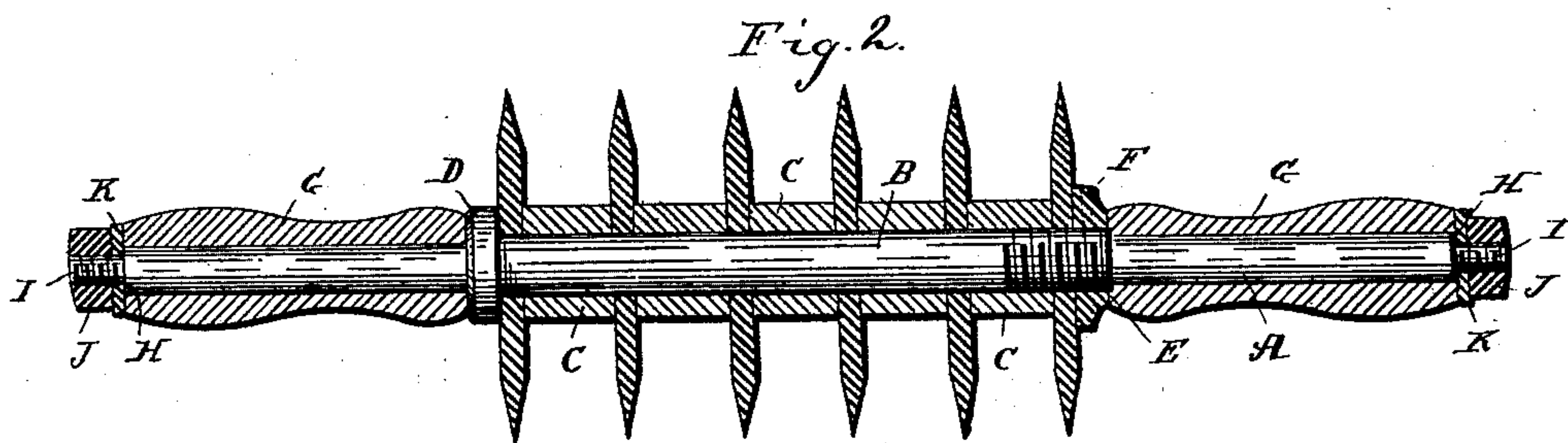
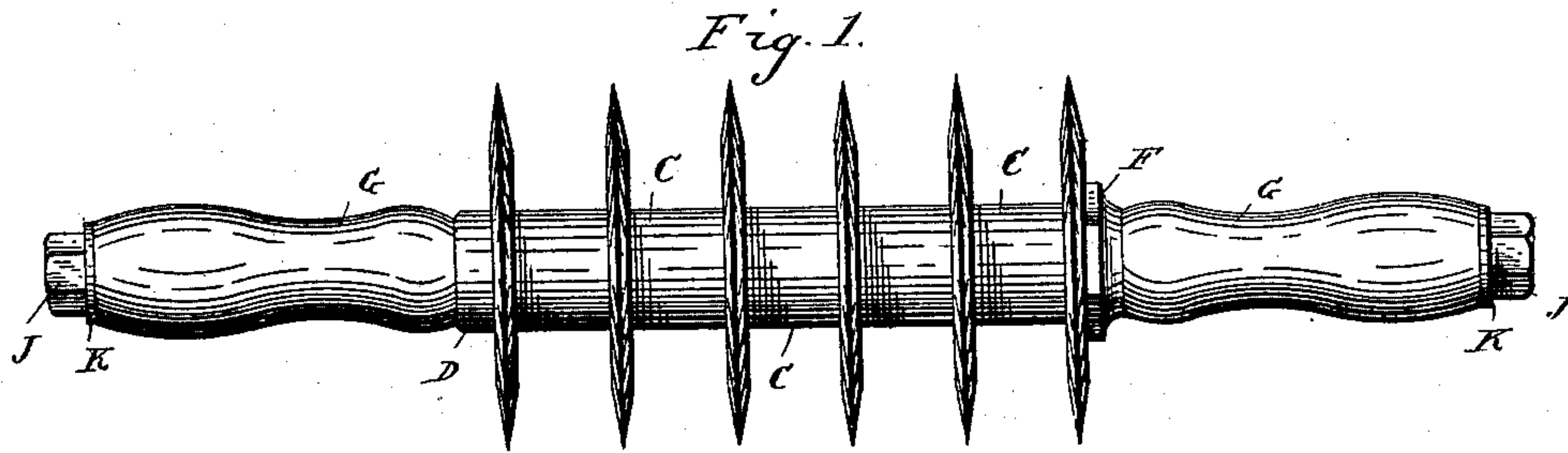


(No Model.)

