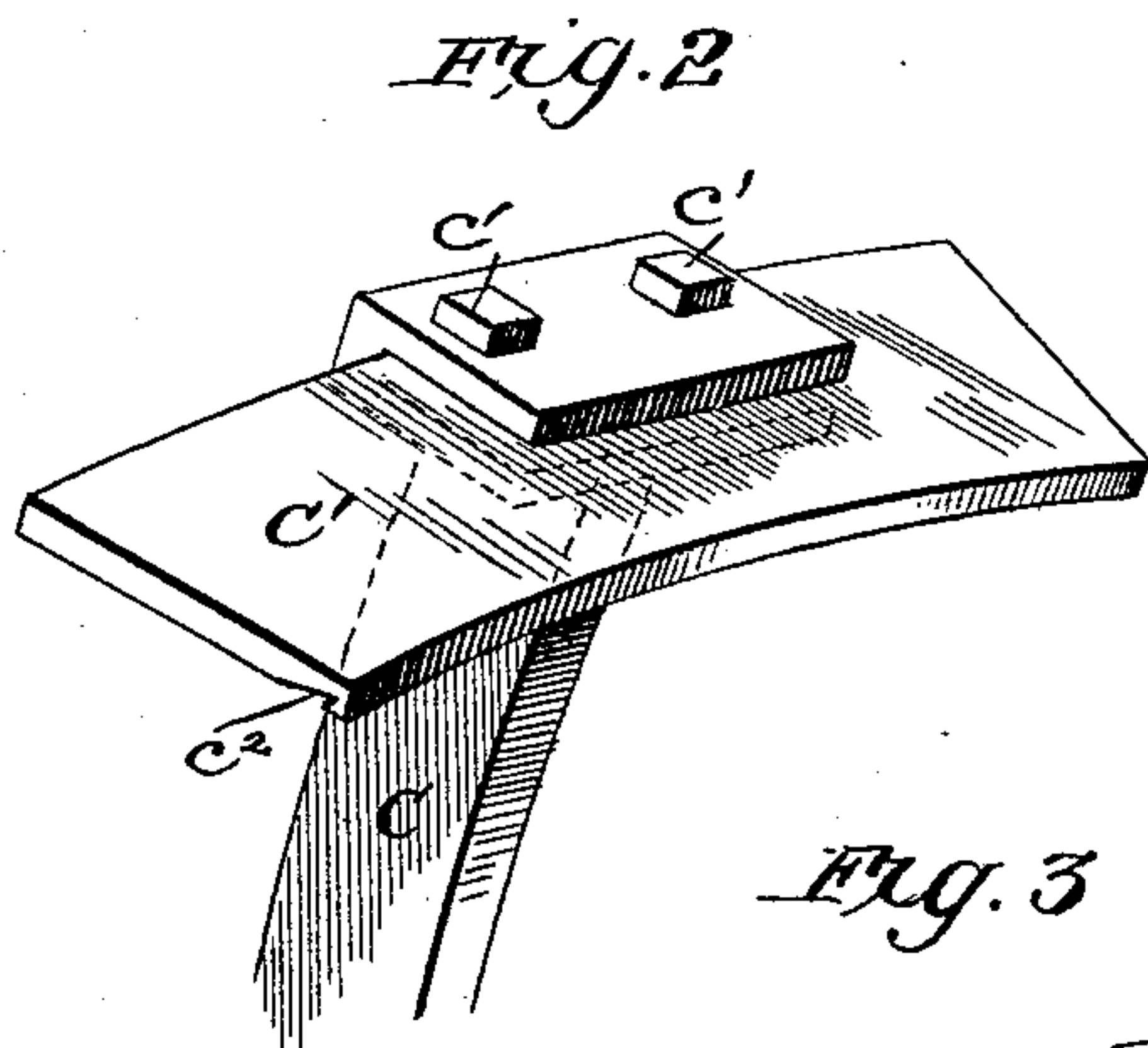
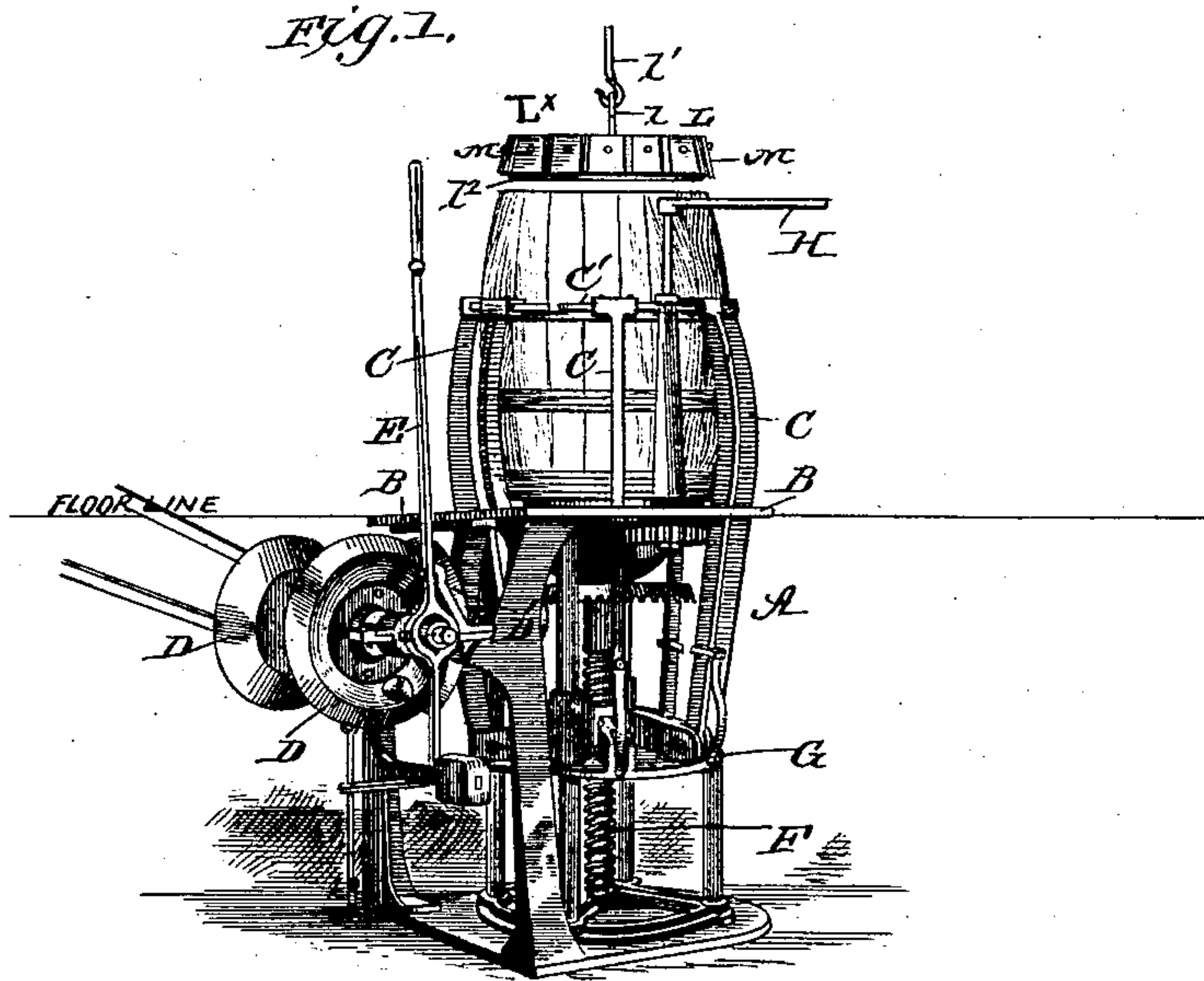
(No Model.)

