

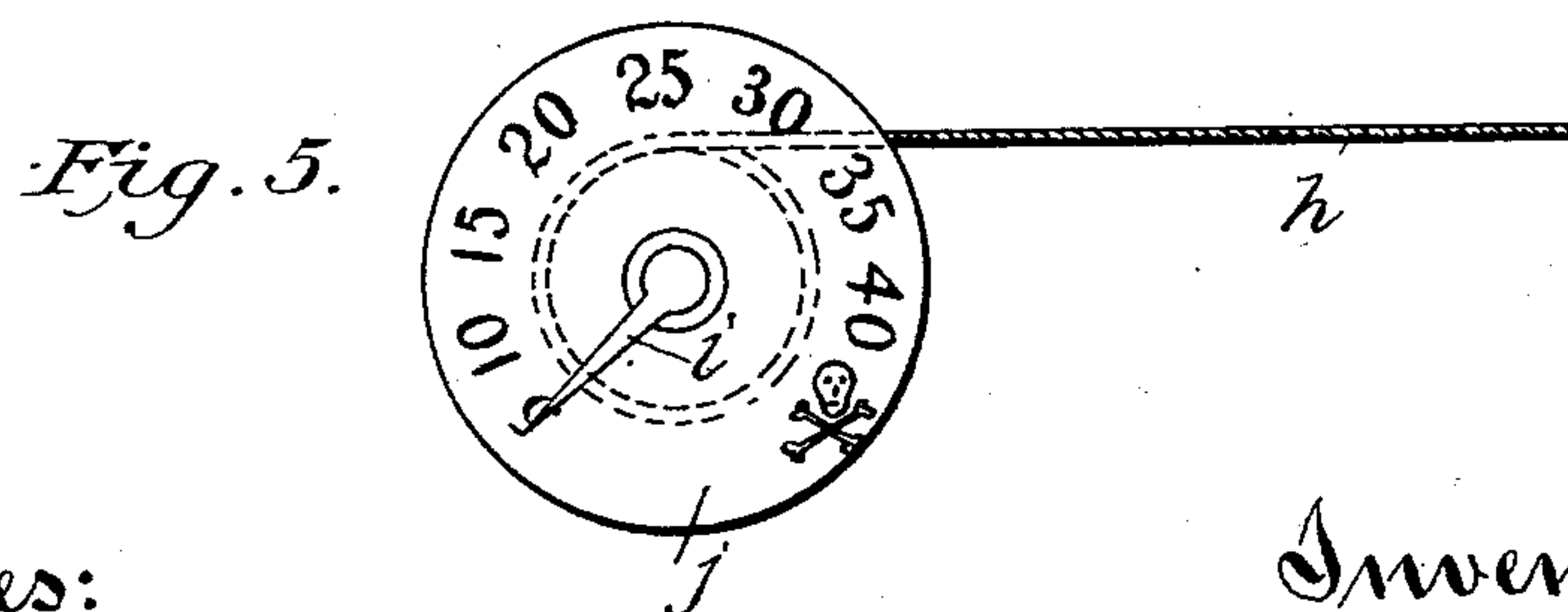
