

(No Model.)

2 Sheets—Sheet 1.

F. WISKOCIL.

MACHINE FOR GATHERING INSECTS FROM PLANTS.

No. 292,083.

Patented Jan. 15, 1884.

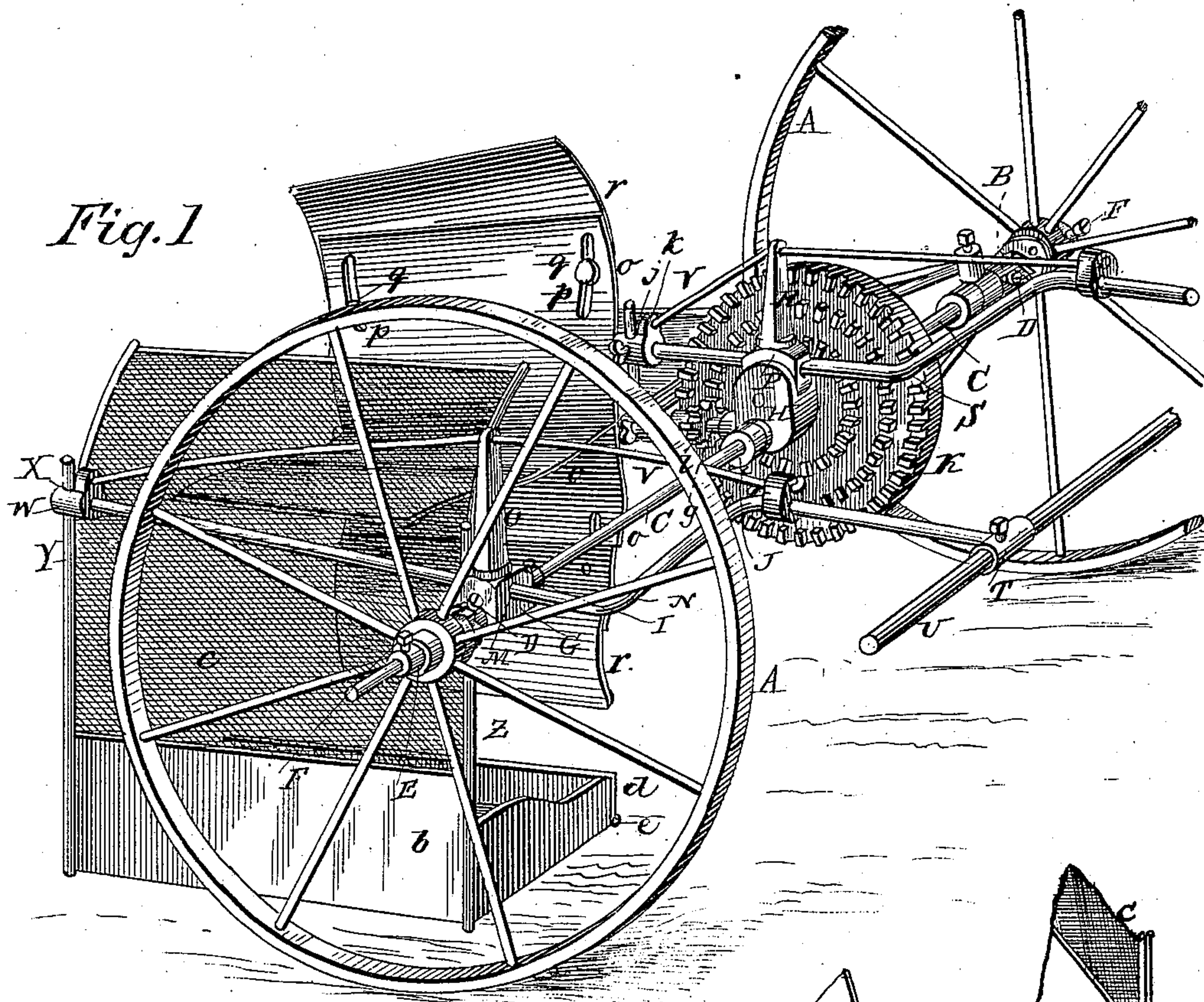


Fig. 5.

