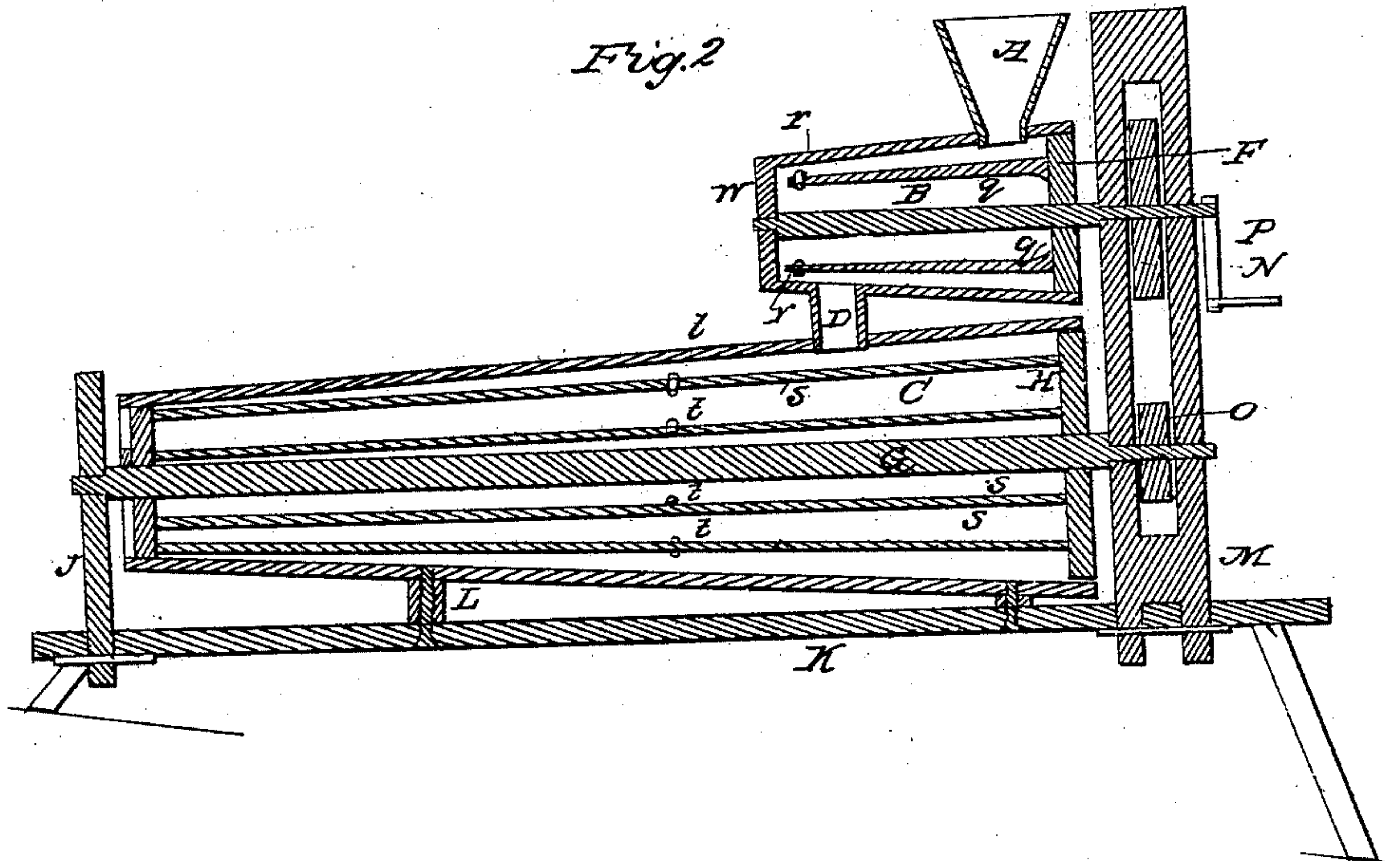
