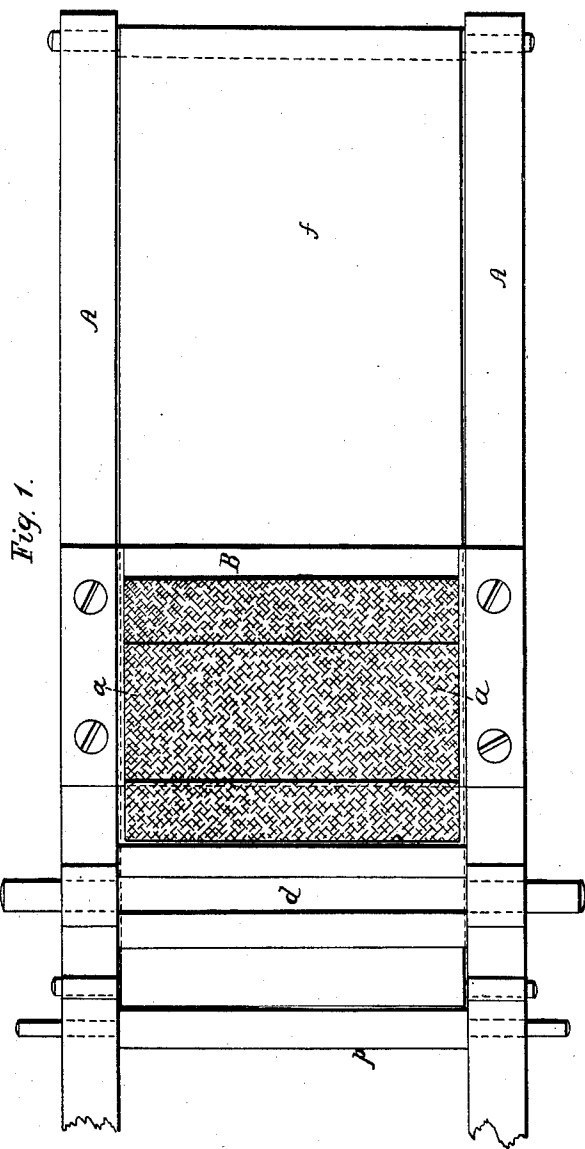


J. Shinn. Wool Oiling Mach.

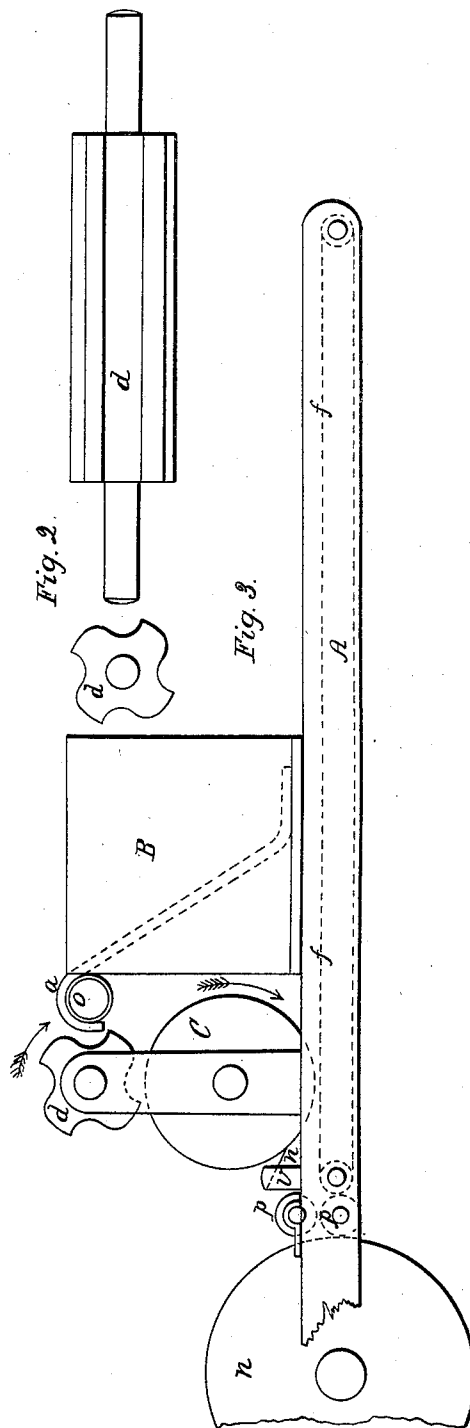
N^o 46,194.

