

(No Model.)

3 Sheets—Sheet 1.

J. H. CLARK.
POOL REGISTER.

No. 433,117.

Patented July 29, 1890.

Fig. 1.

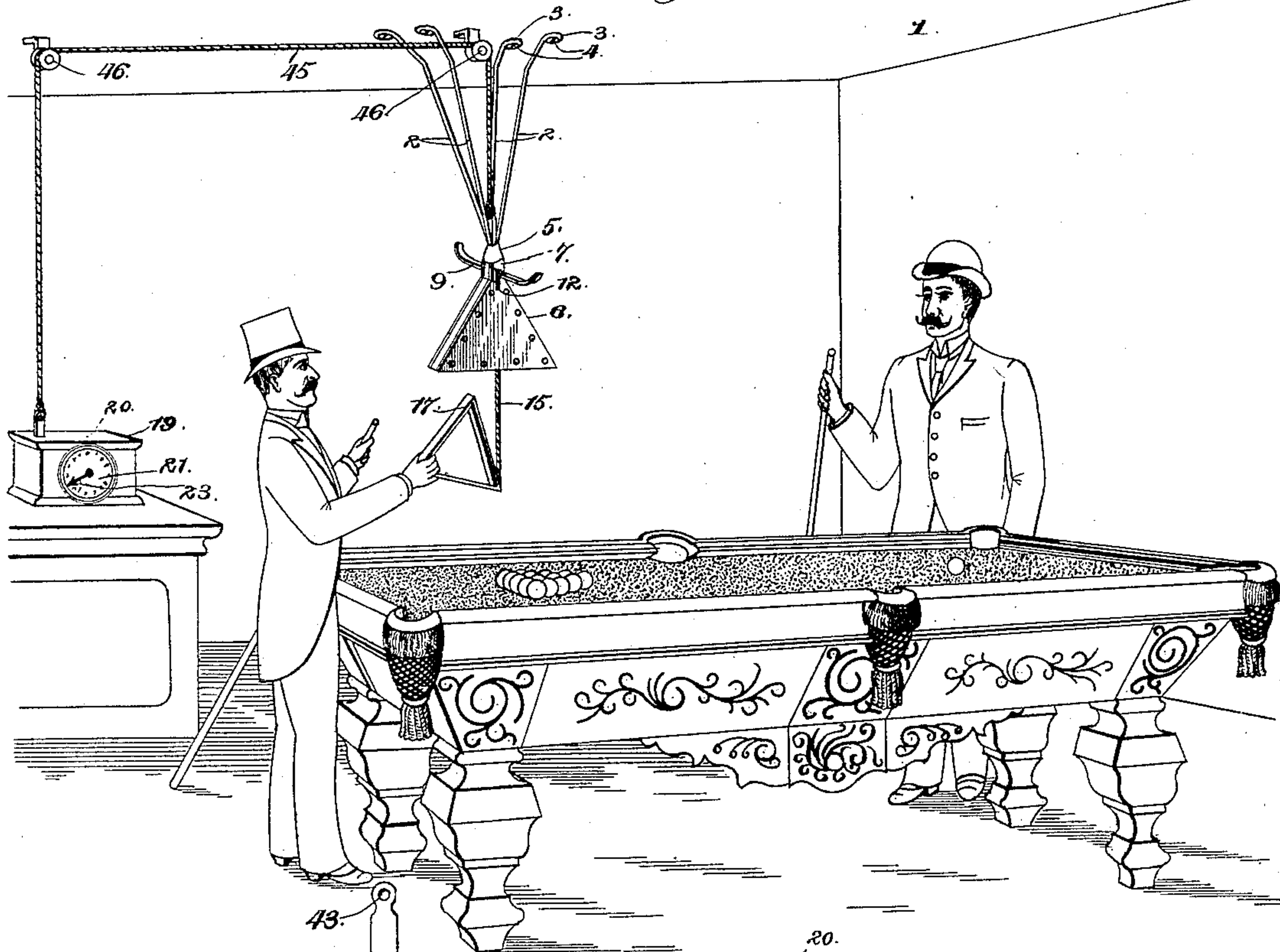
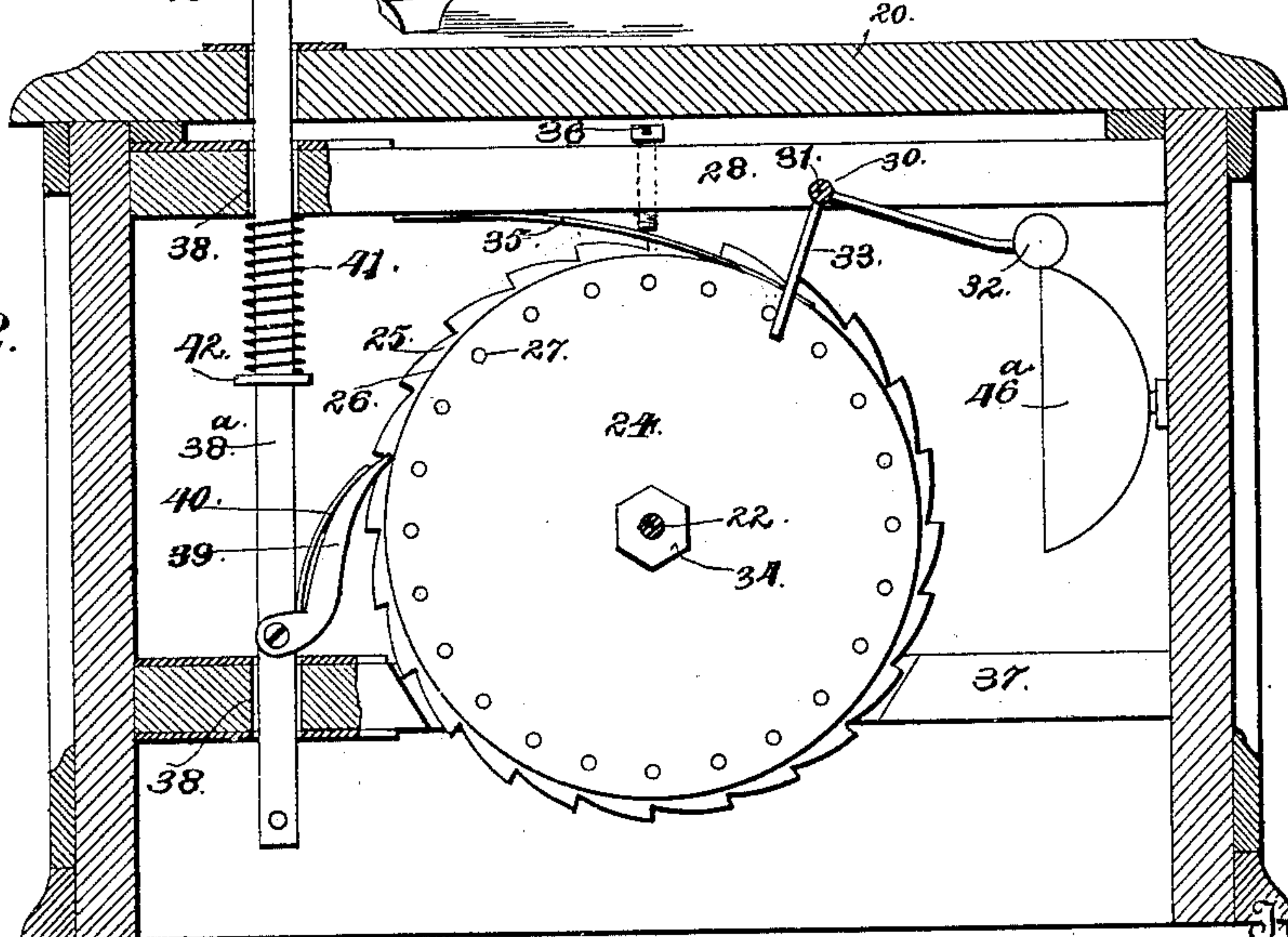


