

(No Model.)

J. N. BLAUVELT.
COIN CONTROLLED DANCING FIGURE.

No. 445,535.

Patented Feb. 3, 1891.

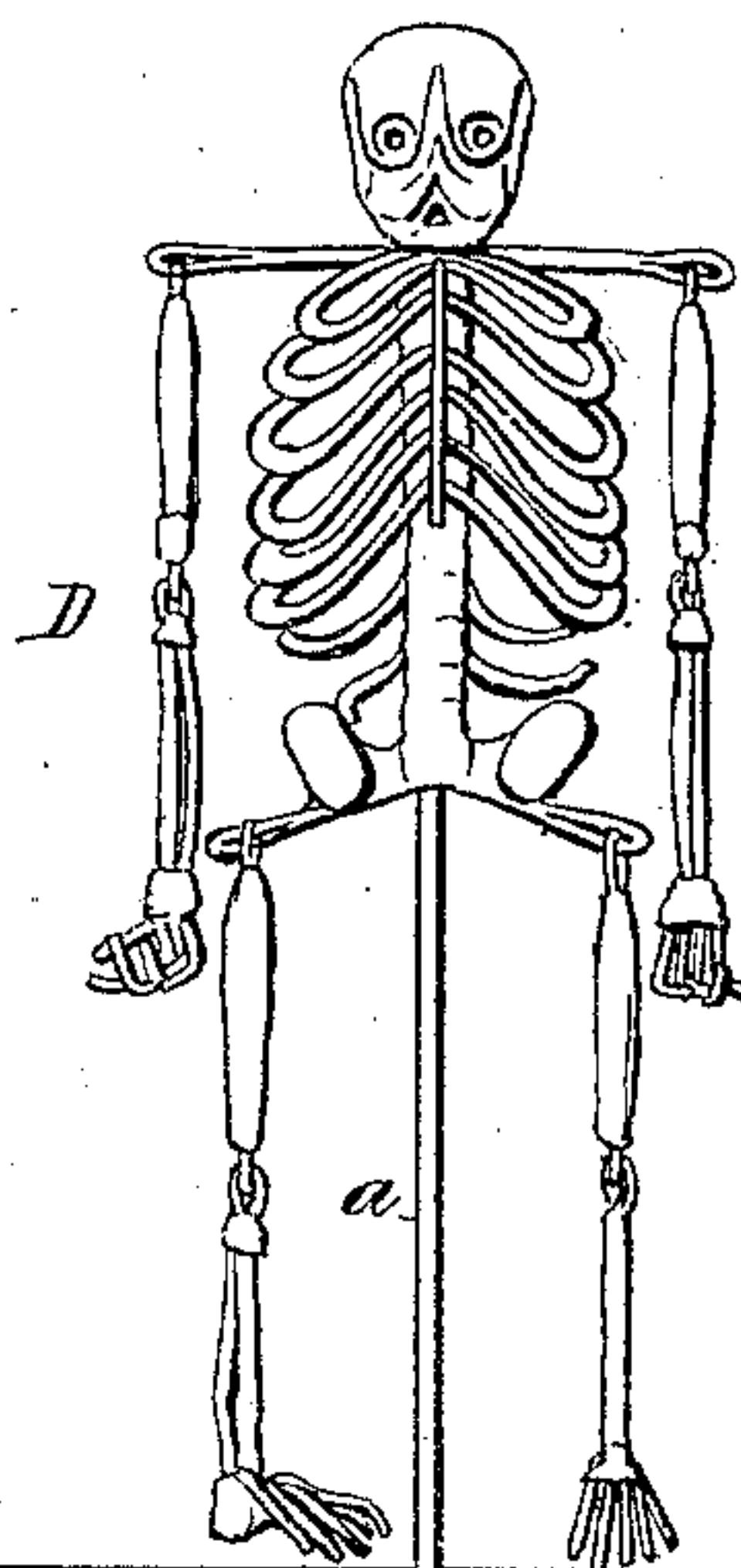
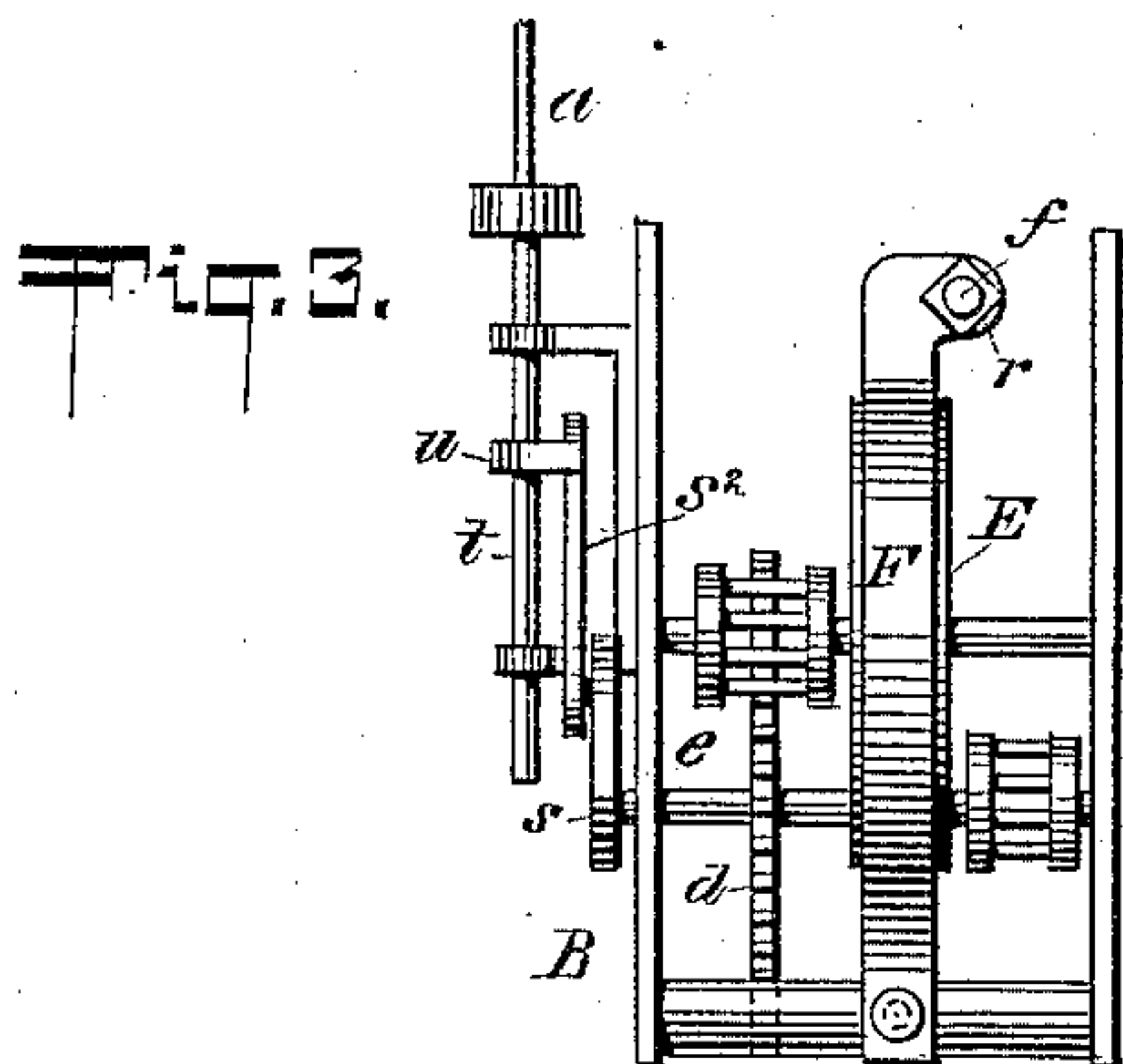


