

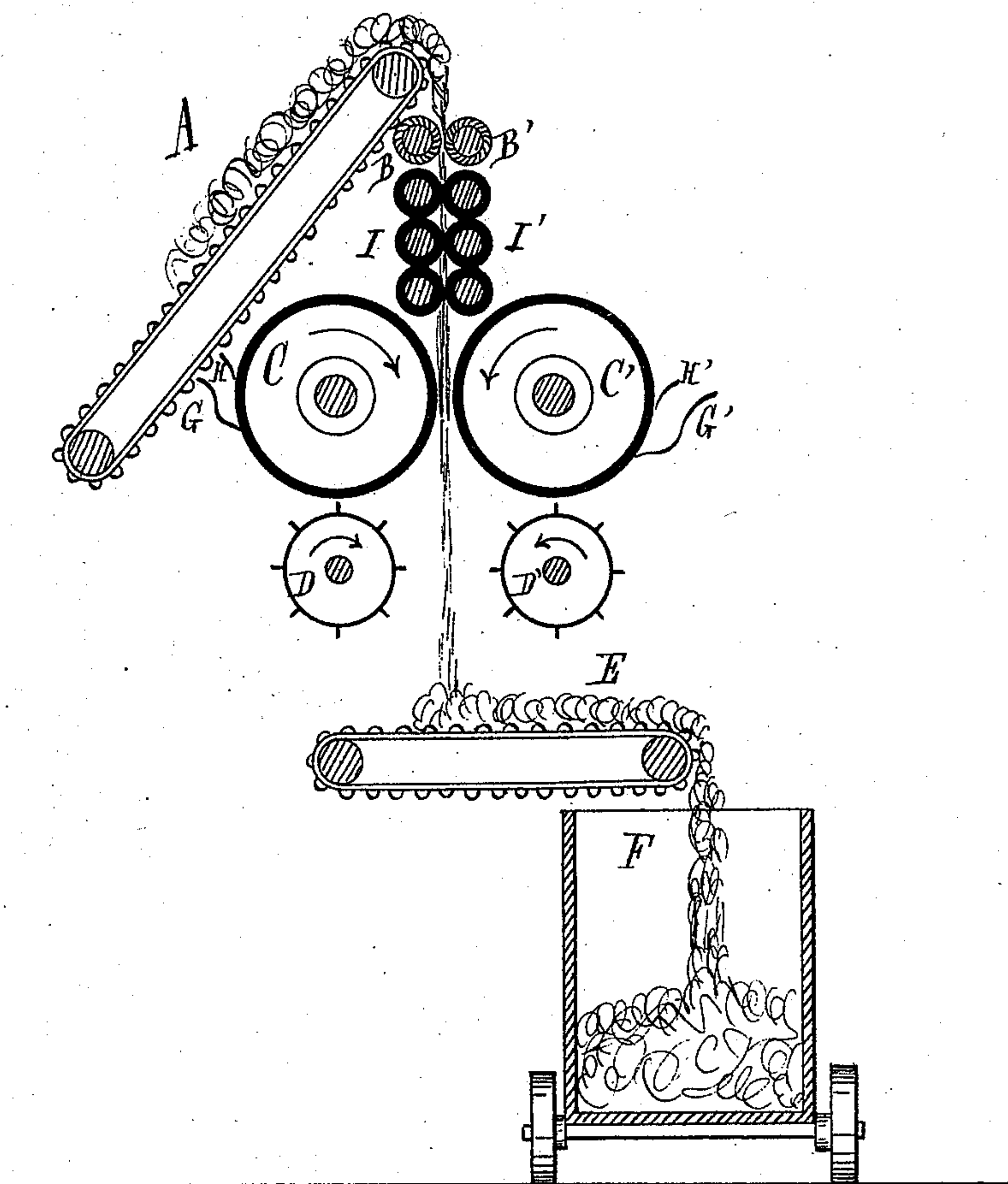
(No Model.)

E. NOUVELET.

APPARATUS FOR REMOVING BURRS AND THISTLES FROM WOOL
AND SIMILAR FIBERS.

