

(No Model.)

D. W. CONARD.  
FLY BRUSH.

No. 503,945.

Patented Aug. 29, 1893.

Fig. 1.

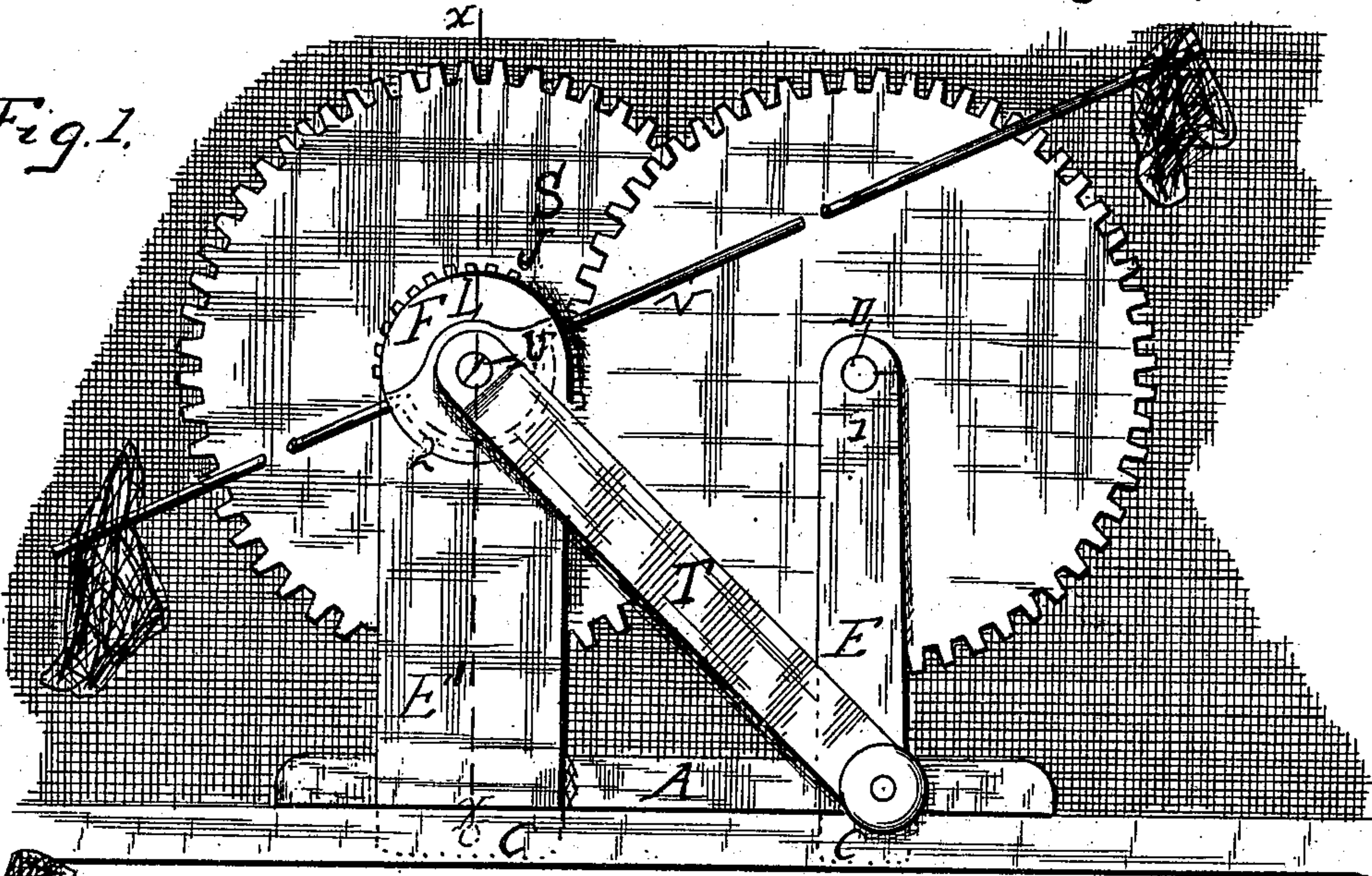


Fig. 2.

