

(No Model.)

3 Sheets—Sheet 1.

W. A. SMITH.
COIN ACTUATED MACHINE.

No. 491,196.

Patented Feb. 7, 1893.

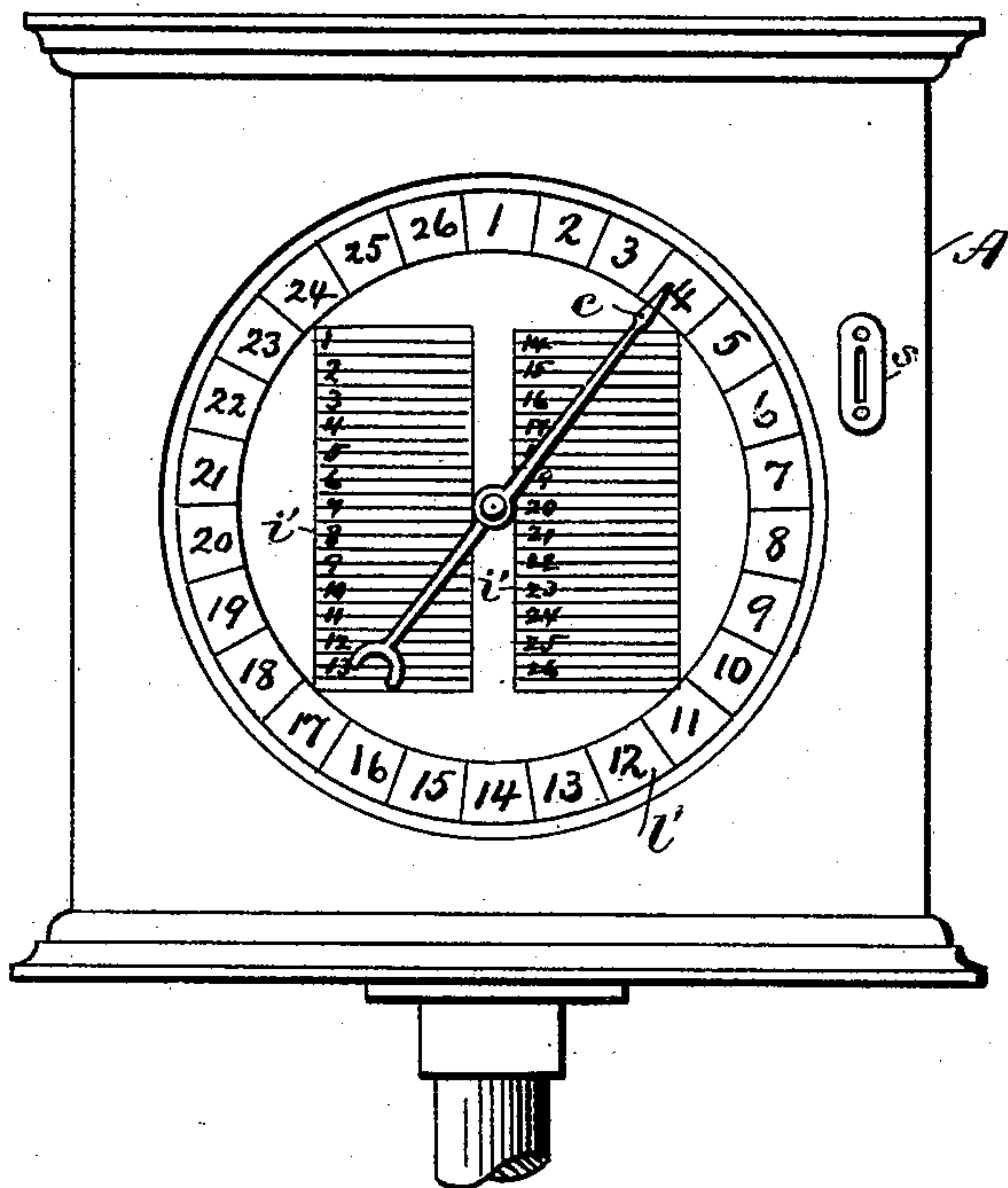


Fig. 1.

