(No Model.)

F. L. BLAIR.

Machine for Cutting Cork.

No. 227,876. **Patented May 25, 1880.**

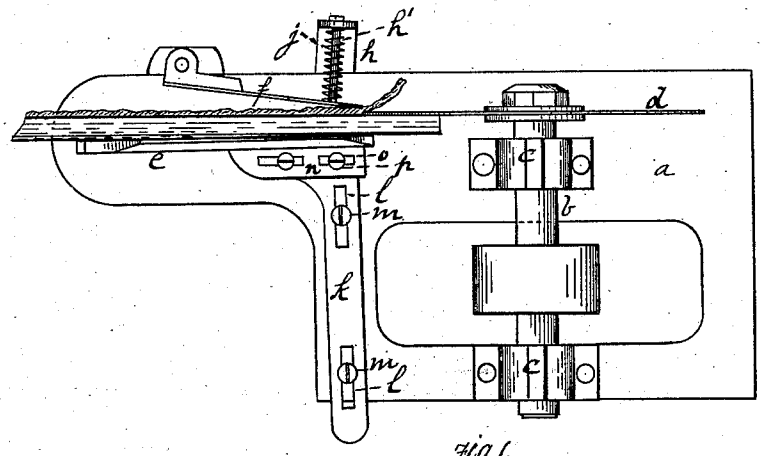


Fig. 1.

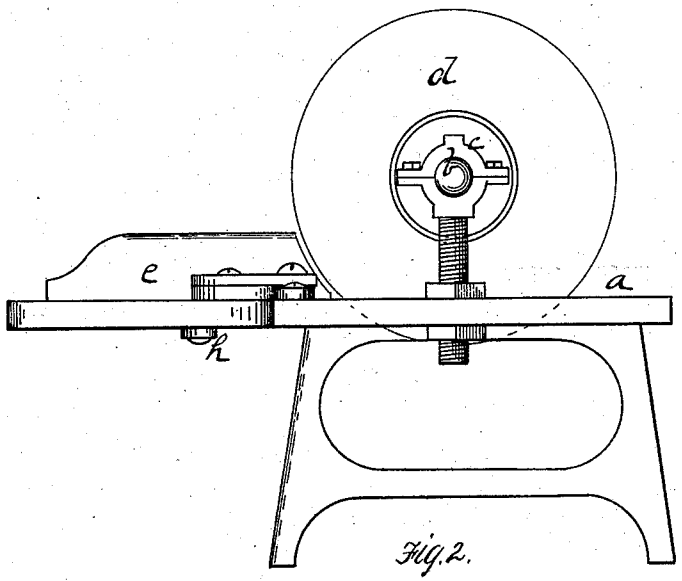


Fig. 2.

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UNITED STATES PATENT OFFICE.

FRANK L. BLAIR, OF ALLEGHENY, PENNSYLVANIA.

MACHINE FOR CUTTING CORK.

SPECIFICATION forming part of Letters Patent No. 227,876, dated May 25, 1880.

Application filed March 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, FRANK L. BLAIR, of Allegheny city, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Machines for Cutting Cork; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of my improved cork-cutter, and Fig. 2 is a side view of the same.

Like letters refer to like parts wherever they occur.

My invention relates to a new and improved machine for cutting cork; and it has for its object the removal from cork strips of the outer and coarser surfaces.

In the manufacture of cork from the inner bark of the cork-tree it is cut into long strips, from which the corks are cut; but before this is done it is necessary to remove the coarse and rough surfaces. This is easily and quickly accomplished by my improved cutter.

My machine is composed of a revolving circular disk mounted upon a suitable table or frame, having adjustable and spring guides for holding and presenting the cork to the cutting-edge of the disk. I will now describe it, so that others skilled in the art may make and use the same.

a is the table or frame, on which is mounted the shaft *b* in suitable bearings *c*. At one end of this shaft is the circular steel cutting-disk *d*, which extends down through the table or frame *a*.