2 Sheets—Sheet 1.

M. ROSENOW.
BARREL HOOPING MACHINE.

No. 453,917.

Patented June 9, 1891.



WITNESSES:

Fred G. Dieterich
Jos. A. Ryan

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Max Rosenow.

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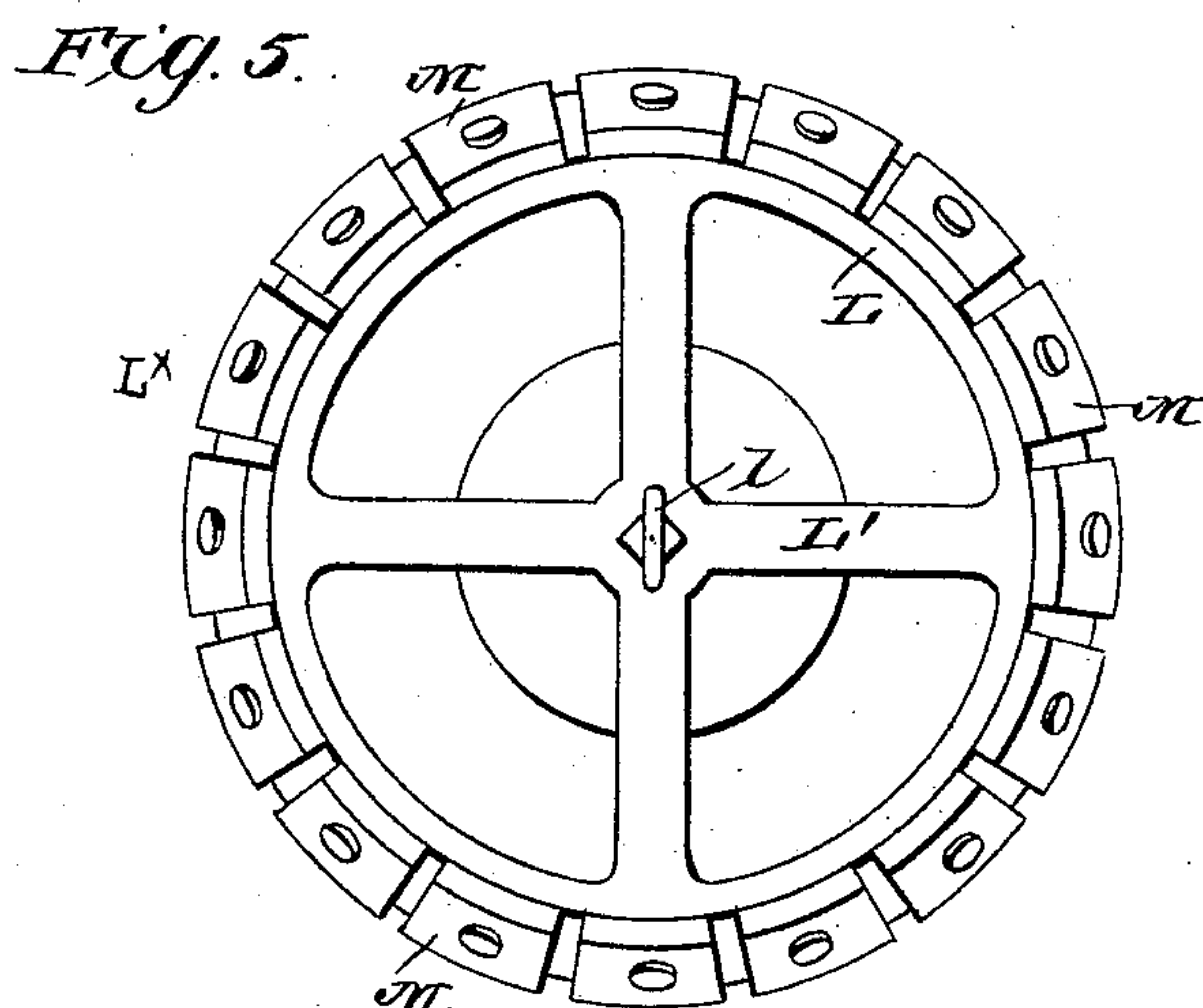
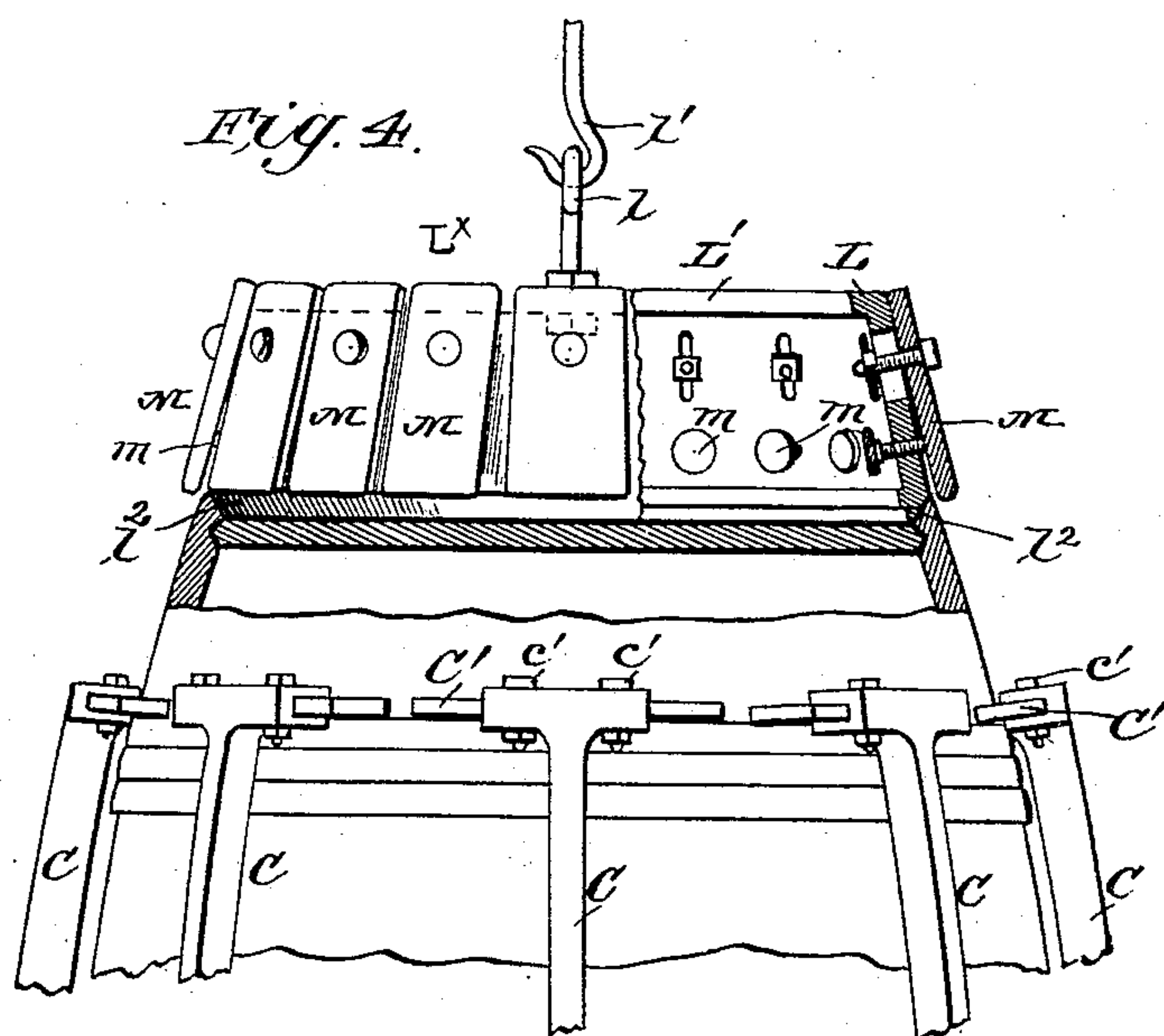
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UNITED STATES PATENT OFFICE.