Fig. 2.



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(No Model.)

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Fig. 3

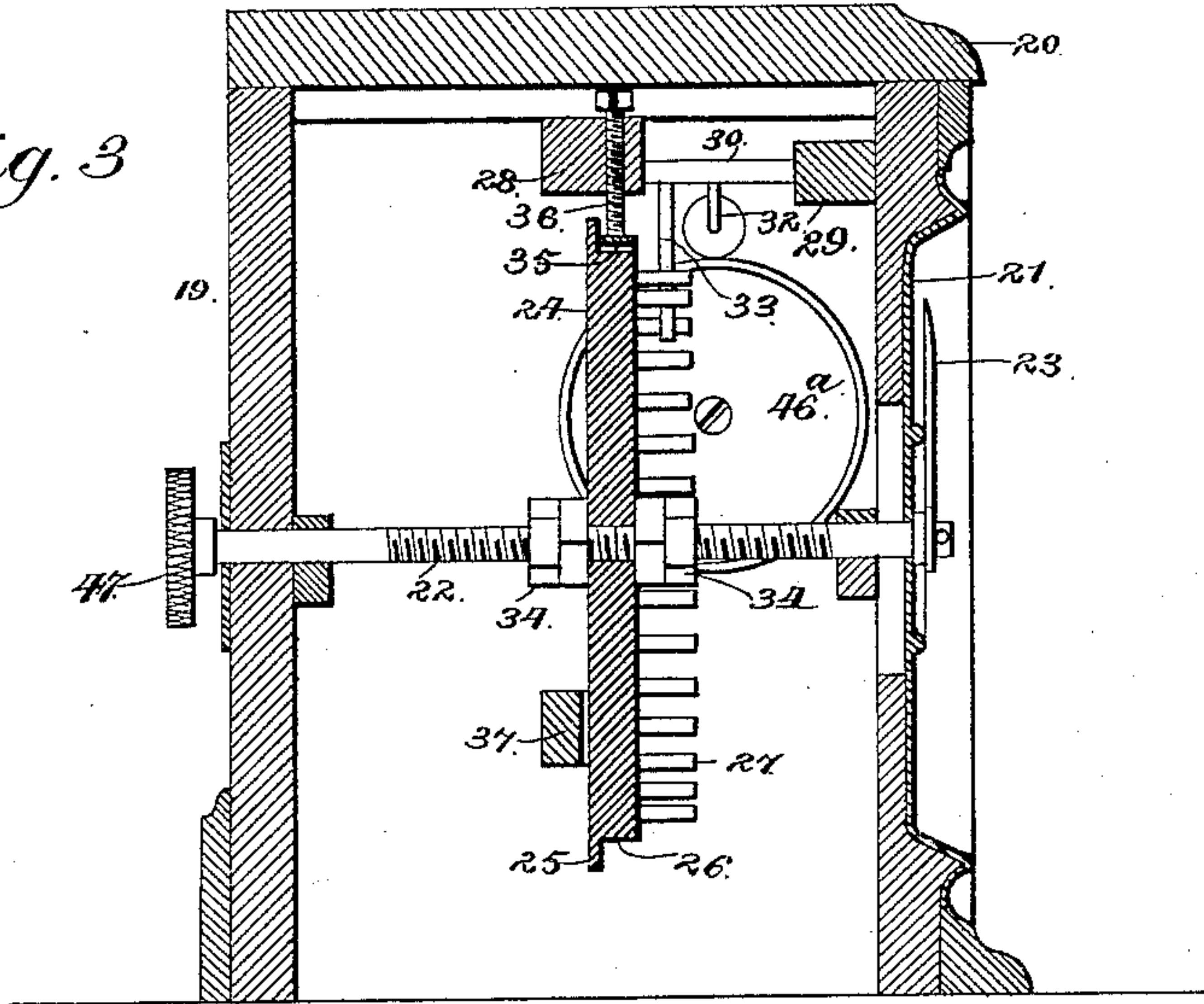


Fig. 4.

