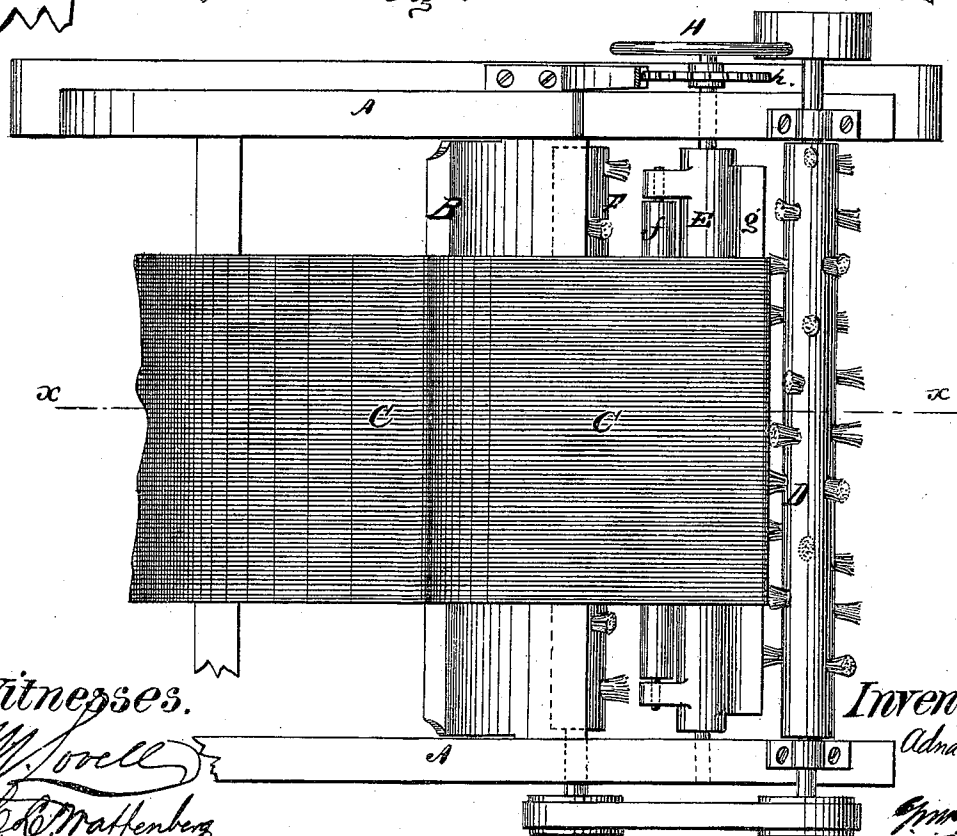


No. 148,171.



*Witnesses.*

M. Lovell  
H. B. Mattenberg

*Inventor.*

Adna Brown

Број 1000  
—  
атл.

# UNITED STATES PATENT OFFICE.

ADNA BROWN, OF SPRINGFIELD, VERMONT.

## IMPROVEMENT IN CLOTH-SHEARING MACHINES.

Specification forming part of Letters Patent No. **148,171**, dated March 3, 1874; application filed December 23, 1873.

*To all whom it may concern:*

Be it known that I, ADNA BROWN, of Springfield, in the county of Windsor and State of Vermont, have invented a new and useful Improvement in Cloth-Shearing Machines; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention is in the nature of an improvement in a machine for shearing woolen cloths; and the invention consists in a changeable brush-rest alone, and in combination with a nap-raising brush, a flock-removing brush, and a flock-catcher, as hereinafter described and claimed.

In shearing machinery heretofore constructed great difficulty has been experienced in shearing different kinds of cloths on the same machine, some cloths working to a better advantage against what is known as the "dead or flat side," others working better against a roller, so that it has been found necessary to change the brush-rests from time to time, sometimes using a dead or flat surface, and at others a roller.

In the accompanying sheet of drawings, Figure 1 is a cross-section taken in the line *x x*, Fig. 2; and Fig. 2 is a plan or top view of my invention.

Similar letters of reference indicate like parts in the several figures.

A represents the supporting-frame for the shears, shear-rest, brushes, and other appliances common to a shearing-machine. B is the shear-rest or surface over which passes the cloth C while being sheared. D is the brush which raises the nap on the cloth. These several parts, in their construction and operation, being old and well known in shearing-machines, need no further description. Secured to the frame A, immediately above the nap-raising brush D, is a brush-rest, E. This brush-rest is provided at its end with suitable journals, fitting into corresponding bearings in the frame A, and is provided on one side with a roller, *f*, and a fin, *g*, on the other. Fitted to the frame A, above the last-described rest E, and between the said rest and the shearing-rest B, is a brush, F. Affixed to the

base of the frame A, in any suitable manner, is a shell, G. This shell may be constructed of metal or any suitable material, and is of an irregular form, as shown in the section thereof, Fig. 1.

My invention being constructed substantially as I have described, its operation is as follows: When brushing up the nap on that class of goods which requires a dead or flat surface to support it against the action of the brush, it is simply necessary to revolve the rest E until the edge of the fin *g* thereof brings the cloth against the brush, when a dead or flat surface rest is obtained; and when it is desired to brush up the nap on that class of goods requiring a curved or cylindrical surface, the rest E is revolved until the roller *f* forces the cloth to the action of the nap-raising brush D, so that, without loss of time or change of machinery, the rest best adapted to the kind of cloth to be napped and sheared is had.

The rest E may be revolved by a hand-wheel, H, or by any suitable mechanism, and it is held in any desired position by the ratchet *h* and pawl *i*.

As the cloth C passes over the shear-rest B, its under surface is brought in contact with the revolving brush F, which not only brushes the cloth free from the flock which has accumulated thereon, (and in this way prevents it from being carried onto the shear-rest B, where, as before stated, it would produce damaging results,) but it throws the flock thus brushed off into the shell G, wherein it is gathered, and prevented from flying and again being deposited on the goods, this shell being formed, as will be seen, with a double curve, the upper one of which catches the flock as it is brushed from the cloth, and the under one acting as a receptacle to hold and confine the flock.

From the foregoing, it will be seen that, by reason of my improvements in a shearing-machine, I have produced a brush-rest combining in the same rest the forms of rest best suited to the different kinds of cloth, and easily and quickly adjusted without change of parts; and I have also produced a device for removing the flock from the under side of the cloth, and a device for catching the flock as it is removed, and preventing it from being again

deposited on the cloth, thus preventing the damage that frequently occurs from the accumulation of the flock between the shearing-rest and cloth, as before recited.

What I do claim as new, and desire to secure by Letters Patent, is—

1. A shearing-machine constructed with a revolving brush-rest, said rest having two or more different surfaces, any one of which may be used, as desired, substantially as and for the purpose described.

2. In a shearing-machine, the combination of the nap-raising brush, changeable brush-rest, and flock-removing brush, constructed

and arranged substantially as shown and described.

3. In a shearing-machine, the combination of the nap-raising brush, changeable brush-rest, flock-removing brush, and flock-catcher, constructed, arranged, and operating as shown and described.

4. In a shearing-machine, the changeable brush-rest, constructed and operated as described, in combination with the nap-raising brush, as specified.

Witnesses:

ADNA BROWN.

CHARLES A. FORBUSH,  
HENRY CLOSSON.