

No. 753,500.

PATENTED MAR. 1, 1904.

R. KNÖLLNER.

APPARATUS FOR CLEANING BOTTLE BASKETS OR CASES.

APPLICATION FILED SEPT. 2, 1903.

NO MODEL.

Fig. 1.

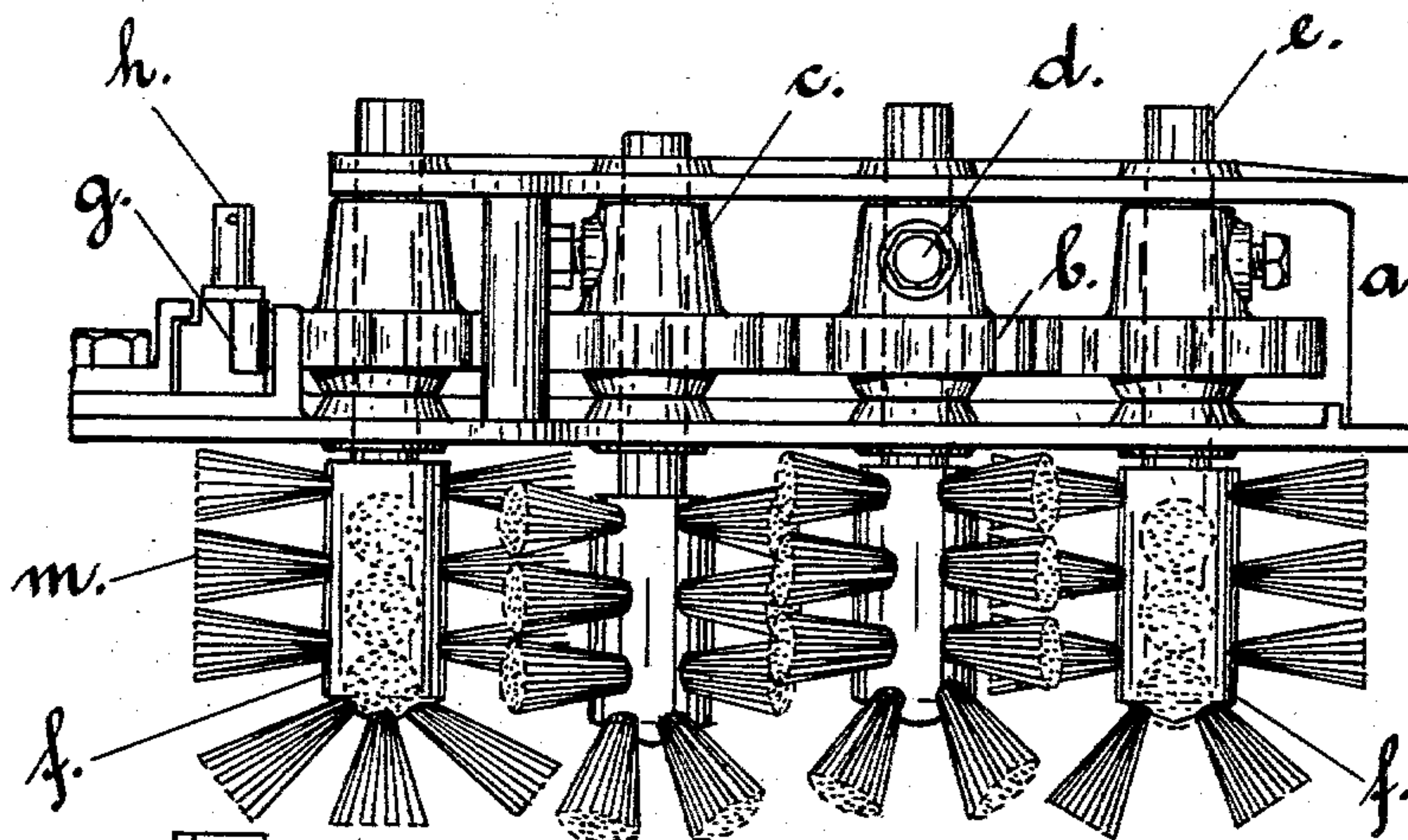


Fig. 2.

