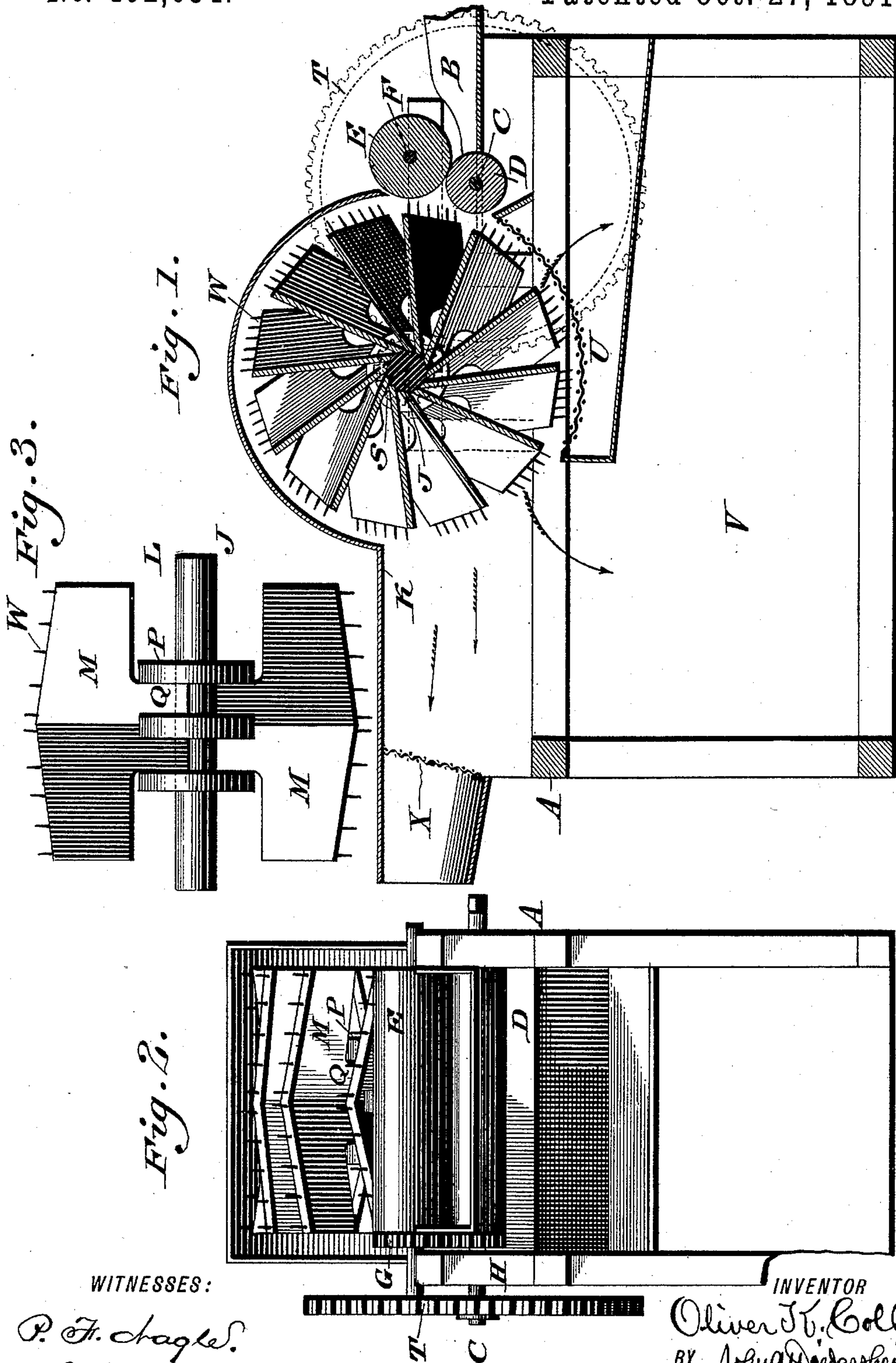


(No Model.)

O. K. COLLINS.  
HAIR PICKER.

No. 462,034.

Patented Oct. 27, 1891.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

OLIVER K. COLLINS, OF CAMDEN, NEW JERSEY.

