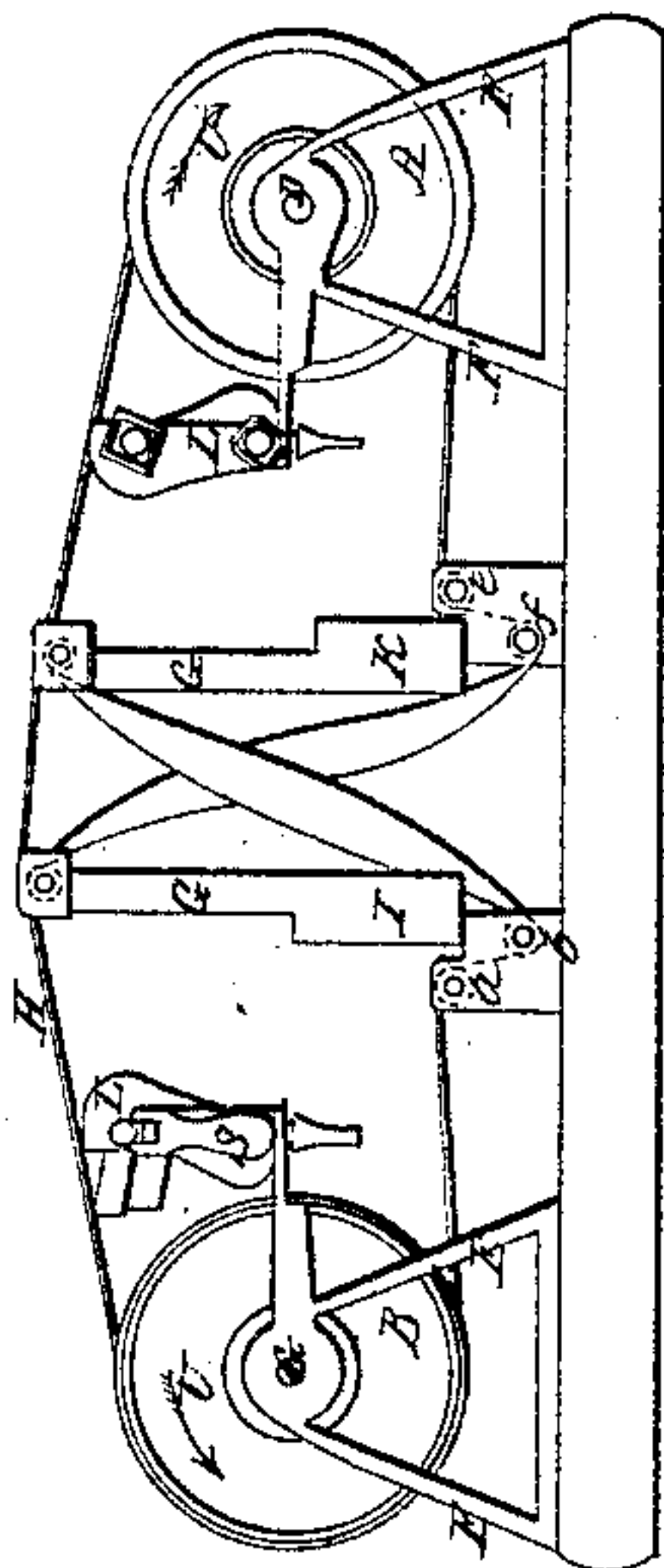


*G. Healey,  
Osier Peeler.*

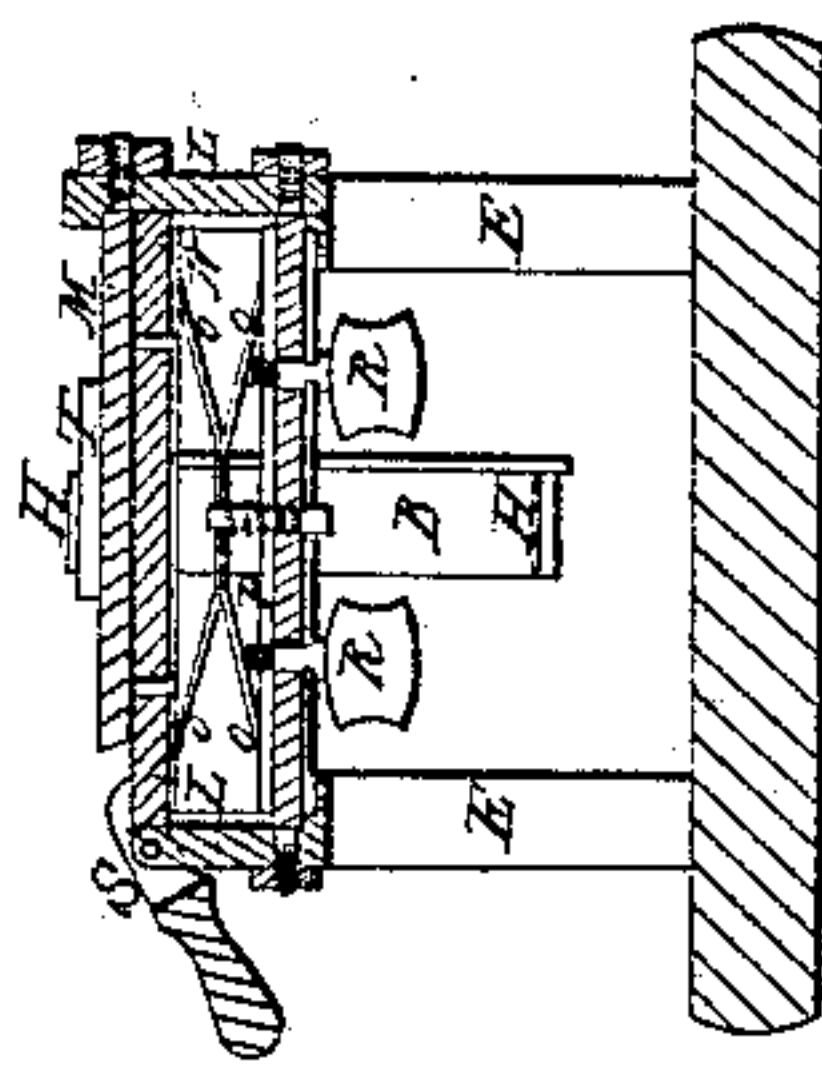
*N<sup>o</sup> 62,629.*

*Patented Mar. 5, 1867.*

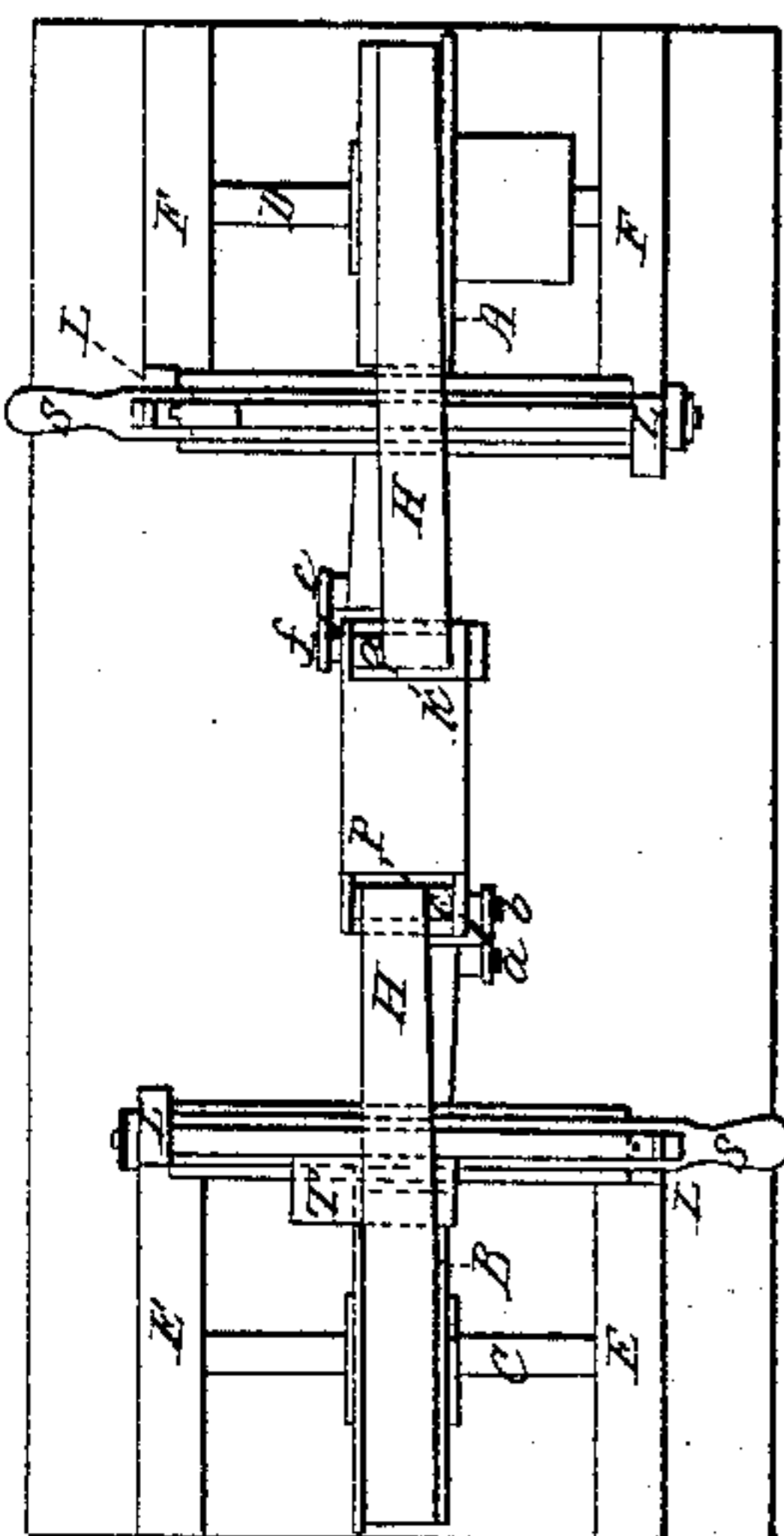
*Fig 2.*



*Fig 3.*



*Fig 1.*



*Witnesses:  
Geo H Andrews  
Chas W. Piper*

*Inventor:  
George Healey  
by his attorney  
R. M. Ledy*

# United States Patent Office.

GEORGE HEALEY, OF EAST WOBURN, MASSACHUSETTS.