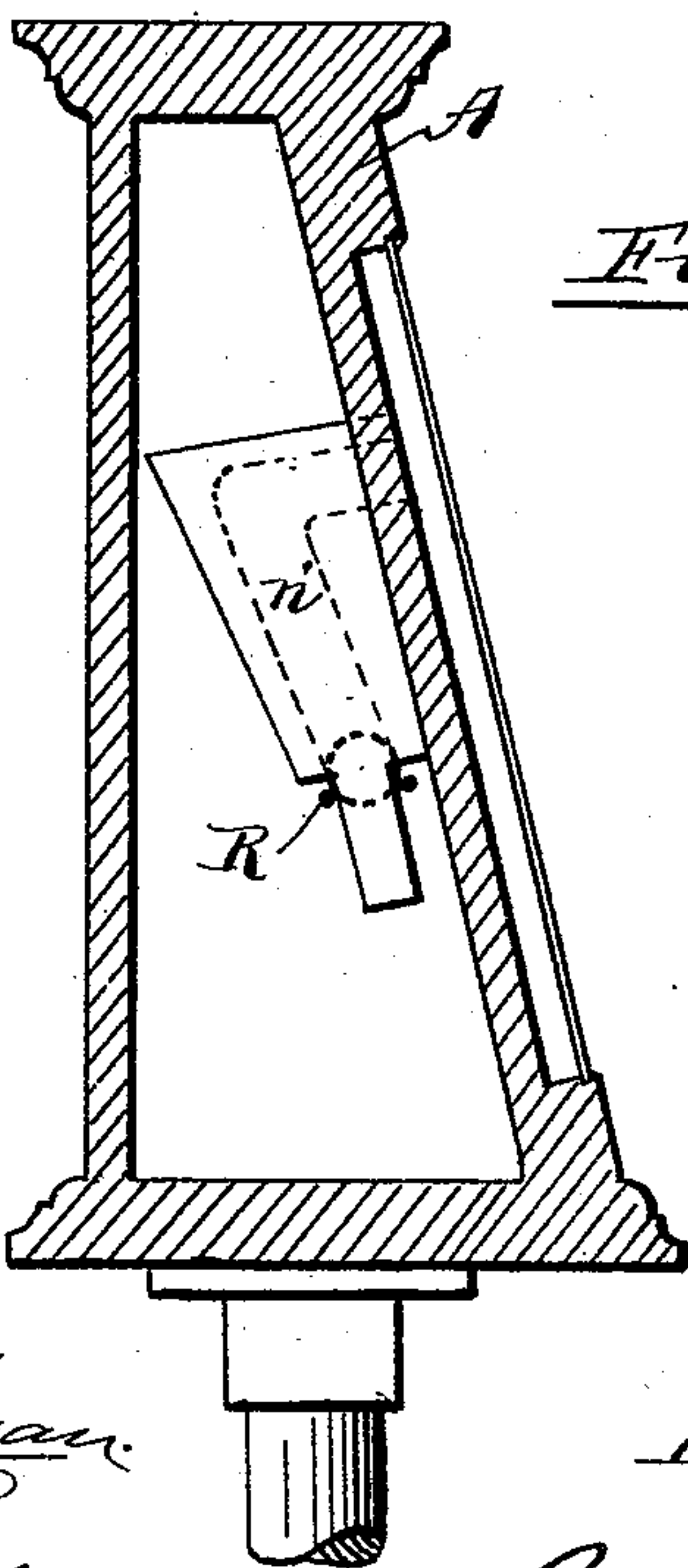


Fig. 4.

Witnesses.

Charles Fannigan
Frank B. Smith

Inventor.

