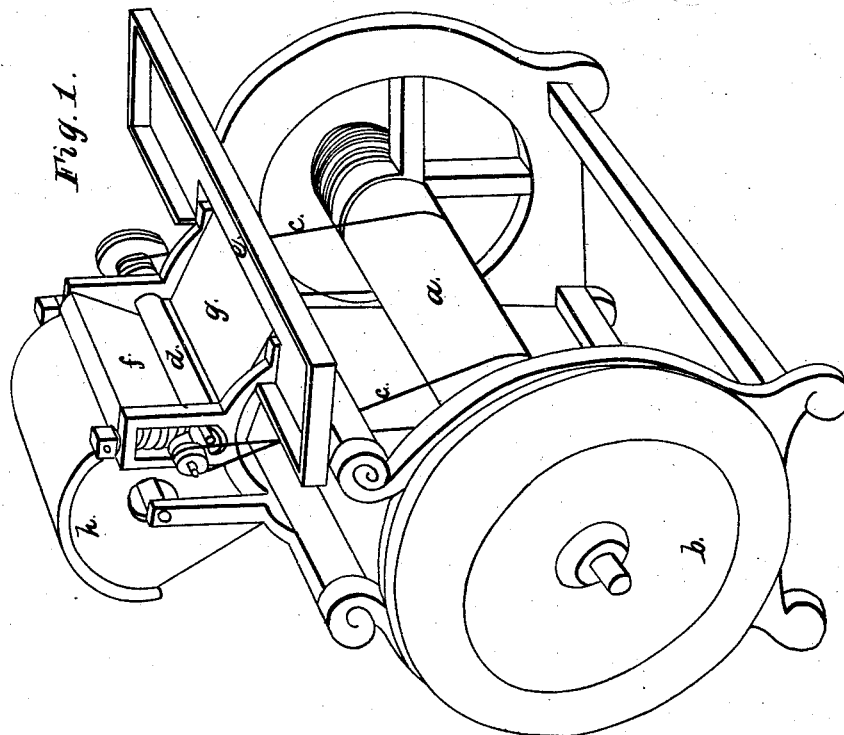
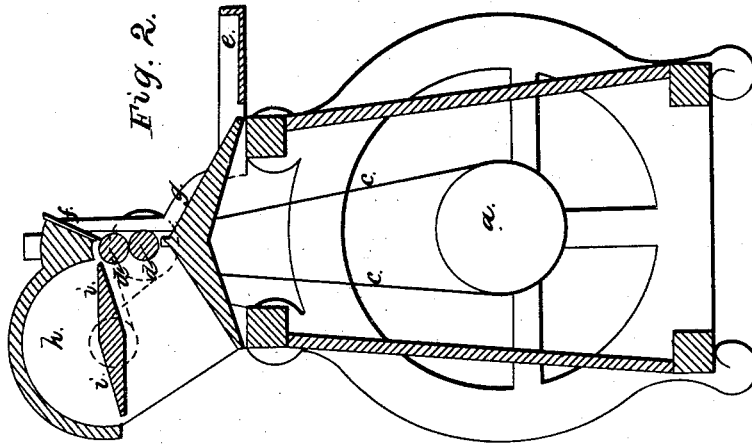


*T. Ely*  
*Wool Picker*  
*N<sup>o</sup> 925. Patented, Sept. 17, 1838.*



# UNITED STATES PATENT OFFICE.

THEODORE ELY, OF POUGHKEEPSIE, NEW YORK.

## MACHINE FOR CLEANING WOOL FROM BURS AND OTHER FOREIGN MATTER.

Specification of Letters Patent No. 925, dated September 17, 1838.

*To all whom it may concern:*

Be it known that I, THEODORE ELY, of Poughkeepsie, in the county of Dutchess and State of New York, have invented a new and improved machine for cleaning wool from burs and other foreign matter which it usually contains as ordinarily mixed as imported from South America and elsewhere; and I do hereby declare that the following is a full and exact description of said machine.

The wool to be cleaned, after being assorted in the usual way, is fed by hand to the machine, in which it passes between a pair of rollers, which I prefer to make of copper, although they may be made of any other metal, or even of wood; but there appears to be a peculiar adaptation in the texture of copper, so far as my experience has extended. The uppermost of these rollers is borne down by a spiral or other spring, which enables it to adapt itself to the varying thickness of the sheet of wool passing between the pair.

To remove the burs from the wool, as it passes between the rollers, I employ a plate, or blade of sheet steel, which stands in front of the upper roller, its lower edge being nearly opposite to the line of junction of the two rollers, and its back side nearly touching the upper roller. This plate is made adjustable, sliding up and down in grooves, which receive its ends. It does not stand vertically, but is inclined, from its upper edge, toward the rollers.

In the accompanying drawings, Figure 1, represents a perspective view of the machine, and Fig. 2, a vertical section from front to back, through the middle of it.

In each of these figures the same parts are designated by the same letters of reference.

*a, a*, is a shaft, or drum, to which the moving power is to be applied; *b*, is a fly wheel on one end of this shaft, and *c, c*, are bands which extend up to whirls on the rollers *d, d*,

between which the wool is to be passed, one of the bands being crossed to give the rollers the proper direction.

For a machine of ordinary size, the rollers may be a foot long, and one inch in diameter; this however, will admit of considerable variation.

The wool to be cleaned is placed upon the table *e, e*, in front of the machine, and the attendant passes it by hand between the rollers, which move in the proper direction to draw it between them. In the perspective view the upper roller is hidden by the steel plate, or blade *f, f*, which is to be tempered so that its lower edge may be turned by a burnisher; in the manner of the edge of a currier's knife. This edge is then so turned as to cause it to project forward, which will have the effect of enabling it to catch against the burs, &c., and detach them from the wool, when they fall down the inclined board *g, g*, and through an opening between its lower edge and the table, thus escaping out of the way.

Within the head, or circular box *h, h*, there is a revolving fan, with two or more vanes *i, i*, the edges of which come nearly into contact with the cylinders, from which they take the cleaned wool, and blow it off back, and clear of the machine. This fan is driven by passing one of the bands around a whirl on its shaft.

Having thus fully described the construction and operation of my machine, I hereby claim as my invention—

The use of the steel plate, or blade, with its lower edge turned, as above described, and operating in combination with the metallic, or other rollers, for the purpose, and substantially in the manner set forth.

THEODORE ELY.

Witnesses:

C. H. WITTEBERGER,  
LINTON THORN.