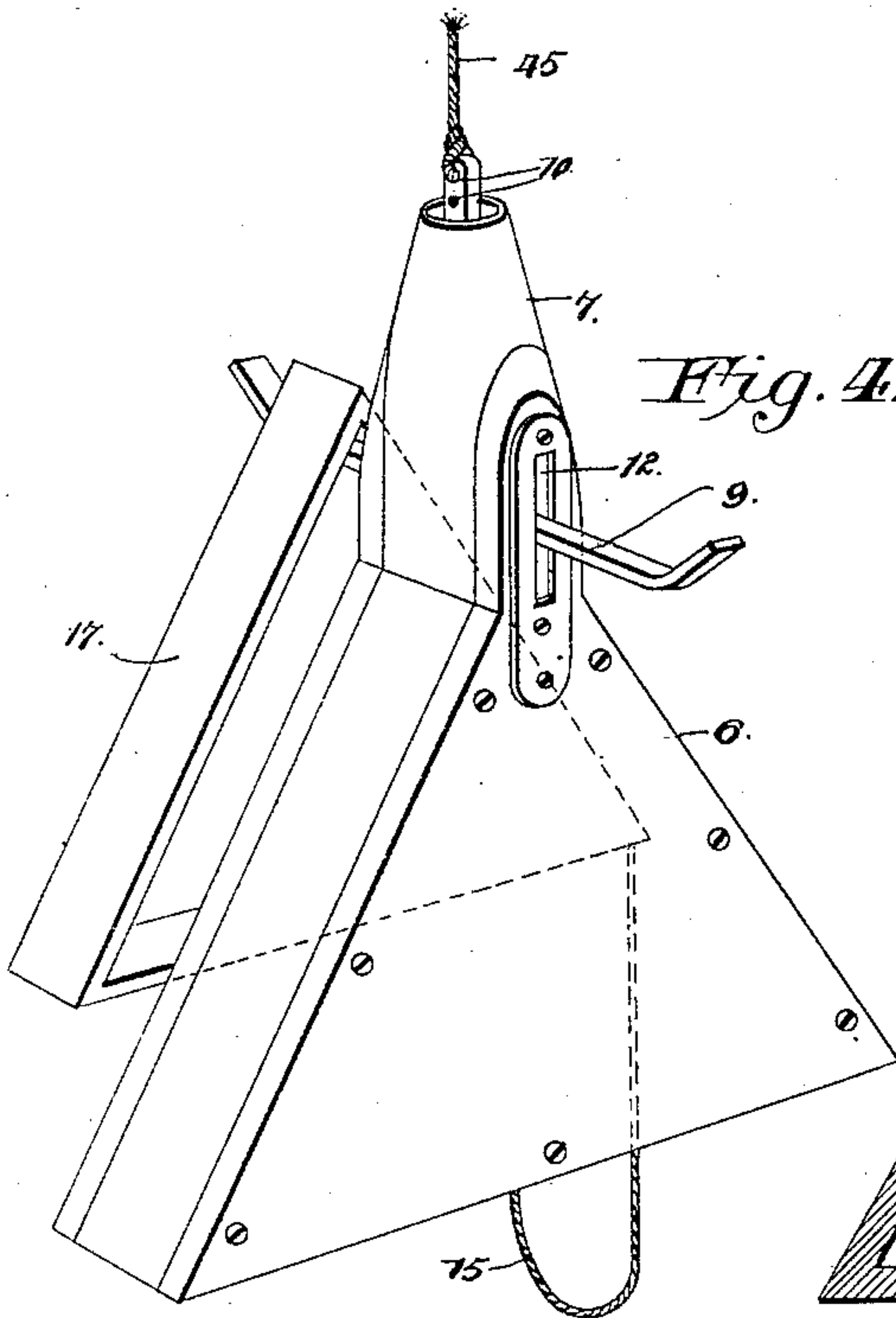
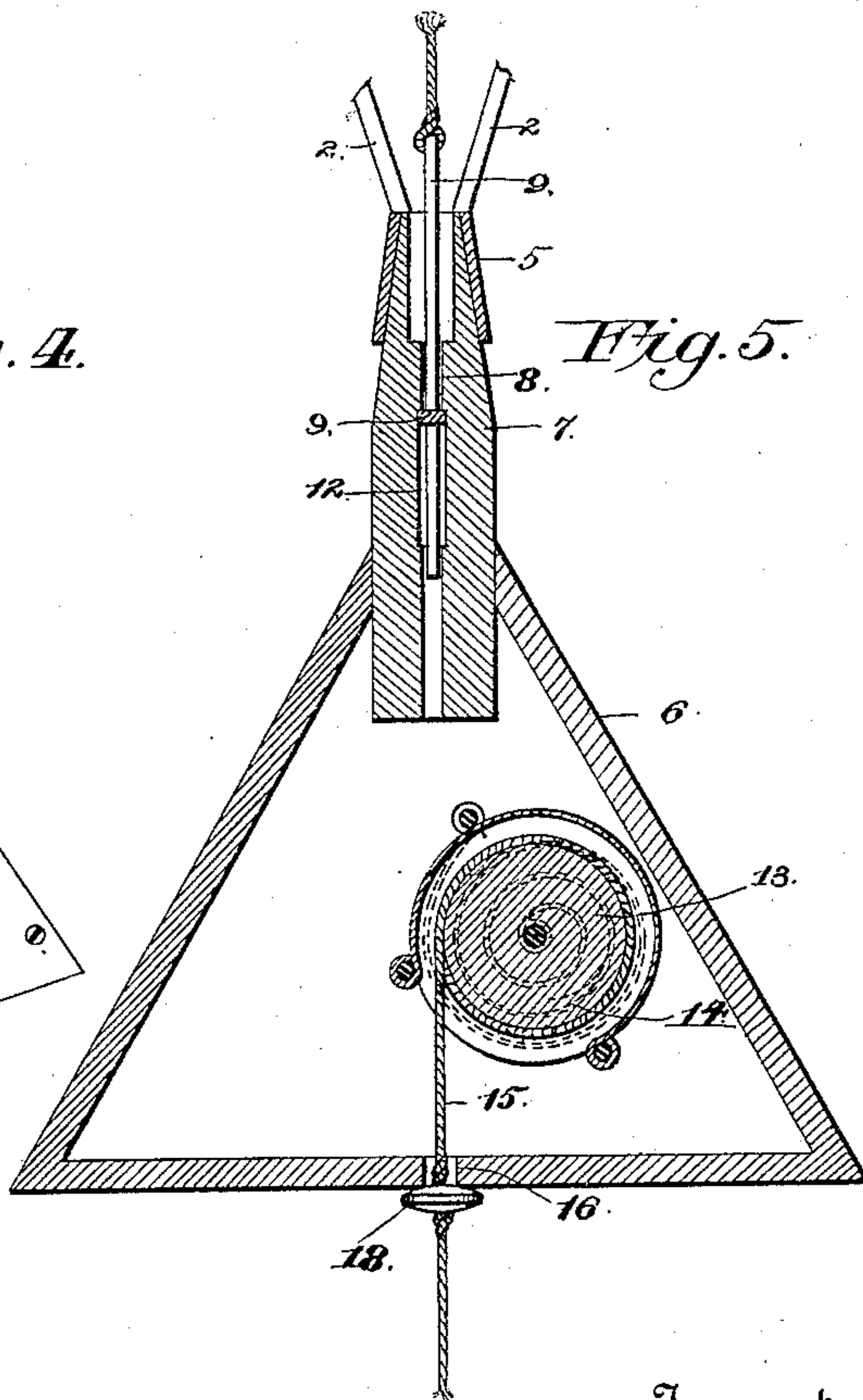


Fig. 5.