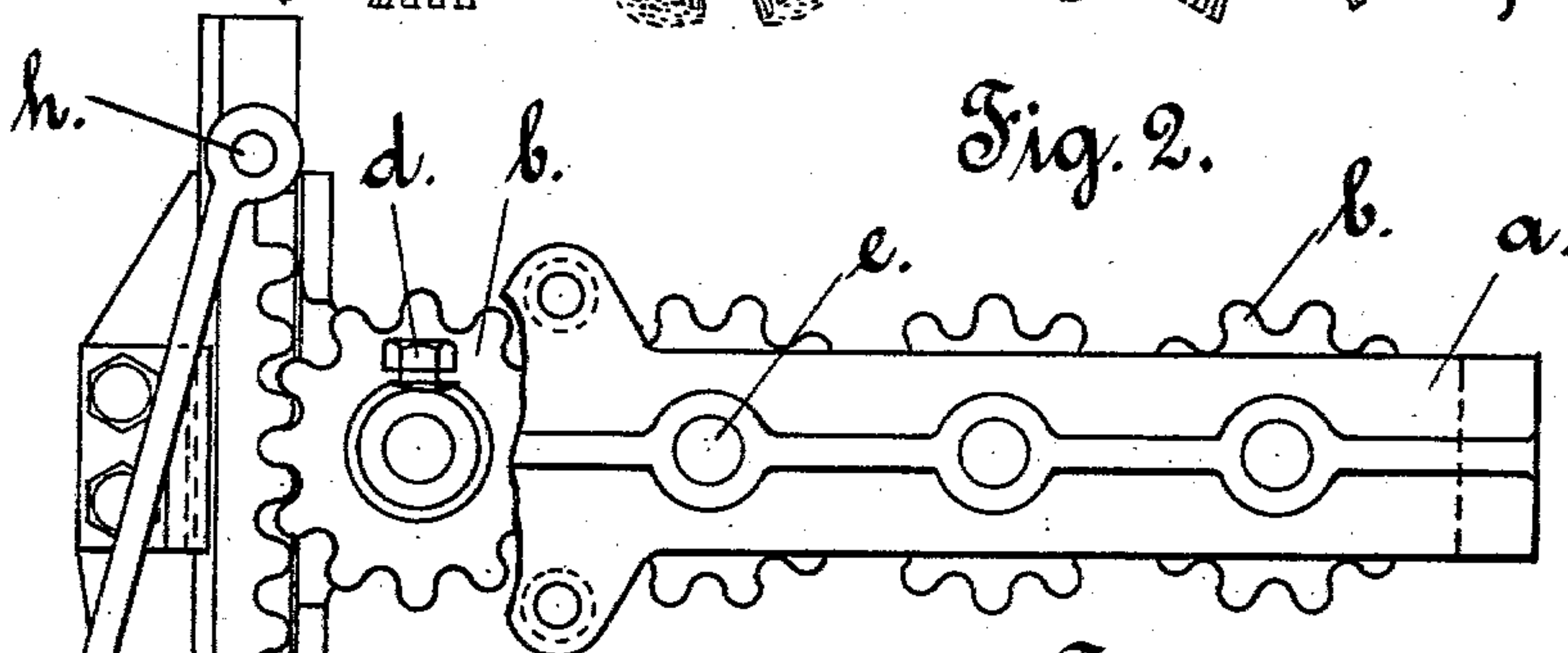
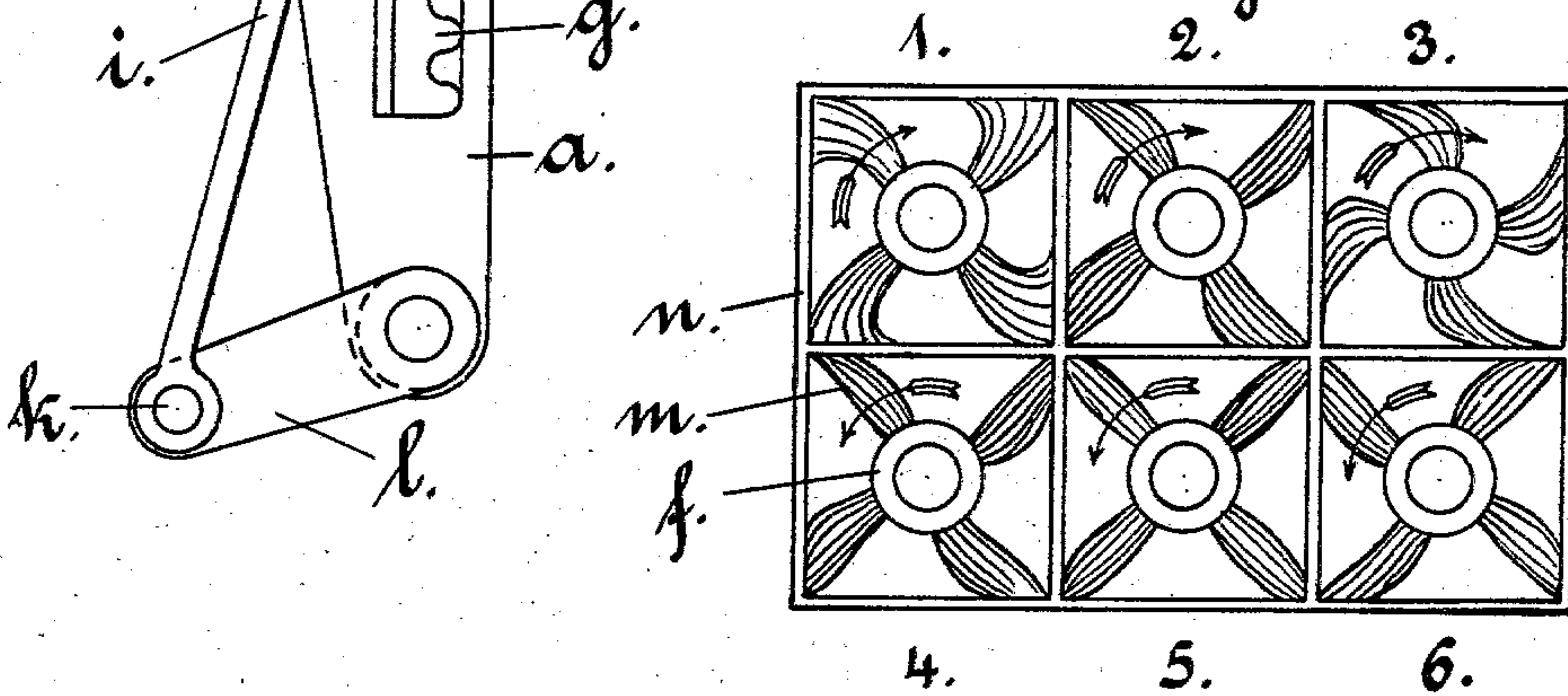