Fig. 1.

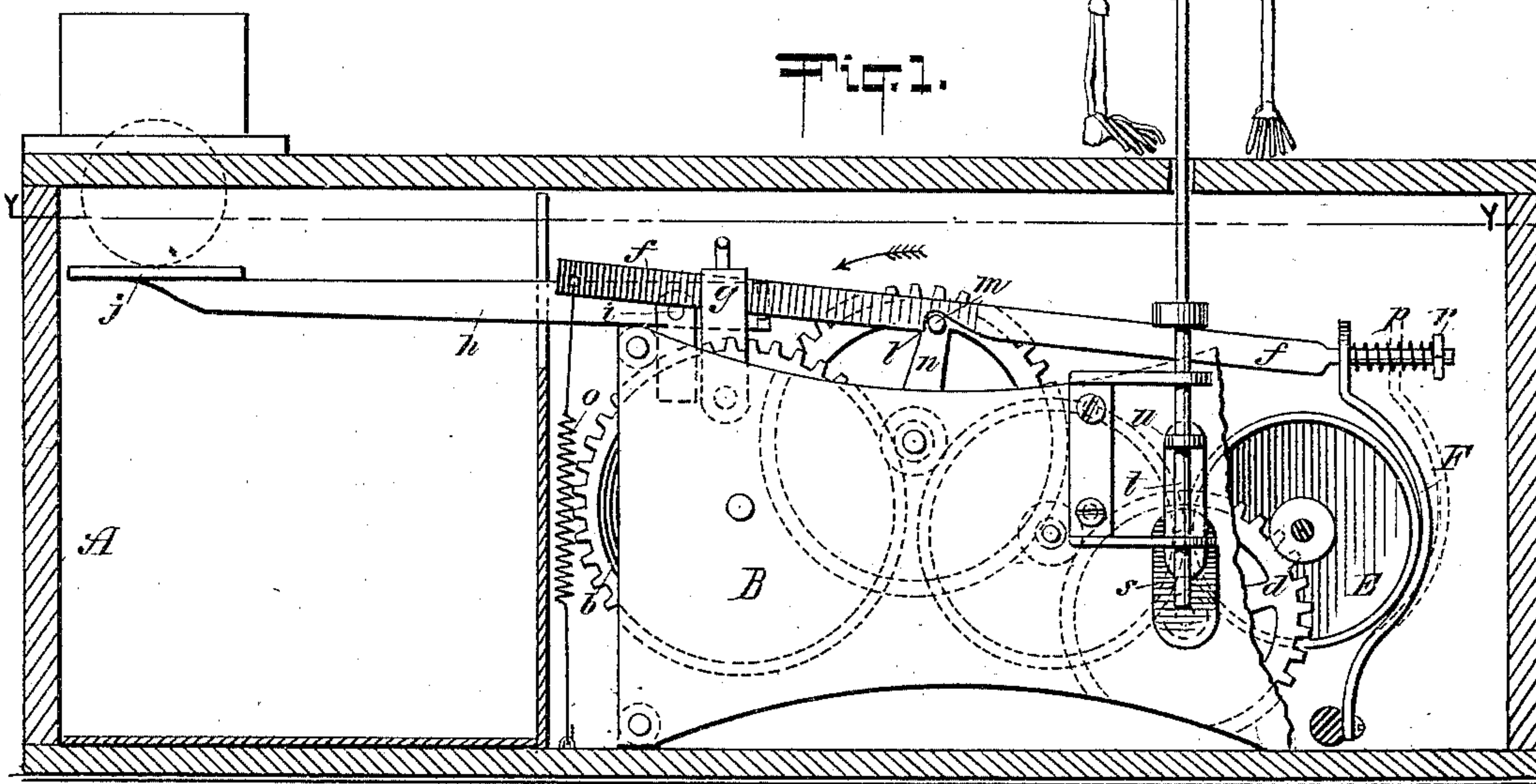
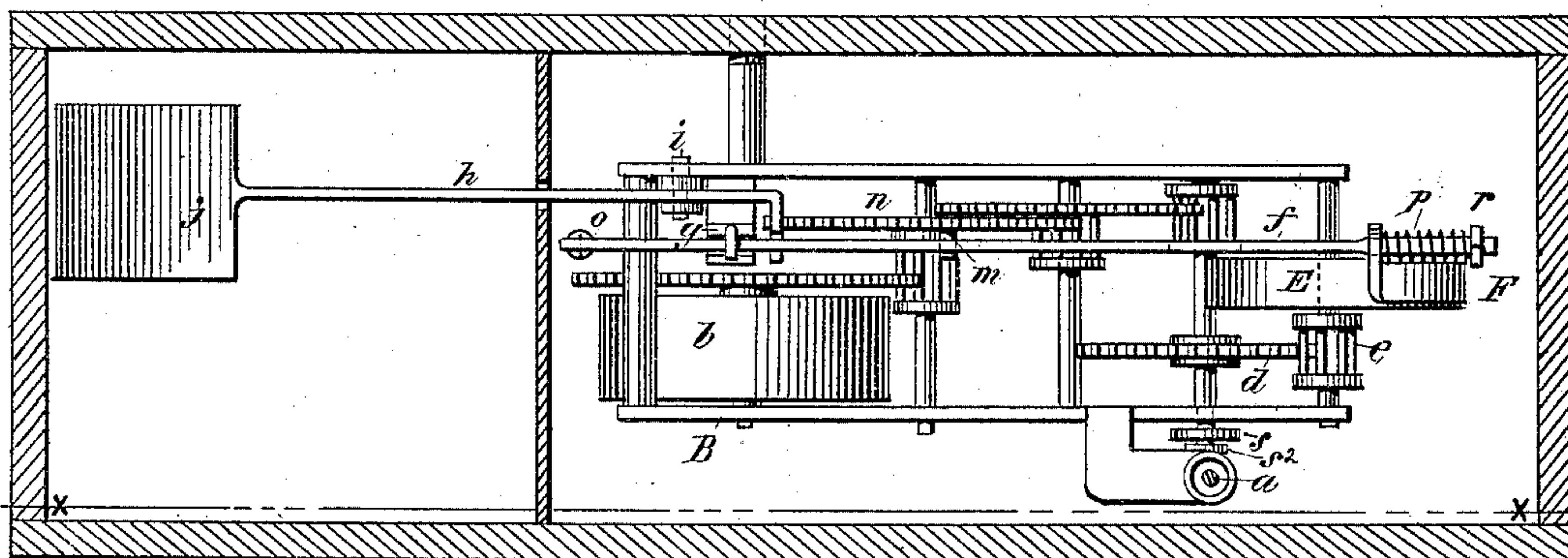