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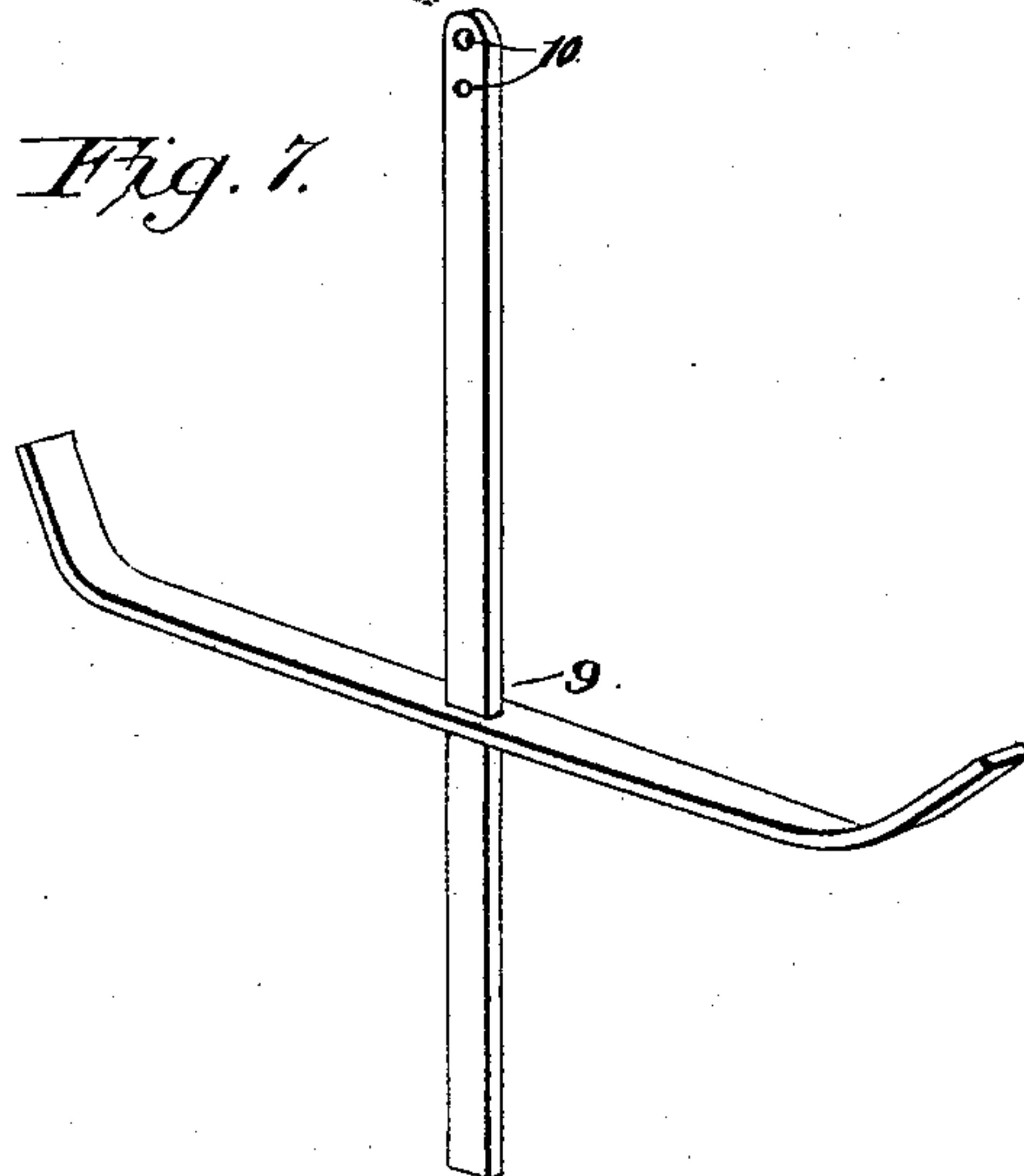