Fig. 3.



Witnesses:
John Keweg.
Arthur Lips.

Inventor:
Richard Knöllner
by Erich Peters atty.

UNITED STATES PATENT OFFICE.

RICHARD KNÖLLNER, OF MAGDEBURG, GERMANY.

APPARATUS FOR CLEANING BOTTLE BASKETS OR CASES.

SPECIFICATION forming part of Letters Patent No. 753,500, dated March 1, 1904.

Application filed September 2, 1903. Serial No. 171,671. (No model.)

To all whom it may concern:

Be it known that I, RICHARD KNÖLLNER, merchant, a subject of the King of Prussia, German Emperor, residing at 12 Kaiser Otto Ring, Magdeburg, Germany, (whose post-office address is 12 Kaiser Otto Ring, Magdeburg, Germany,) have invented a new and useful Apparatus for Cleaning Bottle Baskets or Cases, of which the following is a specification.

The object of my invention is to provide an apparatus for the purpose of cleaning bottle baskets, cases, or the like. There has hitherto been no apparatus used for this purpose. The cleaning has been accomplished by hand with a brush and jets of water.

Figure 1 in the annexed drawings shows a view of the apparatus, the impulsion mechanism being removed. Fig. 2 is a plan view of the apparatus. Fig. 3 is a view showing the mode of working the brushes. Sketches 1 to 3 show the position of the brush-bristles when turning to one direction, and 4 to 6 show the position of the same when turning to the other direction.

Similar letters refer to similar parts throughout.

In a frame *a* are journaled a number of pinions *b*, whose naves *c* are hollow and provided with set-screws *d*. In these naves *c* the shafts *e* of the brushes *f* are placed and are fixed by said set-screws. It is thus possible to put the brush-shafts *e* as far as one chooses into the nave and to fasten them by tightening the set-screws. In the drawings, Fig. 1, the second brush is shown as pushed down somewhat lower than the other brushes. The brushes are turned by the pinions in the following manner: The pinions gear with each other, so that all brushes are moved at the same time.

One pinion gears with a rack *g*, which slides on the frame *a* and is provided with a pin *h*. On this pin *h* is secured a connecting-rod *i*, whose other end is connected with the pin *k* of the crank *l*, rotating on the frame *a*. When the crank *l* is turned, then all the brushes move at the same time to and fro. The bristles *m* of the brushes *f* are of such a length that they press into the corners of the compartments *n* of the baskets or boxes. If the brushes would be turned only in one direction, then the bristles *m* would only touch the corners lightly or even slide over them without pressing into them. Therefore it is advisable to change the rotating direction of the brushes several times during the cleaning procedure. The effect of this is shown in Fig. 3. The ends of the bristles will be pressed into the corners of the compartments when the brushes rotate backward and will be kept there a short time, while the brushes still rotate. The bristles make thus an oscillating movement and scratch out the corners.

What I claim as my invention, and desire to secure by Letters Patent, is—

In an apparatus for cleaning quadratic compartments of bottle baskets or cases the combination of a series of brushes, having shafts, pinions gearing together having hollow naves fixed to the shafts by set-screws, a rack gearing with the aforesaid pinions, a crank actuating the rack and a frame bearing all the parts, all as described and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

RICHARD KNÖLLNER.

Witnesses:

ERICH PETERS,

JAMES L. A. BURRELL.