No. 412,531.

Patented Oct. 8, 1889.



WITNESSES.

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UNITED STATES PATENT OFFICE.

EDMOND NOUVELET, OF WIGNEHIES, FRANCE.

APPARATUS FOR REMOVING BURRS AND THISTLES FROM WOOL AND SIMILAR FIBERS.

SPECIFICATION forming part of Letters Patent No. 412,531, dated October 8, 1889.

Application filed May 25, 1889. Serial No. 312,167. (No model.) Patented in France October 19, 1888, No. 193,628; in Belgium November 5, 1888, No. 83,847, and in England November 17, 1888, No. 16,713.

To all whom it may concern:

Be it known that I, EDMOND NOUVELET, a citizen of the Republic of France, residing at Wignehies, in the Department of Nord and Republic of France, have invented certain new and useful Improvements in Apparatus for Removing Burrs and Thistles from Wool and Similar Fibers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

This invention has been patented in the following countries, to wit: France, October 19, 1888, No. 193,628; Belgium, November 5, 1888, No. 83,847; England, November 17, 1888, No. 16,713.

In certain types of apparatus for removing burrs and thistles from wool and similar fibers the crushing of the burrs and thistles is effected during the passage of the wool in the form of a fleece or film in a horizontal direction between a series of pairs of rollers placed side by side. According to my improvements a different arrangement of rollers is employed, and they are placed upon each side of a vertical plane through which the wool falls under the combined action of the rollers and gravity.

I will proceed to particularly describe this invention with reference to the accompanying drawing, which represents in vertical section the essential details of the apparatus, the framing, driving-gear, and other accessories being omitted for the sake of clearness, and also because the construction and arrangement of these accessories are well known.

In an apparatus constructed according to these improvements the wool is delivered to and spread upon an endless traveling apron A, which delivers it above and between the two upper rollers B B' of the series of vertical rollers. These rollers are clothed with wire cards or with needle-points. The draw-

ing-rollers I I' immediately below the card-rollers and the crushing-rollers C C' are each clothed with india-rubber or other similar elastic or yielding material. The number, diameter, and speed of all these rollers may be varied to suit the character and condition of the wool to be cleaned. The doffing-rollers D D' are placed wider apart than the upper rollers and immediately below the crushing-rollers. The cleansed wool is doffed from the rollers C C' by the doffers D D' and falls upon a horizontal endless traveling table E, which delivers it to any desired position—as, for example, onto the truck F. At the back of each of the crushing-rollers there is fixed a knife or scraper H H', with its edge bearing upon the surface of the roller, so as to clear therefrom the débris which clings to it after passing the doffer. Below each knife there is a trough or receptacle G G', into which the débris removed by the knife is received, and from whence it may from time to time be removed.

When the apparatus is in operation, the wool is formed into a fleece or film by means of the rollers B B'. This fleece is then drawn and guided by the intermediate rollers I I' and delivered to the crushing-rollers C C'. The crushed thistles, burrs, and other débris, with a portion of the wool, adhere to the surface of the rollers, and are carried forward by their revolution until such of the wool as clings to them is removed by the doffers and added to the bulk on the apron E. The crushed burrs and other débris are not removed by the doffers, but are carried forward until they are removed by the knives H H' into the receptacles G G'.

The hereinbefore-described combination and arrangement of the apparatus gives a result superior to that which can be obtained by the use of similar apparatus as at present constructed and occupies only a small amount of floor-space.

Having now particularly described and ascertained the nature of my invention and in what manner the same is to be reduced to practice, I declare that what I claim is—

In an apparatus for removing burrs and
thistles from wool and similar fibers, the
combination and arrangement of the verti-
cally-disposed carding, drawing, crushing,
5 and doffing rollers with the knives H H', the
receptacles G G', and the endless traveling
apron E, all substantially as hereinbefore de-
scribed and shown.

In witness whereof I hereunto set my hand
in presence of two witnesses.

EDMOND NOUVELET.

Witnesses:

R. J. PRESTON,
HENRY DANZER.