W. WEBER.
ROLLER KNIFE.

No. 359,480.

Patented Mar. 15, 1887.



WITNESSES

Edwin L. Bradford
James M. Durant,

William Weber, ^{INVENTOR}
By *Edwin L. Bradford*
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UNITED STATES PATENT OFFICE.

WILLIAM WEBER, OF EVANSVILLE, INDIANA.

ROLLER-KNIFE.

SPECIFICATION forming part of Letters Patent No. 359,480, dated March 15, 1887.

Application filed December 20, 1886. Serial No. 222,037. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WEBER, a citizen of the United States, residing at Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Roller-Knives, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention is an article of manufacture to be used by druggists in cutting leaves, herbs, flowers, &c., into small pieces, as also to be used as a kitchen implement for cutting up vegetables, meats, &c.

15 In the accompanying drawings, forming a part of this specification, and on which similar letters of reference indicate the same or corresponding features, Figure 1 represents a side elevation of my improved roller-cutter, and Fig. 2 an axial sectional view of the same.

20 The letter A designates a metallic shaft or arbor of two diameters, upon the portion B of which is slipped or fitted a series of circular blades, beveled from opposite sides to form sharp edges, and between these blades is placed a like series of spools or collars, C, preferably of wood, which serve to space the said blades.

25 The portion B of the arbor at one end is provided with a collar or shoulder, D, and at the other with a screw-threaded portion, E, upon which is secured a binding-nut, F. The portion B of the arbor being larger than the end portions admits of the nut F being slipped over the smaller portion, so as to be engaged with the threads E. The nut F binds against one of the blades, and that blade against the adjacent collar, and said collar against the next blade, and so on throughout the series until the last blade is resisted by the collar D, whereby all the blades are firmly secured. As a result the arbor revolves with the blades when the latter are pressed upon the material which it is desired to cut up. The handles G are therefore loosely mounted on the end portions of the arbor, and these portions of the arbor are shouldered at H and threaded at I to receive a nut, J, and a washer, K. The washers fit against the shoulders H, and therefore bind against the ends of the handles, but merely prevent the displacement of the handles, leaving the handles free to rotate.

I have used this device in connection with

my occupation as a druggist, and find it very useful in reducing leaves, herbs, flowers, &c., to a fine or chopped condition for the purpose of making drugs. As a culinary instrument it is also useful in slicing vegetables and mangling meat.

The blades are made of steel, the handles of wood, and the shaft of iron, and the collars of wood or metal, but preferably of the former, in that it is cheaper, and the number of blades may be increased at pleasure, and the diameter varied to suit the purposes for which the instrument is to be used. In cutting the larger herbs or roots it is desirable to have the cutting-blades of larger diameter, so as to more rapidly roll over and upon and into the same, because if the blades are small as compared to the herbs or roots the latter slide away from the blades more or less, and have to be held to the action of the blades.

For druggists' purposes blades four inches in diameter are found to be the proper size, while for culinary purposes the roller-cutters may be made cheaper by saving the material in making the blades of less diameter.

It has been found in practice that where the handles are rigidly mounted and the knives allowed to rotate independently of each other, they often become clogged upon the shaft and refuse to turn, and as the shaft itself does not turn within the handles it results that one portion of the knife has to perform all the work. It is to overcome this difficulty that is the object of my invention; and I do not wish to be understood as laying claim to any such construction as above set forth. In my invention I mount the knives so that they are dependent upon the rotation of the shaft or arbor, and I mount the handles loosely on the smaller portions of the arbor. In this way by pushing the cutter forward and backward the shaft revolves within the handles and the knives are compelled to rotate. Moreover, the revolution of the handles upon the shaft renders the cutting much easier than when they are rigidly mounted, as in the former case they can be grasped firmly in the hands, and a much greater pressure can be brought upon the knives.

What I claim is—

As an improved article of manufacture, a roller-cutter consisting of an arbor of two di-

ameters, a series of stout circular blades having tapering peripheries, mounted upon the larger diameter of the arbor, so as to rotate only with the rotation of the arbor, a series
5 of collars placed between said blades, a shoulder at one end of the larger diameter of the arbor, and a handle which bears against it, screw-threads at the other end, and a nut applied to the said threads, and a handle that
10 bears against it, the said handles being loosely

mounted upon the smaller portions of the arbor, and said portions being shouldered and screw-threaded and having washers and nuts, substantially as described.

In testimony whereof I affix my signature in 15 presence of two witnesses.

WILLIAM WEBER.

Witnesses:

CHARLES LAVEL,
H. H. SIEFFERT.