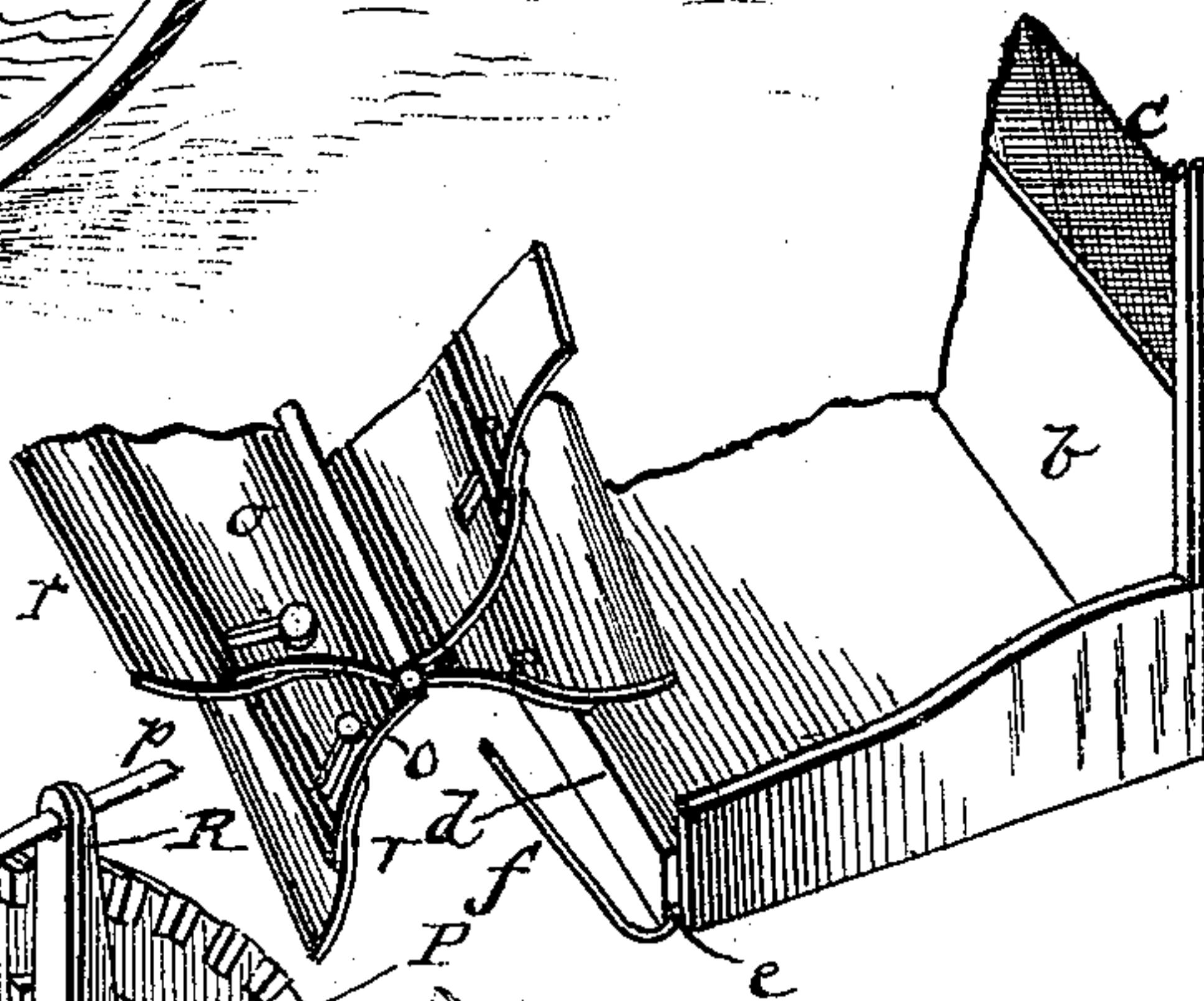
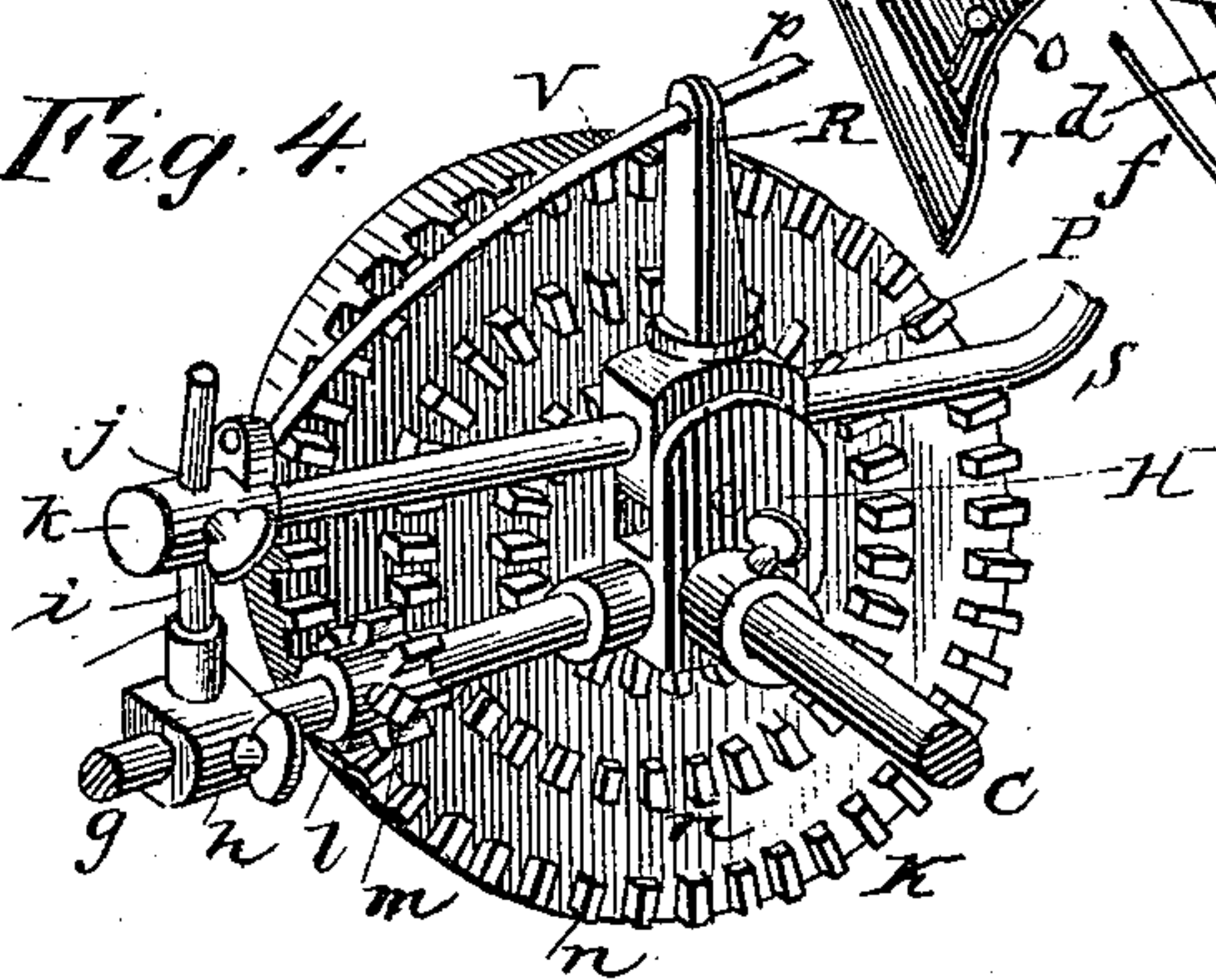


