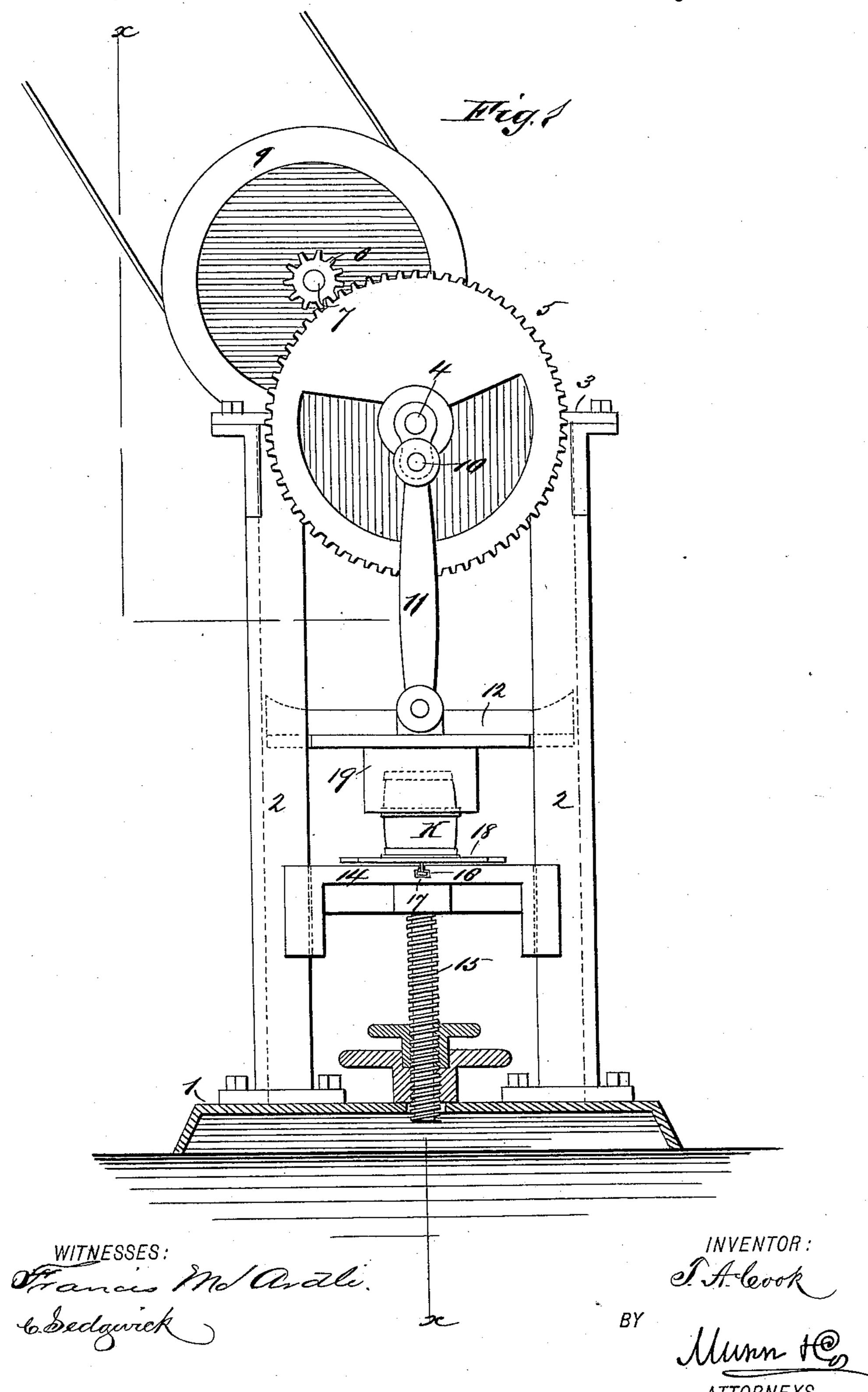
T. A. COOK.

MACHINE FOR HOOPING AND HEADING KEGS.

