

U. S. WOLF.
Willow-Peelers.

No. 150,213.

Patented April 28, 1874.

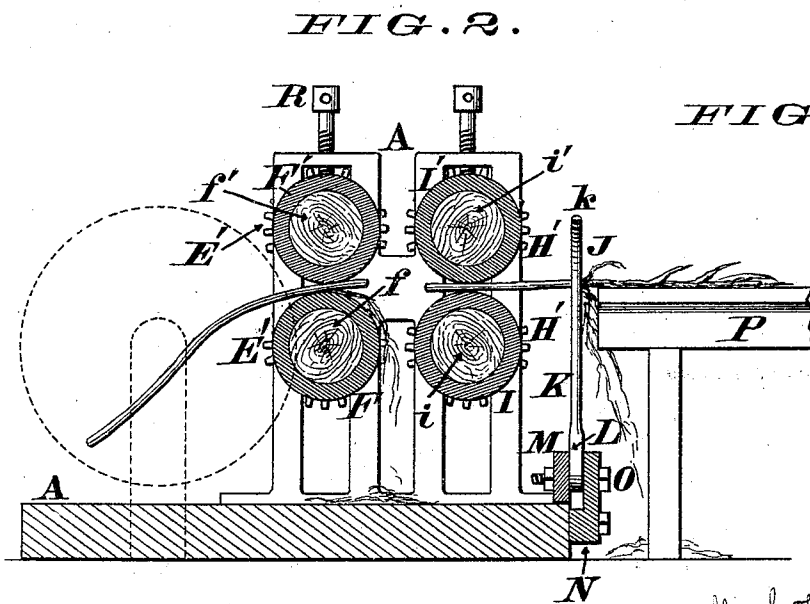
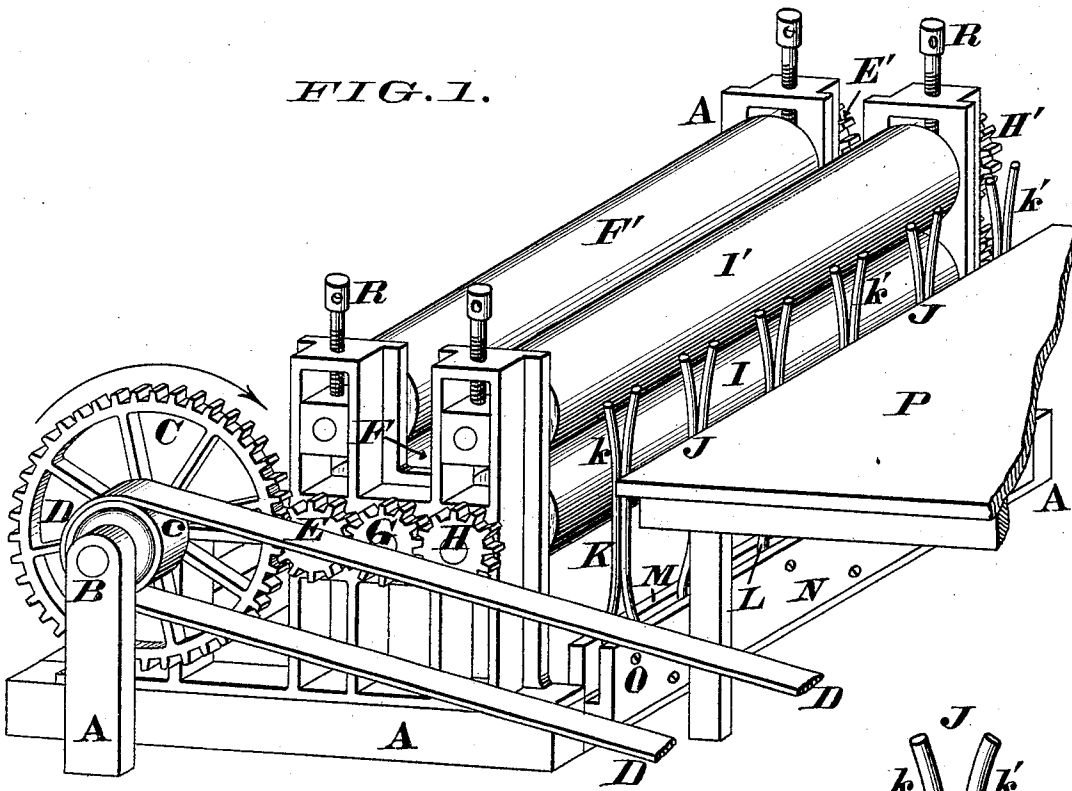
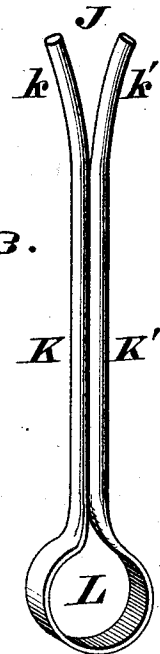


FIG. 3.