Willard A. Smith
By Benj. Arnold
Att'y

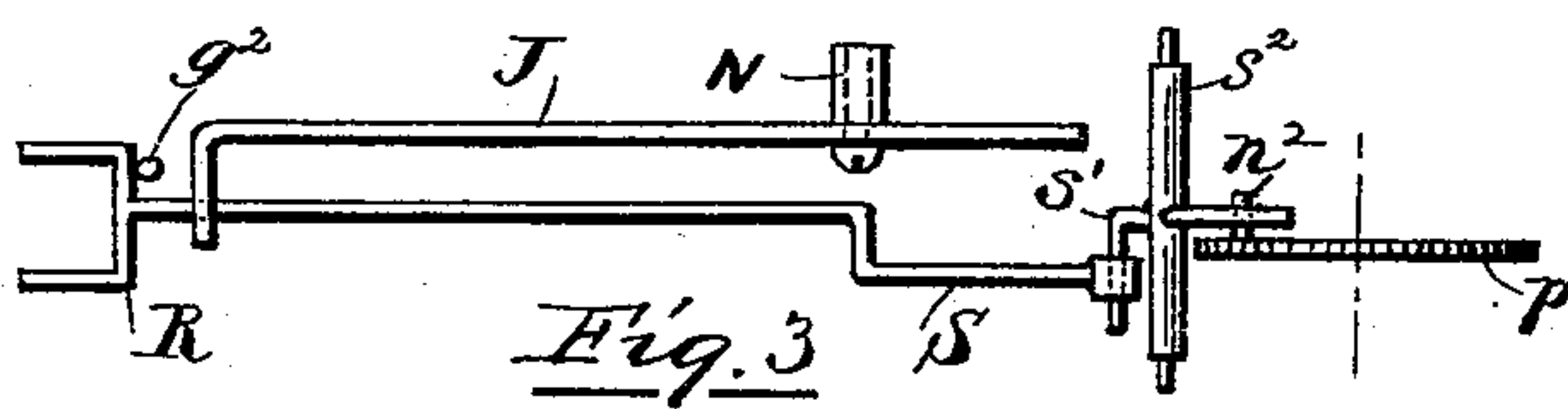
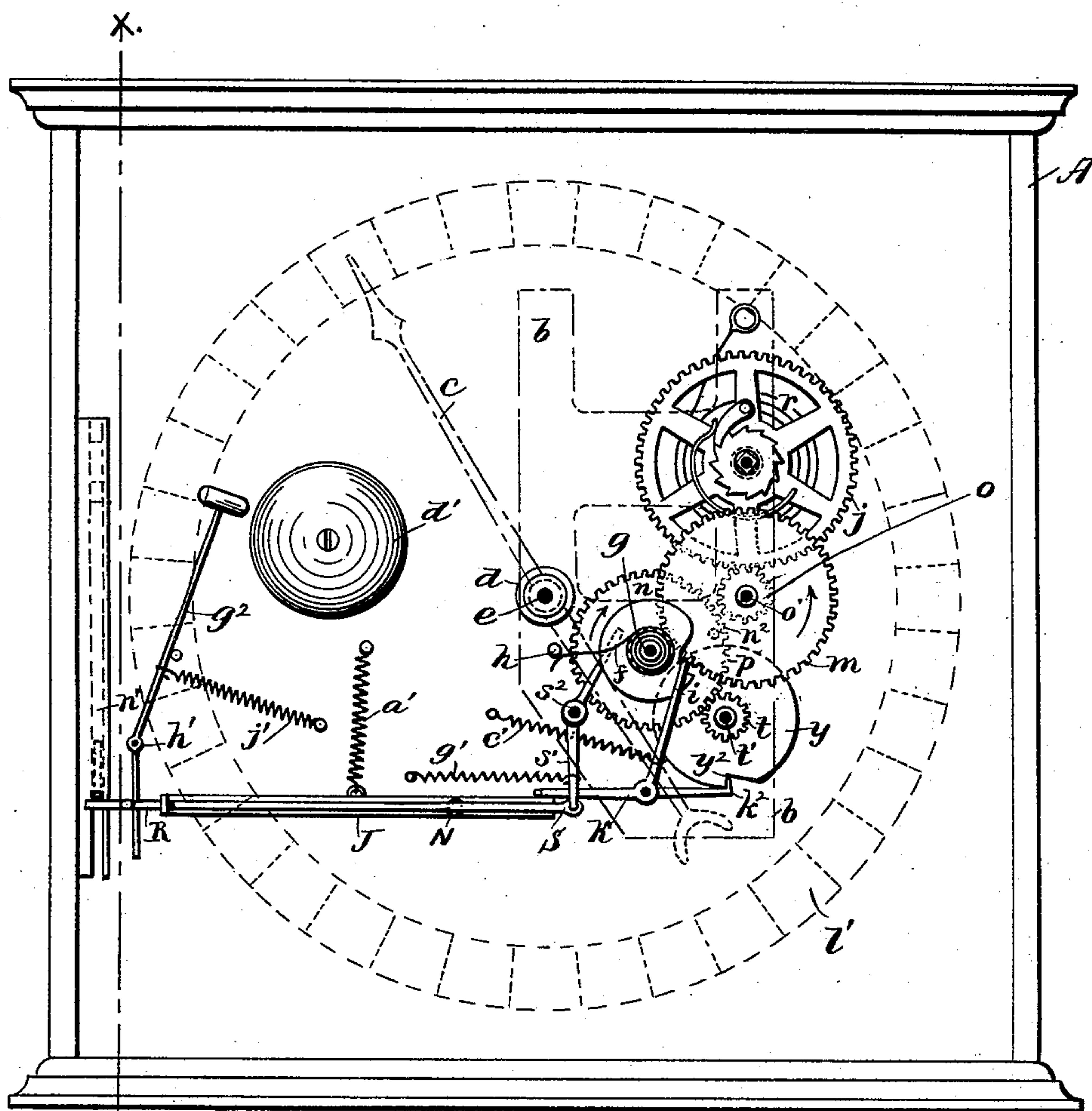
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WITNESSES.