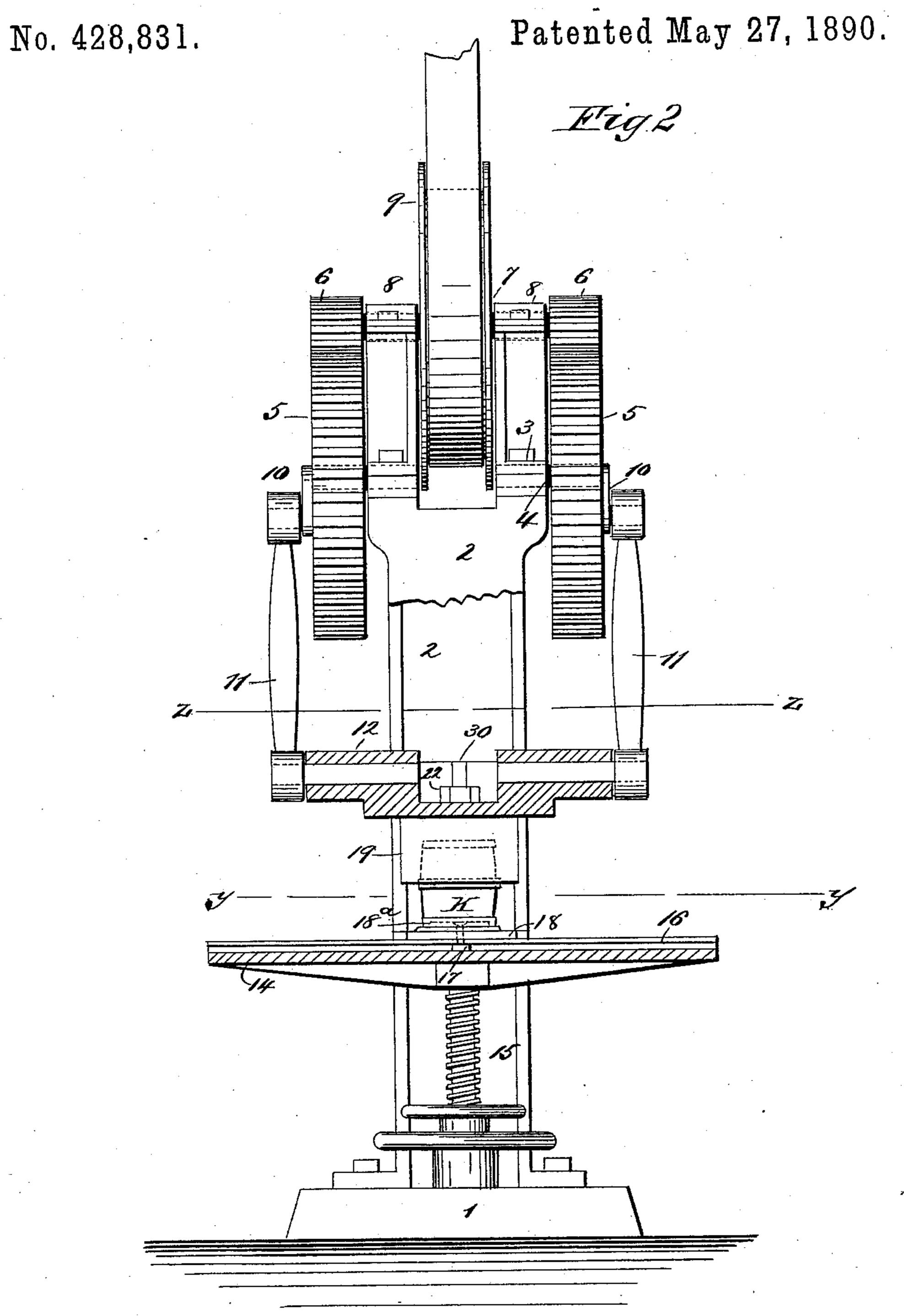
No. 428,831.

Patented May 27, 1890.