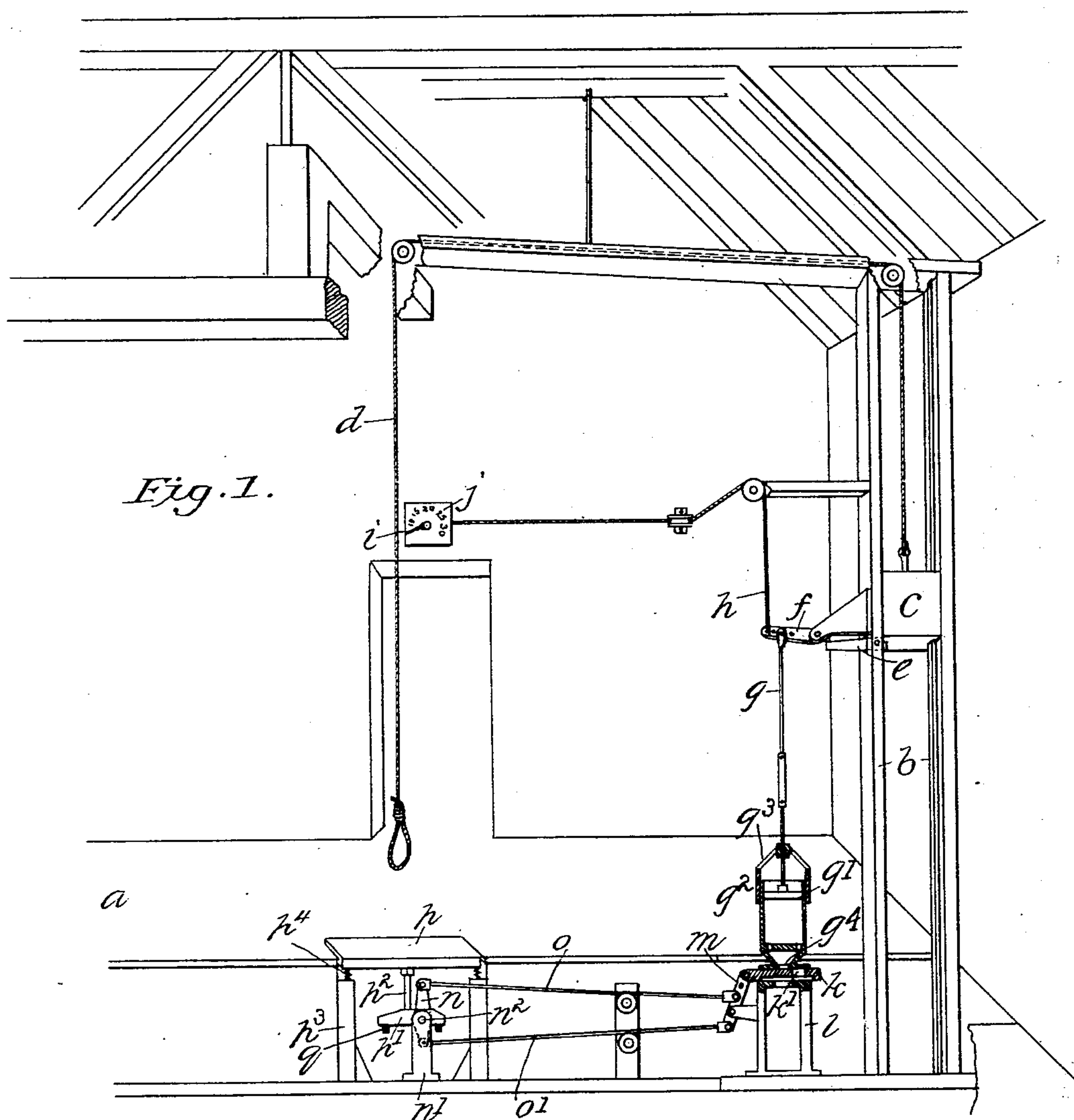
(No Model.)

