

Tobacco Cutter.

No. 64,980.

Patented May 21, 1867.

Fig. 1

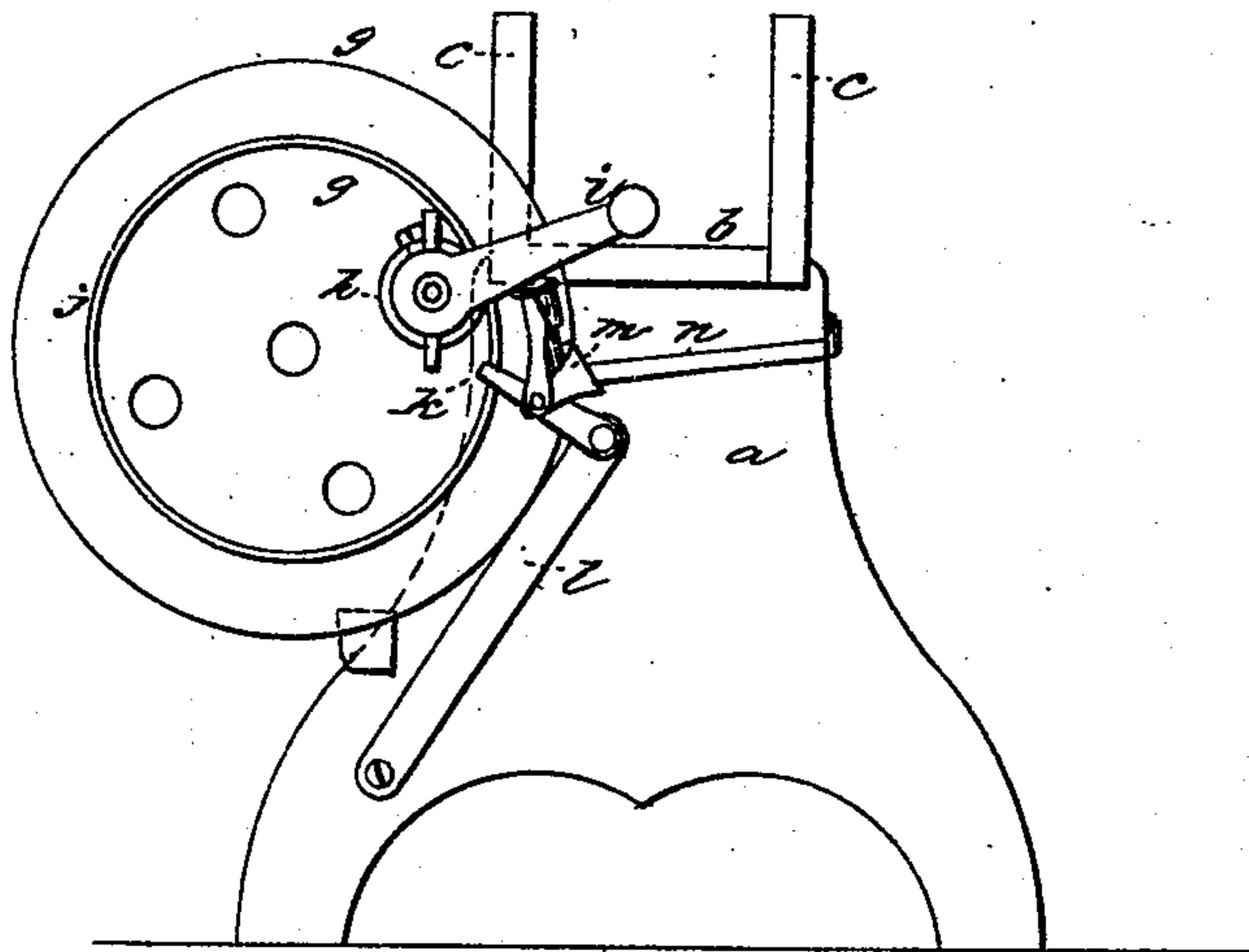


