

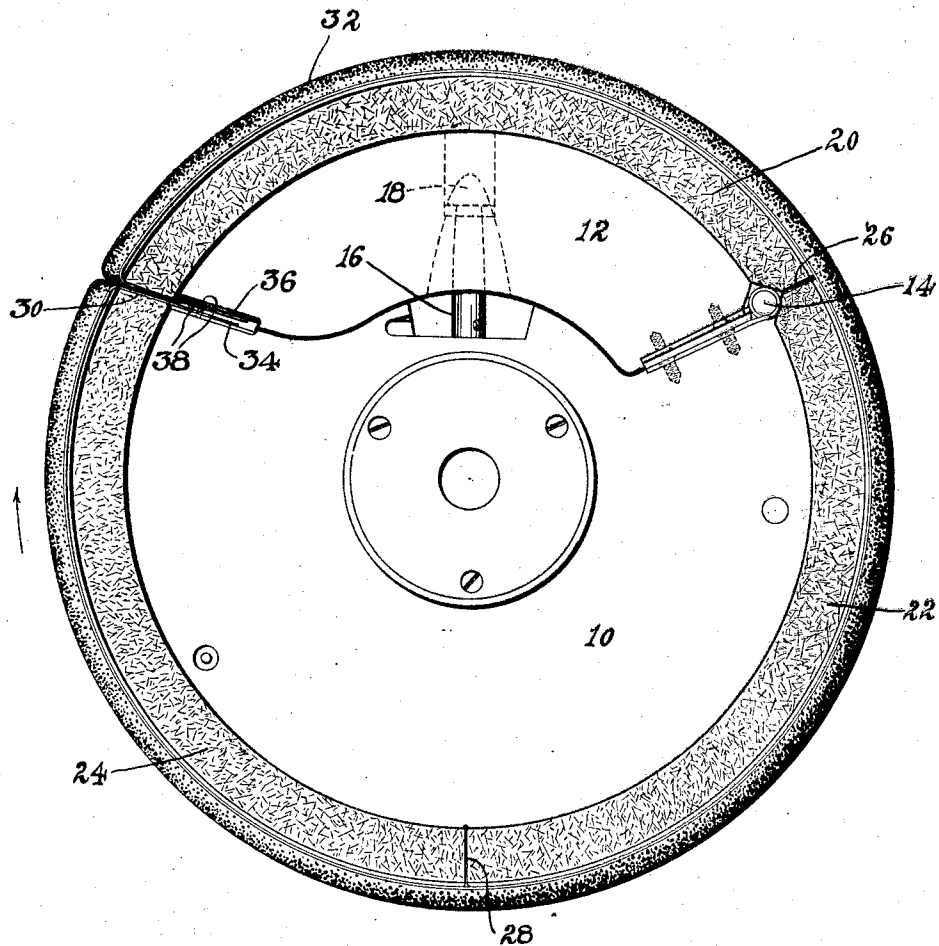
June 14, 1927.

C. L. PEARSON

1,632,244

LAST SCOURING WHEEL

Filed Dec. 26, 1922



INVENTOR—

Chester L Pearson
By his Attorney,
Nelson M Howard

UNITED STATES PATENT OFFICE.

CHESTER L. PEARSON, OF BEVERLY, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY CORPORATION, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

LAST-SCOURING WHEEL.

Application filed December 26, 1922. Serial No. 609,006.

This invention relates to scouring and is herein shown as embodied in a wheel for scouring lasts.

Last scouring wheels as commonly constructed have a peripheral cushion of felt glued to the wheel and covered by an abrasive sheet. Usually the wheel is of the split type, that is, there is a main portion with a hinged section which is opened when the abrasive sheet is being applied and closed and locked to secure the ends of the abrasive around the felt cushion. Great trouble has been experienced with such wheels due to deterioration of the felt which after some use becomes scorched or burned particularly near the opening end of the hinged section. No solution or satisfactory explanation of this difficulty has hitherto been advanced. The present invention is based on the theory that burning of the felt has been due to a permanent deformation of the felt resulting from a creeping of the felt circumferentially with respect to the wheel with the consequent formation of a bunch at the end of the strip of felt due to pressure of the work. The felt is apt to become loosened from the wheel near the hinged joint due to repeated flexing as the sections of the wheel are opened and closed, and the creeping of the whole strip accumulates to form a bunch which increases the pressure of the work and causes burning of the felt at that point.

An object of my invention, therefore, is to provide an improved last scouring wheel which will avoid these and other disadvantages and defects and be less expensive. In the illustrated construction, a felt covering, which heretofore has been glued to the wheel in one continuous strip, is sectionalized, being made in several parts the ends of which are spaced slightly from one another. The strip may be applied in one piece and cut or the sections may first be formed and separately applied with spaces between. Preferably the main portion of the wheel has two or more separated strips and the hinged section one or more strips the ends of which are spaced from the ends of the strips on the main portion of the wheel. The provision of the spaces localizes any creeping action that may exist and gives each strip a change to expand slightly without forming a bunch. The space at the hinged joint likewise enables the hinged

section to open without unduly crowding the felt or loosening it at that point.

In the drawings, the figure is a side elevation of the improved last scouring wheel the body of which comprises a main portion 10 and a hinged section 12 pivotally secured to the main portion at 14. The two parts of the wheel are locked together by a rotatable bolt 16 having at the end an enlargement 18 engaging a slotted plate on the hinged section. The bolt is turned by inserting a rod within an opening of the bolt and the arrangement is such that in one position the enlargement 18 will pass through the slot in the plate and in another position will extend across the slot in the plate and hold the parts locked together. Secured to the section 12 as by glue is a strip 20 of felt, and fixed to the main portion 10 of the wheel are two or more similar strips 22 and 24 glued to the wheel. The strip 22 extends at one end as far as the hinge 14, and the strip 20 is spaced slightly from it as indicated at 26 to provide clearance. Similarly, there is a space 28 between the strips 22 and 24 overlying a solid part of the wheel and a space 30 between the strips 20 and 24. The outer faces of the strips are convex in cross-section and are covered by a strip 32 of sandpaper or other abrasive sheet material the ends 34 and 36 of which are carried within a recess of the wheel and held in place by the usual prongs 38 which impale the ends of the sheet when the two parts of the wheel are closed and locked.

By means of the construction above described, it is apparent that any creeping of the felt peripherally of the wheel will be localized on account of the clearance spaces between the adjacent ends of the felt strips. If a bunch tends to form on any strip, it will disappear into the space at the end of the strip instead of accumulating at the end of the strip. The space such as indicated at 26, furthermore, will allow the hinged section 12 to be opened without unduly crowding the felt at this point and hence there is no tendency to loosen the felt. Although the cushion has been described as formed of strips of felt, this term is used merely for convenience, as any other suitable material having similar characteristics may be used.

Having described my invention, what I

claim as new and desire to secure by Letters Patent of the United States is:—

A last scouring wheel having, in combination, a wheel body comprising a main portion and a hinged section with means for locking them together, a relatively thick strip of felt secured to the periphery of the hinged section, a plurality of similar strips of felt secured to the periphery of the main

portion and having their adjacent ends spaced apart, the felt strip on the hinged section also having its ends spaced from the remaining ends of the other strips, and an abrasive sheet supported by the strips of felt.

In testimony whereof I have signed my name to this specification.

CHESTER L. PEARSON.