The present invention relates to a log barking device of the type comprising a large revolving barking drum.

Logs covered with bark are fed into one end of the drum and are discharged at the other end with the bark removed, the bark being stripped from the logs due to the relative movement therebetween upon rotation of the drum. Inside most barking drums numerous longitudinally extending ribs or staves which are known as barking irons, are provided for tumbling the logs, thereby increasing the relative movement therebetween. Openings should be provided in the drum shell for removal of the bark, and therefore the barking irons are peripherally spaced so as to form slot-like openings therebetween, through which the bark, but not the logs, may escape. Thus, the actual drum is constituted substantially by the barking irons, which, however, must be held together by circular rings or hoops surrounding the drum and mutually spaced throughout the length of the drum.

The drum may be rotatably supported on flanged rollers engaging tracks encircling the drum and mounted thereon.

The barking drum may be divided into a series of individual drum sections.

During the barking operation the logs are sprayed with water in order to facilitate both actual stripping operation and the removal of the bark from the drum.

In winter when the logs may be coated with ice it is sometimes advantageous to use hot water, especially in the portion of the drum adjacent the feeding end of the device, for instance in the first drum section. In order that the hot water may act upon the logs as long as possible, the first drum section may have a design differing from that of the remaining sections in that the said first section may have an impervious shell and restricted end openings, so that a water sump is formed in the bottom of the section. However, this interferes with the removal of the bark from the drum. Still in winter the advantage of this design may outweigh the said inconvenience.

In other seasons the benefit from the hot bath in the bottom of the first barking drum section will not be nearly as great as the drawbacks caused by the imperfect removal of the bark from the drum section.

The object of the present invention is to provide a log barking device comprising a series of drum sections and which, if desired, may be operated with a water sump in the bottom of at least the first drum section, but which in case such an operation is not desired, provides for a bark discharge through openings at the periphery of the drum sections as in ordinary barking drums.

To this end there is provided easily releasable sealing means for sealing the bark discharge openings in at least one drum section, this drum section being provided with end openings of smaller diameter than the diameter of the drum.

As such releasable sealing means may be secured to a section of the same design as the remaining sections except for the restricted end openings, it will be appreciated that when the releasable sealing means are removed the drum will operate in substantially the same way as the said remaining sections, i.e., without a water sump, the openings permitting free removal of bark and water.

On the other hand, the means may easily be fitted on the section so as to substantially seal the bark discharge openings. In this respect it should be mentioned that for maintaining a certain water level in the drum section it is not necessary for the sealing means to provide an absolutely water-tight seal.

Further features of the invention will appear from the following description, reference being had to the accompanying drawings which illustrate two embodiments of the sealing means in accordance with the invention.

In the drawings:

FIG. 1 is a view of a barking drum section provided with sealing means in the form of thin flexible plates.

FIG. 2 is a fragmentary section taken on the line II--II of FIG. 1 but on a larger scale.

FIG. 3 is a fragmentary cross-section corresponding to FIG. 2, but illustrating a barking drum section in which slot-like openings between barking irons are sealed by means of bars, each releasably secured in and sealing one opening in a drum section.

FIG. 4 is a view of one of the sealing bars illustrated in FIG. 3.

FIG. 5 is an end view on a larger scale of the bar in FIG. 4.

FIG. 6 is a fragmentary cross-section illustrating how a bar may be clamped in a slot-like opening between two barking irons.

The drum illustrated in FIG. 1 comprises barking irons spaced peripherally so that slots 2 are formed between the irons. Bark and water may be discharged through the slots 2 when the sealing means of the invention were removed. The barking irons 1 are interconnected so as to form a drum by means of circular head plates 3 and rings or hoops 4. To each of the outer hoops (only one is shown in FIG. 1) there is secured a carrier ring 5 having a track 6 running on bearing rolls 7. To a central hoop 4 there is secured a toothed wheel rim 8 engaging a gear (not shown) for rotating the drum.

The head plates 3 form end walls extending a short distance inwards from the periphery of the drum so that the end openings are of smaller diameter than the diameter of the drum. The central inlet opening is somewhat smaller than the outlet opening, so that water will flow through the drum. The outlet opening is further provided with a short cylindrical sleeve member 9 adapted to extend in the next drum section.

In the embodiment of FIGS. 1 and 2, the slots 2 are sealed by means of thin and preferably flexible plates 10, for instance stainless steel plates of a thickness of 2 mm. These plates 10 are provided with flanges 11 for releasably uniting e.g. six plates into a continuous sleeve surrounding the periphery of the drum section between the circular rings 4.

FIGS. 3 to 6 illustrate another embodiment of the sealing means. In accordance with this embodiment the slot-formed openings 2 between the barking irons 1 are sealed by means of bars 12 which are clamped in the openings from the inside by means of bolts 13 clamped to the bars 12 and extending through the openings between the barking irons. As illustrated in FIG. 5, the bolts 13 engage in threaded engagement with the bolts 13 force abutment members 14 against the edges of the barking irons, whereby the bar 12 is clamped in the slot 2 so as to seal the same.

I claim:

1. A log barking device comprising a series of opened rotatable drum sections having discharge openings for discharge of bark at the periphery at least one of said drum sections having end openings of smaller diameter than the diameter of the drum and releasable sealing means for sealing the discharge openings in at least the drum section formed with end openings of reduced diameter.

2. A log barking device as claimed in claim 1, wherein
said sealing means comprise thin plates which are releasably maintained in position on the said drum section.

3. A log barking device as claimed in claim 1, wherein said sealing means comprises a plurality of bars, said discharge openings being slot-like openings, each releasably secured in and sealing one of said slot-like discharge openings at the periphery of the drum section.

4. A log barking device as claimed in claim 3, wherein each bar carries bolts adapted to extend from the inside of the drum section through one of said discharge openings, and cooperating abutment members and nuts for mounting on said bolts from the outer side of said openings for securing the sealing bars in the respective discharge openings.

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