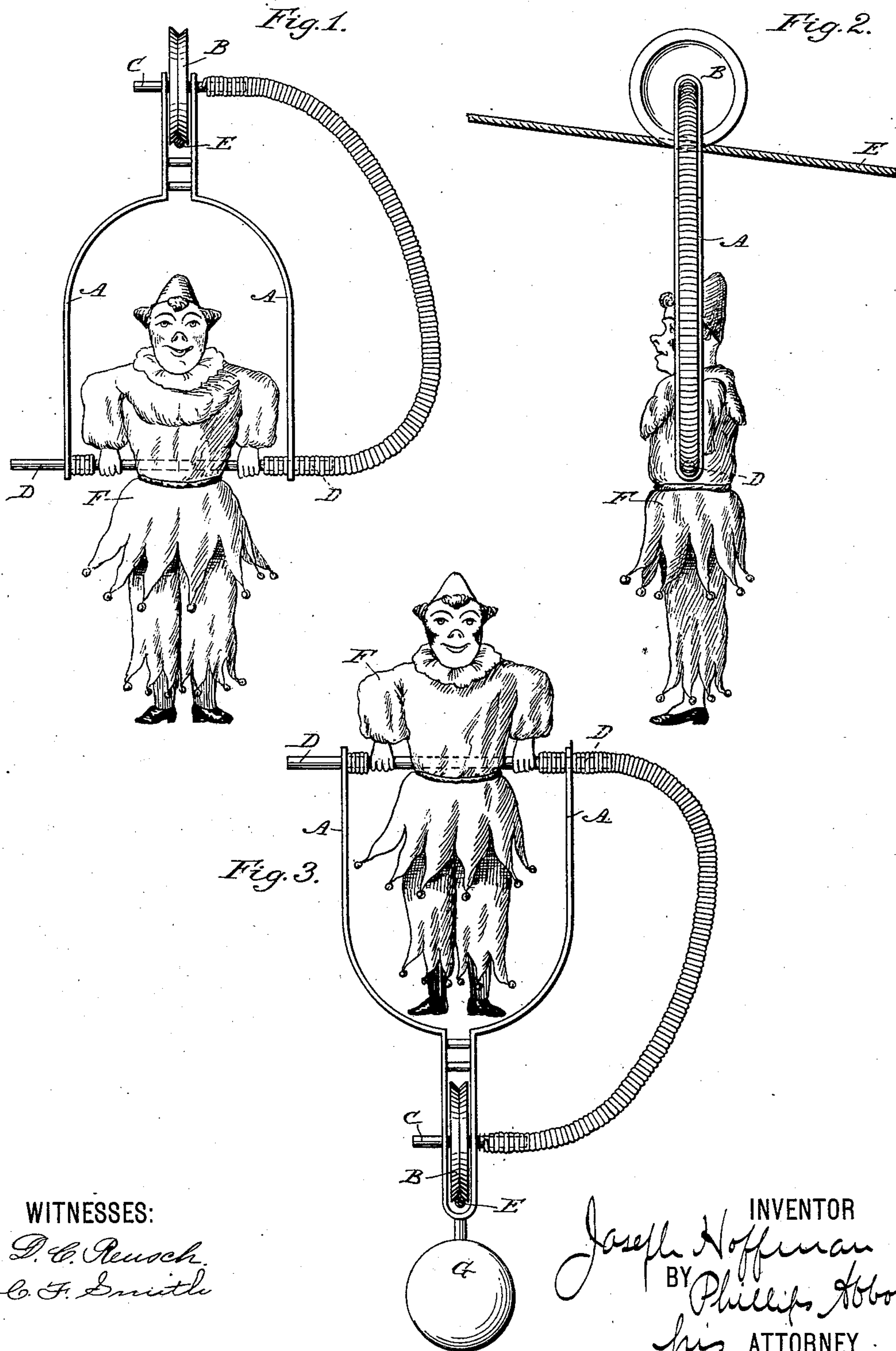


(No Model.)

J. HOFFMAN.
TOY.

No. 435,423.

Patented Sept. 2, 1890.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH HOFFMAN, OF HOBOKEN, NEW JERSEY.

TOY.

SPECIFICATION forming part of Letters Patent No. 435,423, dated September 2, 1890.

Application filed May 5, 1890. Serial No. 350,552. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HOFFMAN, a citizen of the United States, and a resident of Hoboken, in the county of Hudson and State of New Jersey, have invented a certain new and useful Toy, of which the following is a specification.

My invention relates to a new and useful toy; and it consists, generally stated, in a frame within which is journaled a grooved wheel, and to the end of the journal is attached a spiral spring or equivalent device which receives rotation from the wheel, the other end of the spring engaging with a shaft supported on the frame, to which is attached a figure, which is given rotation by the running of the wheel. The apparatus is designed to run upon a cord under the action of gravity.

Figure 1 is a front view, and Fig. 2 a side view, both in elevation, of the device as arranged for operation below the cord. Fig. 3 is a front elevation of the device as constructed with the counterpoise.

In the drawings the same reference-letters refer to the same parts in all the figures.

A is a frame made of thin metal or other suitable material. At one end it supports the grooved wheel B, which is set upon the little shaft C.

D is a spiral spring, preferably of very thin flexible wire, the other end of which is attached to the shaft D, which is likewise supported on the widely-separated ends of the frame A.

E is a cord upon which the toy traverses, the respective ends of the cord being made higher or lower, as the case may be, to secure the running of the wheel upon it by the action of gravity.

F is a figure shown in the drawings as that of a man, but it manifestly may be any other figure or device. The hands are shown as grasping the shaft D, which passes also

through the body part of the figure D. Any suitable mode of attaching the figure to the shaft may, however, be employed.

The operation is exceedingly simple. As the wheel B is turned by reason of its rolling along the cord E motion is transmitted to the spring or its equivalent, and by a well-known mechanical operation the same movement is transmitted to the shaft D, giving it rotation. Thus the figure F is made to turn somersaults within the frame A, first in one direction and then in the reverse direction, depending upon the direction of movement of the device along the cord.

In Figs. 1 and 2 I have shown the apparatus as adapted to use with the figure and frame below the cord E. In Fig. 3 I have shown it in conjunction with the counterpoise G, which is attached to the frame A, the counterpoise having sufficient weight to hold the apparatus erect above the cord E.

I claim—

A toy comprising, essentially, a frame A, consisting of two strips of metal which approach one another at one end and are separated at their other ends, a grooved wheel placed between the ends which are close together supported upon a shaft which is journaled in said ends, a figure located between the separated ends and attached to a shaft journaled in them, and a flexible connection between the shaft of the wheel and the shaft of the figure, all constructed and arranged substantially as shown, so that the rotation of the wheel gives rotation to the figure, substantially as set forth.

Signed at Hoboken, in the county of Hudson and State of New Jersey, this 3d day of May, A. D. 1890.

JOSEPH HOFFMAN.

Witnesses:

CHARLES A. LIEB,
PHILLIPS ABBOTT.