Fig. 2

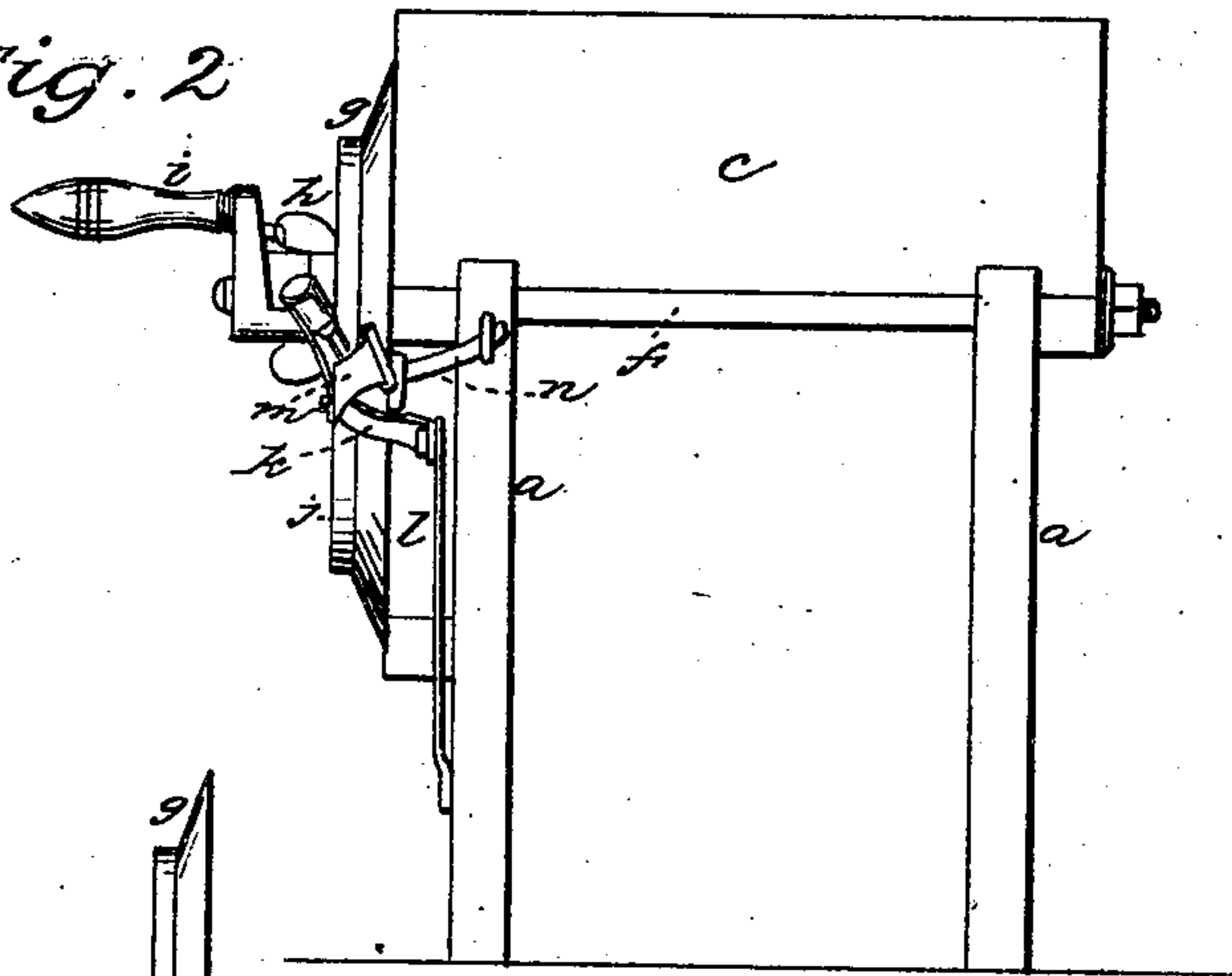
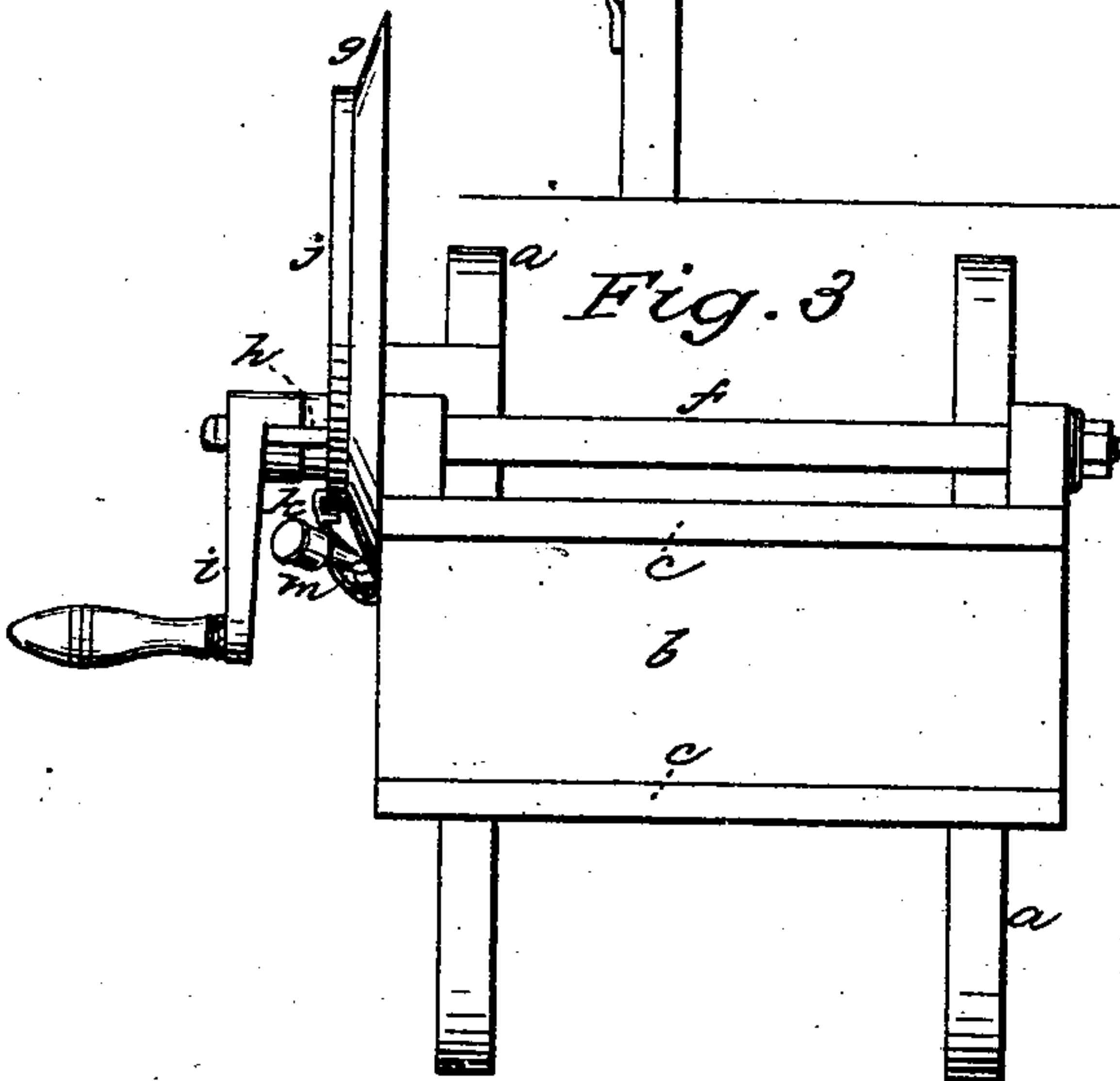


