

No. 706,918.

J. J. FITZPATRICK.
TOY.

Patented Aug. 12, 1902.

(Application filed Oct. 3, 1901.)

(No Model.)

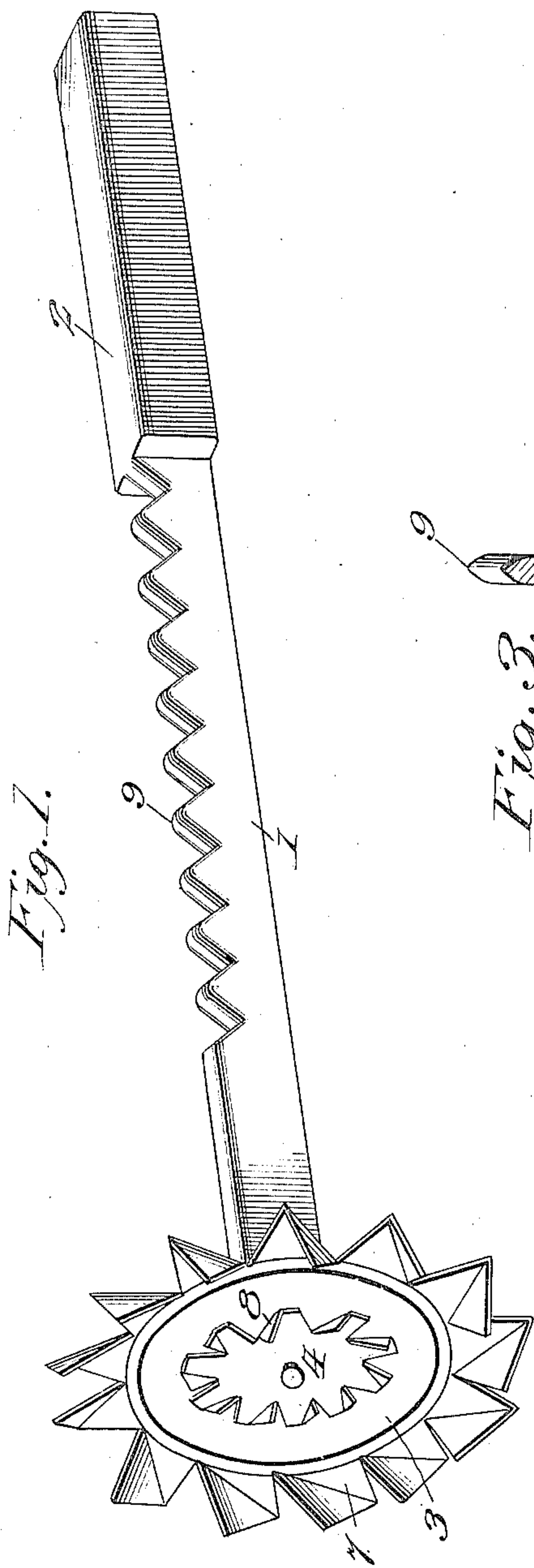


Fig. 1.

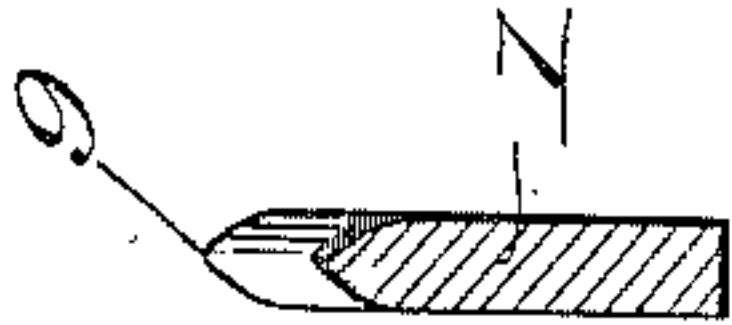


Fig. 3.