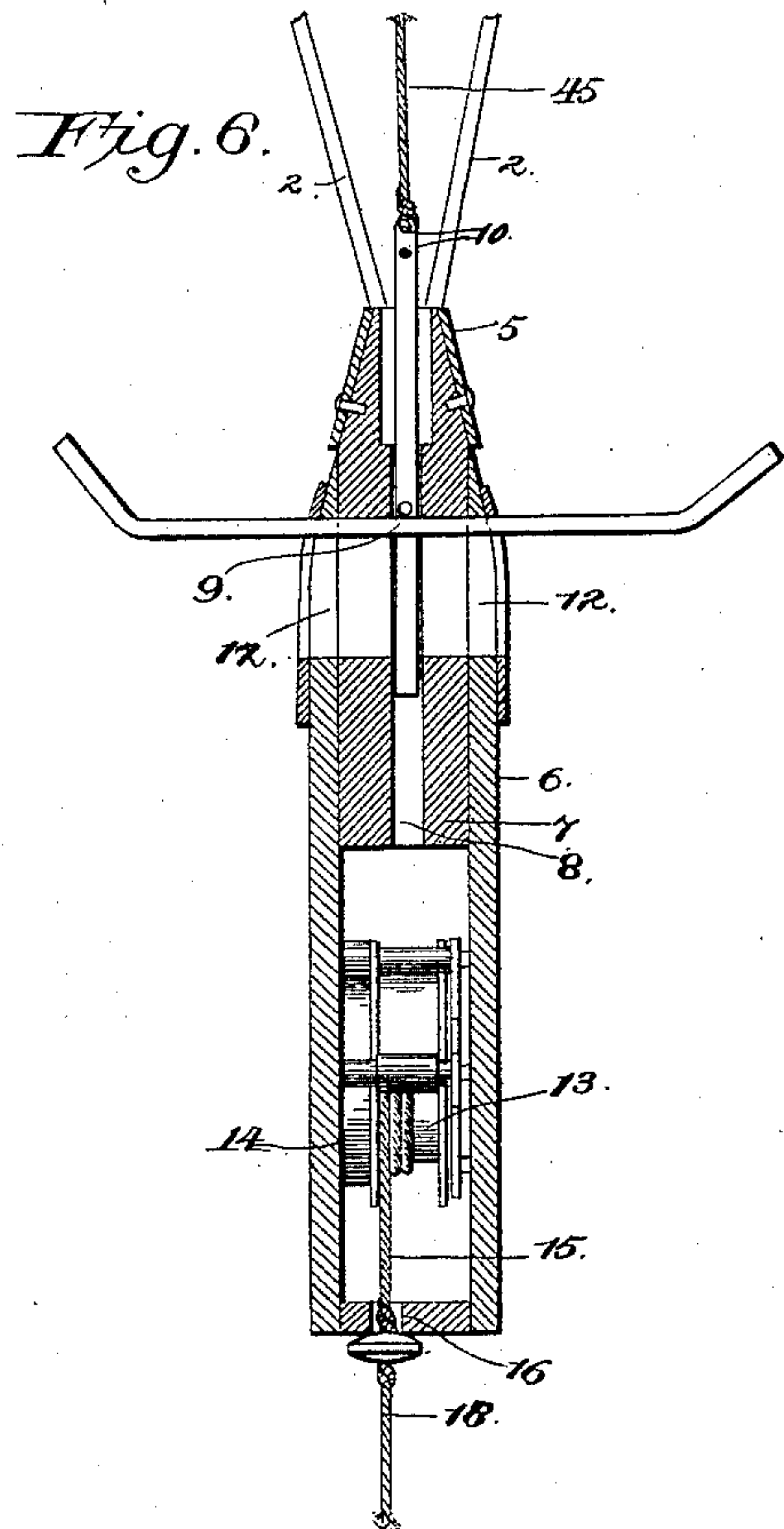
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UNITED STATES PATENT OFFICE.