Fig. 2.



WITNESSES:

A

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COIN-CONTROLLED DANCING FIGURE.

SPECIFICATION forming part of Letters Patent No. 445,535, dated February 3, 1891.

Application filed May 7, 1890. Serial No. 350,859. (No model.)

To all whom it may concern:

Be it known that I, JAMES N. BLAUVELT, a citizen of the United States, and a resident of Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Coin-Controlled Dancing Figures, of which the following is a specification.

The object of my invention is to cause a coin to release or start the mechanism of a toy dancing figure.

The invention consists in the novel details of improvement and the combinations of parts that will be more fully hereinafter set forth, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a longitudinal sectional view on the plane of the line X X, Fig. 2. Fig. 2 is a horizontal section on the plane of the line Y Y, Fig. 1; and Fig. 3 is a detail edge view of part of the mechanism.

Referring now to the drawings, the letter A indicates a suitable casing, within which is placed a suitable mechanism B for giving the figure D a vertically reciprocating or any other desired motion. The figure D is shown connected with the mechanism B by a rod *a*, by which it is supported and actuated.

In the example shown the mechanism B consists of a suitable clock-work or train of gearing driven by a spring *b*. In said mechanism is a fly-wheel E, that is shown driven by the wheel *d* of the train which gears with the pinion *e* on the shaft of the fly-wheel, which fly-wheel, when pressed upon by the brake F', will stop the mechanism, and thereby check the movement of the figure D. The brake F is shown connected at one end to the framing of the mechanism B and lies in proximity to the fly-wheel E. When the brake F is out of contact with the fly-wheel E, the mechanism B will be free to run to actuate the figure D. The brake F is intended to normally hold the mechanism in check and to be actuated by a coin to release the mechanism. I have shown a very simple means for effecting this, which is as follows: To the brake F, preferably near its free end, is connected a rod *f*, that passes over or through the mechanism, and is shown guided near its free end in guides *g* on the mechanism B.