On the table *a* is an adjustable guide, *e*, which consists of a strip of wood or metal, placed vertically upon its edge, extending along the table *a* at a slight angle to the cutting-disk, so as to give the proper lead to the strip of cork against the cutting-edge of the disk. Its inside surface, or the surface along which the strip of cork passes, is perfectly smooth and even. On the other side of the cutting-disk from the guide *e* is a spring or pressure guide, *f*, which consists of a strip of metal or wood, pivoted at its farther end to the table *a*, and extending to a point at or about the cutting-edge of the disk *e*. From this point under the table *a* extends an arm or bracket, *h*, which is pivoted to the table *a*.

Fastened to and extending from the arm *f* is a rod, *h'*, which passes through a slot in the bracket *h*. On and around this rod *h'*, between the bracket *h* and guide-strip *f*, is a spring, *j*, which presses the free end of the guide-strip *f* against the guide-strip *e*, so that when a strip of cork is fed between the stationary guide-strip *e* and the pivoted guide-strip *f* the spring *j* will cause the guide-strip *f* to press the strip of cork firmly against the guide *e*, and yet at the same time allow sufficient give to enable it to be fed evenly and easily against the cutting-disk in spite of any inequalities in thickness and roughness of surface of the cork.

The front end of the guide *f* is curved to conform to the curved shape of the knife, so that it shall hold the strip of cork firmly up to the very cutting-point, and thus prevent wabbling and irregular feeding of the strip.

From the outer side of the guide-strip *e* there extends, at right angles to it, an arm, *k*, provided with slots *l* over corresponding slots in the table *a*. Through these slots pass screw-bolts *m*, by which the arm *k* is fastened to the table *a*.

The guide-strip *e* is provided on its outer side with a flange or projecting arm, *n*, which extends over the arm *k*. This arm or flange *n* is provided with slots *o*, through which the screw-bolts *p* pass and fasten the guide-strip *e* thereby adjustably to the table *a*, so that it may be presented toward the cutting-disk *a* at the desired angle, and the space between it and the cutting-disk may be increased or lessened in order to accommodate different thicknesses of cork.

The ends of the guides *e* and *f* nearest the edge of the cutting-disk are so formed as to correspond with the arc of the same, and thereby hold the cork firmly against the edge of the disk.

The operation of my machine is as follows: The cork strip is fed between the guide-arms *e* and *f* against the rapidly-revolving disk *c*, the spring *j* holding it tightly against the arm *e*. The cork strip passes out from between the guide-arms *e* and *f* to one side of the disk *c*, while the bark cut therefrom passes on the other.

The advantage of setting the guide *e* at an angle to the cutting-disk is, first, that the proper lead is given to the strip of cork; and, secondly, that the direction of the cutting-edge of the disk is outward, or toward the rough surface of the strip, so that any tendency of the cork to spring will not throw it across the cutter, as might occur if the guide were set in a plane parallel to the plane of the cutting-edge of the disk.

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

1. In a machine for cutting the rough surfaces from strips of cork, the combination of a rotating cutting-disk, an adjustable guide or gage set at an angle to the cutting-edge or plane of rotation of the cutting-disk, and an automatic spring-guide or presser-guide for holding the strip of cork against the adjustable guide or gage and presenting it to the cutting-edge of the rotary cutting-disk, substantially as specified.

2. In a machine for cutting the rough surfaces from strips of cork, the combination, with the rotating cutting-disk *d*, of the adjustable guide *e* and the pivoted spring pressure-guide *f*, the ends of guides *e* and *f* nearest the cutting-disk being curved to correspond with the arc of the disk, substantially as and for the purpose specified.

In testimony whereof I, the said FRANK L. BLAIR, have hereunto set my hand.

FRANK L. BLAIR.

Witnesses:
T. B. KERR,
JAMES A. MCKEAN.