JAMES H. CLARK, OF WESTERN, NEBRASKA, ASSIGNOR OF ONE-FOURTH TO
ROSWELL O. EASTMAN, OF SAME PLACE.

POOL-REGISTER.

SPECIFICATION forming part of Letters Patent No. 433,117, dated July 29, 1890.

Application filed November 15, 1889. Serial No. 330,410. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. CLARK, a citizen of the United States, residing at Western, in the county of Saline and State of Nebraska, have invented a new and useful Pool-Register, of which the following is a specification.

This invention has relation to a register and apparatus for registering the number of games played upon pool-tables, and among the objects in view are to provide a register adapted to be operated at each replacing of the spotting-frame.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claims.

Referring to the drawings, Figure 1 is an interior view of a portion of a billiard-room in which is located a pool-registering device constructed in accordance with my invention. Fig. 2 is a detail in longitudinal section of the register. Fig. 3 is a transverse section of the same. Fig. 4 is a detail in perspective of the spring take-up and spotter-frame support. Fig. 5 is a vertical longitudinal section of the same. Fig. 6 is a vertical transverse section. Fig. 7 is a detail in perspective of the spotter-frame-supporting rod.

Like numerals indicate like parts in all the figures of the drawings.

1 represents the ceiling of a room, and from the same, directly over that end of the pool-table upon which the balls are spotted, there depend four rods or supports 2, said supports terminating at their upper ends in eyes 3, through which are inserted screws 4 for securing the rods to the ceiling.

5 represents an annular collar or socket open at both ends, and to the upper end of the same there are secured the lower ends of the rods.

6 represents a triangular or, it may be, other shaped box or case, and from the upper end or apex of the triangle there projects a block 7, having an internal bore 8 throughout its length, in the upper end of which there is mounted an inverted-T-shaped rod 9, the upper end of the rod projecting through and above the end of the block and provided with perforations 10, and the lower T-arms projecting laterally from the block at each side

thereof and through vertical slots 12. The upper end of the block is tapered and secured within the socket supported by the rods 2, and the casing is therefore suspended directly over the pool-table. Within the casing there is mounted for rotation a drum 13, actuated by a coiled spring 14, and to the drum is secured one end of a cord 15, the opposite end being passed through a perforation 16, formed in the base of the casing, and to said end is secured an ordinary triangular pool-ball-spotting frame 17, which is adapted to be drawn down and placed upon the table for the purpose of spotting the balls in the usual manner, and in being drawn down unwinds the spring-actuated drum against the tension of the spring. A button 18 is secured to the cord at a suitable distance above the spotting-frame, whereby the amount of cord rewound after the spotting operation is limited by the button coming in contact with the casing. After the operation of spotting the spotting-frame is hung upon either one of the arms projecting from the T-rod, and the weight of the frame serves to lower the rod in the bore of the block.

19 represents the register-case, and the same is in this instance rectangular and provided with a removable cover 20, and at its side with a dial-plate 21, suitably numbered, and in the case there is journaled a transverse shaft 22, one end of which projects through the dial-plate, and upon the same is mounted a pointer 23. Upon the shaft there is mounted a disk 24, fixed to the shaft and having at one side of its periphery a ratchet or toothed flange 25, the remainder of the periphery being plain, as at 26, and the face of said disk is provided with an annularly-arranged series of laterally-projecting pins 27. A longitudinal bar 28 extends across the upper end of the casing, and a bracket 29 projects from the inner wall of the said casing, and in the bracket and bar there are formed bearings 30, and in the bearings there is mounted loosely a shaft 31, from which projects a hammer 32, and at a right angle thereto there depends from the shaft an actuating-arm 33, said arm depending in the path of the laterally-projecting pins. The shaft upon which the disk is mounted is in this in-

stance screw-threaded, and the disk is perforated at its center and threaded on the shaft, and at each side of the disk there is mounted in the shaft a pair of jam-nuts 34, whereby the disk is held at the desired point and turns with the shaft. From the longitudinal bar there depends a flat spring 35, the terminal of which bears upon the plain portion or periphery of the disk, and mounted in the bar and bearing upon the upper surface of the spring is a set-screw 36, serving to force the spring upon the periphery of the disk, whereby the latter is maintained under the desired tension. 37 represents a similar bar located near the lower end of the register-case and vertically opposite the upper bar. Slots 38 are formed in both bars and in line with each other, and in the slots there is mounted a plunger-rod 38^a, to the lower end of which there is pivoted an upwardly-projecting pawl 39, which by a spring 40 has its free end normally meshing with the teeth of the ratchet. A spring 41 is mounted upon the rod, the lower end of the same being supported by a disk 42, the upper end of said spring terminating against the under surface of the upper longitudinal bar, said spring having a tendency to normally maintain the plunger at the lower end of its stroke, and so that the operating end of the pawl is under the shoulder of a tooth. The upper end of the plunger-rod extends through the removable cover of the casing and terminates in an eye or perforation 43.

The register described may be located at any suitable point in a billiard hall or room, and usually convenient to the cashier's desk, whereby the same may be inspected when it is desired to settle for the number of games played.

The operation of my invention is as follows: In order to spot the balls at the commencement of the game, the spotting-frame is removed from the supporting-arm or T-rod, the upper end of which is by a cord or wire connected to the upper end of the plunger-rod of the register, said wire or cord 45 being supported at proper intervals by pulleys 46, secured to the wall or ceiling. The spotting-frame is now lowered to the pool-table and performs its usual function of assembling the balls, the take-up paying out the cord for this purpose. After the balls have been spotted the spotting-frame is raised and replaced upon either one of the arms of the T-rod, the slack of cord connecting the frame with the take-up being rewound by the latter. When the frame is removed from the arm of the T-rod, the spring upon the plunger of the register serves to raise said T-rod and to lower the plunger, so that its pawl engages the next succeeding tooth of the ratchet of the disk of the register. When the frame is replaced upon the T-rod, the weight of said frame is sufficient to more than counterbalance the strength of the spring, and thus the T-rod is lowered and the plunger-rod is elevated, raising the

pivoted pawl and rotating the ratchet-disk one tooth, and in so doing rotates the shaft upon which the disk is mounted and moves the pointer one degree upon the dial, thus indicating that a game has been played. As the disk is rotated one tooth, the laterally-projecting pins, one of which is located opposite each of the teeth of the ratchet of the disk, comes into contact with it and passes by the depending arm of the bell-hammer shaft and permits the hammer to fall by gravity and sound a bell 46^a, secured to the inner wall of the register, and thus notify the players and cashier that the balls have been respotted for another game. In this manner any number of games may be registered.

