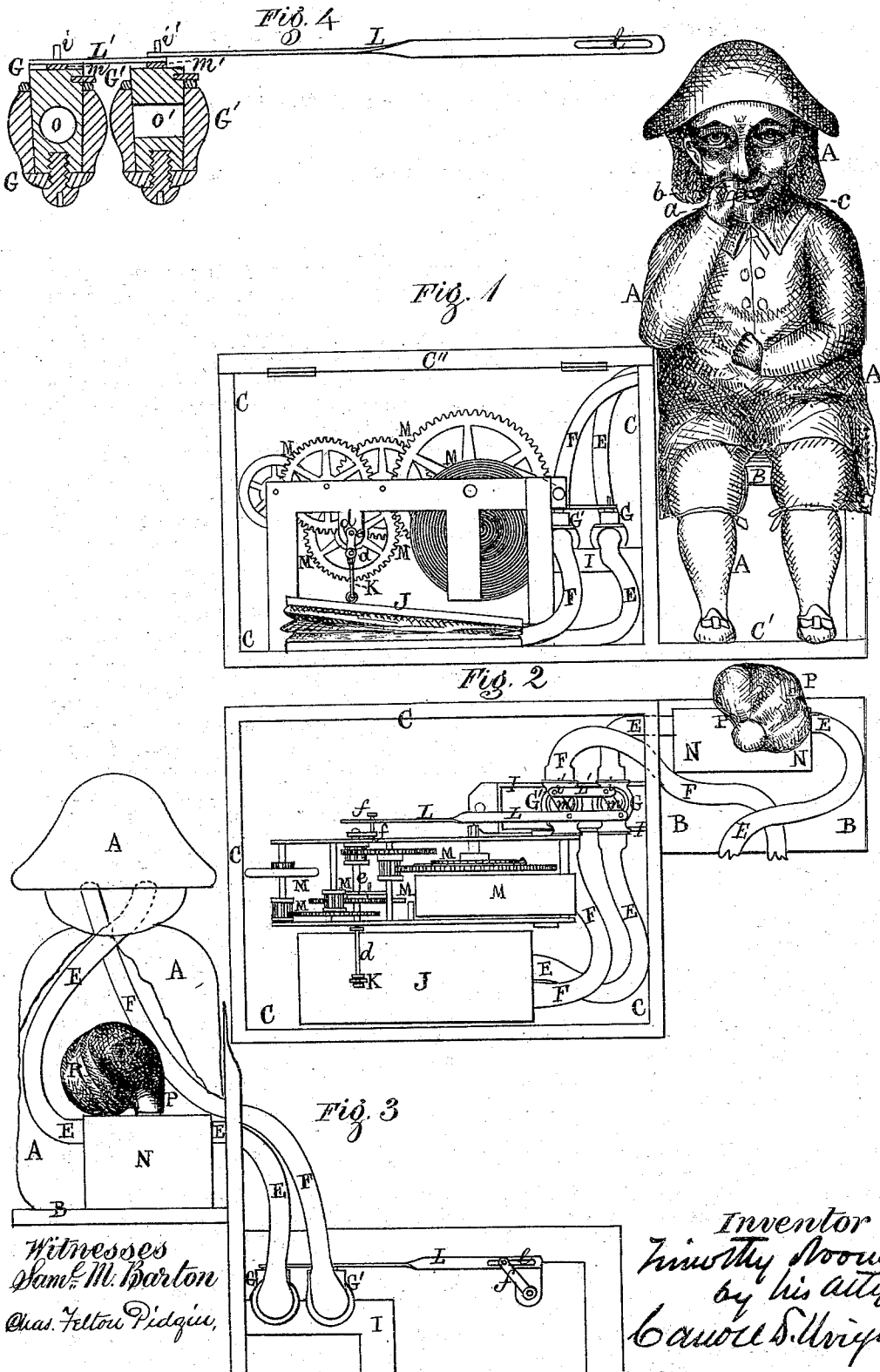


T. NOONAN.
Automatic Smoking Toys.

No. 153,905.

Patented Aug. 11, 1874.



UNITED STATES PATENT OFFICE.

TIMOTHY NOONAN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN AUTOMATIC SMOKING-TOYS.

Specification forming part of Letters Patent No. **153,905**, dated August 11, 1874; application filed May 5, 1874.

To all whom it may concern :

Be it known that I, TIMOTHY NOONAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Automaton Smoking-Toy, of which the following is a specification :

Figure 1 of the accompanying drawings is a front view of my invention, with the front of the case removed. Fig. 2 is a top view of the same, with the figure and top of the case removed. Fig. 3 is a rear view of a portion of my invention. Fig. 4 is a central vertical section through the valves of my invention, showing a side view of their operating levers at an enlarged scale.

