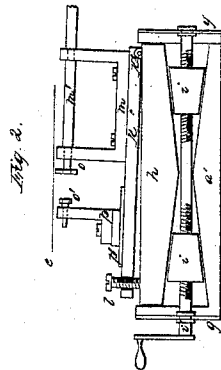
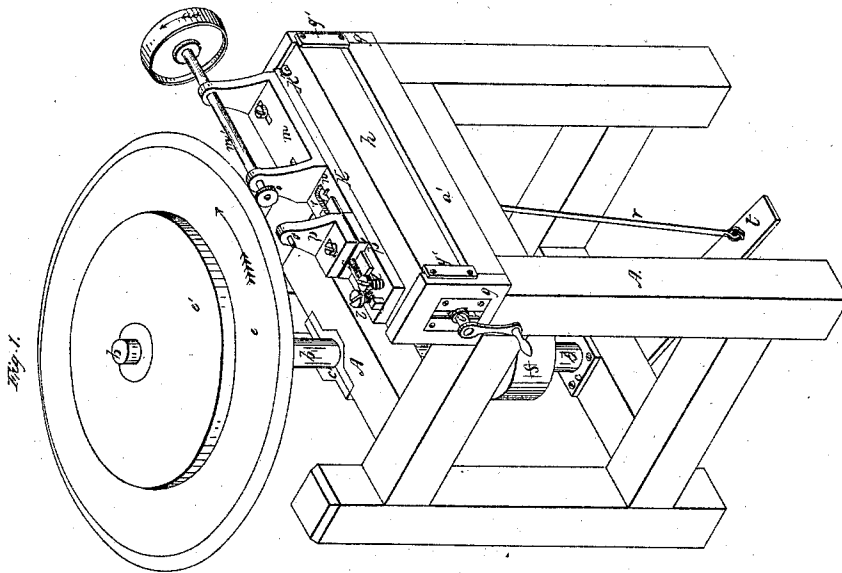


W. King,
Cork Machine.

N° 8,208.

Patented July 8, 1851.



UNITED STATES PATENT OFFICE.

WM. KING, OF NEW YORK, N. Y.

CORK-CUTTING MACHINE.

Specification of Letters Patent No. 8,208, dated July 8, 1851.

To all whom it may concern:

Be it known that I, WILLIAM KING, of the city, county, and State of New York, have invented an Improvement in Machines
5 for Cutting Corks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

10 Figure I is a view in perspective. Fig. 2 is a section in detail and like letters refer to like parts in both the figures.

The nature of my invention consists in such construction of a machine for giving
15 the cylindrical form to bottle corks, as will enable the workman readily to adjust it while actually cutting, to cut a perfectly formed cork of the largest size the "square" will admit. In all machines for this purpose
20 hitherto in use the corks are cut to a uniform size, but in practice this is not found to be desirable, as from the peculiar nature of the material it is difficult to provide "squares" of uniform size, and hence,
25 where the machine must be set to cut a perfectly formed cork from "squares" of the smallest size, a loss of stock results on all others.

My construction for this purpose is as follows. On a suitable frame work A I place
30 a vertical shaft (*b*) in proper boxes (*c*, *c'*) having on the top a horizontal knife (*E*) which is a thin circular plate of steel strengthened by suitable disks (*E'*). On the
35 shaft is also a pulley (*f*) by means of which rotary motion may be given.

Attached to the frame A, and perpendicularly below the edge of the knife, is a plate (*a'*) to each end of which are affixed
40 uprights (*g*, *g*) having on them guides (*g'*, *g'*). A block (*h*) within these guides may be moved vertically when required by making the lower side of the block (*h*) in the form of a double wedge, and the upper
45 side of the plate (*a'*) of the same form inverted; and placing between them wedges (*i*, *i*) operated by a shaft, (*i'*) on which are right and left screws working through the wedges in a manner well known and
50 the whole of which is clearly shown in Fig. II.

On the top of the block (*h*) I place a bed, (*k*) which is hinged at one end (*k'*) to the block, and at the other is provided with
55 set screws (*l*, *l*) by means of which that end may be raised or lowered at pleasure,

on this bed is an adjustable head (*m*) supporting a mandrel (*m'*) to which motion is given by a pulley (*n*). The holder or
chuck (*o*) by which the "square" is made
60 to revolve is of the construction common for this purpose, and is fixed on the end of the mandrel. It must then be in such position that the edge of the knife is directly over the axis of the chuck. On the bed (*k*) is
65 also another head (*p*) moving on a slide (*p'*) and sustaining a holder or center (*o'*) capable of revolving, the axis of which must be in the same line as that of the mandrel (*m'*). To the head (*p*) a cord (*r*) is attached
70 which passing over a sheave (*r'*) to a treadle (*t*) serves to move the head (*p*) upon its slide toward the head (*m*). A spring (*s*) is also attached to the opposite side of the head (*p*) for the purpose of
75 withdrawing it.

The operation of my machine will be as follows. The bed (*k*) is first raised by turning the set screws (*l*), to give the required conical form to the cork, the block
80 (*h*) is then adjusted to such distance below the edge of the knife (*E*) as will bring the holders far enough below the knife to accommodate a "square" of the largest size
85 among the lot to be cut; rapid rotary motion is then given to the knife, and a comparatively slow motion to the chuck (*o*) in the directions indicated. The workman now
places with his left hand the smaller end of a "square" against the center (*o'*) and
90 with his foot presses the treadle bringing up the head (*p*) so that the piece of cork comes in contact with the chuck (*o*). It is thus caused to revolve and with it now revolves the center or holder (*o'*). If the
95 piece should chance to be a small one, and the "square" is not sufficiently cut away to give a perfectly formed cork, the workman with his right hand turns the shaft (*i'*)
100 by means of a crank, raising the block (*h*), and with it the holders, the cork still revolving, and thus the cutting may be continued as long as desired. By raising the foot from the treadle the head (*p*) will be no longer
105 held; the spring (*s*) will then be permitted to draw it back, and the cork will drop out. The shaft (*i'*) is now turned back to its initial position and a new "square" put in place.

I do not confine myself strictly to the precise form of construction herein described
110 but claim to vary the same as desirable while

I produce the like results by equivalent mechanical means.

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

- 5 The lifting block (*h*) susceptible of such adjustment with reference to the edge of the knife, while the machine is in motion that from squares of varying sizes perfectly

formed corks may be cut, of the largest size each square will afford, the whole being constructed and operating substantially in the manner herein set forth. 10

WILLIAM KING.

Witnesses:

S. H. MAYNARD,
THOMAS H. WOOD.