Charles Harrigan
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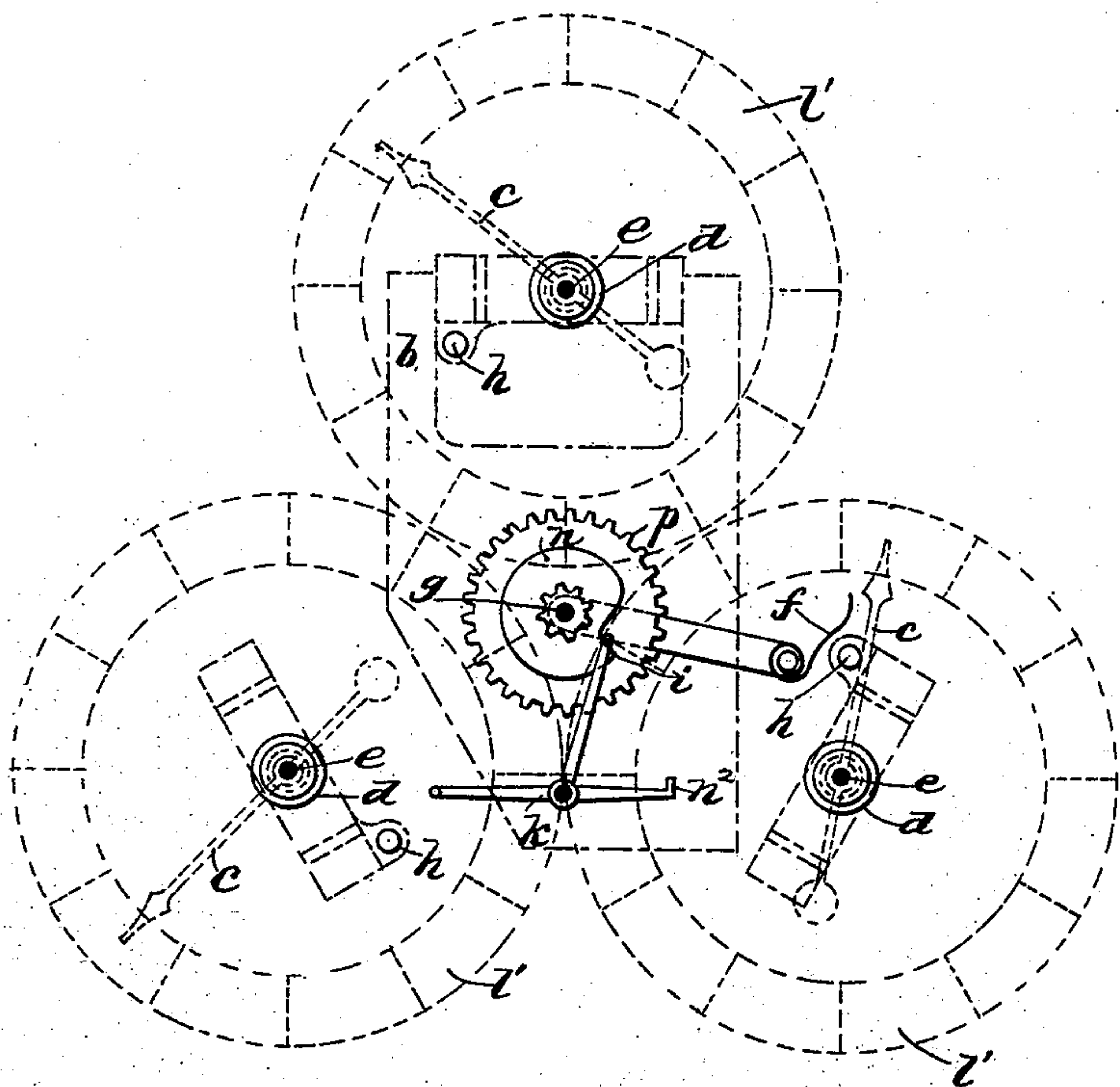


Fig 5.

Witnesses.

