

No. 769,680.

PATENTED SEPT. 6, 1904.

L. BREDANNAZ.
FEED ROLLER FOR RAG PICKERS.
APPLICATION FILED FEB. 10, 1903.

NO MODEL.

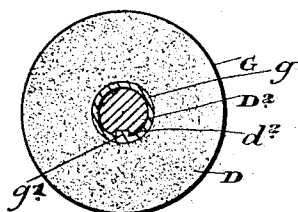


Fig. 1.

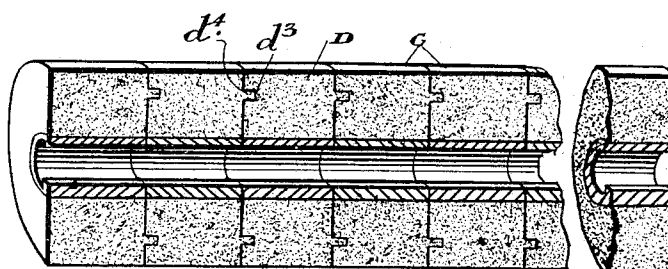


Fig. 2

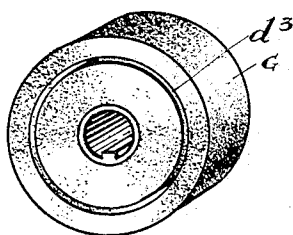


Fig. 3.

Witnesses.

H. B. Young.

Att. at.

Inventor:

Louis Bredannaz.

By J. P. Weller, Attorney.

UNITED STATES PATENT OFFICE.

LOUIS BREDANNAZ, OF TORONTO, CANADA.

FEED-ROLLER FOR RAG-PICKERS.

SPECIFICATION forming part of Letters Patent No. 769,680, dated September 6, 1904.

Original application filed October 14, 1902, Serial No. 127,248. Divided and this application filed February 10, 1903. Serial No. 142,817. (No model.)

To all whom it may concern:

Be it known that I, LOUIS BREDANNAZ, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Feed-Rollers for Rag-Pickers, of which the following is a specification.

This application is a division of an earlier application filed by me jointly with Paul Jules Follin, Serial No. 127,248, filed October 14, 1902.

My invention relates to improvements in feed-rollers for rag-pickers; and the object of the invention is to provide a feed-roller that will feed the stock to the picking-cylinder and hold it in position to be operated on by the picking-cylinder throughout the entire length of the feed-roller notwithstanding any inequality in thickness of the stock fed throughout the length of the feed-roller; and it consists, essentially, of a feed-roller comprising an annular sectional cover the sections of which have yielding peripheral surfaces and are provided with interlocking portions formed on the contacting edges of the sections and having means for preventing the rotation of the sections upon the central spindle, the parts being arranged and constructed in detail, as hereinafter more particularly explained.

Figure 1 is a transverse sectional view of the roller. Fig. 2 is a longitudinal section through the feeding-roller of a rag-picker machine, such roller being intermediately broken away. Fig. 3 is an enlarged detail of one of the sections, showing the covering of the feed-roller.

In the drawings like letters of reference indicate corresponding parts in each figure.

D is the feed-roller forming part of the machine shown and described in hereinbefore-mentioned application.

G represents yielding elastic or resilient annular sections provided with a central annular metal core *g*, having a feather *g'* formed on its interior periphery. The feather *g'* is designed to enter the keyway *d'*, and thereby prevent the rotation of the sections upon the spindle D². It will thus be seen that the sectional elastic covering can be cemented, vulcanized, or otherwise permanently affixed

to the metal core *g* and that this construction forces the covering to rotate with the shaft while permitting its easy removal for renewal when worn.

d' is an annular face-groove formed on one face of each section, and *d'* is an annular tongue formed on the opposite side or face of the section. These sections are connected together by each tongue *d'* fitting in its corresponding groove in the adjacent section.

By this construction it will be seen that I obtain a sectional covering having equal resiliency throughout, which revolves with the spindle and is easily removed therefrom. When so divided sectionally, if the stock is too heavily fed to the roller it might cause the covering next the joint between the two sections—that is, at the edges of the sections—to give, so that the pieces of stock might become lodged between the two sections or pass unpicked onto the picking-cylinder. By my tongue-and-groove joint I make each section support the adjacent ones, and thus have a covering of equal resiliency or elasticity throughout its length and overcome the defects above referred to.

In practice I have found that a rubber covering to a spindle is well adapted for the purpose and that it gives a resilient and elastic surface, as required, and I have found that since hard substances are liable to pass in with the stock, which might destroy the covering of the feed-roller at one point in its length, it is advisable to divide the resilient and elastic surface-covering into sections, thus enabling an injured section to be replaced and the roller repaired with little cost. The sectional covering must of course revolve with the shaft or spindle.

What I claim as my invention is—

1. In a feed-roller for rag-pickers or like machines, in combination, a plurality of elastic resilient tubular sectional coverings, an integral tongue on one contacting face of each section, designed to fit into grooves in the contacting face of the abutting sections substantially as and for the purpose specified.

2. In a feed-roller for rag-pickers or like machines, in combination a plurality of tubular

sectional coverings having yielding peripheral surfaces, an integral tongue on one contacting face of each section designed to fit into a groove in the contacting face of the abutting section substantially as and for the purpose specified.

3. In a feed-roller for rag-pickers or like machines, in combination a plurality of elastic resilient tubular sectional coverings, an integral annular tongue on one contacting face of each section designed to fit into annular grooves in the contacting face of the abutting section substantially as and for the purpose specified.

4. In a feed-roller for rag-pickers or like machines, in combination a plurality of tubular sectional coverings having yielding peripheral faces, an integral annular tongue on one contacting face of each section designed to fit into grooves in the contacting face of the abutting

section substantially as and for the purpose specified.

5. In a feed-roller for rag-pickers or like machines, in combination a central spindle having a feather-way, a plurality of annular cores or sleeves provided with a feather-key designed to extend into the feather-ways in the spindle and a corresponding number of yielding tubular sectional coverings into which the annular cores or sleeves fit and annular tongues formed in each section and designed to fit into the corresponding groove in the adjacent section substantially as and for the purpose specified.

LOUIS BREDANNAZ.

Witnesses:

B. BOYD,

M. McLAREN.