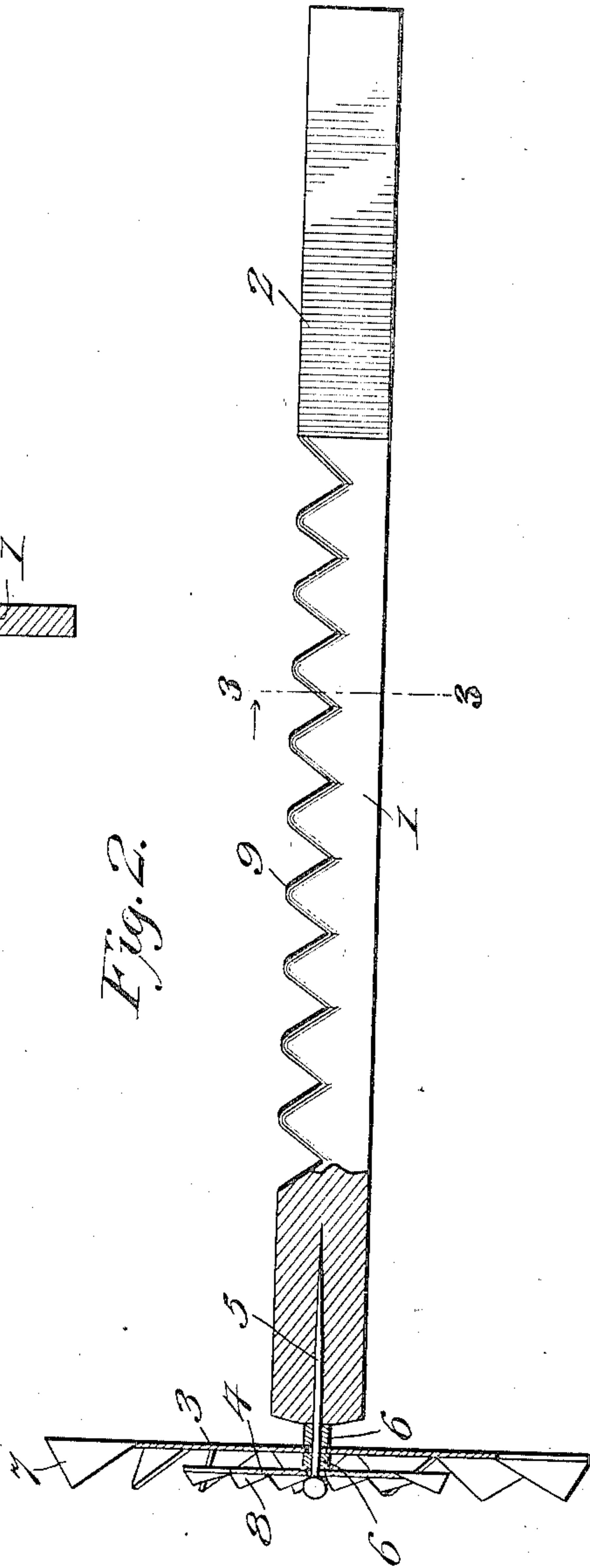


Fig. 2.

Witnesses
Edwin L. McKee
J. W. Carey

Inventor
John J. Fitzpatrick

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

JOHN J. FITZPATRICK, OF WASHINGTON, PENNSYLVANIA.

TOY.

SPECIFICATION forming part of Letters Patent No. 706,918, dated August 12, 1902.

Application filed October 3, 1901. Serial No. 77,459. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. FITZPATRICK, a citizen of the United States, residing at Washington, in the county of Washington and State of Pennsylvania, have invented certain new and useful Improvements in Toys; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to toys, and more particularly to that class of toys known as "whirligigs;" and its object is to provide a device of this character of novel construction in which a wheel is revolved in either direction or caused to oscillate by the vibration of a blade to which it is loosely attached, the vibration being effected by the rapid reciprocation of a suitable rubbing device over the toothed edge of the blade.

The invention comprises a blade of any suitable material formed along one edge with a series of angular teeth having oppositely-beveled edges and provided at one end with a handle and a wheel revolvably mounted upon the opposite end of the blade upon a suitable pin and slitted radially to provide segments, which are formed with forwardly-bent angular wind-wings diagonal of the segments, thus furnishing a serrated periphery to the wheel.

Heretofore a vibratory motion has been converted into a rotary motion by rubbing a toothed blade with a suitable rubbing device; but the present invention is distinguished from the prior art in that with the devices heretofore used it is necessary to turn the toothed blade at one angle to reverse the direction of revolution, while in my device, owing to the opposite inclination of the sides of the pointed teeth, the blade may be held without turning and the rubbing device applied to either side thereof to vary the direction of revolution.

The construction of the improvement will be fully described hereinafter in connection with the accompanying drawings, which form a part of this specification, and its novel features will be defined in the appended claims.

In the drawings, Figure 1 is a view in perspective of a toy embodying the invention. Fig. 2 is a side elevation of the same, partly

in longitudinal section; and Fig. 3 is a section on the line 3 3 clearly showing the form of the pointed teeth.

The reference-numeral 1 designates a blade which may be made of wood or other suitable material and is provided at one end with a handle 2. At the opposite end of the blade are revolvably mounted two wheels or disks 3 and 4 by means of a pin 5, which passes through central perforations in the wheels, suitable washers 6 being employed upon the pin between the end of the blade and the inner wheel and between the wheels for spacing the parts so that the wheels may rotate freely. The larger wheel 3 is slitted radially to provide segments, which are formed with forwardly-bent angular wings 7, and the small wheel 4 is provided with similar segments which are provided with angular wind-wings 8, but bent in a direction opposite to that of the wings of the larger wheel. This insures the revolution of the two wheels in opposite directions, and the wings adapt the device to be used as a pin-wheel to be operated by the wind as well as by the vibration of the blade. The sides of the pointed teeth 9 are beveled in opposite directions, as best shown in Fig. 3, and this construction presents a beveled surface at each side of the blade along which the rubbing device is adapted to be rubbed. The application of the rubbing device to one side of the blade will revolve the wheels in one direction, while by applying the rubber to the opposite side of the blade the direction of revolution of the wheels is at once reversed. This is accomplished without turning or inclining the blade, which is held stationary.

It will be obvious from the above description that the device is also capable of use as a pin-wheel, adapted to be revolved by the wind in the ordinary way.

I claim—

1. A whirligig toy comprising a blade formed with a handle and a rubbing edge provided with pointed teeth beveled at their sides, a headed pin located at the end of the blade, and a wheel loosely mounted on the pin and constructed with peripheral segments which are bent forward to provide angular wind-wings diagonal of the segments.

2. A whirligig toy comprising a blade formed with a handle and a rubbing edge pro-

vided with pointed teeth beveled at their sides,
a headed pin located at the end of the blade,
washers mounted on the pin, a large wheel
loosely mounted on the pin between the wash-
5 ers constructed with peripheral segments
which are bent forward to provide angular
wind-wings diagonal of the segments on one
side and a small wheel loosely mounted on the
pin between the outer washer and the head
10 of the pin, constructed with peripheral seg-

ments which are bent forward to provide an-
gular wind-wings diagonal of the segments
at the opposite side to those of the segments
of the large wheel.

In testimony whereof I affix my signature 15
in presence of two witnesses.

JOHN J. FITZPATRICK.

Witnesses:

H. SCHMIDT,

HERBERT D. LAWSON.