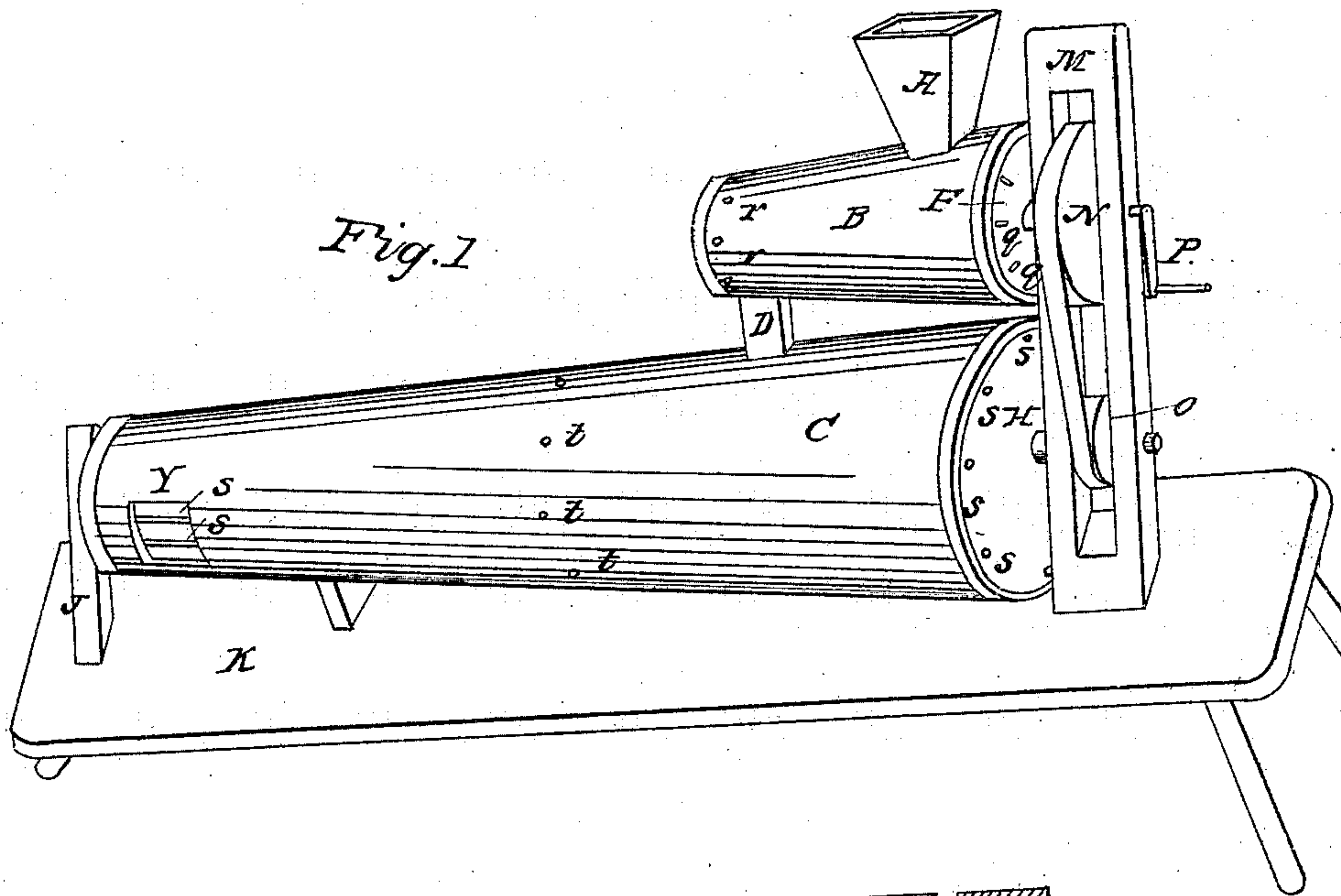


