

H. WELD.
Wind-Mill Attachment.

No. 167,964.

Patented Sept. 21, 1875.

Fig. 1.

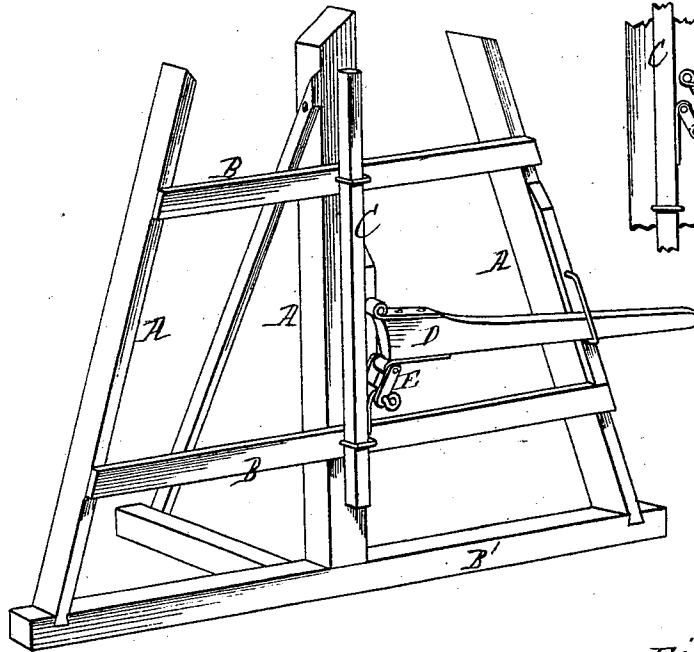


Fig. 2.

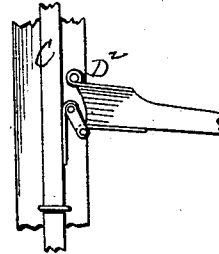


Fig. 3.

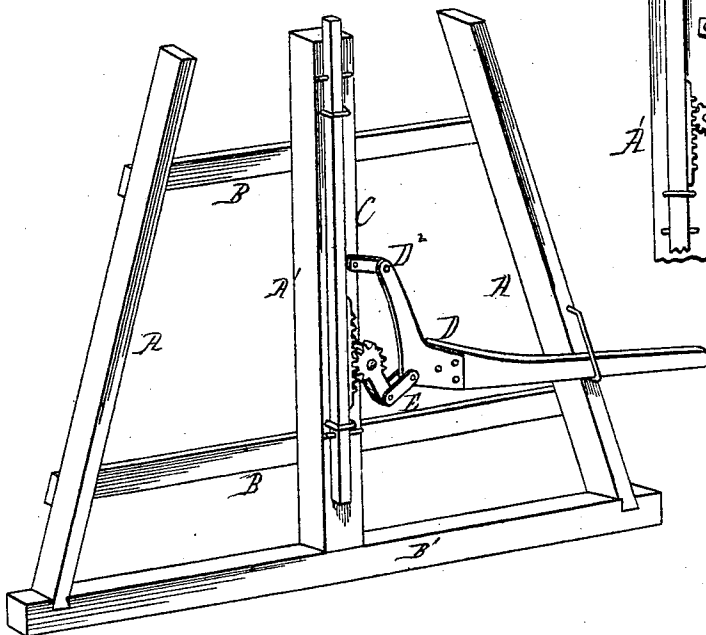
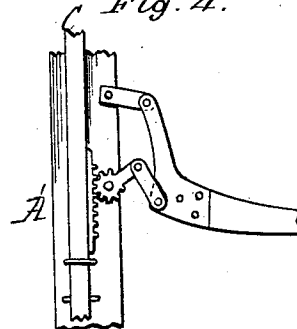


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY WELD, OF HALE, ILLINOIS.

IMPROVEMENT IN WINDMILL ATTACHMENTS.

Specification forming part of Letters Patent No. **167,964**, dated September 21, 1875; application filed June 21, 1875.

To all whom it may concern:

Be it known that I, HENRY WELD, of Hale, in the county of Ogle and State of Illinois, have invented a new and useful Improvement in Windmill Attachments; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view of the lower portion of the frame which supports the wind-wheel, with my improvements for operating a churn applied to the pump-rod. Fig. 2 is a front elevation of a portion of the pump-rod and devices for operating the churn, showing the pump-rod at the upper end of its throw. Fig. 3 is a similar view to Fig. 1, showing a modification in the manner of connecting the lever to the pump-rod; and Fig. 4 is a similar view to Fig. 2, showing the modification.

Similar letters of reference denote corresponding parts in all the figures.

The invention relates to a novel means for driving a churn-dasher from the pitman or pump-rod of a wind-wheel, for increasing the speed of the dasher; and consists in connecting the dasher-rod of the churn with the pump-rod through an elbow-lever, the upper end or arm of which is connected to the frame by a fixed pivot, while the elbow is connected to the pump-rod through a double pivoted link, in such a manner that the movement of the pump-rod, acting through said link upon the elbow of the lever, shall cause the outer or fore arm of said lever to be reciprocated in both directions when said pump-rod is reciprocated in either direction, as will be explained.

In the accompanying drawings, A A' represent the upright frame-bars, and B B' the cross bars or braces, these constituting the frame upon which the wind-wheel is mounted. C is the pitman or pump-rod, connected to the upright A' by means of loops or staples, or by any other convenient means. D is an el-

bow-lever, the inner or short arm of which is connected to the frame through a fixed pivot, D², while the outer or long arm is connected to the dasher of the churn. E is a link, pivoted at one end to the elbow of the lever D, and at the other end to the pump-rod.

A modification in the manner of connecting the lever with the pump-rod is shown in Figs. 3 and 4, in which the link E is connected to an arm secured to a pinion or a segment of pinion mounted upon the upright A', and which gears into a rack connected to the pump-rod; but it will be seen that the motion in both cases is the same.

The operation is as follows—supposing the parts to be in the position shown in Fig. 1, the pump being at the lower end of its throw, the link which connects it to the lever being about perpendicular and extending below the elbow: Now, as the pump-rod is drawn up the link is caused to assume a horizontal position, which causes the elbow to be rocked upon the pivot of the short arm, thus raising the outer end of the long arm up after the link has passed the horizontal line, and is carried up above the elbow, and, behind the short arm of the elbow, is drawn inward, which causes the outer end of the long arm to be depressed, the same movement being given at the return stroke of the pitman as upon the upward movement.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with the pitman or pump-rod actuated by the wind-wheel, of the elbow-lever pivoted to the frame, and the double pivoted link for connecting it with the pitman, arranged and operating substantially as described.

This specification signed and witnessed this 6th day of May, 1875.

HENRY WELD.

Witnesses:

G. W. FORD,
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