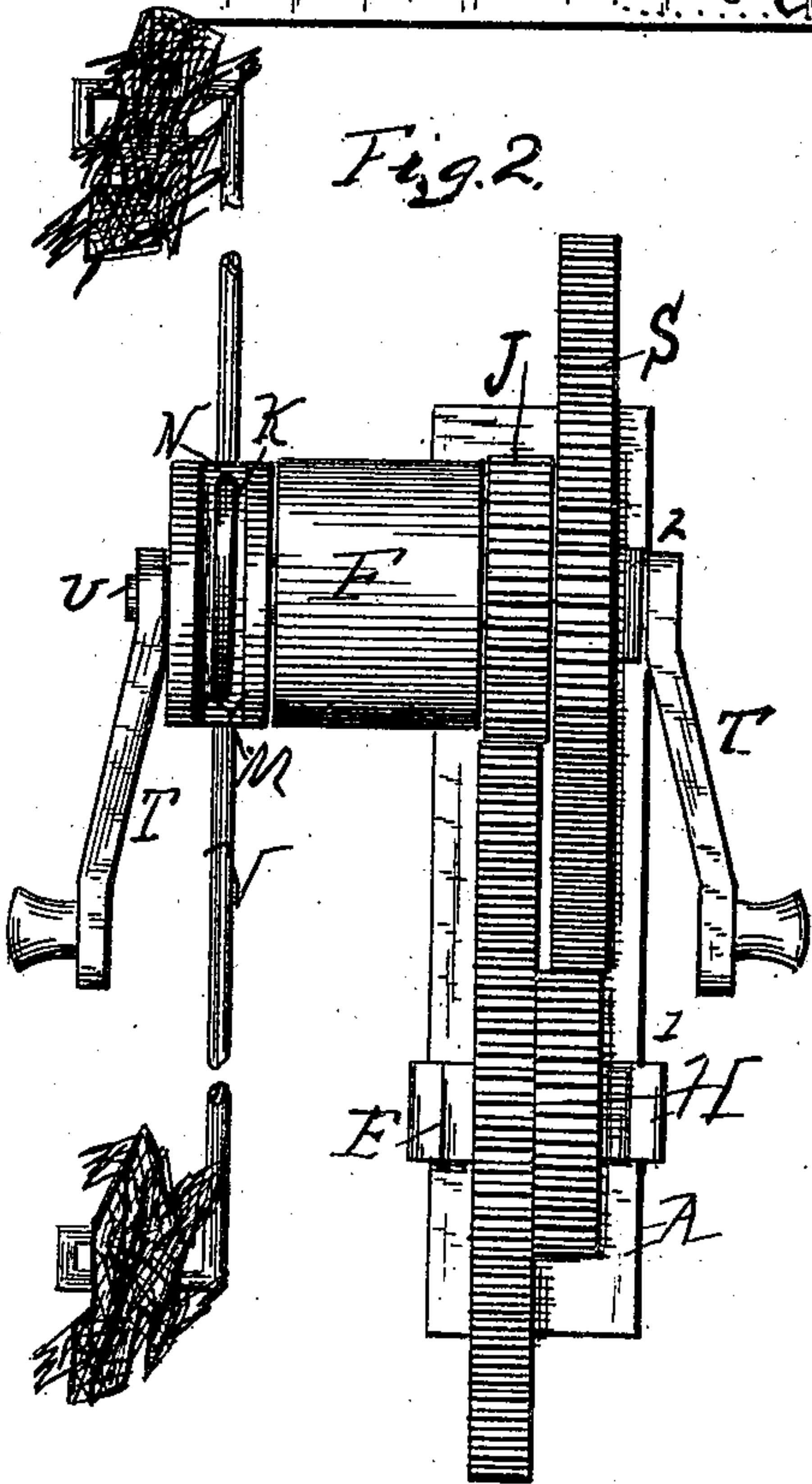