Patented Jan. 31, 1865.



Witnesses.

Edward E. Jones
H. B. Evans



Inventor.

John Shinn

UNITED STATES PATENT OFFICE.

JOHN SHINN, OF PHILADELPHIA, PA., ASSIGNOR TO HIMSELF AND ISAAC STEAD, OF SAME PLACE; SAID STEAD ASSIGNOR OF HIS RIGHT TO NICHOLAS H. GRAHAM, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN MACHINERY FOR OILING WOOL IN CARDING-MACHINES.

Specification forming part of Letters Patent No. 46,194, dated January 31, 1865.

To all whom it may concern :

Be it known that I, JOHN SHINN, of Leverington, Twenty-first ward of the city of Philadelphia and State of Pennsylvania, have invented new and useful improvements in machinery for oiling wool on the feed apron or cloth of a wool picker or card; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists of oiling wool on the feed of a wool picker or card by means of a tank, wick, and one fluted and one plain roller and doctor, the oil being raised by capillary attraction from the tank.

To enable others to make and operate my invention, I will proceed to explain its construction and operation.

In referring to the drawings, which make a part of this specification, Figure 1 is a top or bird's-eye view. Fig. 2 is a view of the fluted roller. Fig. 3 is a side view of the feed and an end view of the oiler.

Similar letters in the figures represent same parts.

A represents the frame of the card-feed, which is fastened to the card in the usual way; *f*, the feed-apron; *pp*, the feed-rollers; *n*, the licker-in or bur-roller, all of which are constructed and operated in the usual way.

B is the oil-tank, which should be made of sheet-iron, with tight joints, so that it will not leak. At the top and side of the tank nearest to the card is a pipe, *o*. This pipe is fastened to the tank seen in Fig. 3. In this tank is the wick *a*, which is the full width of it. One end of the wick is fastened to the bottom of the tank, the other is carried up and over the pipe on the side, as shown in Fig. 3. This wick is made and is the same as ordinary lamp-wick.

d is the fluted roller. (Seen in Figs. 2 and 3.)

C is a plain roller. *r* is the doctor. (Seen in Fig. 3.) This doctor is fitted in posts *vv* on the feed-frame A, and set at any suitable angle, that the edge may act as a knife to keep the rollers clean. The rollers *d* and C are supported in a stand connected to the feed-frame A.

The operation is performed in this manner: The oil is put into the tank B, when, by capillary attraction, the oil rises in the wick, where it is held in suspension in the end of the wick, hanging over the pipe *s*. The roller revolves in the direction of the arrow. The ridges of this roller press the end of the wick gently, which wipes the oil out of the end of the wick onto the ridges of the roller *d*. The oil is then carried to the surface of the plain roller C, which turns in the direction of the arrow, and the same direction as the feed apron, upon which is carried the wool to be oiled. As it passes under the roller C a gentle pressure causes it to absorb the oil from the surface of the roller C as it passes to the card.

The doctor *r*, at the back of the roller, will prevent any wool or oil from rising. As the ridges of the flutes wipe the oil from the wick other oil will rise as the spaces in the roller are passing around. The quantity of oil wished to be put on the wool will be regulated by the speed of the roller *d*. The roller C always travels at the same speed as the feed-apron. In gearing the rollers, I prefer to use the spur or cog gearing as it is a positive motion, but straps or cords may be used, this gearing to be driven by the feed-rollers or any other suitable motion.

The object of the pipe *o* is that where steam is handy, in cold weather, a small jet may be introduced to make the oil more limpid and flow more easily; but all carding rooms should be kept sufficiently warm in winter and cold weather that the oil will not chill.

All kinds of liquid mixtures may be used with this arrangement for lubricating wool. When by long usage the wick becomes hard or gummy, it can be taken out and thrown into a solution of soda and warm water, which will thoroughly cleanse it.

I claim—

In combination with a wool-oiling apparatus, raising the oil from the tank by a wick or capillary attraction as and for the above-described purpose.

JOHN SHINN.

Witnesses:

EDWARD E. JONES,
H. B. EVANS.