Fig. 3



Witnesses:

Thaddeus B Beecher
John M Intyre

Inventor:

work use

United States Patent Office.

W. W. HUSE, OF BROOKLYN, NEW YORK.

Letters Patent No. 64,980, dated May 21, 1867.

TOBACCO-CUTTING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, W. W. HUSE, of the city of Brooklyn, Kings county, and State of New York, have invented certain new and useful improvements in the Machine for Cutting Tobacco and other substances; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a front elevation.

Figure 2 a side elevation; and

Figure 3 a plan view.

The same letters refer to the same parts in each of the figures.

My invention consists in so arranging or hanging a circular cutter, formed of a disk of metal, eccentrically upon the shaft which carries it, that only about one-fourth of its periphery or cutting-edge is at one operation brought to act upon the mass of tobacco or other substance to be cut, and that when this cutting surface becomes dull from use the bearings of the cutter can be shifted upon the shaft which rotates it so as to bring another portion of its cutting surface into operation, and thus the entire cutting surface or periphery of the cutter can be made available for cutting. And my invention also consists, in combination with so arranging the cutter eccentrically upon its shaft, in making its face, for a short distance from its periphery or cutting-edge, inclining outward from its plane of motion, to avoid a very serious difficulty in the operation of cutting tobacco. This difficulty is the accumulation of juice on the face of the cutter, which is forced out of the tobacco by the pressure to which it is subjected and by the cutting action. This accumulation of juice on the face of the cutter results from the general practice of forming that face of the knife or cutter which is towards the mass of tobacco flat, and in the plane of the cutting-edge, and hence its cutting action is seriously impeded or stopped until cleaned. And my invention also consists in combining with the cutter so constructed, and arranged eccentrically upon its shaft, a sharpening instrument and wiper, whereby the cutting-edge of the cutter is always kept sharp and fit for use, and its inclined face towards the tobacco kept clean and free from any juice or dust which might accumulate upon it. I will proceed to describe my said improvements as applied to cutting tobacco, although they are equally applicable to the cutting of other substances, such as straw, corn-cobs, &c.