RADEBAUGH & MATLACK.

Hair Picker.

No. 6,331.

Patented April 17, 1849.



UNITED STATES PATENT OFFICE.

JOHN RADEBAUGH AND JOHN A. MATLACK, OF LANCASTER, OHIO.

IMPROVEMENT IN MACHINERY FOR CLEANING HAIR.

Specification forming part of Letters Patent No. 6,331, dated April 17, 1849.

To all whom it may concern:

Be it known that we, JOHN RADEBAUGH and JOHN A. MATLACK, of Lancaster, in the county of Fairfield and State of Ohio, have invented a new and Improved Machine for Beating and Cleaning Hair; and we do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 a longitudinal vertical section.

Similar letters indicate like parts in both the figures.

The nature of our invention consists in combining a beating-chamber, B, for preliminarily beating and opening the hair by a series of rotating elastic vibrating rods, *q q*, with another larger chamber, C, in which the operation is completed by the reacting vibration of a series of rotating tension-cords, *s s*. Our hair beater and cleaner is erected upon the inclined platform K in the manner represented in the drawings. The casing C is of a conical form, open at the ends, and is secured to the base or platform K in a strong and permanent manner by means of suitable fixtures, so arranged as to give but a slight inclination to the under side of the casing. The smaller conical-shaped casing B is placed above the casing C, with the largest ends of the two in a vertical line with each other, and is confined thereto by means of the tube D, which tube also serves to connect the spaces within the casings with each other.

A is a hopper opening into the largest end of the upper casing, B. A shaft, G, passes through the center of the casing C, which has its bearings in the standards J and M, rising from the platform K at each end of the casing.

H and I are disks made fast on the shaft G, and passing a short distance within the ends of the casing C, but not fitting so closely therein as to cause friction when they are revolved. The series of tension-cords *s s*, extending from the disks H to I, are placed equidistant from each other, and have their extremities secured near to the peripheries of the disks in such a manner that their tension can be readily adjusted. A series of

pins, *t t*, corresponding in number with the tension-cords *s s*, are inserted equidistant from each other through the center of the casing C, and project inward a sufficient distance to strike against and simultaneously vibrate the tension-cords, when the shaft G is revolved.

Through the center of the upper casing, B, there passes the shaft E, having its bearings at one end in the standard M, and at the other in the head W, closing the smallest end of the casing.

F is a disk secured on the shaft E, and fitting loosely within the largest end of the casing B.

q q are a series of elastic beating-arms let into and secured in the disk F near its periphery, and extending into the casing nearly to the head W. A series of pins, *r r*, are inserted through the sides of the casing B near the smallest end, equidistant from each other, and corresponding in number with that of the beating-arms *q q*, which pins project a sufficient distance within the casing to simultaneously vibrate the beating-arms as the shaft E is revolved.

N is a pulley on the shaft E, and O is a pulley on the shaft G, which pulleys are located within a slot in the standard M, and are connected by a band, as shown in the drawings. Motion may be communicated to the shafts E and G by a crank placed upon either shaft, or by any other means.

The operation of our before-described machine for beating and cleaning hair is as follows: The hair being placed in the hopper A, and motion imparted to the shafts E and G, the hair falls into the casing B, and is violently acted upon by the vibrating arms *q q*. The hair is thoroughly opened by the beating-arms, and is gradually carried forward, and falls through the tube D into the casing C, where it is again operated upon and whipped by the vibrating cords *s s*, and is carried forward to the smallest end of the casing and discharged through the opening *y*.

Having thus fully described our improved machine for opening and cleaning matted hair, what we claim as our invention, and desire to secure by Letters Patent, is—

The combination of a chamber in which are placed a series of elastic arms that are simul-

taneously made to vibrate as the disk from which they project is revolved, with another chamber in which are placed a series of tension-cords that are made simultaneously to vibrate as the disks to which they are made fast are rotated, the arrangement of the two chambers and the manner of operating upon

the hair being substantially as herein represented and described.

JOHN RADEBAUGH.
JOHN A. MATLACK.

Witnesses:

GEO. SANDERSON,
JOEL RADEBAUGH.