W. GESCHE.

APPARATUS FOR BARKING WILLOW TWIGS.

APPLICATION FILED AUG. 30, 1911.

1,018,659. Patented Feb. 27, 1912.

Fig. 1.

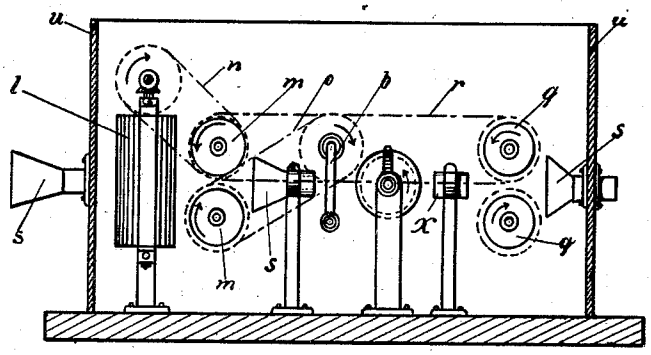


Fig. 2.

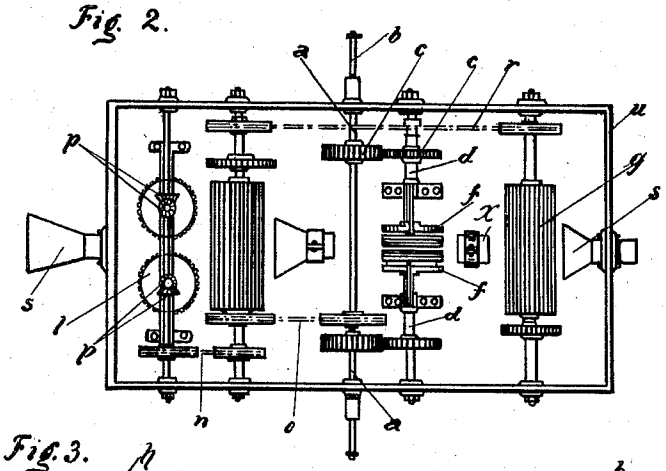


Fig. 3.

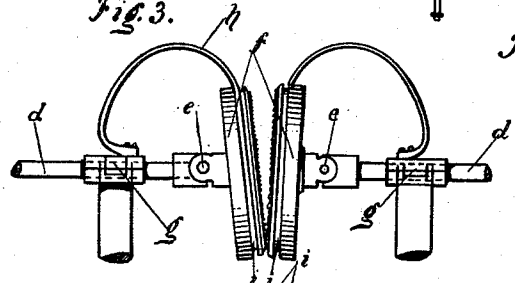


Fig. 5.

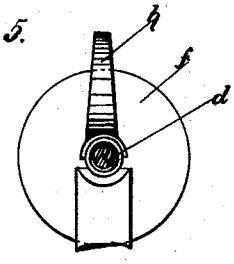


Fig. 4.

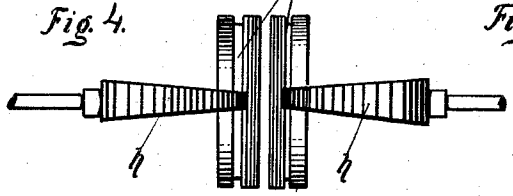
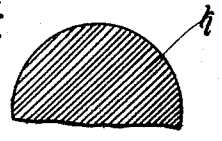


Fig. 6.



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APPARATUS FOR BARKING WILLOW-TWIGS.

1,018,659. Specification of Letters Patent. Patented Feb. 27, 1912.

Application filed August 30, 1911. Serial No. 646,911.

To all whom it may concern:

Be it known that I, WILHELM GESCHE, a subject of the German Emperor, and resident of Tirschtiegel, Germany, have invented certain new and useful Improvements in Apparatus for Barking Willow-Twigs, of which the following is a specification.

This invention relates to an improved device for use in connection with apparatus for barking willow-twigs, which is adapted to peel off the bark which has been loosened by the squeezing rolls. Hitherto, similar devices have become known, in which for instance the knives effecting the peeling off are arranged springy relatively to each other in such a way that the axles carrying said knives are axially pressed together by spiral springs. The willow-twigs, especially if they possess a small diameter, are by the known device treated in proximity to the center of the rotary knives where the latter have a small circumferential speed only, while in the subject matter of the present invention the diameter of the willow-twigs is without influence. Two rotary plates, which at their circumferences are provided with ring grooves and on their adjacent working faces ribbed and which are carried by the intermediary of cross-joints on two axles, which lie in the same axial direction, and acted upon by blade springs of which the ends slide in said ring grooves, approach each other during their rotation always at one point of their circumferences, whereby a wedge-shaped split is formed between them for the reception of the willow twig to be treated.

In the accompanying drawing, Figure 1 is a side view of the machine, and Fig. 2 a plan view of same. Fig. 3 is a front view, Fig. 4 a plan view, and Fig. 5 a side view of the plates, while Fig. 6 shows an inner face view of one of the plates.

On each end of the driving shaft *a* a crank-handle *b* is fixed. From said driving shaft, the two axles *d* are driven by toothed gearings *c*, said axles being placed in axial line with each other and at their adjacent ends provided each with a cross-joint *e*, which transmits the rotary movement of the axles on the two plates *f* carried on said joints. On the bearings *g* of the two axles *d*, two blade-springs *h* are arranged which with their ends run in circumferential grooves *i* of the plates in such a way that they act to keep the plates always in such inclined position to each other that they almost touch each other at the lowest point of their circumferences while at their top they are removed from each other, whereby twigs of different thickness can be barked. On their adjacent working faces *k* the plates are ribbed.

The supply of the twigs between the plates is effected by means of a pair of vertical rollers *l* and a pair of horizontal rollers *m* disposed in front of the plates and adapted to be driven from the driving shaft *a* by chain gearings *o* and *n* and bevel gearings *p*. Said rollers, of which the circumferences are fitted with an elastic material, serve further in the known way to squeeze off the bark from the twigs and are for this purpose longitudinally grooved. Behind the plates a pair of horizontal rollers *q* is disposed, which is driven by a chain gearing *r* and which serves for the removal of the barked twigs from the apparatus. At the front end of the machine as well as behind the pairs of horizontal rollers *m* and *q* a funnel *s* is disposed for guiding the willow-twigs, while behind the plates *f* a shell *x* is provided for the same purpose. A frame *u* serves to support the single parts of the apparatus.

I claim:

In an apparatus for barking willow-twigs, in combination, two rotary axles arranged in axial line with each other, bearings to support said axles, two cross-joints at the adjacent ends of said axles, two plates with ribbed inner faces carried by said cross-joints and each provided with a circumferential groove, and two blade springs fixed on said bearings and designed to run with their free ends in said circumferential grooves and thus to act on said plates to keep them in such inclined position to each other that a wedge-shaped split is formed between them, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

Tirschtiegel, June 28, 1911.

WILHELM GESCHE.

Witnesses:
BENNO BOORS,
SIGISMUND ADAMS.