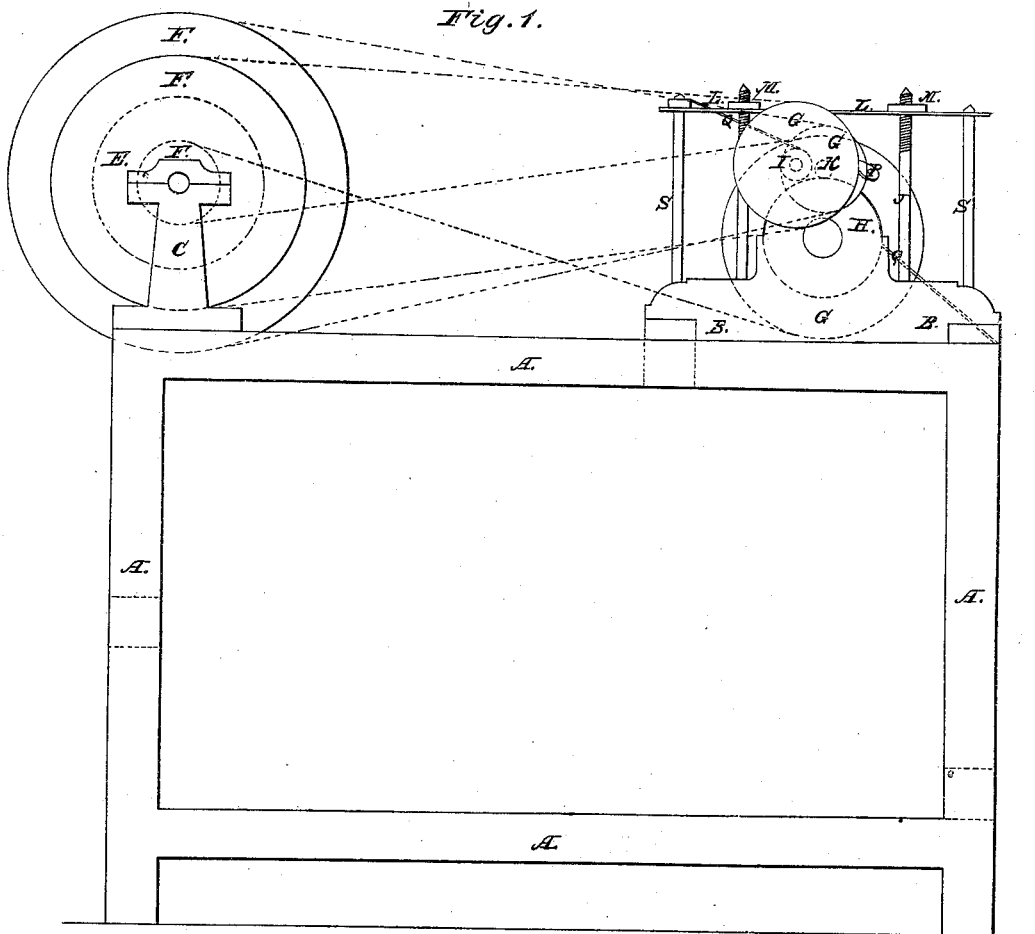


*H. Conklin,
Burring Machine.*

N^o 1,217

Patented July 6. 1839.



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Fig. 2.

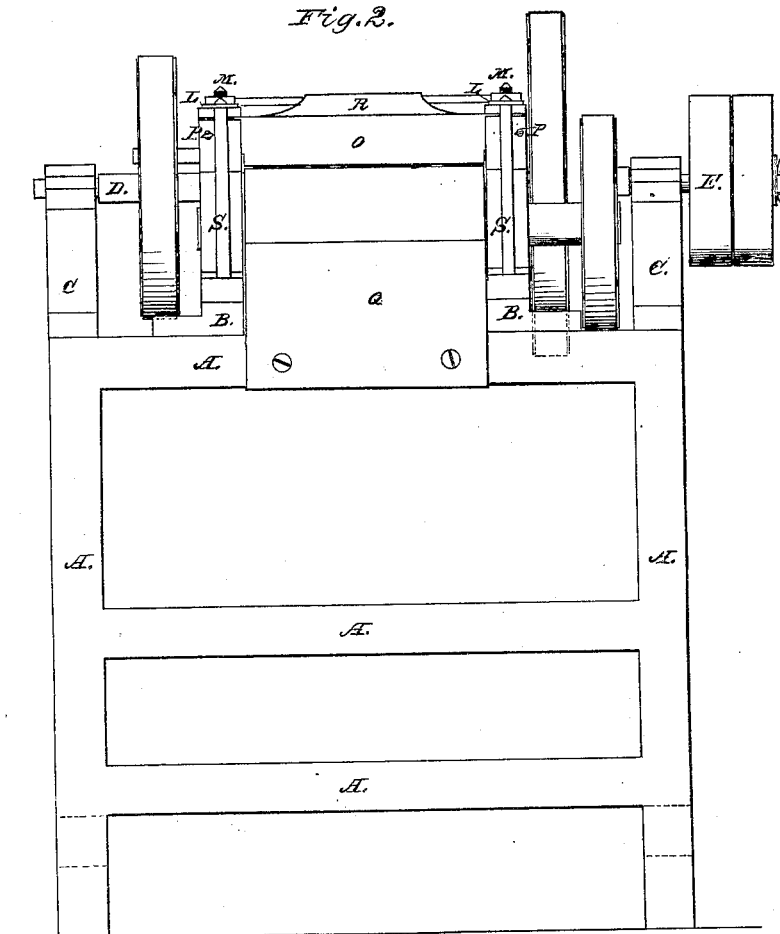
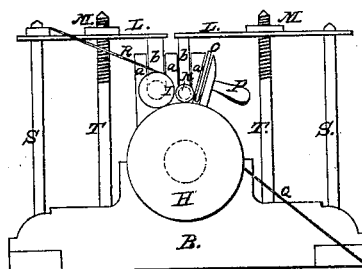