The present invention relates to certain new and useful improvements in automaton toys, having for their principal object the production of a toy human figure, for tobacconists' shops or other purposes, that will inhale and emit smoke from a pipe or cigar sustained in the mouth of the figure; and to effect this end, my invention consists mainly in a toy human figure, having in its mouth an induction-orifice arranged to hold a pipe or cigar, and an eduction-orifice; the said orifices being connected by tubes with a bellows operated by clock mechanism, that also operates a lever or rod connecting with, and operating so as to open and close alternately at the proper time, valves connected with the said tubes, and inhale the smoke from the pipe or cigar and emit the smoke from the eduction-orifice of the mouth of the figure.

These improvements also consist in the construction, arrangement, and combination of minor devices, for the effective operation of the invention, that will be more fully explained in due course.

The construction, arrangement, and operation of my improvements are as follows :

In the drawings, A represents a toy human figure, constructed of any material and in any desired manner, and arranged in any position preferred. In the present example, the figure A is represented as sitting on a seat or shelf, B, projecting from the side of a box or case, C, whose bottom C' is extended at one side to support the legs or bearings of the seat. The case C may be of any desired shape, or formed to represent any object that may be

preferred, and may be located in any desired position in regard to the figure, and is provided with a hinged or other cover, C'', or is otherwise arranged to give ready access to its interior. The mouth of the figure A is formed with an induction-orifice, *a*, arranged to hold a cigar or pipe, *b*, and an eduction-orifice, *c*. Connected with the said orifices *a c*, at the rear, are rubber or other suitable tubes, E F, that connect or are provided with ordinary gas-pipe or other suitable valves, G, supported on a frame, I, or bearings within the case C, and on the other side of the valves connect with the front end of a bellows, J, that on the top is provided with a connecting-rod, K, that engages with and is operated by a crank, *d*, on one of the driving-arbors *e* of clock mechanism M. The other end of the driving-arbor *e* is provided with a crank, *f*, that engages in a slot, *l*, formed in one end of a lever or connecting-rod, L, whose other end is pivoted to two lateral parallel arms, *m m'*, attached to the top of the valves G G', and provided with pivots or stems *i i'*, which receive and carry a parallel longitudinal arm, L', that thus holds the ends of the lateral arms *m m'*, and insures the even working of the valves G G', whose apertures *o o'* are arranged within the valves in such a direction in regard to each other that one shall be closed when the other is opened by the action of the lever L, whose slot *l* is so proportioned in regard to the play of the connecting-rod K as to allow either one of them—that is, the lever L or rod K—to receive the full power of the spring of the clock mechanism while the other is not performing its work; thus, if the crank-lever L is allowed a play of nine-sixteenths of an inch, and the bellows crank-rod K is allowed a play of three-sixteenths, the latter is working three-sixteenths of its slide while the former is performing its work, which is three-sixteenths; and while the crank-lever L is sliding nine-sixteenths, the rod K is operating the bellows nine-sixteenths; consequently the valves G G' are operated to open and close alternately at a time when the bellows J is resting, and the bellows is operating at the time the valves are at rest, and vice versa. The induction-tube E is connected with, so as to be readily adjusted to or removed from, a tin or other box or receptacle,

N, located at the rear of the figure, or otherwise situated, between the cigar or pipe and valves, to receive the liquid, sediment, &c., of the tobacco; and the box N or tube E is provided with a rubber or other elastic bag, P, to receive any waste or leakage of smoke from the induction-pipe and prevent its being expelled through the pipe or cigar.

By the above description, reference being had to the drawings, it will be readily seen that, the clock machinery being wound, the bellows J is operated by the crank-rod K, and the valves G G' are alternately opened and closed at the proper time by the action of the lever L, so as to draw air through the induction-tube E and inhale the smoke from the lighted cigar, or tobacco in the pipe, and impel air through the eduction-pipe F and expel the smoke through the eduction-orifice c of the figure A, who is thus made to smoke a cigar or pipe in an effective manner for half an hour, more or less, according to the clock mechanism provided and the number of cigars or amount of tobacco furnished.

Having thus described my improvements,

what I claim as my invention, and desire to have secured to me by Letters Patent, is—

1. A box or receptacle, N, in combination with an induction-tube, E, and bellows J, of an automaton smoking figure, combined and arranged to operate substantially as described.

2. The tubes E F, valves G G', arms *m m'* L', lever L, crank *f*, clock mechanism M, crank-rod K, and bellows J, all constructed and arranged to operate substantially as described.

3. A toy human figure, provided with an induction-orifice, *a*, to hold a cigar or pipe, *b*, and an eduction-orifice, *c*, in combination with induction and eduction tubes E F, valves G G', lever L, clock mechanism M, and bellows J, all arranged to operate substantially as and for the purposes herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

TIMOTHY NOONAN.

Witnesses:

CARROLL D. WRIGHT,
SAML. M. BARTON.