*Letters Patent No. 62,629, dated March 5, 1867.*

## IMPROVEMENT IN MACHINES FOR PEELING WILLOW.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL PERSONS TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, GEORGE HEALEY, of East Woburn, in the county of Middlesex, and State of Massachusetts, have invented a new and useful Machine for Removing the Bark from Willow Twigs; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view; and

Figure 2, a side-elevation of it.

Figure 3 is a transverse section taken through one set of the stripping jaws of the machine.

Willow twigs employed in the manufacture of baskets, or various other articles, are required to be divested of their bark before being put in use. My machine is intended for the accomplishment of this effect, and may be thus described.

In the drawings, A and B are two wheels mounted on two horizontal shafts, C D, whose journals are supported in bearings formed in or applied to four standards, E E, F F, arranged as represented. Between the two wheels are two posts or standards, G G, each of which serves to support three horizontal guide-rollers, *a b c* or *d e f*, arranged, as represented, by dotted circles in fig. 2. An endless crossed belt, H, goes around the two wheels and about the guide-rollers in manner as shown in figs. 1 and 2. Each of the uprights is provided with a deflector, I or K, which is a plate arranged obliquely at an angle of forty-five degrees to the vertical plane of the endless belt, and in other respects with the said belt, in manner as represented in the drawings. To each of the wheels A B there is a set of stripping jaws, each set of them being placed near its wheel and between it and the next adjacent standard G, and being supported in one of two stationary frames L L, upheld by the wheel-supporting standards E E, F F. Each pair of the jaws is composed, as shown in fig. 3, of a stationary bar or jaw, M, and a movable jaw or bar, N. The said jaw N is placed directly underneath the jaw M and upheld at or near both of its ends by a pair of springs, O O, which are arranged on a movable bar, P, provided with screws, R R, for effecting its elevation or depression in order to increase or diminish the pressure of the springs on the lower of the jaws. A lever, S, applied to the jaw-frame, and having its shorter arm resting on the movable jaw at or near one end of it, constitutes a means by which an attendant on the machine is enabled to depress the lower jaw preparatory to and for the insertion of a twig of willow between the two jaws, and with its but or end extending into the bite of the endless belt and next contiguous wheel, A or B. To each of the jaws of the wheel B I apply a lip, T, of India rubber, or other equivalent, it being arranged as exhibited in figs. 1 and 2 of the drawings, and being for the purpose of facilitating the removal of the bark from the body of the twig. On the wheel A being put in revolution in the direction indicated by the arrow U marked thereon, movements will be imparted to the endless belt and the other wheel in the directions denoted by the arrows marked thereon. Under these circumstances, if a twig of willow be placed "but end" foremost between the stripping jaws of the wheel A, and so that the said end of the twig shall enter the bite of the wheel and the endless belt, all that part of the twig extending from the jaws to the bite will not be acted on or stripped of bark by the jaws during an advance of the twig caused by the action of the wheel and belt. The other wheel and its jaws become a convenient addition for effecting the stripping of the part so unacted on. The wheel A and the belt will draw the twig along between the stripping jaws, which, by their pressure on the bark, will crack it and separate it from the body of the twig, which, on being forced against the next deflector, I, will be ejected thereby on a curve at, or about at, right angles with the plane of the belt; thus, another workman standing on the side of the belt on which the twig is so thrown off, will find the twig reversed, its smaller end being foremost to him. He is next to seize the twig by such end and pass it between the other set of jaws and their elastic lips and into the bite of the wheel B and the endless belt. The twig will next be drawn between the last-mentioned jaws and their lips, which will not only remove the balance of the bark, but will wipe off any moisture or extraneous matter adhering to the surface of the twig. On the twig being forced against the deflector K, it will be deflected thereby so as to be out of the way of the attendant who may be first applying the twigs to the machine.

A single machine, composed of one wheel, an endless belt, its supporting rollers, a set of the stripping jaws, and a deflector, may be used to perform the operations necessary to the removal of the entire bark from the



twig; but with the compound machine, composed of the single endless crossed belt and its supporting rollers, the two sets of jaws, and the two wheels and the deflectors, arranged as set forth, the operations can be carried on with much greater expedition and less consumption of power, as both of the wheels may be driven by the single belt and the power applied to the shaft of one of such wheels.

What I claim as my invention, therefore, is as follows:

I claim the combination of a single wheel, a set of stripping jaws, and an endless belt, its supporting rollers, and a deflector, the whole being substantially as described and for the purpose set forth.

I also claim the combination of the two elastic or flexible lips, with the single wheel, a set of stripping jaws, and an endless belt, its supporting rollers and deflector, as described.

GEORGE HEALEY.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.