The rod *f* rests at or near its free end on a rod or lever *h*, that is pivoted, as at *i*, in the mechanism. The outer end of the lever is shown broadened at *j*, so that a coin can drop on it to depress it. The rod *f* is to be drawn forward by one of the wheels of the train of gearing, so as to press the brake against the fly-wheel E. This may be accomplished as follows: The underside of said rod *f* has a notch *l*, that is adapted to receive a pin or projection *m* on a wheel *n* of the train, as in Fig. 1. When in its normal position, the pin *m* will be in the notch, as in Fig. 1, and will thus draw on the rod *f* and press the brake F against the wheel E to hold the mechanism in check. A light spring *o* may be connected to the outer end of the rod *f* and to the mechanism B, as shown, to keep the notch *l* down to be engaged by the pin or projection *m*. I prefer that the rod *f* should have a slight independent longitudinal movement, and for this purpose it passes freely through the brake F, and has coiled around it a spring *p*, that presses at one end against the brake F, and at its other end against a nut *r* or the like on the end of the rod *f*, as shown. By this means the pressure of the brake upon the fly-wheel is cushioned, and the rod *f* will be given a slight longitudinal movement when the pin *m* is released from the notch to bring the notch forward into position to receive the pin again.

The operation is as follows: When the parts are in their normal position, as in Fig. 1, the brake F will hold the mechanism from running, and thus the figure D will be prevented from movement. When now a coin is passed upon the part *j* of the lever *h*, it will depress said lever and raise its inner end, which will lift the free end of the rod *f*, thus disengaging the pin *m* from the notch *l*. The brake F will now be released from the fly-wheel E, and the train of gearing will thus be permitted to run to actuate the figure D. The rod now moves longitudinally under the influence of the spring, and also descends slightly, thereby raising the lever *h*, which the coin has now released, whereby the notch *l* is brought into the path of the pin *m*. The wheel, carrying the pin *m*, turns in the direction of the arrow, Fig. 1, and when it has made, say, one revolution the pin *m* will engage the

notch *l*, draw the rod *f*, and thus press the brake *F* against the fly-wheel *E* to stop the mechanism. When the rod *f* is first drawn it pulls against the tension of the spring *p*,
 5 which cushions the pressure of the brake against the fly-wheel *E*. The mechanism will now be held until another coin releases the brake. Of course any other wheel but the wheel *n* could carry the pin *m*, and according
 10 to the speed of the wheel carrying the pin *m* the length of time that the figure *D* will be actuated is determined.

The means I have shown for actuating the figure *D* consists of a crank *s* on the shaft of
 15 the wheel *d*, which crank connects by a link *s'* with a rod *t*, that is guided to reciprocate in bearings *u* on the mechanism *B*, the rod *t* being connected to the rod *a*. By this means the rod *a* and figure *D* are reciprocated quickly.

20 Having now described my invention, what I claim is—

1. A figure and mechanism for actuating the same, provided with a fly or regulating wheel, combined with a brake for stopping
 25 said mechanism, another wheel of the train or mechanism, and connections between said brake and said last-mentioned wheel, whereby said last-mentioned wheel will actuate said brake to stop the mechanism automatically,
 30 substantially as described.

2. A figure and mechanism for actuating the same, provided with a fly-wheel, combined with a brake for said wheel, a rod *f*, connected
 35 to said brake, and connections between the rod *f* and another wheel of the mechanism,

whereby said last-mentioned wheel will act to press said brake against said fly-wheel by drawing on said rod *f* and automatically stop the mechanism, substantially as described.

3. A train of gearing and a fly-wheel in the same, combined with a brake, a rod *f*, a spring
 40 *p*, interposed between the rod *f* and the brake, and connections between the rod *f* and a wheel of the train, whereby said rod will be drawn by said last-mentioned wheel to press
 45 the brake against the fly-wheel, the spring *p* permitting the rod *f* to have a slight independent movement, substantially as described.

4. The mechanism *B* and wheel *E* in said mechanism, a brake to engage said wheel, and
 50 a rod *f*, connected to said brake, said rod having a notch *l*, combined with a pin or projection *m* on a wheel of the mechanism, to engage said notch to draw the rod *f*, and coin-actuated mechanism for releasing the pin
 55 from the notch, substantially as described.

5. The mechanism *B*, fly-wheel *E*, and brake *F*, combined with the rod *f*, coin-actuated lever *h*, and connections between the rod
 60 *f* and a wheel of the train for actuating the rod by said wheel, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 5th day of May, 1890.

JAMES N. BLAUVELT.

Witnesses:

T. RHYS SMITH,
 H. W. NORTON.