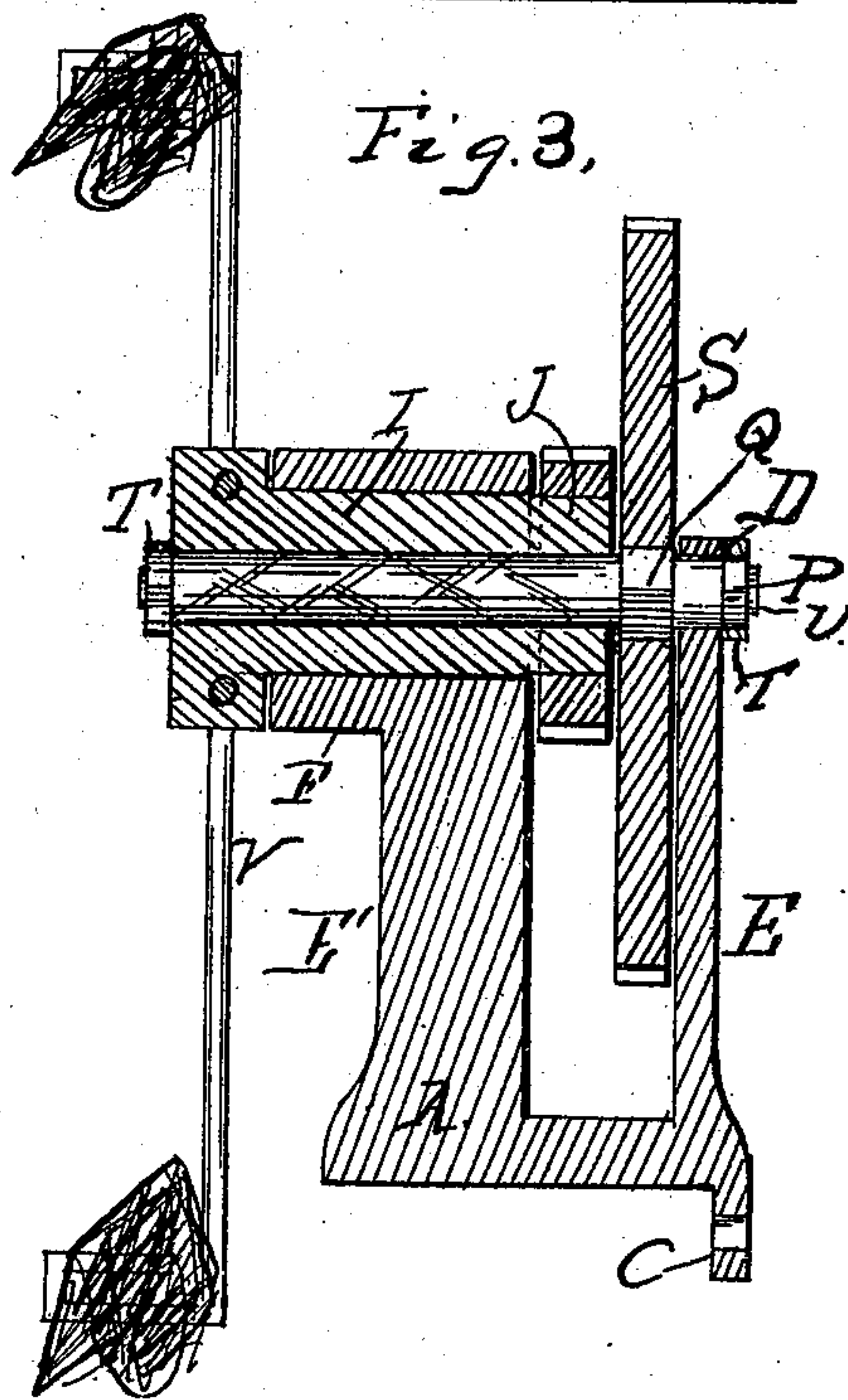