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UNITED STATES PATENT OFFICE.

UFFORD S. WOLF, OF OTTO, INDIANA.

IMPROVEMENT IN WILLOW-PEELERS.

Specification forming part of Letters Patent No. **150,213**, dated April 28, 1874; application filed December 12, 1873.

To all whom it may concern:

Be it known that I, UFFORD S. WOLF, of Otto, Clarke county, Indiana, have invented a new and useful Willow-Peeler, of which the following is a specification:

The object of my invention is to completely remove the bark without splitting or mashing the willow; and I accomplish this result by a machine which consists essentially of a series of vertical spring-strippers, and two pairs of rubber rollers. These rollers serve to draw the willows in between the aforesaid strippers without crushing the wand, so as to effectually remove the bark by a single passage through the machine, as hereinafter fully described.

Figure 1 is a perspective view of a willow-peeler embodying my improvements, and Fig. 2 is a transverse section of the same. Fig. 3 is an enlarged view of one of the spring-strippers detached from the machine.

A represents the main frame of the machine, said frame being provided with a shaft, B, upon which is journaled a spur-wheel, C. The wheel C has a pulley, c, attached to it for the reception of a band, D, that may communicate with a steam-engine, a horse-power, or other suitable motor. The spur-wheel C gears with a pinion, E, of the roll F, and gearing E' transfers motion from said roll F to another one, F'. By this arrangement both of said rolls are compelled to rotate at uniform speeds, but in opposite directions. Meshing with the pinion E is a carrying-wheel, G, which gears with a pinion, H, of a roll, I. Motion is communicated from this roll to another one, I', by means of the gearing H'. These rolls consist of cylindrical wooden cores *f f' i i'*, which cores are fitted into rubber tubes, the object of this rubber wrapping or envelope being to insure the passage of the willows through the machine without bruising the wooden portions. On this account it is preferred to employ tubes about an inch and three-quarters thick, as such a thickness of rubber will yield sufficiently to allow willows of various sizes to pass through the machine at the same time. Located in front of the rolls I I', and projecting vertically from the frame of the machine, are a series of strippers, J. These strippers consist of two vertical parallel bars, K K', which are united by

a spring portion, L, and the upper ends of said bars are provided with outwardly-inclined terminations *k k'*. These outwardly-inclined terminations facilitate the insertion of the willows between the strippers. The strippers are maintained in an erect position by being confined between two clamping-bars, M N, of which the one, N, is permanently secured to the bed plate or frame of the machine, and said bars are connected together by bolts O. By simply unslackening these bolts the strippers can be adjusted to any desired position, or they may be removed from the machine and other ones substituted for them. P is a platform upon which the willows are laid previous to being fed into the machine. R are temper-screws for regulating the pressure of the rubber rolls.

The operation is as follows: The willows are first laid upon the platform P, with their butt ends toward the machine, and the attendant then proceeds with the feeding operation. Each willow is taken up separately, pressed down between the strippers K K', and its butt inserted between the first pair of rolls I I', after which the peeling operation is entirely automatic. As the rolls I I' revolve in opposite directions, they serve to draw the willow in between the strippers K K', and feed it into the rear rolls F F'. This passage through the machine effectually removes all of the bark. The strippers K K' peel the bark from two opposite sides of the willow, and the rolls I I' and F F', remove it from the other two opposite sides, so that the willow, when delivered from the rear rolls, is entirely free of its bark, and at the same time it is not bruised, mashed, or otherwise injured.

After having inserted a willow between the first set of strippers the attendant then proceeds to feed others in successively between the second and third set of strippers. By the time he has inserted the third willow, the first one has passed through the machine, and he accordingly inserts another in its place, and then proceeds to fill the second and third strippers again, so as to render the feeding operation a continuous one.

By providing the machine with six pairs of strippers, two boys will be enabled to peel twelve hundred pounds of willows in a single

day, and as one hundred pounds per day has heretofore been as much as one man could accomplish, the advantage of my machine is self-evident.

I claim as my invention—

The combination, substantially as herein described, of the two pairs of rubber rollers F F' and I I', when arranged to be used in connection with the spring-strippers J K K' k k'

L, and their clamping-plates M N O, for the purpose stated.

In testimony of which invention, I hereunto set my hand.

U. S. WOLF.

Attest:

ARGUS DEAN,
SUSAN B. HAMILTON.