M.B. Southwick, Flox Brake.
Fig.1. 117342 PATENTED JUL 25 1871 Mitnesses: M. vorland Mo Bouthwick

UNITED STATES PATENT OFFICE.

MASA BRANCH SOUTHWICK, OF MONT ST. HILLAIRE, CANADA.

IMPROVEMENT IN FLAX-BRAKES.

Specification forming part of Letters Patent No. 117,342, dated July 25, 1871.

To all whom it may concern:

Be it known that I, MASA BRANCH SOUTH-WICK, of Mont St. Hillaire, Province of Quebec, Canada, have invented new and useful Improvements in Flax-Brakes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention relates to flax-brakes; and consists in a new configuration of rollers whereby the crushing and breaking of the fibers are effect-

ed with improved results.

Figure 1 is a transverse sectional elevation of a pair of cogged rollers arranged according to my improvement, and Fig. 2 is a front elevation of the same.

Similar letters of reference indicate correspond-

ing parts.

In this instance I have represented a pair of rollers, A, having long cog-teeth B extending from end to end and meshing into each other, between which rollers the flax is to be fed in the ordinary way, to be broken between the teeth. In these teeth I have provided the serrations or grooves a on the surfaces of the cogs, and the bottoms of the grooves, running parallel with them, for adapting the said surfaces to break the flax more rapidly and efficiently, which I find in practice to be the case. But I propose also to apply serrated, denticulated, or any form of indented surfaces on all forms of fluted or cogged rollers, or to even-faced rollers or cylinders, or on any other devices used or to be used, either by hand or by motive power, for breaking the straw of flax or straw of other fibrous material,

to separate it or facilitate its separation from the flax or other fiber, as the case may be, or to pre-

pare flax for upholstering purposes.

In making the serrated surfaces I form lengthwise of the rollers, on the cogs and grooves, from eight to twelve (more or less) angular-pointed teeth to the inch surface of the grooves of the flax-brake rollers, or to cylinders, or to other devices for breaking the straw of flax, &c. The grooves between the angular-pointed teeth I make from one-twelfth to one-sixteenth inch in depth, but they may be made of a greater or lesser depth, as may be desired. When a pair of rollers is in working position the upper rollercog should work near the bottom of the groove of the lower one, but should not rest on it, as when the rollers are to be operated as without the serrated surfaces. The first pair of serrated rollers, between which the flax is made to pass, (when more than one pair is used,) may have coarser or a less number of teeth to the inch surface than the second pair.

I do not claim as my invention serrated surfaces of rollers or other devices whose teeth, when used for breaking the straw of flax, &c., mesh into the grooves of other and similar serrated surfaces, as I am aware that such have

been in public use; but

What I do claim, and desire to secure by Let-

ters Patent, is—

The rolls A A, having rigid cogs B with angular denticulated surfaces, combined as described, for the purpose specified.

MASA BRANCH SOUTHWICK.

Witnesses:

FRS. LAHAISE, FELIX LAHAISÉ.