MAX ROSENOW, OF PEORIA, ILLINOIS.

BARREL-HOOPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 453,917, dated June 9, 1891.

Application filed October 29, 1890. Serial No. 369,750. (No model.)

To all whom it may concern:

Be it known that I, MAX ROSENOW, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Barrel-Hooping Machines, of which the following is a specification.

My invention has for its object to provide certain attachments for the ordinary iron-hoop driving or trussing machine whereby the same can be readily adapted for the use of driving wooden hoops on barrels.

It has also for its object to provide suitable means whereby the chine or head hoops can be the more effectually placed on the barrel without the danger of crushing or breaking the same.

To this end my invention consists in the novel features of construction and peculiar combination of parts, all of which will hereinafter be fully described in the annexed specification, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the ordinary trussing or thin-iron-hoop-driving machine with my improvements applied and shown in operative condition. Fig. 2 is a detail perspective view of one of the driving-arms with the hoop-pushing segment attached. Fig. 3 is a detail perspective view of one of the segments detached. Fig. 4 is a side view of the upper portion of the driving-arms, the barrel, and the tub-shaped guide and support, showing same in position for driving the chine or head hoops, parts of the barrel and tub-shaped guide being in section. Fig. 5 is a detail view of the tub-shaped guide, hereinafter specifically referred to.

In the accompanying drawings, A indicates an iron-hoop driving or trussing machine, which may be of any of the well-known constructions, preferably of the kind shown, in which B indicates the floor or bed plate, C the vertically-movable and laterally-swinging hoop-pusher arms, D D D' the friction-pulleys, E the shifting-lever by means of which the pulleys D are set to run the pulley D' in reverse directions, F the feed-screw, G the follower, and H the spreading-lever for adjusting the arms outward, all of which, being

of the ordinary and well-known construction, need not be further specifically referred to.