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WITNESSES: OF Ma Cartle Co. Sedgwick INVENTOR: I.A.Cook

BY

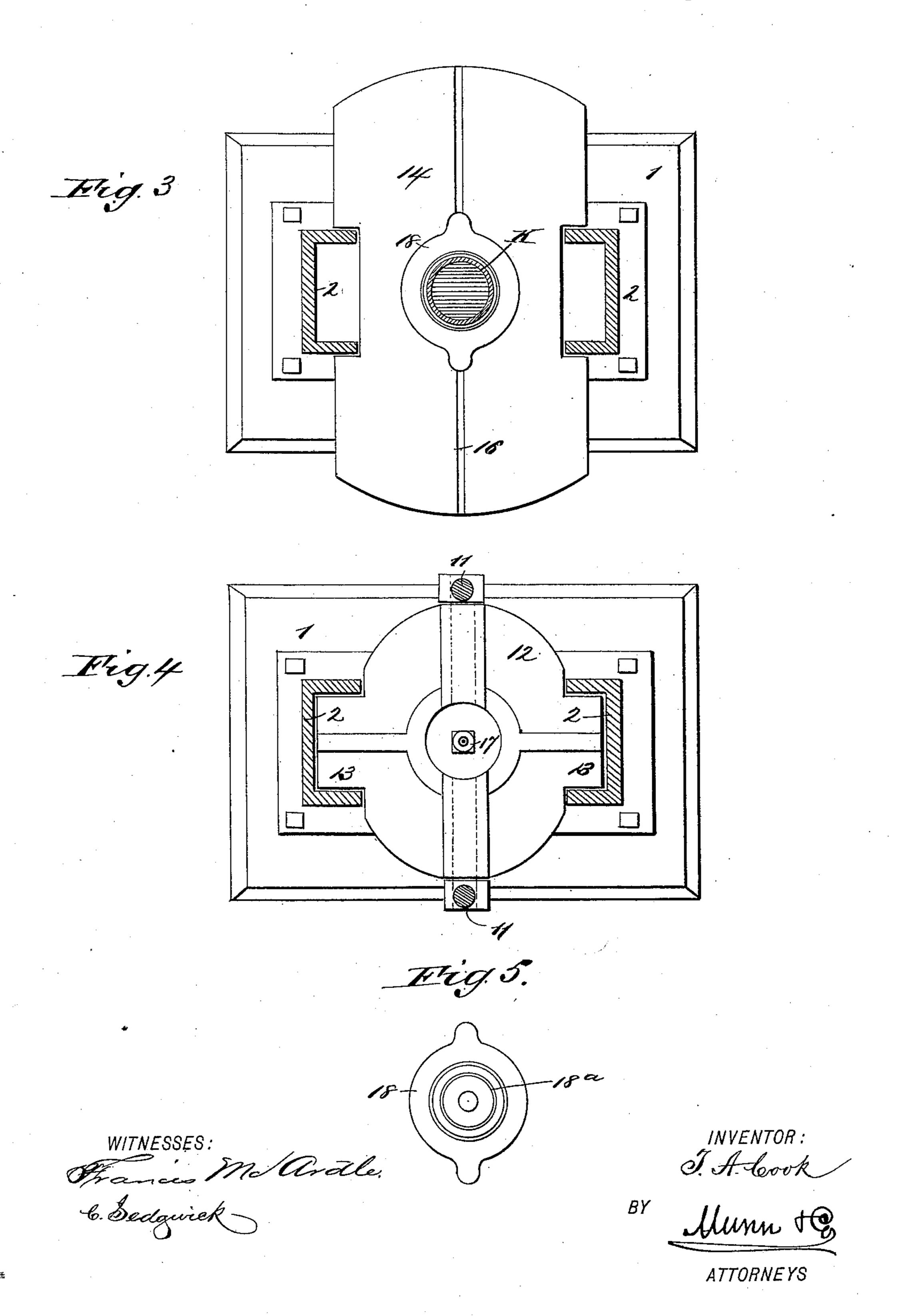
Munn & Co ATTORNEYS

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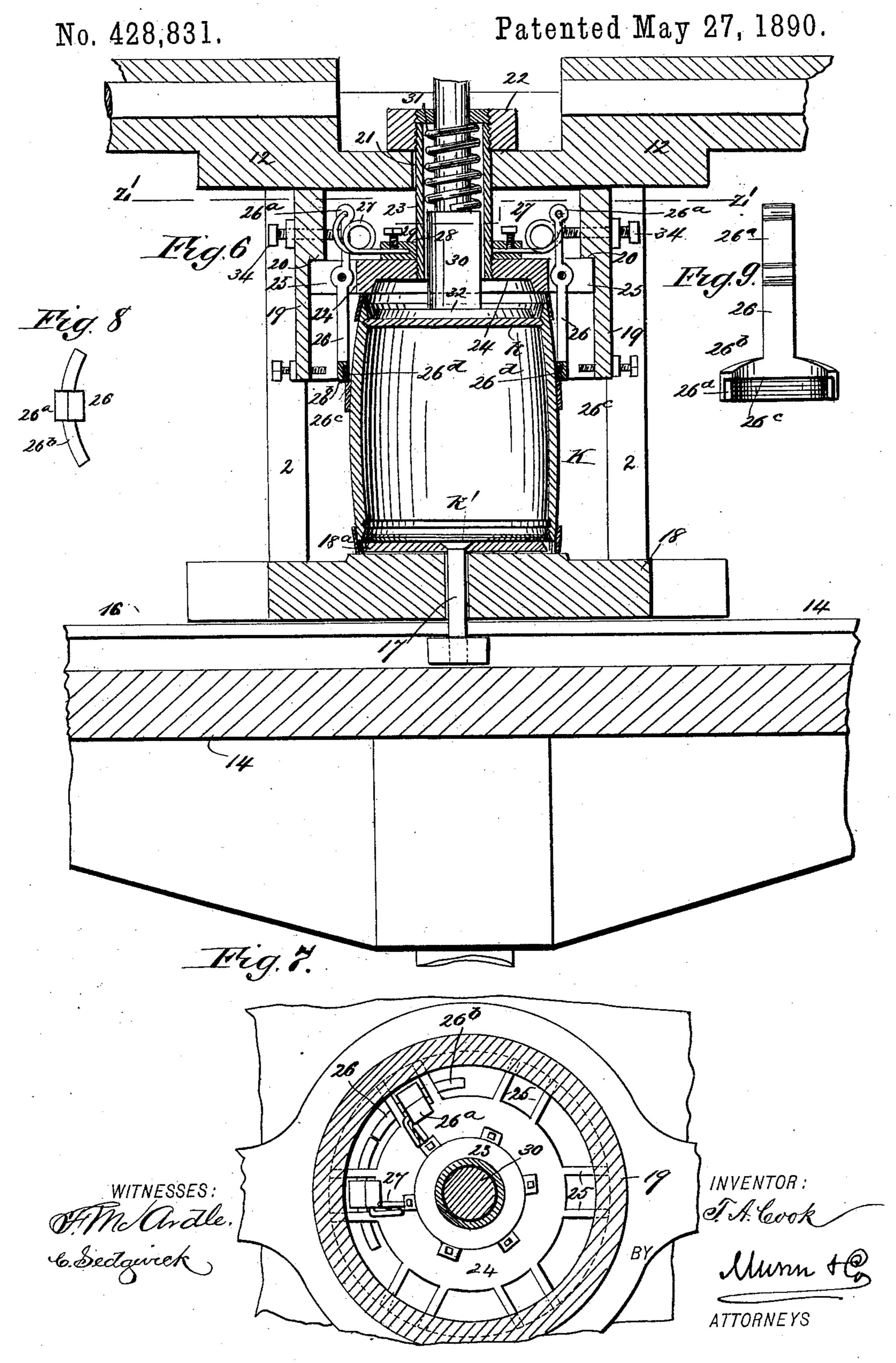
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## United States Patent Office.

THEODORE A. COOK, OF BROOKLYN, NEW YORK.

## MACHINE FOR HOOPING AND HEADING KEGS.

SPECIFICATION forming part of Letters Patent No. 428,831, dated May 27, 1890.

Application filed November 12, 1889. Serial No. 329,970. (No model.)

To all whom it may concern:

Be it known that I, THEODORE A. COOK, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Machine for Hooping and Heading Kegs, of which the following is a full, clear, and exact description.