The rear end of the transverse shaft of the register is provided with a milled nut 47, by which the shaft may be rotated and the dial brought back to the starting-point after the table has been deserted by one set of players, and the recorder is then in position to register the games of the next succeeding set of players.

If desired, the mechanism of the recorder may be duplicated any number of times, thus serving to register the games of a series of tables, each table being likewise provided with a take-up and spotting-frame, as will be readily understood.

Having thus described my invention, I claim—

1. The combination, with the depending standards secured to the ceiling, of a case rigidly secured to the lower ends thereof, provided with a perforation at its lower end and a spotting-frame support mounted for sliding in the case, a spring-actuated drum mounted for rotation in the case, a cord wound upon and having one end secured to the drum and passed through the perforation, a spotting-frame secured to the opposite end of the cord, a register, and a cord or wire leading from the operating mechanism thereof to the said sliding spotting-frame support, substantially as specified.

2. The combination, with depending standards secured to the ceiling and a collar connecting the lower ends of the standards, of a casing terminating at its upper end in a block fitting the collar and secured therein, a spring-actuated drum mounted in the casing, a cord wound upon and secured to the drum, and a spotting-frame connected to the opposite end of the cord, substantially as specified.

3. The combination, with the depending standards or supports terminating at their upper ends in screw-eyes, screws connecting the standards to the ceiling, and a collar connecting the lower ends of the standards and serving as a socket, of a triangular case provided with a block at the upper end of the same and fitted and secured within the collar, a drum actuated by a spring mounted in the case, a cord having one end connected to the drum and the opposite end passed through an opening in the case, and a spotting-frame

connected to the cord, said cord being provided with a button for limiting the amount of cord taken up by the drum, substantially as specified.

5 4. The combination, with a register mechanism comprising a reciprocating rod for operating the same, of a case, a spotting-frame-supporting hook sliding in said case, a cord
10 connecting the same with the rod of the register, and a spotting-frame mounted on the supporting-hook and adapted to depress the same and operate the rod of the register, substantially as specified.

15 5. The combination, with a register comprising a reciprocating rod for actuating the same, and a spring for reciprocating the rod in one direction, of the spotting-frame support connected to one end of the cord, the opposite
20 end of which is connected with the rod of the register, and an independent spotting-frame adapted to be mounted on the support and to depress the same and operate the rod of the register against the tension of its spring, substantially as specified.

25 6. The combination, with a register comprising a reciprocating rod, and a spring for operating the same in one direction, of a spring-actuated drum or take-up, a spotting-frame support mounted for vertical movement in
30 the upper end of the casing of the same, a cord connecting the support with the operating-rod of the register, a cord wound upon the take-up and passed through its casing, and a spotting-frame connected to the opposite
35 end of the cord and adapted to be mounted upon its support to depress the same and raise the operating-rod of the register against the tension of its spring, substantially as specified.

40 7. The combination, with a support comprising a reciprocating support-actuating rod,

of supports secured to the ceiling and terminating in a socket, a take-up frame having an internally-bored block at its upper end, slotted and mounted in the collar, a T-shaped
45 rod mounted in the bore and having its arms projecting through slots, a cord connecting the rod with that of the support, a spring for normally depressing the support, and thus elevating through the medium of the cord
50 the T-shaped arm, and a spotting-frame mounted upon one of the arms and adapted to counterbalance the spring and raise the rod of the support, substantially as specified.

8. The combination, with a register-case, of
55 a shaft mounted therein, a dial mounted on the case, a pointer mounted on the shaft and moving over the dial, a disk mounted on the shaft and having a plain periphery provided at one side with a ratchet-flange, a flat spring
60 bearing on the plain portion, a bell-shaft located above the disk and having an arm depending into the path of a series of pins projecting from the disk, a hammer extending from the bell-shaft and a bell located in the
65 path of the hammer, a reciprocating bar having a spring for normally depressing the same, a pawl pivoted to the rod and meshing with the ratchet of the disk, a spotting-frame support adapted for vertical reciprocation
70 and connected with the rod, and a spotting-frame mounted on the support and adapted to depress the same and elevate the rod against its spring, substantially as specified.

In testimony that I claim the foregoing as
75 my own I have hereto affixed my signature in presence of two witnesses.

JAMES H. CLARK.

Witnesses:

O. M. QUACKENBUSH,
ADAM BUCHER.