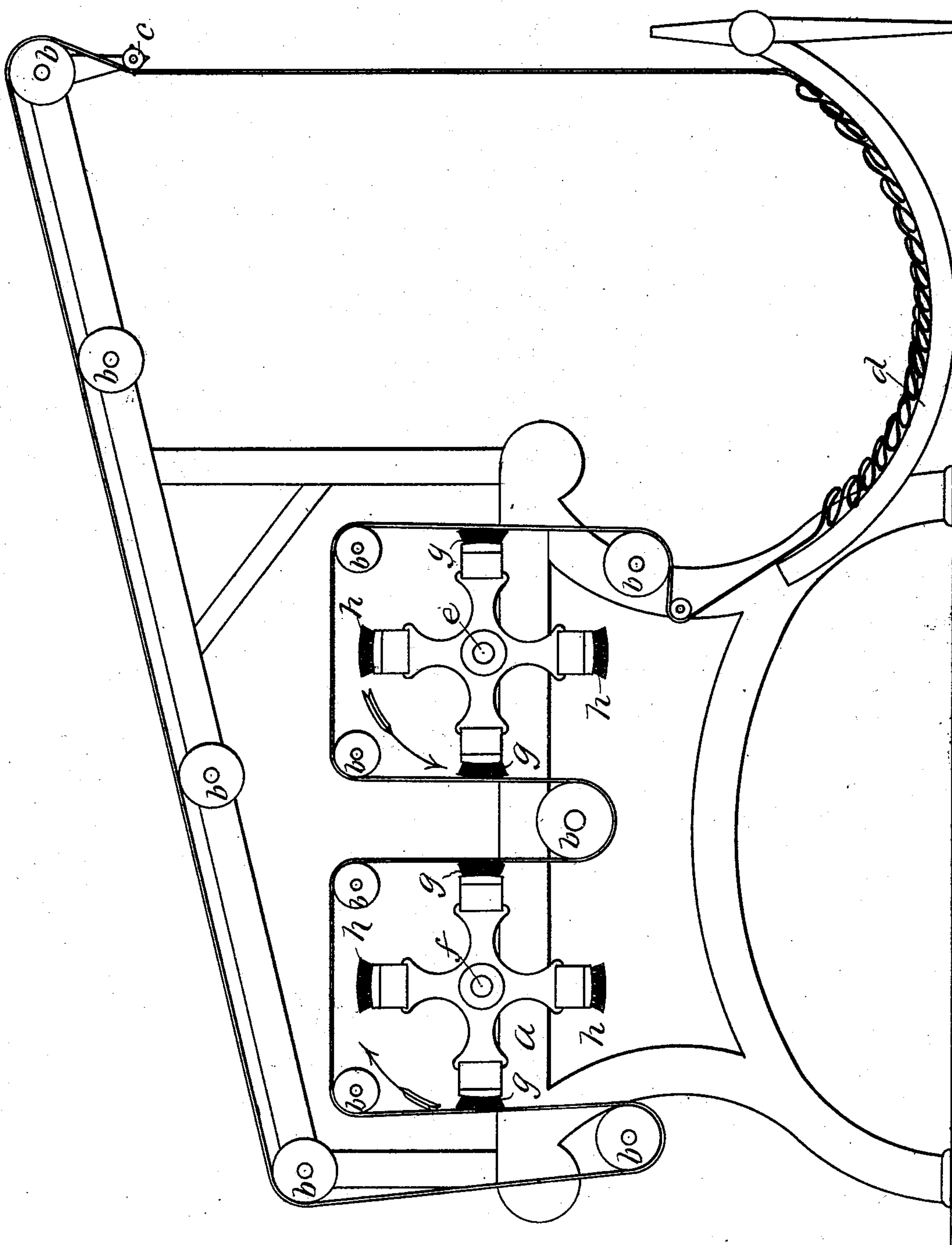


(No Model.)

A. BROWN.
CLOTH FINISHING MACHINE.

No. 509,296.

Patented Nov. 21, 1893.



WITNESSES:
Harman C. Brown.
A. D. Harrison.

INVENTOR:
Adna Brown,
by *Wright Brown Hewesley,*
Attys.

UNITED STATES PATENT OFFICE.

ADNA BROWN, OF SPRINGFIELD, VERMONT.

CLOTH-FINISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 509,296, dated November 21, 1893.

Application filed March 18, 1893. Serial No. 466,572. (No model.)

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 certain new and useful Improvements in Cloth-Finishing Machines, of which the following is a specification.

This invention has relation to machines for finishing worsteds and other cloths; and it has for its object the provision of a machine which will take the place of the so-called "English pumicing machine," and do more and better work, and be manufactured at less cost than said machine.

To these ends the invention consists of a cylinder or armed shaft, provided alternately with lags of whalebone filaments and stiff bristles, which lags, as the cloth is passed through the machine are adapted to be brought into contact with the said cloth with, as it were, a beating motion, all as I will now proceed to describe in detail and point out in the claims.

Reference is to be had to the annexed drawing, and to the letters marked thereon forming a part of this specification, the said drawing representing a side view of so much of the machine as it is necessary to portray in order to give a clear understanding of the invention.

In the drawing *a* designates the frame of the machine which may be of any suitable form and construction and which may be equipped with cloth moving and guiding rolls *b* properly constructed and arranged, and also with a folder *c* and table *d*. The folder is merely shown in outline, but it will be understood that it may be operated in any suitable or known way.

e f designate shafts, each of which is provided with four arms, on the outer ends of which are provided alternately whalebone filaments and stiff bristle brushes *g h*. The cloth in its course through the machine is so guided as that the whalebone filaments and bristle brushes of each armed shaft may come in contact therewith at two points. The arrows indicate the direction in which the armed shafts are rotated, by which it will be seen that one is run in the opposite direction

from the other. The brushes act in a beating motion on the cloth, and effect a certain amount of teaseling and napping. The action of the whalebone filaments has a tendency to round up and polish the thread and soften the goods, while the bristles effect a perfect brushing of the cloth.

This machine can be employed on many kinds of goods that will not bear teasels, and will effect much better and more work than the English pumicing machine, while costing very much less money to construct.

It will be observed that the lags might be arranged on a cylinder instead of the outer ends of arms connected with a shaft, and that other changes may be made in the form and arrangement of parts without departing from the nature or spirit of the invention.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

1. A cloth-finishing machine comprising in its construction an armed rotary shaft provided with lags of alternate whalebone filaments and bristles adapted to be brought into contact with the cloth under treatment, as set forth.

2. A cloth-finishing machine comprising in its construction two armed rotary shafts, each provided with lags of alternate whalebone filaments and bristles adapted to be brought into contact with the cloth under treatment, and said shafts being adapted to be rotated in opposite directions, as set forth.

3. A cloth-finishing machine comprising in its construction, revoluble lags of alternate whalebone filaments and bristles, adapted to strike the cloth under treatment with a beating motion, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 15th day of March, A. D. 1893.

ADNA BROWN.

Witnesses:

A. M. ALLBE,
GERSHEM L. CLOSSON.