(No Model.)

A. W. PEARSON.

COIN CONTROLLED WRIST TESTING MACHINE.

No. 536,736. Patented Apr. 2, 1895.

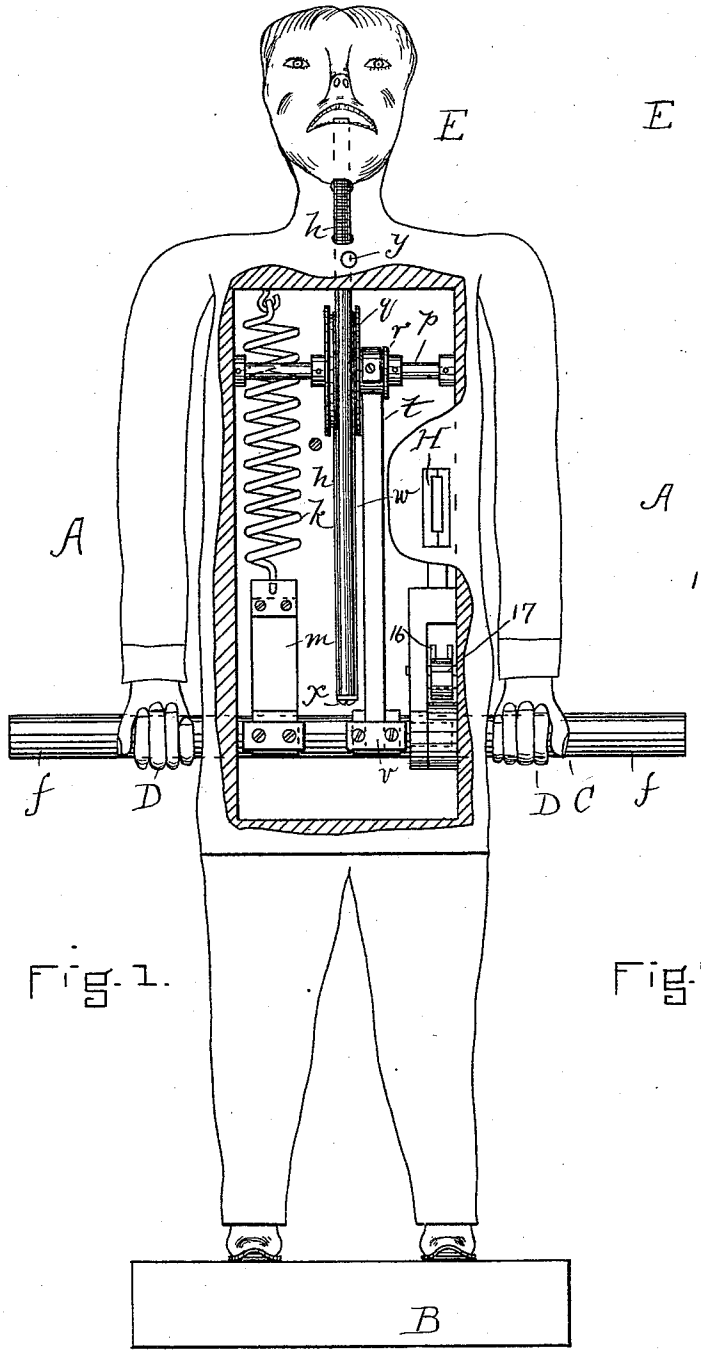

Fig. 1.

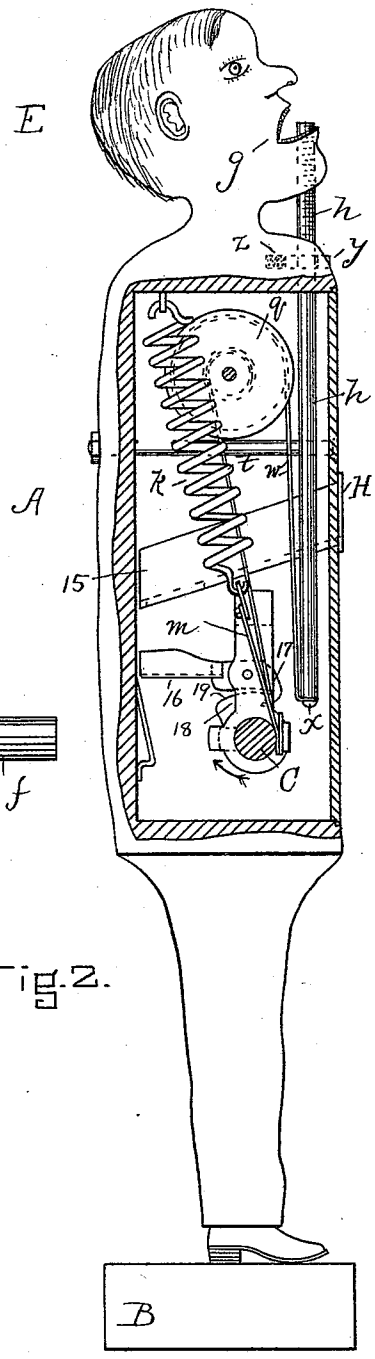

Fig. 2.

WITNESSES.