Fig. 4.



WITNESSES:

And. E. Dietrich
Sp. Lecher

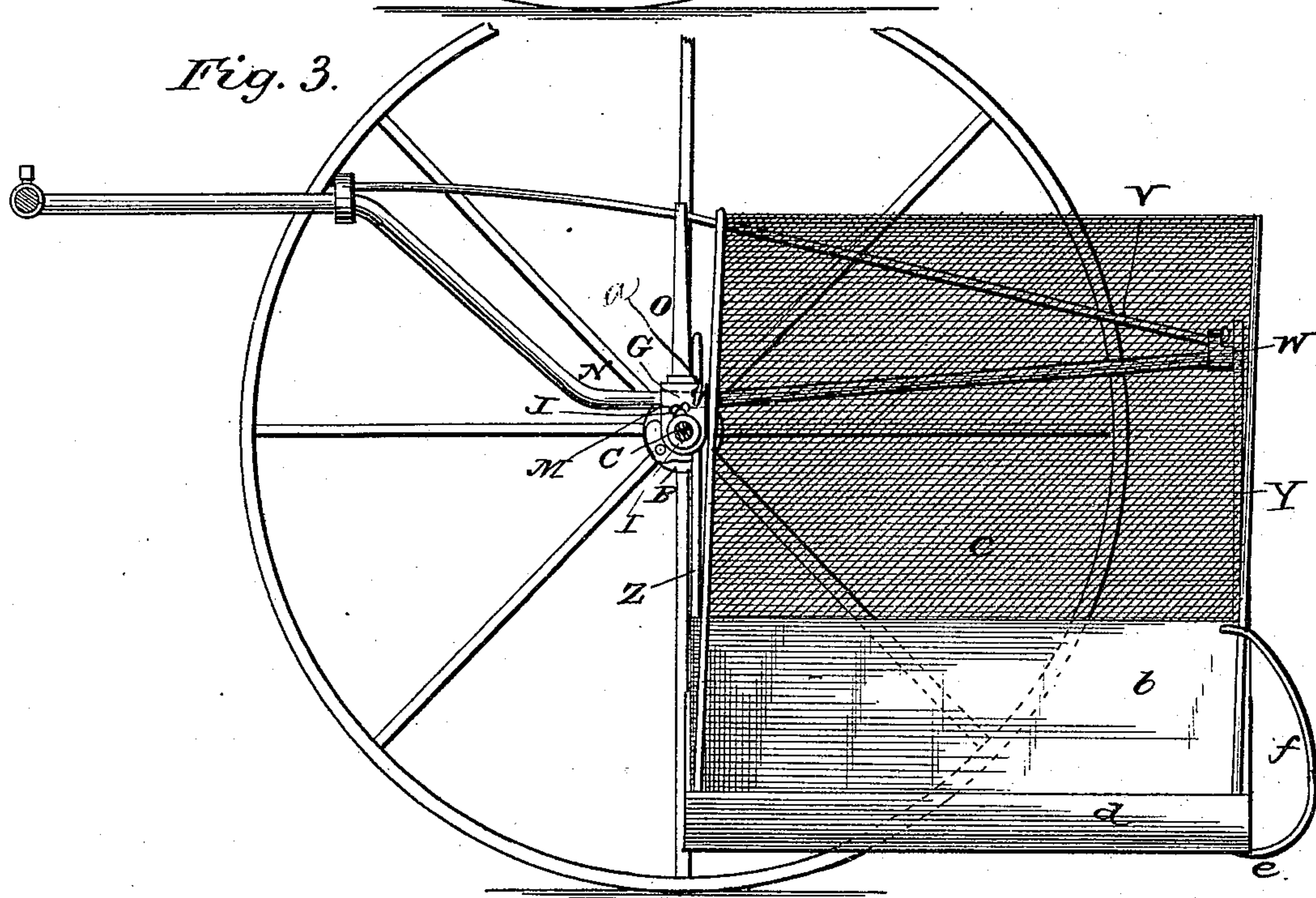
