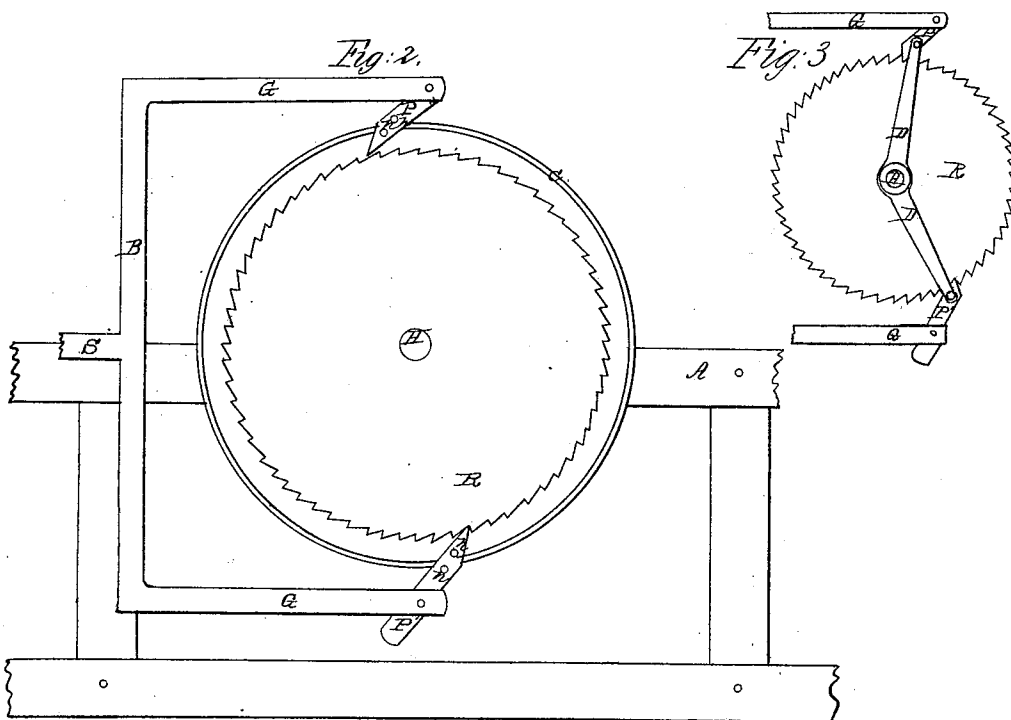
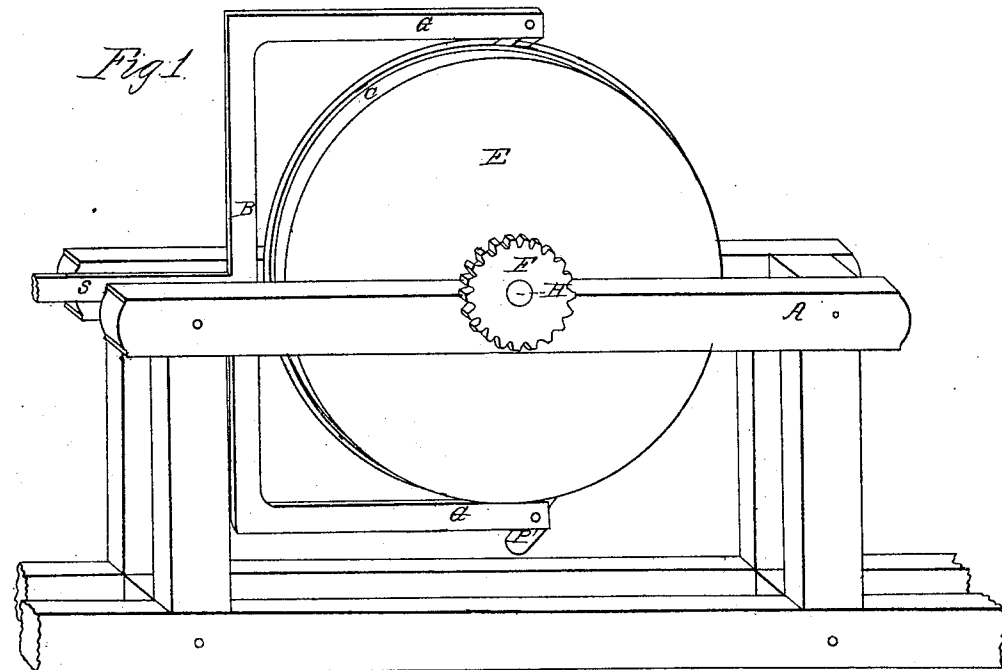


No. 25,132.

PATENTED AUG. 16, 1859.

W. H. MITCHELL.
ROTARY MOVEMENT.



UNITED STATES PATENT OFFICE.

WILLIAM HOWARD MITCHELL, OF SAN FRANCISCO, CALIFORNIA.

ROTARY MOVEMENT.

Specification of Letters Patent No. 25,132, dated August 16, 1859.

To all whom it may concern:

Be it known that I, WM. H. MITCHELL, of San Francisco, in the county of San Francisco and State of California, have invented
5 a new and useful Improvement in the Method of Converting Reciprocating into Rotary Motion; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had
10 to the annexed drawing, forming part of this specification, in the several figures of which similar characters of reference denote the same part.

Figure 1 is a side elevation of my arrangement for converting reciprocating into rotary motion. Fig. 2 is a vertical section of same.

This invention has for its object producing rotary motion by means of a vertical, or
20 horizontal reciprocating movement, and its nature consists in a certain combination of devices to effect that purpose.

The details of construction and operation are as follows.

25 In the drawing A, represents the frame, across which is shaft H, having on it a ratchet wheel R, with a flanged casing E, on each side, between these flanges on each side of the periphery of the ratchet wheel are
30 two inclined reversed pawls or catches P, and P', jointed to flanges E, by pins h, h, and also attached to two horizontally moving arms G, connected by bar B; to the center of which is attached the shaft S, to which
35 the power is applied for the movement of the said arms G. F, is a pinion also on shaft

H. So that the power being applied to shaft S, the horizontal movement of arms G is produced and in their movement one or the other of the pawls P, or P', constantly
40 coming in contact with the teeth of ratchet wheel R, and being reversed and self detaching cause the constant rotary movement of said ratchet wheel R, and consequently
45 that of shaft H, and pinion F, thus accomplishing the desired object.

I do not claim the ratchet wheel and pawl for the purpose of producing a rotary movement, as that is in common use.

What I claim is,

50 1. Two or more reversed, self detaching pawls or catches working on opposite sides of the periphery of the ratchet wheel by being attached to arms working in parallel lines and in the same direction, constructed
55 and operating substantially as, and for the purpose specified.

2. I also claim the combination of the ratchet wheel R, with the pawls or catches P, and P', and flanges E; and the cross beam
60 B, with parallel arms G, substantially for the uses, and purposes set forth.

3. I also claim the combination of the ratchet wheel, with the flanged casing or
65 flanges.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

WM. HOWARD MITCHELL.

Witnesses:

GEO. PATTEN,
G. W. RISON.