My invention relates to a machine designed more particularly for hooping and heading small kegs, such as are commonly used for paints, but may be used for any cooperage if made on a large or appropriate scale.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters and numerals of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation, partly in section, of my new hooping-off machine. Fig. 2 is a sectional elevation of the same on the line x x of Fig. 1. Fig. 3 is a sectional plan on the line y y of Fig. 2. Fig. 4 is a similar view on line z z of Fig. 2. Fig. 5 is a plan view of the supporting-plate for the keg removed. Fig. 6 is an enlarged sectional view showing the details of the machine. Fig. 7 is a sectional view on line z' z' of Fig. 6. Figs. 8 and 9 are respectively a plan and front elevation of one of the hoop-drivers removed.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

The main frame of the machine comprises the base 1, columns 2, and top 3, on which is | 35 journaled the shaft 4. To the ends of the shaft are secured the cog-wheels 5 5, with which mesh the pinions 6 6 on the power-shaft. 7. This is journaled on bearings 8, and is provided between said bearings with a pulley 9, 40 over which a belt passes to impart motion to the machine. Shaft 4 is provided at each end with a crank 10, connected by pitman 11 to the upper table or plate 12, so that this table is vertically reciprocated when the machine 45 is in operation. The columns 2 2 are channeled, as shown in Figs. 3 and 4, to form guides or ways for the reciprocation of said table, the same being formed with lateral projections 13 to fit said columns.

 14 is the supporting-table or bed-plate, which carries the header 18 for the keg K to be hooped and headed. This table is verti-

cally adjustable by means of a screw 15, and in its upper surface is formed a groove 16 to receive the headed bolt 17, which connects the 55 bottom header 18 to the said plate 14. The header is provided with a removable plate 18<sup>a</sup>, held by the bolt 17. In consequence of the slot 16 the said header may be drawn out to receive the keg to be hooped and to facilitate 60 the removal of the keg after it has received the hoops and heads.

To the under surface of the upper plate 12 is secured the flange 19, formed with the interior shoulder or offset 20. In a central aper- 65 ture 21 is held by a nut 22 a tube 23, to the lower end of which is secured the plate 24. This is formed at its outer edge with six pairs (more or less) of lugs 25, which reach under the offset 20, and thus hold the flange 19 in 70 place. By removing the nut 22 the said flange and all parts connected thereto may be removed and another size substituted to suit the size of kegs to be headed and hooped. To and between each pair of lugs 25 is pivoted a 75 hoop-driver 26, the lower end of each of which is constantly pressed inward by a spring 27, held by a ring 28 and set-screw 29, the outer end of the spring acting upon the upwardlyprojecting arm 26° of the hoop-driver. The 80° lower end 26b is enlarged and curved and formed with the depression 26°, to receive a steel facing 26d to engage with edge of the middle hoop, as shown clearly in Figs. 6 and 9.

In the tube 23 is placed the spindle 30, which 85 is pressed downward by the heavy coiled spring 31, and to the lower end of this spindle is secured the plate 32, which presses in the head k of the keg down into the croze. The lower head k' is pressed in by the lower plate 90 18°, attached to the header by the rod 17.

The action is as follows: The keg is first provided with the hoops and one head. The lower head is placed on the plate 18°. The keg is then placed on the plate 18 over the 95 bottom head and plate 18°, and the whole slid in place under the upper table 12. When this table is forced down by the cranks and pitmen of the shaft 4, the plates 32 and 18° force the heads in place, and the upper and lower 100 hoops are pressed on by contact therewith of the plates 24 and 18, and the middle hoop is pressed on by the hoop-drivers 26, as clearly illustrated in Fig. 6. The outward movement

of each of the hoop-drivers is limited by a screw 34. (Shown clearly in Fig. 6.)

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a machine for hooping and heading kegs, a main support provided with a header-plate, a movable upper plate or table, and means for reciprocating it, in combination with a flange or ring attached to the said movable table adapted to surround the barrel, the plate 24 within said flange, the spring-actuated hoop-drivers pivoted therein, a tube attached to said plate, and a spring-actuated follower held on said tube and provided with

the upper header-plate, substantially as described.

- 2. The upper plate formed with the casing or flange 19, offset at 20, in combination with the plate 24, hoopers 26, springs 27, tube 23, 20 spindle 30, and spring 31, substantially as described.
- 3. The bed-plate channeled at its upper surface, in combination with a bottom headerplate held by bolt working in said slot, sub- 25 stantially as described.

THEODORE A. COOK.

Witnesses:

Amos A. Rankin, Walter Long.