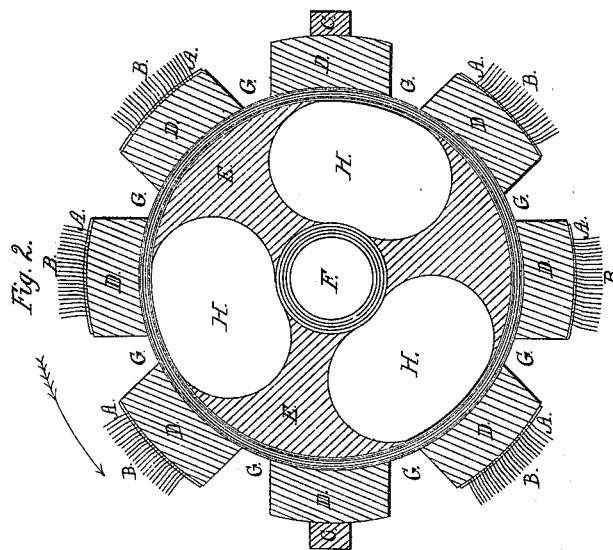
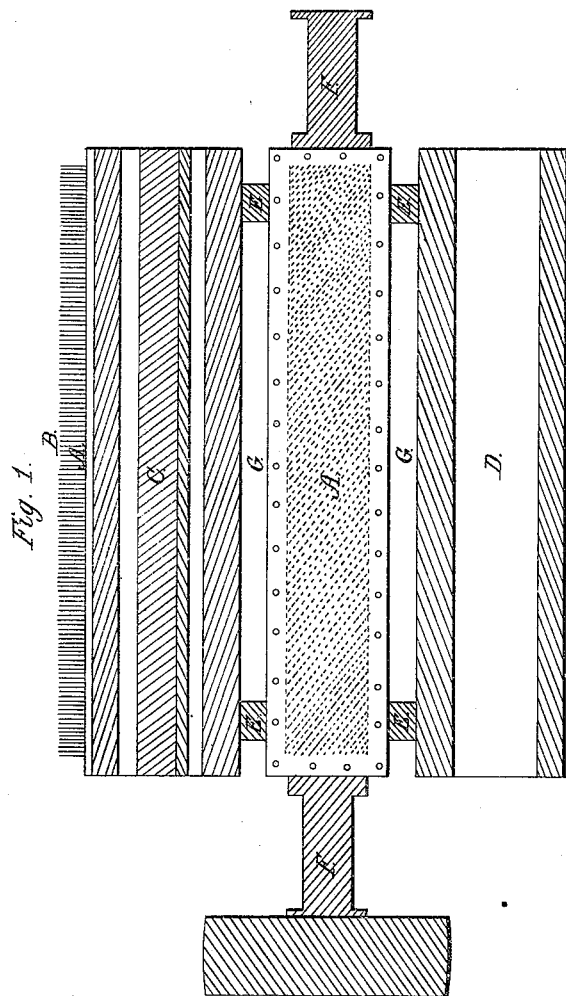


*A. Arnold.*  
*Cotton and Wool Picker.*

*No. 5562.*

*Patented May 9, 1848.*



# UNITED STATES PATENT OFFICE.

ADDISON ARNOLD, OF WALPOLE, MASSACHUSETTS.

BEATER-CYLINDER FOR CLEANING WOOL AND COTTON.

Specification of Letters Patent No. 5,562, dated May 9, 1848.

*To all whom it may concern:*

Be it known that I, ADDISON ARNOLD, of Walpole, in the county of Norfolk and State of Massachusetts, have invented a new and  
5 useful Improvement in Beaters for Separating and Cleaning Cotton, Wool, Fur, or other Stock to be Manufactured; and I do hereby declare that the same is fully described and represented in the following  
10 specification and accompanying drawings, letters, figures, and references thereof.

Of the above mentioned drawings, Figure 1, letter A, denotes a top view; letter B, a longitudinal section of the clothing; letter  
15 C, a guard bar on opposite sides of the cylinder to protect the clothing in case any hard substance comes in contact with it.

Fig. 2 a transverse section or end view, with the clothing and guards on, in the  
20 proper places.

The beater is composed of a series of wooden lags D, D, fastened to the cast iron circular heads E, which are fixed upon a  
25 central shaft F. Every two consecutive lags are arranged with a space or air passage G, between them, and each of the heads E E has three induction air holes H, H, H, made through it. The outer surface of all, excepting two of the lags is covered with beater  
30 clothing A A, all of whose points B are arranged respectively in lines radiating toward the center or axis of the cylinder, on the other two lags I put bars of iron or steel G, to reach nearly as far as the points of the  
35 clothing from the center.

My improvement consists of wire set in leather, or other elastic substance, of much smaller size and more than twenty times as

thick, as they can be used when set permanent, and for protection to these, I claim  
40 the invention of the guard bars which must break down any hard substance which may pass through the feed rolls, before it bends the points more than they will give back in elastic substance and come up to the proper  
45 place. The teeth may be made straight, and set straight through the leather but it would require a different machine, to set them and they would amount to about the same thing. Another improvement in the cylinder is the  
50 shape of the lags, which leave the space on the outer surface larger than the other and gives the air a better chance to blow the stock from the beater. The above beater to be used in the various kinds of machines  
55 called lappers, which receive the stock after it has passed through a burring machine, a picker, a willow or whipping machine, and forms a sheet or lap wound on a roller, to be drawn off into the card for carding.  
60

Practice has proved this beater to be far superior to any in use.

What I claim as my improvements, and wish to secure by Letters Patent is—

The substitution of clothing made of wire  
65 set in elastic substance, in the place of permanent teeth, in combination with bars of iron or steel to protect the clothing substantially as herein described.

In testimony whereof I have hereto set my  
70 signature this fifth day of August, A. D. 1847.

ADDISON ARNOLD [L. s.]

Witnesses:

HARLOW LAWRENCE,  
E. W. CLAP.