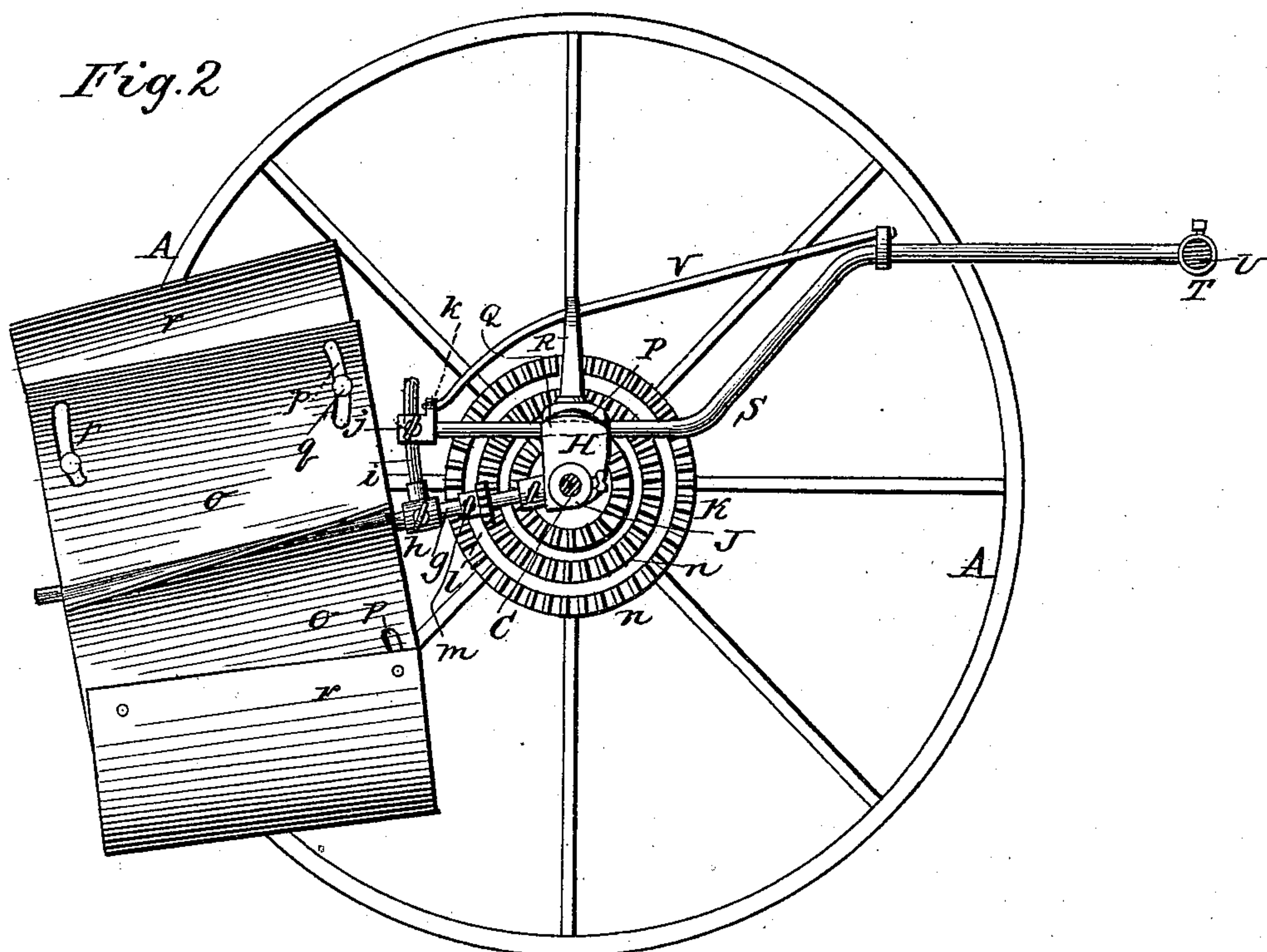
Ferdinand Wiskocil
INVENTOR.