2 Sheets—Sheet 1.

J. L. WOODBRIDGE.
AUTOMATIC GALLOWS.

No. 541,409.

Patented June 18, 1895.



Witnesses:
J. A. Cantin
Arthur D. Jenkins,

Inventor
Jabez L. Woodbridge
by Chas. L. Burdett,
attorney

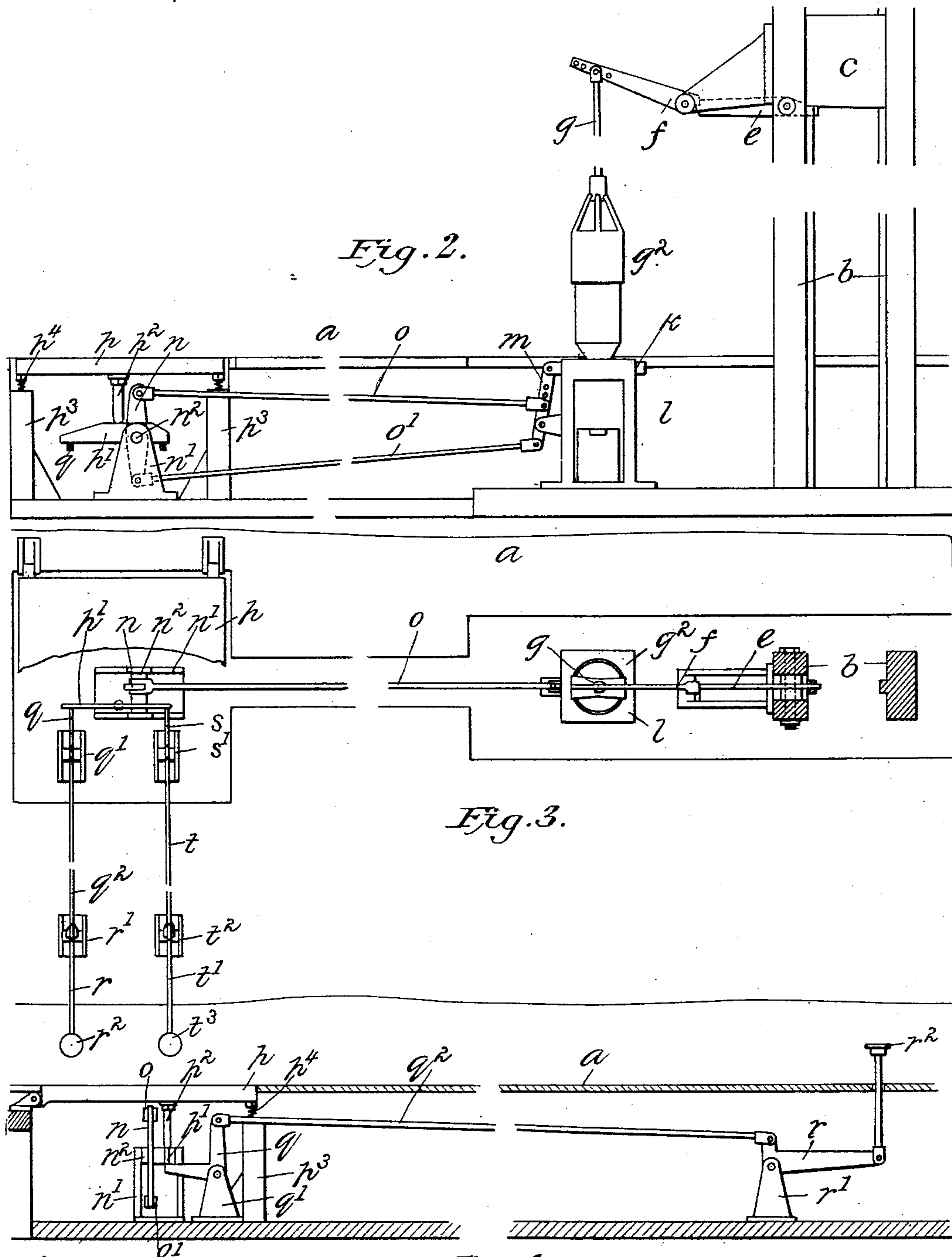
(No Model.)

2 Sheets—Sheet 2.

J. L. WOODBRIDGE.
AUTOMATIC GALLOWS.

No. 541,409.

Patented June 18, 1895.



Witnesses:

J. A. Cantin
Arthur B. Jenkins.

Fig. 4.

Inventor:

Jabez S. Woodbridge.
By Chas. S. Burdett,
attorney

UNITED STATES PATENT OFFICE.

JABEZ L. WOODBRIDGE, OF WETHERSFIELD, CONNECTICUT.

AUTOMATIC GALLOWS.

SPECIFICATION forming part of Letters Patent No. 541,409, dated June 18, 1895.

Application filed February 18, 1895. Serial No. 538,828. (No model.)

To all whom it may concern:

Be it known that I, JABEZ L. WOODBRIDGE, a citizen of the United States, and a resident of Wethersfield, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Automatic Gallows, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

The object of my invention is to provide an apparatus or machine by means of which the penalty of capital punishment may be inflicted with certainty by devices that are to a certain extent automatic, but which remain wholly under the control of the public officer until the final moment.

To this end my invention consists in the details of the several parts making up the apparatus as a whole and in the combination of such parts as more particularly hereinafter described and pointed out in the claims.

Referring to the drawings, Figure 1 is a view of the apparatus as arranged in a room. Fig. 2 is a view in elevation of the vertically-movable platform, the weight, and the connected mechanism. Fig. 3 is a plan view showing the arrangement of the several levers and bolts located between the vertically-movable platform and the weight. Fig. 4 is a view in side elevation showing the arrangement of the platform-controlling lever and of the platform-lever. Fig. 5 is a view of the dial and mechanism for operating the index-hand.

In the accompanying drawings the letter *a* denotes the floor of a room, preferably raised as shown in the accompanying drawings, leaving a space thereunder in which is located part of the operating mechanism. The letter *b* denotes the weight guides; *c*, the weight, and *d* a rope in the end of which the usual knot is made in such manner as to form a loop, the knot being one that will not slip.