## HAIR-PICKER.

SPECIFICATION forming part of Letters Patent No. 462,034, dated October 27, 1891.

Application filed October 18, 1890. Serial No. 368,512. (No model.)

*To all whom it may concern:*

Be it known that I, OLIVER K. COLLINS, a citizen of the United States, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Improvement in Hair-Pickers, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in machines for picking hair; and it consists of a novel picker constructed, as hereinafter described, so as to prevent injurious action on the hair.

It further consists of a rotary picker having vanes forming fans, as hereinafter described.

It finally consists of the combination of parts hereinafter described.

In the drawings, Figure 1 represents a vertical section of a hair-picking machine embodying my invention. Fig. 2 represents an end view of the same. Fig. 3 represents a front view of a portion of the picker and the fastening devices therefor.

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

Referring to the drawings, A designates the frame of the machine, and B the feed-table thereof.

C designates a rotary shaft mounted in the frame A and having a feed-roller D thereon.

E designates a feed-roller having on its shaft F a gear-wheel G, engaging with a gear-wheel H on the shaft C, so that the roller E receives motion therefrom.

Mounted on a shaft J, which is parallel with the shaft C, and journaled in the sides of a casing K on the frame A, is a picker L, consisting of the vanes M and the teeth W thereon. On said shaft J are secured the heads P, between which are fastened the tongues Q of the vanes, so as to hold said vanes firmly in place. The vanes extend tangentially to the shafts and are angular in form, forming wings, whereby all of the teeth W on the periphery thereof do not come in contact at the same time with the hair passed between the rollers; but each adjacent tooth on the wings of the vane comes successively in operation, thereby having a drawing action upon the hair. The vanes also serve as fans, their angular form enabling them the

more efficiently to create a strong current of air for removing dust or dirt from the hair while the latter is passing through the casing.

The heads P may be three in number, as shown in the drawings, and each of the vanes may have two tongues, one to be fitted in each of the recesses between the disks, and this form is preferable; but only two heads need be employed, a single tongue on the vane serving to hold the latter in place.

The shaft J of the picker is provided with a pinion S, meshing with a gear-wheel T on the shaft C, so that motion is communicated to the shaft J from the shaft C.

The operation of the device is as follows: The hair which is to be picked is placed on the table B and fed by the rollers D E to the picker L, the adjacent teeth of each wing of a vane thereof coming successively in contact with the hair, as has been described, so that a successive drawing action of adjacent portions of the hair is had, whereby the latter is more freely separated or opened and the dirt or dust therein permitted to escape therefrom, passing through the perforated bottom of the casing K into a suitable receptacle U within the frame of the machine. The vanes in their rotations serve as fans to create a strong current of air, which greatly assists in removing the light dust from the hair, so that it may readily pass through the screen X at the end of the casing, the picked hair falling into the box V within the frame.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A hair-picking machine having a frame, a table, feed-rollers, a shaft, a rotary picker consisting of vanes tangentially arranged on said shaft and provided with teeth on the peripheries thereof, and a casing with a perforated bottom, said parts being combined substantially as described.

2. In a hair-picking machine, a picker having vanes with teeth on the peripheries thereof, and a shaft to which said vanes are tangentially secured, said parts being combined substantially as described.

3. In a hair-picking machine, a picker consisting of vanes having tongues on their inner ends and teeth on their peripheries, in combination with heads on an operating-

shaft, between which said tongues are held, substantially as described.

4. In a hair-picking machine, a shaft with heads thereon, vanes secured to said heads and  
5 extending tangentially to said shaft, and teeth on the periphery of said vanes, said parts being combined substantially as described.

5. In a hair-picking machine, a shaft with heads mounted thereon, angular vanes forming wings secured to said heads, and teeth on  
10 the periphery of said vanes, said parts being combined substantially as described.

6. In a hair-picking machine, a shaft with heads thereon, and a picker consisting of angular  
15 vanes with tongues on their inner ends and

teeth on their peripheries, said tongues being secured between said heads and said vanes extending tangentially to the shaft, said parts being combined substantially as described.

7. A hair-picking machine having an operating shaft with heads thereon, angular vanes secured to said heads by tongues and extending tangentially of said shaft, and teeth on said angular vanes, said parts being combined substantially as described. 20

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Witnesses:

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