Upon the upper ends of the arms C (of which there are preferably eight in number) are detachably secured the segmental plates C', said plates being also arranged for adjustment to or from the barrel by providing the same with the slots *c c* in their outer edge, through which pass the holding-bolts *c' c'*, as most clearly shown in Fig. 2 of the drawings.

The under face of each of the plates C is formed with an arc-shaped groove or recess *c²*, which serves to form a grip-bearing for the hoops when the said arms are adjusted over such hoops. Said groove may, however, be dispensed with, if desired, and the arms bear with their lower flattened edge against such hoops. By reference to Fig. 1 of the drawings it will be observed that the said segmental plates are extended laterally from the arms C some distance, and the inner ends of such plates are curved approximately parallel to the curve of the barrel, such plates thereby forming almost a true circle about the barrel when drawn together by the operation of the machine, and at the same time providing a large bearing-surface against the wooden hoops and avoiding the possibility of crushing or snapping them, which would be the case were the ordinary pusher-plates used, which are employed for pushing iron hoops on the barrels.

So far as described the machine is operated as follows: The bilge or center hoops are first slipped over the head of the barrel, the arms with the plates are adjusted inward, the plates C' taking hold on top of each hoop. The operator then shifts the lever D and causes the arms to pull the hoop down to its desired position. Then by operating the lever E the arms are relaxed, the friction-pulleys again shifted so as to carry the arms up, when they are again set to engage the next succeeding hoop, said operation being repeated until the upper series of the bilge-hoops are in position. After the first or upper set of bilge-hoops have been drawn in place, the upper set of chine or head hoops are forced on the end of the barrel, and to render such operation simple, effective, and without the danger of breaking the hoops, I employ the device

most clearly illustrated in Figs. 4 and 5, which serves as a re-enforce for the upper end of the barrel and a guide for the hoops as they are placed over same to be pushed into position by the arms C. By reference to the said Figs. 4 and 5 it will be seen that said device consists of an inverted tub-like frame L^x , formed of an annular ring L, connected at its upper end with the skeleton cross-frame L' , provided centrally with a lifting-eye l , whereby the same may be conveniently raised by means of a hooked arm l' , lifted in any desired manner. The lower end of the ring L is beveled inwardly at l^2 to conveniently fit the beveled upper edges of the barrel-staves. Upon the outer face of the ring L a series of spring-plates M are adjustably secured at their upper ends, the lower ends of such plates projecting over the beveled edge of the ring L, said lower ends of the spring-plates being adjusted outward by means of the set-screws $m m$, as shown. After the upper bilge-hoops have been forced in place the metal tub-shaped device L^x is placed on the upper end of the barrel, the ends of which fit between the bevel l^2 and the ends of the spring-plates M. The head hoops are then slipped over the end of the tub L and the arms C brought in operation as before, the spring-plates M standing all pressure of the said arms, thus protecting the ends of the barrels and forming a solid support for the hoops. After the upper-head hoops are forced in place the barrel is reversed and the operation of the machine repeated, as before.

Having thus described my invention, what I claim as new is—

1. An improvement in barrel-hooping machines, consisting of the tub-shaped device L^x , formed of an annular cone-shaped ring L,

a series of spring-plates M, secured for vertical adjustment at their upper ends to the ring L, the lower ends of the spring-plates arranged to project beyond the base of the ring L, and means for adjusting such lower ends outwardly, substantially as and for the purpose described.

2. The tub-shaped device L^x , formed of a cone-shaped ring L, having a lower inwardly-beveled edge l , a skeleton-frame connection on its inner face formed with a lifting-hook, a series of spring-plates M, adjustably secured at their upper ends to said ring L, their lower ends projected beyond the outer edge of the barrel, substantially as and for the purpose described.

3. The tub-shaped device L^x , formed of an annular cone-shaped ring L, formed with an inwardly-extending flange, a lifting-hook secured to said tub, a series of spring-plates adjustably secured at their upper ends to the said ring L, and means for adjustably forcing the lower ends of such plates outward, substantially as and for the purpose described.

4. The combination, with the hooping-machine A, formed with a series of vertically-movable and laterally-swinging arms C C, having laterally-extended segmental plates at their upper ends arranged to engage the hoops and pull them down, of the tub-shaped device consisting of an annular cone-shaped ring L, a series of spring-plates M on its outer face, said device adapted to fit on the upper edge of the barrel and form a guide-support for the head-hoops as they are drawn down by the arms C C, substantially as set forth.

MAX ROSENOW.

Witnesses:

MAX. H. RITZWOLLER,
G. H. WYMOND.