R. W. Lewis.

Self Feed for Wool Cards.

No. 61,219. Patented Jan. 15, 1867.

Fig. 1

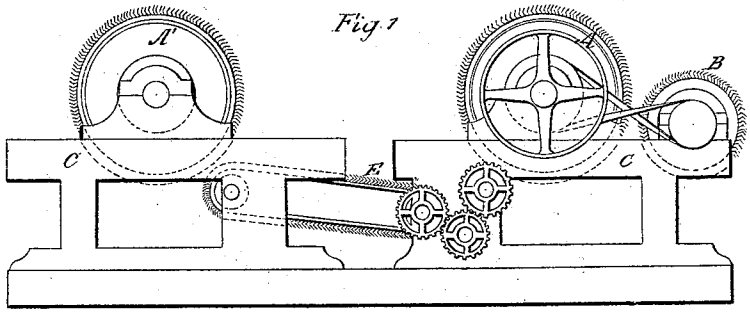


Fig. 2

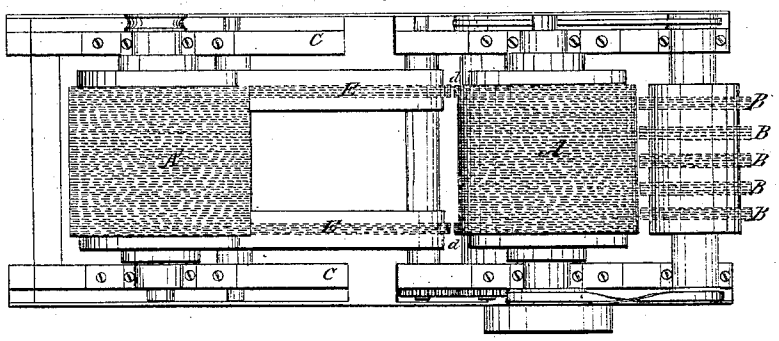
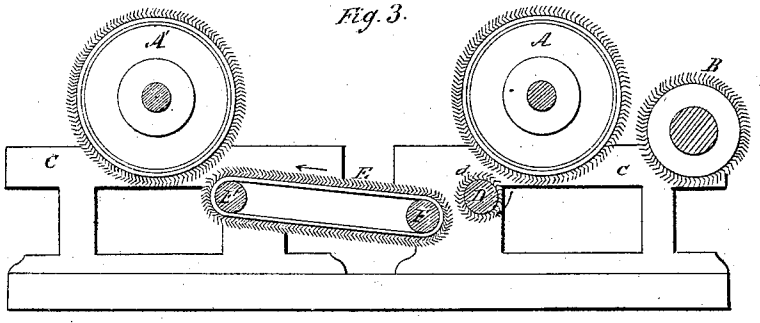


Fig. 3.



WITNESSES.

J. B. Hawley

John R. Shumway

INVENTOR

R. W. Lewis

By his Atty John E. Earl

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

R. W. LEWIS, OF BEACON FALLS, CONNECTICUT.

Letters Patent No. 61,219, *dated January* 15, 1867.

IMPROVEMENT IN SELF-FEED FOR CARDING ENGINES.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, R. W. LEWIS, of Beacon Falls, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Self-Feed for Wool-Cards; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of two main cylinders, with my improvement connected.

Figure 2, a top view of the same; and in

Figure 3, a longitudinal section.

In cards, as heretofore constructed, the outside strand of roving, as it comes from the doffer, is so imperfect as to require to be recarded, and is termed "waste roving;" thus, from a main cylinder, with forty-two doffer rings, one-twenty-first part of the work performed by the machine is lost. To overcome this is the object of my invention, which consists in an arrangement for returning the two outside or waste "rovings" from the outside edge of the main cylinder to the second breaker, and using the same as though it were of the original "stock."

To enable others skilled in the art to construct and use my improvement, I will proceed to describe the same, as illustrated in the accompanying drawings.

A and A′ are two main cylinders; B, the doffer rings, constructed and arranged upon their respective frames C in the usual manner. In use the doffer rings are forty-two in number; but in the illustration of my invention I have shown a less number, each ring forming a strand of roving, the two outer ones of which are waste. To avoid this waste, I take the two outer "rovings" from the main cylinder A by means of doffer rings *d* on a cylinder D; thence, by a creeper, E, or its equivalent, carried by cylinders F F, the waste roving is taken from the doffer ring *d* and carried to the main cylinder A′ of the second breaker, and is there wrought into perfect roving as the original "stock;" and thus in a main cylinder a saving of five per cent. is made. The creeper E, I here represent as formed from a strip of common card clothing, or may be an equivalent device, which will transfer the waste roving from the doffer ring *d*. The said creeper E and doffer ring *d* are caused to revolve in the direction denoted by the arrows by connection with the power which drives the main cylinder. It will be readily seen that the doffer ring *d* may be used to advantage to remove the waste roving when it is not immediately transferred to the second breaker; and it is also evident that this arrangement is equally applicable to the second as to the first cylinder.

I am aware of the machine of McGuirk and Cole, for carrying the waste roving to the second breaker; but it will be observed that in their invention the waste roving is not taken directly from the main cylinder, as in my invention.

Having therefore thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

1. The doffer ring *d*, arranged in combination with the main cylinder A, so as to take therefrom the outside or waste roving.

2. The combination of the creeper E with the doffer rings *d* and the main cylinder of second breaker, substantially in the manner described, so as to receive the waste roving directly from the main cylinder and transfer it to the second breaker, substantially as set forth.

R. W. LEWIS.

Witnesses:

JOHN WOLFE,

J. E. JOHNSON.