Fig. 3.



UNITED STATES PATENT OFFICE.

HENRY CONKLIN, OF POUGHKEEPSIE, NEW YORK.

MACHINE FOR BURRING WOOL.

Specification of Letters Patent No. 1,217, dated July 6, 1839.

To all whom it may concern:

Be it known that I, HENRY CONKLIN, of Poughkeepsie, in the county of Dutchess and State of New York, have invented a new and improved mode of constructing machines for separating burs from wool, which I denominate my "improved wool-burring machine;" and I do hereby declare that the following is a full and exact description thereof.

I make a frame of wood, or of iron, which may be three feet six inches long, two feet six inches wide, and two feet four inches high. This frame has at one end the standards which sustain three or more rollers or cylinders, by means of which and their appendages the burring is to be effected. On the opposite end of this frame is the main driving shaft, supported on suitable standards and carrying the whirls or band wheels by bands from which motion is to be given to the cylinders.

Figure 1 in the accompanying drawing is a side view of the machine. Fig. 2 is a front view, and Fig. 3 a vertical section through the rollers and their appendages.

A, A, A, is the frame of the machine.

B, B are the standards which sustain the burring rollers.

C, C, are standards which sustain the main driving shaft D, with its whirls or band wheels.

In the standards B, B, are the bearings of the burring rollers, or cylinders, which I usually make of cast iron. These, as represented in the drawings, are three in number, but there may be more if desired. The larger cylinder or roller H, I makes six inches in diameter and fifteen inches long, but this, as well as the others, may be varied in size. Immediately above the larger roller H, I place a small roller K, which is about three-fourths of an inch in diameter and the same in length with the larger. Immediately in the rear of this I place a third roller I, one inch and a half in diameter, or nearly so, and in length the same with the others. The gudgeons of these two latter rollers run between cheeks *a, a, a*, projecting up from the standards B, B, their peripheries resting on the larger roller H, upon which they are to be made to bear with any desired degree of force. They may be weighted down upon it in various ways, but the mode of pressing them down by the action of springs, as represented in

the drawings, is at once compact and efficient.

S, S, are vertical rods which support the outer ends of the spring pieces L, L, the inner ends of which rest upon slide pieces *b, b*, which bear upon the gudgeons of the two smaller rollers I and K, and slide between the cheeks *a, a, a*. By means of the nuts, M, M, on the screw rods T, T, the pressure of these rollers may be perfectly regulated. These smaller rollers I denominate pinching rollers, their office being to hold, or pinch, the wool upon the larger roller.

E is the pulley or band wheel by which the power is applied to the main driving shaft D, and F, F, F, are band wheels on this shaft from which bands pass around whirls G, G, G, on the roller shafts, the respective band wheels being of such sizes as shall cause the peripheries of the rollers to move with equal velocities and in such direction as shall carry the wool between them from the front toward the back of the machine.

O, O, Figs. 2 and 3, is a plate of metal one edge of which is nearly in contact with the larger roller, extending along it from end to end. Its plane stands in the direction shown in Fig. 3. P, P, are thumb screws by which it is held in place and regulated.

A, is a plate of tin or other metal one edge of which rests on the larger roller H, to prevent the wool from lapping around it, and R, is a similar piece resting on the roller I, for the same purpose.

The metallic plate O, O, I denominate the detainer, its office being to detain and keep back the burs as the wool passes between it and the larger roller. It is found necessary to employ two or more pinching rollers for the purpose of drawing the wool through under the detainer with a force sufficient to separate the burs from the wool.

The velocity with which the larger roller should revolve will vary with the kind and state of the wool to be operated upon. The general limit will be from eighty to one hundred and sixty revolutions in a minute.

In using this machine the wool is to be fed in by hand, so that the larger roller will catch the fibers of the wool and draw it through under the detainer, this drawing being effected by the pinching rollers. The wool does not undergo any particular preparation, nothing further being necessary than

for the person who feeds it to the machine to pull apart any portion which may be in lumps as it is passing through the machine.

Having thus fully described the manner
5 in which I construct my wool burring machine and shown the mode of applying the same to use, what I claim as constituting my invention, and desire to secure by Letters Patent is—

The combination of the larger roller, the 10
detainer, and the pinching rollers, constructed and operating substantially as herein set forth.

HENRY CONKLIN.

Witnesses:

SILAS E. HAIGHT,

HENRY WHINFIELD,