Fig. 3.



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# UNITED STATES PATENT OFFICE.

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## FLY-BRUSH.

SPECIFICATION forming part of Letters Patent No. 503,945, dated August 29, 1893.

Application filed April 4, 1893. Serial No. 469,056. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL W. CONARD, a citizen of the United States, residing at Waterloo, in the county of Black Hawk and State of Iowa, have invented certain new and useful Improvements in Fly-Brushers; 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

10 which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 My invention relates to a fly brusher.

It has for its object to provide a device of this character which may be readily attached to an upright or cross-bar of a screen door in such a position as to enable a person either

20 coming from without or within to operate it and thereby frighten away the flies or insects which may be clinging to the wire fabric; and finally to provide a fly brusher which may be simple in construction, durable in use and

25 comparatively inexpensive of production.

With these objects in view the invention consists in certain construction and combination of parts, which will be hereinafter described and claimed.

30 In the accompanying drawings—Figure 1 is a view of my invention applied to a screen door. Fig. 2 is a plan view of the brusher, and Fig. 3 is a vertical cross sectional view on line  $x-x$ , Fig. 1.

35 In the drawings A, denotes a supporting plate, adapted to be seated on a cross bar or an upright bar of the screen door, provided with projecting ears C, having in their lower ends screw holes, through which are inserted

40 screws to secure the plate in position. Extending upward from the plate is a pair of standards E provided with openings D. On the opposite side of the supporting plate are located similar standards E', one of which is formed

45 with an enlarged bearing F, thus forming two sets of journals, 1 and 2. In the journal 1, is mounted a toothed gear having fixed to the side thereof and turning on the same axis a toothed pinion H. In the journal 2 in the

50 bearing F, I insert a sleeve I, one end of which is squared to fit into a squared opening in a

pinion J, which meshes with the toothed gear hereinbefore described. The opposite end of this sleeve is formed with a recess K on one side and cut-away on the opposite side as

55 shown at L, thus leaving end-walls M, each of which is formed with an aperture N.

O, denotes an axle squared at each end, as shown at P, and provided with a square shoulder Q. This axle is inserted through a sleeve

60 and its enlarged shoulder Q fits in a squared hole in a toothed gear S, which meshes with the fixed pinion, hereinafter described.

T denotes crank levers secured to the squared extremities of the axis by means of

65 screws U, one of these levers being on the inside of the door and the other on the other side.

V denotes a fan shown in this instance, as consisting of a piece of wire having its intermediate portion seated in the groove of the

70 sleeve with its end projecting through the holes in the walls of the sleeve, thus securely locking the fan against movement with respect to the sleeve. This fan may be provided at its ends with pieces of cloth or any

75 other suitable material, or the cloth or material may be entirely dispensed with.

The operation of my invention is as follows: Persons in going into or coming out of the room before opening the door rotates the

80 fan by operating a crank lever and this will cause flies or other insects which cling about the door to be frightened away from the outside, thus preventing the admission of flies from the outside when the door is opened.

85

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

1. In a fly brusher the combination with the base plate adapted to be secured to the frame

90 of a screen door and provided with a pair of standards a toothed gear provided with a fixed pinion mounted in one pair of standards and a toothed gear provided with a central polygonal aperture and meshing with said pinion,

95 a pinion provided with an enlarged polygonal opening meshing with the first named gear and a sleeve having a polygonal end to take into the opening in the pinion, an axle inserted through said sleeve, standards, pinion, and

100 toothed wheel and provided with a squared end to take into the opening in the toothed

wheel, crank-levers secured to the ends of said axle and a brush secured to the said sleeve, substantially as set forth.

2. In a fly brusher the combination with a  
5 rotating sleeve provided with a recess, which has holes through its end walls of the brush holder, consisting of a piece of wire bent to fit into said recess and extending with its ends through the holes in the wall of the recess.

10 3. In a fly brush the combination with a base plate adapted to be secured to a screen door and provided with uprising ears, a toothed

gear provided with a fixed pinion journaled in one pair of ears, and a toothed gear and a pinion journaled in the other pair of ears 15 adapted to rotate in unison and meshing respectively with the first named pinion and gear, and carrying a fan adapted to be rotated by the latter gears, and means for rotating said gears, substantially as herein described.

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Witnesses:

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