The letter *e* denotes the weight lever that is pivoted in a suitable support with one end underlying and supporting the weight *c*, the other end of the lever being in engagement with the trip *f*. This trip *f* is supported on a pivot, with one end engaging the weight lever *e*, and the opposite end connected with a trip rod *g*. A rope or like flexible connection *h* is also attached to one end of the trip *f*, the opposite end of the rope passing around the

shaft of an index hand *i*, the hand overlying the face of a dial *j*. This dial is supplied with characters, as numerals, to denote the movement of the index hand, in the form shown in the drawings the numbers in a series of 5 up to 40 denoting seconds, and the parts just described are so adjusted that when the trip *f* is in its normal position the index hand points to 5, and when this trip has moved to a distance sufficient to release the weight from lever *e* the index hand will have been moved around to 35, denoting that a period of thirty-five seconds has elapsed between the commencement of movement of the trip *f* and the release of the weight lever *e*.

The trip rod *g* is connected to a follower *g'* located in a valve case *g²*. Openings *g³* are formed in the upper part of the valve case, and an opening *g⁴* in the lower part of said case. Underlying the opening *g⁴* is a valve *k*, having therein a valve opening *k'*. This valve is located in a slide way, and is adapted to move so that the valve opening *k'* will register with the opening *g⁴* in the bottom of the valve casing, the slide ways in which the valve moves being preferably located on a standard *l*. A valve lever *m* is pivoted to the standard *l*, one end of the valve lever being also pivoted to the valve *k*.

A platform lever *n* is pivoted to a standard *n'* underneath the platform *p*, and a connecting rod *o* is pivoted to the upper end of the platform lever and to the valve lever *m* at a point between its pivotal support and connection with the valve *k*. In the form shown a supplemental rod *o'* is pivoted to the lower end of both the platform lever and the valve lever, but this rod may or may not be used, it being obvious that its function is the same as the connecting rod *o* and acts merely as an aid in the operation of the device.

To the shaft *n²* to which the platform lever *n* is secured is also attached a platform holding lever *p'*, a support *p²* extending from the vertically movable platform *p* downward and resting on the platform holding lever *p'* forward of its pivotal support. Stops *p³* are located underneath the platform *p* in a position to limit the extent of its downward movement, springs *p⁴* being interposed between the platform and the stops. A platform controlling lever *q*, see Figs. 3 and 4 of the drawings,

is pivoted to a standard q' , this lever being in the form of a bent lever, one arm of which underlies the forward end of the platform holding lever p' , and the other arm of the lever being pivotally connected with the connecting rod q^2 , the opposite end of said connecting rod being attached to the foot lever r pivoted in the standard r' , a foot piece r^2 being secured to the end of the foot lever r .

A releasing lever s is pivoted to a standard s' with one arm underlying the platform holding lever at a point back of the pivotal support of the latter. A connecting rod t is pivoted to the opposite arm of the releasing lever s , the opposite end of the connecting rod t being pivoted to a foot lever t' pivoted to the standard t^2 , and a foot piece t^3 is also secured to the foot lever t' . The general construction of the releasing lever s' , the foot lever t' and the connected mechanism is the same as that shown and described with reference to the platform controlling lever, q , foot lever r and connected mechanism.

The movement of the follower g' is controlled by the pressure on the under side of the follower. A fluid or solid substance may be used to control its movement. Shot are preferably used, as the operation of the device can be more easily controlled than with the use of less solid substances.

In the operation of the device the movable parts being in the position shown in Fig. 1 of the drawings, as pressure is put upon the vertically movable platform n , the latter is depressed till it encounters the stops p^2 . This operation rocks the platform lever n and the valve lever m to a distance sufficient to cause the opening in the lower part of the valve case g^2 and that in the valve g' to partially register each with the other, and allow the shot to flow out of the valve case. As the shot flow from the case the follower g' is depressed under the action of the weight c and connected mechanism, until the weight lever e is released from the trip f , causing the weight to fall and the rope d to be suddenly drawn upward.

In the downward movement of the trip f the pull upon the flexible connection h causes the index hand i on the dial j to be revolved, and as before stated the time that will elapse from the release of the shot by the mechanism herein described to the release of the weight lever from the trip will be just thirty-five seconds, as denoted on the dial. This gives sufficient time in which the knot may be properly adjusted and it is held in this position by the attendant until the release of the weight. This necessitates that the blow caused by the fall of the weight shall be given at the proper place to effect the desired result.