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UNITED STATES PATENT OFFICE.

WILLARD A. SMITH, OF PROVIDENCE, RHODE ISLAND.

COIN-ACTUATED MACHINE.

SPECIFICATION forming part of Letters Patent No. 491,196, dated February 7, 1893.

Application filed June 15, 1892. Serial No. 436,784. (No model.)

To all whom it may concern:

Be it known that I, WILLARD A. SMITH, of Providence, in the county of Providence and State of Rhode Island, have invented certain
5 new and useful Improvements in Coin-Actuated Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of
10 reference marked thereon, which form a part of this specification.

This invention relates to that class of machines operated, or put in operation, by means of a coin of predetermined value, and is intended more especially to amuse persons who
15 desire to penetrate into the future with regard to their fortunes, and for other similar purposes. It is illustrated in the accompanying drawings.

20 Figure 1 shows a front elevation of the machine. Fig. 2 is a back elevation of the mechanism, taken after the removal of that part of the frame that supports the rear end of the shafts, &c. Fig. 3 is a top view of the coin
25 operated lever, with some parts connected with it. Fig. 4 is a vertical cross section on line x, x , in Fig. 2. Fig. 5 shows a modification of the indicating mechanism.

The object of this invention is to furnish an
30 automatic "wheel of fortune," as it is commonly called, operated by means of a spring wound up by a key, and released to operate a pointer over a dial, by means of a coin passed into a slot conveniently located for
35 that purpose.

It consists of a case A, made preferably of hard wood, and mounted on a pedestal, or arranged to be set on a counter or table, if desired. It has a glass front, covering a dial
40 with a circle divided into any desired number of spaces l' , occupied by figures to designate them, and a printed paper is attached to the lower part of this dial, with paragraphs i' numbered to correspond with the spaces in
45 the circle; each paragraph describing or designating some particular fortune or result to be expected in connection with a particular number on the circle. A balanced hand or
50 pointer c , is held over the face of the dial on the end of a shaft e , that projects through the center of the dial, so that the end of the pointer will indicate some one of the figures on the dial, after the manner of a clock hand. A slot s , at one side of the face, is made of

such size as may be suited to the coin in- 55
tended to be used in operating the machine. The mechanism operated on by the coin, is shown in Fig. 2. The portion of that part of the frame removed, that supports the back
end of the shaft e , is indicated by the dotted 60
outlines b . The shaft e , that carries the pointer c , over the dial, is normally free from all connection with the operating mechanism, and when made to revolve, will continue
to do so until it loses its momentum. A 65
small wheel d , is made fast on the shaft e , and has a rubber band stretched around its periphery. Through this wheel d , the shaft e , and pointer c , receive the impulse to revolve
from an involute spring f , coiled around a shaft 70
 g . The outer end of spring f , rests on a fixed stud h , so long as the shaft g , is held from turning, by the catch k^2 , in the notch y^2 , in a
plate y , fast on the shaft t' . When this catch
 k^2 , is thrown out of the notch by the coin, 75
as will be hereinafter described, the shaft g , will be free to turn, and coil up the spring f , far enough to draw the end off of the fixed stud
 h , and make one revolution around the shaft
 g , when it will again rest on the stud. In mak- 80
ing this revolution, the end of the spring will brush against the rubber surface of the wheel
 d , and give it a whirl, causing it, with the
pointer c , to revolve until it has lost the momentum given it by the blow of the spring. 85
The connection between the spring f , and the main spring r , is made by the gear wheel j , fast on the main spring shaft, which engages
with a gear pinion o , on shaft o' , and a gear
wheel m , fast on that shaft, engages with a 90
gear pinion fast on shaft g . A gear wheel p , on shaft g , engages in a gear pinion t , on shaft
 t' , which has a plate y , fast on it, in which a
notch y^2 , is made, in which the catch k^2 , is engaged when the machine is not in operation. 95
A cam wheel n , is made fast on the shaft g , and has a notch in it to receive the catch i , when shaft g , has made one revolution, and
allow the catch k^2 , to drop into notch y^2 , in
wheel y . 100

The lever J, which is held on a pivot at N, is a flat lever having a rod S, extending through it, free to slide endwise. A fork R, is made
on one end of the rod S, the points of the fork
entering the chute n' , to receive the coin when 105
dropped therein. The space between the two
bars of the fork, is adjusted to the diameter
of the coin to be used to operate the machine,

and so as to catch, for instance, a nickel, so called, and allow a cent to pass between the points without operating the lever. The other end of the rod S, is connected to a lever s' , held on a pivot s^2 , and which has its upper end in position to be struck by the pin n^2 , in wheel p , so that when the shaft g , makes a turn to give an impulse to the wheel d , by spring f , as described, the pin n^2 , in turning, will push over the upper end of the lever s' , and its lower end will draw back the rod S, and the fork R, out from under the coin in the chute, and allow it to drop to the bottom of the case.

