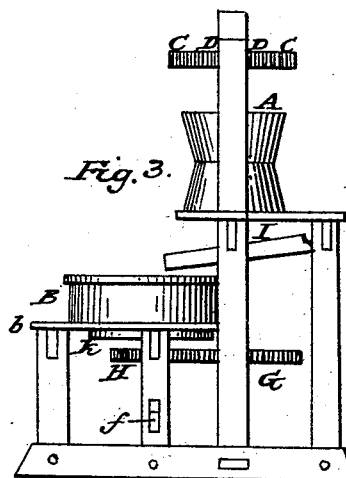
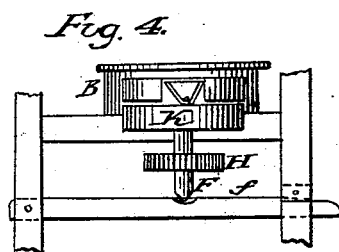
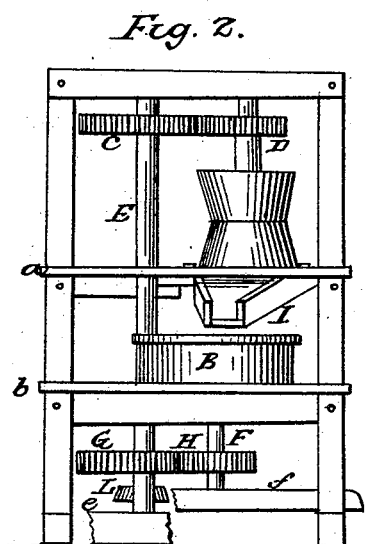
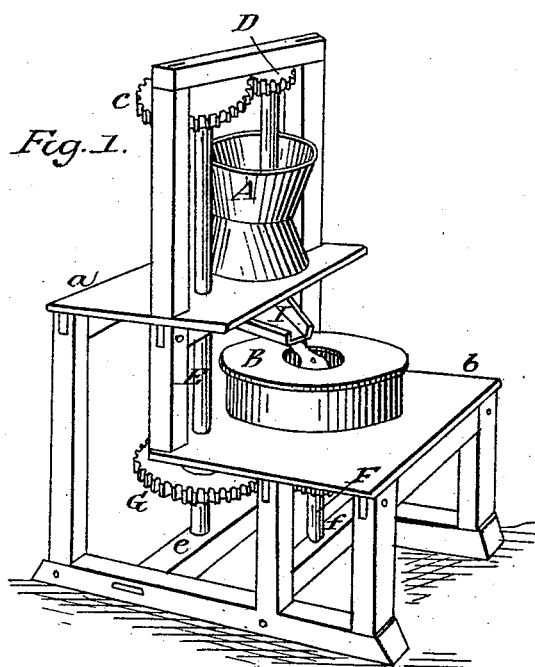


M. WINGER.

Manufacture of Quercitron Bark.

No. 108,669.

Patented Oct. 25, 1870.



Witnesses:
Wm B Wiley
Jacob Stauffer

Inventor:
Martin Winger

United States Patent Office.

MARTIN WINGER, OF EPHRATA, PENNSYLVANIA.

Letters Patent No. 108,669, dated October 25, 1870.

IMPROVEMENT IN THE MANUFACTURE OF QUERCITRON-BARK.

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

I, MARTIN WINGER, of Ephrata, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in the Manner of Grinding Bark or Quercitron so as to produce a superior quality, of which the following is a specification.

The nature of my invention consists in a new process or method of treating and manufacturing quercitron-bark so as to yield a soft fibrous product, free from knots or hard lumps, and that needs no subsequent screening, a thing that cannot be accomplished by the use of the chaser or vertical revolving stones heretofore in use in connection with a crushing-mill; but by submitting the previously-crushed bark to the rubbing action, between a pair of horizontal stones, produces results not heretofore attained.

The accompanying drawing will illustrate my arrangement of a combined mill, in which—

Figure 1 is a perspective view.

Figure 2, a front elevation, and

Figure 3, a side elevation.

Figure 4, the runner, spindle, and lever-step.

A shows an ordinary iron mill, of any approved construction, on a table or platform, *a*.

B shows the case over a stationary millstone and runner, made adjustable by any of the ordinary means in use, on its platform *b*.

C is a cogged wheel on the main shaft E, which has also a cogged or spur-wheel, G, and is provided with a pulley or bevel-pinion, L, fig. 2, to which the power is communicated.

The upper wheel C drives the pinion D, on the shaft *d*, in the vertical grinding-mill A.

The lower wheel G drives the pinion H on the spindle F of the runner of the horizontal mill.

The several steps *e f*, and bearings, with the supporting frame-work, are clearly shown.

Having made the grinding of quercitron a specialty for a number of years, and at a considerable cost of time and money endeavored to perfect the same, I find that by submitting the crushed bark to the action of ordinary millstones the happiest result is produced by effectually grinding the same in a more uniform and thorough manner.

Stones of this kind have been considered inapplicable for grinding bark, and I am not aware that they were ever used for this purpose before I tested the same; I, however, do not claim either the vertical iron mill or crusher, nor the horizontally-revolving stone and stationary millstone and appliances, as such are common, but rather their application to a new purpose and the results of producing a superior article of manufacture by such use; therefore,

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

1. The improved method of treating and manufacturing quercitron-bark by submitting the previously-crushed bark to the rubbing action between a pair of horizontal stones, substantially in the manner and for the purpose specified.

2. The soft fibrous product of quercitron-bark, manufactured substantially in the manner herein specified.

MARTIN WINGER.

Witnesses:

WM. B. WILEY,

JACOB STAUFFER.