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AUGUSTUS W. PEARSON, OF MARBLEHEAD, MASSACHUSETTS.

COIN-CONTROLLED WRIST-TESTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 536,736, dated April 2, 1895.

Application filed November 26, 1894. Serial No. 529,966. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS W. PEARSON, of Marblehead, in the county of Essex, State of Massachusetts, have invented certain new and useful Improvements in Coin-Operated Wrist-Testing Machines, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation of my improved machine, the body being represented as broken away to show the operating mechanism, and Fig. 2 a vertical transverse section of the same.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to a machine for testing the strength of the wrist, the resisting mechanism being released by the weight of a coin; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simple, cheap and effective device of this character.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body of the machine which is mounted on a suitable base, B, and is preferably a hollow cast iron figure of a man. A rotary bar, C, passes horizontally through the figure and the hands, D, of the figure appear to grasp the bar and resist the efforts of the operator to turn it. Said bar is extended beyond the hands to form handles, *f*. The head, E, of the image is thrown backward and the mouth, *g*, is open so that a vertically sliding index rod, *h*, may project therefrom. A stiff coiled spring, *k*, has one end fast within the body, the opposite end being connected by a flexible strap, *m*, with the bar, C. Said spring acts to resist the rotation of said bar. In the upper portion of the body there is a horizontally arranged rod or shaft, *p*, upon which a grooved pulley, *q*, is journaled. Said pulley has a hub, *r*, with which a strap, *t*, is connected said strap being fastened at, *v*, to the bar, C. A strap, *w*, has one end secured to the pulley, *q*, the rod, *h*, having its lower end fastened at, *x*, to the free end of said strap, *w*. The upper end of the rod passes through the top of the figure and through the mouth of the head, E. A horizontally arranged pin, *y*, is pushed outward by a spring, *z*, and is in frictional contact with said rod sufficiently to hold it when elevated. By pushing in the pin, *y*, the rod will fall by gravity. An inwardly inclined coin-chute, H, opens through the front of the body, A, and discharges at, 15, onto a pan, 16, which is secured to one arm of a locking pawl, 17, pivoted within the body. On the rod, C, there is a cam-tooth, 18, which is engaged by the pawl, 17, locking said rod against rotation in the direction of the arrow in Fig. 2. The heel, 19, of said tooth is so arranged that it will, when the rod is rotated a determined distance, engage the rear end of the locking pawl and sustain the pan, 16, for a determined time.

In the use of my improvement, the operator grasps the handles, *f*, of the rod, C, and drops a coin into the chute, H, said coin falling from the chute, lands on the pan, 16, tilting the locking pawl, 17, sufficiently to free the tooth, 18, so that the operator can rotate the bar toward him or in the direction of the arrow in Fig. 2. The cam-heel, 19, of the tooth, 18, sustains the pan so that the coin will not fall therefrom until the operator has rotated the bar, C, sufficiently so that the pawl, 17, when it drops again will not engage the tooth, 18. As soon as the point on the pawl has passed the tooth, 18, the weight of the coin will tilt the pan downward and the coin will drop into any suitable receptacle in the bottom of the figure. The pawl tooth is of sufficient weight to counter-balance the pan which will turn into position to engage the tooth again as hereinafter described. As soon as the tooth is freed from the pawl the operator can turn the rod or bar, C, toward him. This winds the strap, *m*, onto said bar which is resisted by the spring, *k*, preferably of known tension. As the bar is thus rotated the strap, *t*, is also wound thereon driving the pulley, *q*, in the opposite direction and winding the strap, *w*, onto said pulley which elevates the indicator rod, *h*, projecting its free end from out the mouth of the image. Said

rod is spaced and marked to indicate the number of pounds of resistance which the operator has overcome.

I do not confine myself to using this particular form of index or to constructing the body in the shape of a man, said construction being, however, preferable for amusement as it is designed to give the impression that the hands of the figure are resisting the efforts of the operator. As soon as the operator releases the handles the contraction of the spring, *k*, will serve to rotate it in the opposite direction and the pawl, 17, engaging the tooth, 18, will again lock it until another coin is inserted.

Having thus explained my invention, what I claim is—

1. A coin-operated wrist machine comprising a body; a handle fitted to rotate therein, a spring for resisting the rotation of said handle; and a graduated rod projected from said body by the rotation of said handle for indicating the spring resistance, substantially as specified.

2. A coin-operated wrist machine comprising a body; a handle fitted to rotate therein, a spring for resisting the rotation of said handle; a graduated rod projected from said body by the rotation of said handle for indicating the spring resistance; and a coin-released mechanism for locking said handle against rotation.

3. In a device of the character described, the body, in combination with a handle fitted to rotate therein; a spring resisting the rotation of said handle; a graduated index rod actuated by the rotation of said handle and coin-chute; a pawl locking said handle against rotation in one direction; a receptacle on the free arm of said pawl adapted to receive a coin from said chute and disengage the pawl.

4. In a device of the character described, a body constructed to represent the figure of a man with an open mouth in combination with a handle fitted to rotate in said body and the hand of said figure; a spring resisting the rotation of said handle; an index rod projecting from the mouth of said figure and actuated by the rotation of said handle, substantially as described.

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Witnesses:
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