To cause the lever J, to return to its level position after being depressed by a coin, a small closed spiral spring a' has one end attached to it just outside of its pivot N, and the upper end made fast to the case, and a like spring c' , has one end attached to the upper arm of lever k , and its other end attached to the case, to make the catch i , enter the notch in the wheel n . A light spiral spring g' , has one end attached to the lower part of lever s' , and its other end made fast to the case to draw the lever back and push the fork end of the rod in under the chute n' , after it has been drawn back by the lever s' , as described. A small bell d' , to give notice by striking when the machine is operated, is attached to the case near the chute n' , over the long end of the lever J, and a lever g^2 , having a hammer head on its upper end in proximity to the bell, is held on a pivot h' . The lower end of the lever extends down back of one of the shoulders of the fork R, so as to be carried in by it when rod S, is drawn back to release the coin. The drawing back of the lower end of the lever, throws back the hammer, and when the rod S, is released, the head will be moved to strike the bell by the spring j' , and a stud is placed to keep the hammer from resting on the bell.

The operation is as follows: The main spring r , having been wound up in the usual manner of clock springs, a coin of the proper size is put into the opening s , and it passes down in the chute n' , until caught on the prongs of the fork R, on which it lodges, and by its weight tips down the outer arm of the lever J, throwing up the other end and with it the lower end of the lever k , which throws the catch k^2 , out of the notch y^2 , and the catch i , out of the notch in the cam n . This leaves the shaft g , free to be turned one revolution by the main spring, before the catch i , drops in the notch in cam n , and allows the catch k^2 , to drop into the notch y^2 , in the plate y , and stop the machine. The shaft g , in making its revolution with the spring f , draws the latter over the wheel d , as described, and causes it to revolve with shaft e , and pointer c . The pointer will continue to revolve until it loses its momentum, when it will stop with its point over one of the numbered spaces on the dial, the paragraph below bearing the same number is then referred to as describ-

ing the future awaiting the operator, what gift will be received, or what forfeits are to be paid, as in social games. The shaft g , in turning, will by means of the pin n^2 , push over the lever s' , and draw back the rod S and fork R, from under the coin, and allow it to drop to the bottom of the case, and also move the lever g^2 , so as to cause the hammer to strike the bell, and when the fork R, is relieved of the weight of the coin, the spring a' , will draw it up to a level position ready to be again operated.

Fig. 5 shows a modification of the machine in which three dials are used, but in which the pointers receive an impulse to revolve in practically the same way as described; that is, the impact of a spring against a wheel having an elastic rubber surface, and the spring is carried on the end of an arm, instead of being coiled around the shaft. The parts are lettered to correspond with the other figures. In this modification the same spring f when released by drawing the catch k^2 out of the notch in the plate y , strikes the three wheels d , Fig. 5, in succession and gives each pointer a twirl so that they will severally indicate numbers on each dial when they stop, and these numbers so indicated may be the same or different numbers. In this way a great many combinations of numbers can be made exceeding many times the changes of a single dial and the interest in the game greatly increased.

Having thus described my improvement, I claim as my invention:

1. The combination of two or more dials having pointers normally free of all operating devices and arranged to be operated successively by the same set of devices substantially as described, with a motor for operating said devices arranged to be released by the action of a coin deposited in an opening for that purpose.

2. In a coin operating apparatus, the combination of the shaft e , having wheel d , fast thereon, spring f , arranged to strike and turn said wheel d , when released lever k , to retain said spring f , with a motor, and a coin operating lever for releasing the mechanism for action, substantially as specified.

3. In a coin operating machine, the combination of lever J, carrying the sliding rod S, provided with a fork R, with a chute to guide the coin, a pointer and a dial with mechanism for turning the pointer, adapted to be released for operation by the lever J, substantially as set forth.

4. The combination of a bell and striking lever with a coin actuated lever carrying a sliding coin releasing rod, arranged to operate the striking lever, and a lever connecting said rod with the motor, substantially as described.

WILLARD A. SMITH.

Witnesses:

BENJ. ARNOLD,
J. E. ARNOLD.