In the accompanying drawings *a* represents a suitable frame, in the upper part of which is formed a horizontal bed, *b*, with parallel sides, *c c*, to form a trough or way to receive the tobacco to be cut, and in which it is moved towards the cutter. The tobacco to be cut can be fed towards the cutter in any suitable and convenient manner, not necessary to be described or represented. At the side of the trough is mounted a horizontal shaft, *f*, the front end of which carries a circular cutter, *g*. This cutter, when placed in position on the shaft, is secured in place by a binding nut, *h*, which forces its inner face up against a flange on the shaft *f*. The front end of the shaft also carries a crank-handle, *i*, to give motion to the cutter, or motion may be given to it in any other desired manner. This cutter, from its periphery or cutting-edge, inclines outward from its plane of motion for a short distance, as shown in the drawings, and this outward bevel from the cutting-edge effectually prevents the cutter from being gummed by the juice which is forced out from the tobacco. The rest of the diameter of the cutter is made flat, and there are four (more or less) holes drilled through its face equidistant from the centre, and of the diameter of the front end of the shaft *f*, so that when the shaft is inserted in any one of these holes in the flat portion of the disk of the cutter, and the cutter secured in position by the binding screw, the motion of the cutter is eccentric around the shaft, and only a portion of its periphery or cutting-edge in its revolution is brought to act upon the mass of tobacco to be cut. This arrangement of hanging the cutter not only gives to it a gradual drawing cut in its action, but it will readily be perceived that when that portion of its cutting-edge which has been in active use has become dull, it can be shifted to another hole and secured to the shaft so as to bring another portion of its cutting-surface into operation upon the tobacco, and that in this way the entire cutting-edge or periphery of the cutter can be rendered available to act on the tobacco before it will become necessary to reverse it from the shaft for the purpose of grinding and sharpening it. I propose to apply to the cutter a sharpening instrument to sharpen its cutting-edge, and also what I term a "wiper" to keep the inner inclined portion of the cutter free from dust and other impurity. A rim or

flange, *j*, is formed on the outer face of the cutter, just at the junction of the flat and inclined portions of it, and this rim or flange is embraced by one end of an arm, *k*, the other end of which is pivoted to one end of another arm, *l*, the other end of which is pivoted to the frame. Another piece *m*, is attached by a screw or otherwise to the arm *k*, and to this piece *m* is secured in any convenient manner a sharpening stone, which is made to bear against the outer inclined surface of the cutter and at the cutting-edge. The arm *k*, that embraces the rim or flange *j*, on the outer face of the cutter, also carries an oil cup to lubricate the sharpener. To the piece *m*, to which is secured the sharpening instrument, there is also secured what is termed a "wiper," formed of any suitable material, and this wiper is so located as to bear against the inner inclined face of the cutter. The cutter *g* being secured eccentrically on the shaft *f*, it will be readily seen that the rim or flange *j*, being embraced by the arm *k*, and this arm in turn pivoted to another arm which is pivoted to the frame, will, in its revolution around the shaft, draw the sharpening instrument and wiper in towards, and out from, the shaft, and keep them always in their relative positions against the outer and inner inclined faces of the cutter. The sharpener and wiper are assisted in their outward travel from the shaft by an India-rubber or other spring, *n*, one end of which is secured to the piece *m*, and the other end to the frame.

Having fully described my improvements, I wish it to be distinctly understood that I do not limit myself in the use of them to the operation of cutting tobacco, as they are equally applicable to the cutting of other substances.

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

Arranging or hanging the circular cutter eccentrically upon its shaft, so that only a portion of its cutting-edge is at one operation brought into action on the tobacco or other material to be cut, and, when desired, can be shifted on its shaft to bring another portion of its cutting-edge to act on the substance to be cut, as described.

I also claim making the cutter for a short distance from its periphery or cutting-edge inclining outward from its plane of motion as herein described, in combination with the method of hanging the cutter eccentrically and so that it can be shifted on its shaft, as described.

And I also claim, in combination with the eccentric cutter, the employment of a sharpener and wiper, arranged substantially in the manner and for the purposes set forth.

W. W. HUSE.

Witnesses:

A. THIELOKED,
H. W. HUNT.