By means of the platform controlling lever and releasing lever s the movement of the shot from the case can be easily controlled. If it is found that they are running out too fast to enable the required operations to be performed before the release of the weight a

pressure upon the foot lever r^2 throws the platform holding lever p' and consequently vertically movable platform p upward, thus shutting off the flow of the shot. If the required operations are performed quickly and it is desired to hasten the operation of the device a pressure upon the foot lever t' will cause the platform holding lever p' to be rocked farther over, this movement causing the opening in the valve through the connected mechanism between the platform lever n and valve lever m to register with the opening in the bottom of the valve case when all of the shot will immediately flow out from the case causing the weight c to drop at once.

I claim as my invention—

1. In combination in a gallows, a vertically movable platform, a valve case, a follower located within the case, a valve connected with the vertically movable platform whereby the movement of the follower may be controlled, a weight lever connected with the follower, and a weight supported by the weight lever, all substantially as described.

2. In combination in a gallows, a vertically movable platform, a valve case, a follower located within the case, a valve operatively connected with the vertically movable platform, whereby the movement of the follower may be controlled, a trip connected with the follower, a weight lever in engagement with the trip, and a weight supported by the weight lever, all substantially as described.

3. In combination in a gallows, a vertically movable platform, a valve case, a follower located within the case, a valve operatively connected with the vertically movable platform, whereby the movement of the follower is controlled, a trip rod connecting the follower and a trip, the trip, a weight lever in engagement with the trip, and a weight supported by the weight lever, all substantially as described.

4. In combination in a gallows, a vertically movable platform, a valve case, a follower located within the case, a valve lever connecting the vertically movable platform and a valve, the valve, a trip rod connecting the follower and trip, the trip, a weight lever in engagement with the trip, and a weight supported by the weight lever, all substantially as described.

5. In combination in a gallows, a vertically movable platform, a platform lever operatively connected with the vertically movable platform, a valve case, a follower located within the case, a valve operatively connected with the platform lever whereby the movement of the follower may be controlled, a trip connected with the follower, a weight lever in engagement with the trip, and a weight supported by the weight lever, all substantially as described.

6. In combination in a gallows, a vertically movable platform, a platform holding lever supporting the vertically movable platform,

a platform lever connected with the platform holding lever, a valve case, a follower located within the case, a valve connected with the platform lever whereby the movement of the follower may be controlled, a trip connected with the follower, a weight lever in engagement with the trip, and a weight supported by the weight lever, all substantially as described.

7. In combination in a gallows, a vertically movable platform, a pivoted platform holding lever supporting the vertically movable platform forward of its pivot, a platform lever connected with the platform holding lever, a valve case, a follower located within the case, a valve operatively connected with the platform lever whereby the movement of the follower may be controlled, a weight lever operatively connected with the follower, and a weight supported by the weight lever, all substantially as described.

8. In combination in a gallows, a vertically movable platform, stops to limit the downward movement of the platform, a platform lever operatively connected with the vertically movable platform, a valve case, a follower located within the case, a valve connected with the platform lever whereby the movement of the follower may be controlled, a weight lever operatively connected with the follower, and a weight supported by the weight lever, all substantially as described.

9. In a gallows, in combination with the valve operating mechanism and vertically movable platform, a platform holding lever connected therewith, a platform controlling lever in engagement with the platform holding lever, and means for operating the platform

controlling lever, all substantially as described.

10. In a gallows, in combination with the valve operating mechanism and a vertically movable platform, a platform holding lever connected therewith, a platform controlling lever, in engagement with the platform holding lever, and a foot lever connected with the platform controlling lever, all substantially as described.

11. In a gallows, in combination with the valve operating mechanism and a vertically movable platform, a platform holding lever connected therewith, a releasing lever connected with the platform holding lever, and means for operating the releasing lever, all substantially as described.

12. In a gallows in combination with the valve operating mechanism and vertically movable platform, a platform holding lever connected therewith, a releasing lever connected with the platform holding lever, and a foot lever connected with the releasing lever, all substantially as described.

13. In a gallows, in combination, a vertically movable platform, a valve operatively connected with the platform, a valve case, a follower located within the case, a weight lever operatively connected with the follower, a weight supported by the weight lever, and an index hand operatively connected with the weight lever, all substantially as described.

JABEZ L. WOODBRIDGE.

Witnesses:

CHAS. L. BURDETT,
ARTHUR B. JENKINS.