



# UNITED STATES PATENT OFFICE.

FRANK ST. GEORGE, OF OXFORD, MASSACHUSETTS.

## FEEDER FOR FLOCK-CUTTING MACHINES.

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*To all whom it may concern:*

Be it known that I, FRANK ST. GEORGE, of Oxford, in the county of Worcester, State of Massachusetts, have invented a new and useful Feeder for Flock-Cutting Machines, of which the following is a specification.

My invention relates to that class of flock-cutters which require to be fed, and is designed to be attached to them as a self-operating continuous feed, taking the stock from the box or reservoir and presenting it regularly to the cutting-roll or cutters, fast or slow, as may be desired.

In the accompanying drawings, Figure 1 is a perspective view of a feeder embodying my invention as applied to a common form of flock-cutter, of which M represents the top. Fig. 2 is a cross-section of the same taken through the feed-carrying belt.

In cutting flocks two classes of machines are commonly used, the first cutting the material into coarse pieces, which are recut by the other machines. My invention applies more particularly to the latter, though, with some slight modification, it may be used in some cases on the other.

Hand-fed flock-cutting machines have heretofore been fed by the attendant taking the stock and jamming it through an opening over one end of the cutter S, requiring constant careful attention.

With my feeder the attendant has only to see the box kept properly filled by occasional filling, and the feeder gives a regular, steady feed to the cutters.

M is the top of an ordinary flock-cutter, of which S represents the cutting-roll.

Above M is supported the shaft B, having a crank, *b*, attached by the connection C to the plunger D, which is placed over, and when clear down to just enter, the opening over the cutter S, the plunger D moving in suitable guides *e e* and rising high enough for the stock to slide under it.

Q is the box or reservoir for the stock, and

in which the endless belt H is supported by its frame G G'.

The belt H is driven by the shaft I, which is suitably supported from M, and the frame G G' is supported on the same shaft and is capable of a motion at its lower end to the position shown by the broken lines G'', Fig. 2, which motion is controlled and adjusted by the holding-screw J in the slot K in the side L of the box Q, the belt H being provided with lifters or carriers *h h h*, which carry more or less of the stock up, according to the position or inclination of the belt H, as the spaces above the carriers go up about level full, the rest falling back. Thus the inclination of the belt H as adjusted by the screw J regulates the quantity fed.

After being carried up the stock falls from the upper end of belt H onto the slide *f*, and is conducted by it to the opening under the plunger D, by which it is fed into the cutter.

In such cutting-machines as feed alternately each end of the cutting-roll S, I provide a second crank, *b'*, over the other opening, *m*, and then, whenever it is desired to feed that end the other parts are changed over, or, in other words, are made capable of change from one crank to the other, to feed either end.

Having thus fully described my invention, what I claim therein as new is—

1. The automatic feeder for flock-cutters described, consisting of an adjustably-inclined belt or carrier, H, the plunger D, and their operating mechanism, substantially as above set forth.

2. In a flock-feeding machine, the combination of the inclined belt or carrier H, capable of being adjusted so that the quantity fed may be regulated, and the box or reservoir Q, substantially as described.

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Witnesses:

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