By *Louis Ragger & Co.*
ATTORNEYS.

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WITNESSES:

Fred. L. Dieterich,
Wm. Lecher

INVENTOR.

Ferdinand Wiskocil
By *Louis Ragger & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

FERDENAND WISKOCIL, OF PRAIRIE DU SAC, WISCONSIN.

MACHINE FOR GATHERING INSECTS FROM PLANTS.

SPECIFICATION forming part of Letters Patent No. 292,083, dated January 15, 1884.

Application filed October 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, FERDENAND WISKOCIL, a citizen of the United States, and a resident of Prairie du Sac, in the county of Sauk and State of Wisconsin, have invented certain new and useful Improvements in Machines for Gathering Insects from Plants; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved machine for gathering insects from plants. Figs. 2 and 3 are vertical sectional views of the same, seen in both directions from the section-line. Fig. 4 is a detail view of the gearing and fastening of the fan-operating mechanism; and Fig. 5 is a detail view, showing a portion of the insect-receiving box and the fans, seen from the front.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to machines for picking insects from plants, more especially adapted for picking potato-bugs from the vines; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letters A A indicate two wheels, having pawls upon the inner sides of their hubs, which engage ratchet-toothed sleeves B, secured adjustably upon the ends of an axle, C, by means of set-screws D, and the wheels are secured from sliding off the axle by two sleeves, E, secured outside the wheels upon the ends of the axle by means of set-screws F, so that by moving the outer sleeves and the ratchet-sleeves the wheels may be adjusted to fit between rows of plants of any width. The axle turns in bearings in blocks or castings G and H, which are secured adjustably by means of sleeves I and J, which bear against their inner sides, the one block, G, being held in place by its sleeve I and the sleeves securing the one of the wheels, and the other block, H, being held in place by its sleeve J and a crown-wheel, K, which

is secured upon the axle by a set-screw. The block G has a horizontal perforation, M, passing from front to rear, in which a rod, N, the rear end of which is curved slightly upward and rearward, fits, while an upright standard, O, projects from its upper side. The block H forms a bearing in its upper part, in which a block, P, is pivoted, having a longitudinal perforation, Q, and an upright, R. A rod, S, curved upward and rearward in a similar manner to the rod N, slides in the perforation in this block, and the rear ends of the two rods form transverse sleeves T, in which a transverse handle or bar, U, is secured adjustably, which serves as a handle in pushing the machine forward. Two braces, V, extend from the straight rear portion of the two rods which support the handle-bar, and pass through the ends of the two uprights, and are secured at their forward ends to the forward ends of the rods, the rod N of which extends farther forward than rod S, and is provided at its forward end with a block, W, which has a vertical perforation, X, through which a vertical rod, Y, slides, and may be adjusted by means of a set-screw. A similar rod, Z, slides adjustably in a vertical perforation, a, in the block G, and the lower ends of the two vertical rods are fastened to and support a box, b, which is open at the top, and is provided with a perforated screen, c, at its outer side, which extends upward and is curved slightly inward, while the inner side, d, of the box is hinged to the bottom, adapted to swing inward upon a rod, e, the forward end of which is bent upward and curved, forming a fender, f, for the plants. The forward side of block H forms a bearing for a horizontal shaft, g, which also turns in a bearing, h, upon the lower end of a vertical rod, i, which slides adjustably in a sleeve or perforation, j, in a block, k, upon the forward end of the handle-supporting rod S. A pinion, l, is secured upon the horizontal shaft by means of a set-screw, m, and may be adjusted upon the same to mesh with one of a series of cogged flanges, n, upon the face of the crown-wheel K, so as to adjust the speed of revolution of the shaft by moving the pinion forward or back, increasing or decreasing the speed. The outer portion of the horizon-

tal shaft is provided with a number of later-
ally-projecting wings or fans, *o*, the outer ends
of which have transverse slots *p*, in which set-
screws *q*, projecting through the inner ends of
5 a number of extensions, *r*, to the said wings,
slide and may be adjusted, the outer portions
of the said extensions being curved away from
the direction of rotation.

It will be seen that as the machine is pro-
10 pelled the crown-wheel will be revolved, which
will again in turn revolve the pinion and its
shaft and fan, which will strike the plants,
throwing the insects into the box, which may
contain a fluid or other means for destroying
15 or detaining the insects, the screen prevent-
ing the insects from being thrown too far out,
and the machine being propelled with the in-
ner edge of the receiving-box at the edge of the
row of plants, the upwardly-curved end of the
20 hinge-rod for its inner side will act as a fender,
preventing the plants from being caught and
injured by the box.

It will also be seen that, the wheels and the
other parts of the machine being adjustable,
25 the wheels may be moved closer together or
farther apart, according to the width of the
row, the box may be raised or lowered, the
speed of the revolution of the fans may be in-
creased or decreased at will, and the wings
30 may be extended or decreased in width accord-
ing to the height of the plants, thus enabling
the machine to be adjusted to suit any kind of
plants and any manner of planting them.

Having thus described my invention, I claim
35 and desire to secure by Letters Patent of the
United States—

1. The combination of the insect-receiving
box having hinge-eyes at the inner edge of its
bottom, the inner side of said box having hinge-
eyes at its lower edge, and the rod or pintle 40
connecting the hinge-eyes and forming a fender
at its forward end, as and for the purpose
shown and set forth.

2. The combination of the block H, having
a bearing at its upper end, block P, pivoted 45
in said bearing and having a longitudinal per-
foration, rod S, having perforated block *k*,
rod *i*, having bearing *h*, and shaft *g*, turning
in said bearing, and turning with its inner end
in a bearing in block H, as and for the pur- 50
pose shown and set forth.

3. The combination of the frame having
bearings, the drive-axle turning in said bear-
ings and having drive-wheels and the crown-
wheel, the fan-shaft having the pinion mesh- 55
ing with said crown-wheel, and the curved
fans provided with the adjustable curved ex-
tensions, and the insect-receiving box having
a screen at its outer side curving inward at its
upper end, a hinged inner side, and a fender, 60
all constructed as and for the purpose shown
and set forth.

In testimony that I claim the foregoing as
my own I have hereunto affixed my signature
in presence of two witnesses.

FERDENAND WISKOCIL.

Witnesses:

E. W. YOUNG,
HENRY ROSE.