

C.W. Hurd. Mechanical Movement.

118016

PATENTED AUG 15 1871

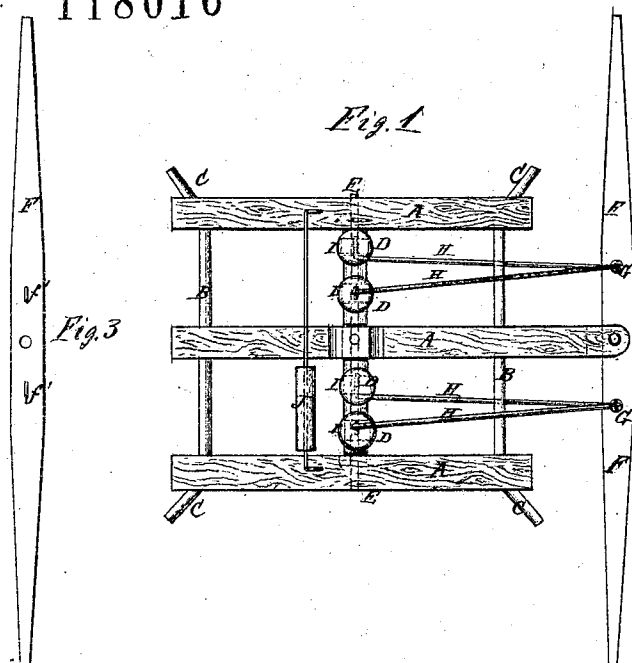
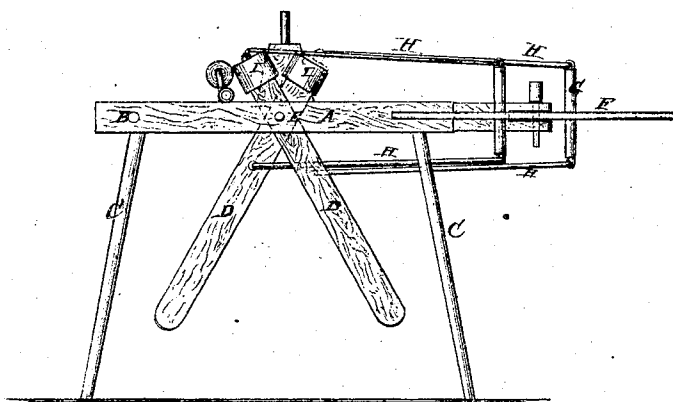


Fig. 3

Fig. 2



Witnesses:

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Wm H. C. Smith.

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UNITED STATES PATENT OFFICE.

CHARLES W. HURD, OF COMSTOCK'S LANDING, NEW YORK.

IMPROVEMENT IN MECHANICAL MOVEMENTS.

Specification forming part of Letters Patent No. 118,016, dated August 15, 1871.

To all whom it may concern:

Be it known that I, CHARLES W. HURD, of Comstock's Landing, in the county of Washington and State of New York, have invented a new and useful Improvement in Mechanical Movement; 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, in which—

Figure 1 is a top view of my improved movement. Fig. 2 is a side view of the same. Fig. 3 is a detail view of a modified form of the hand-lever.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved mechanical movement for working churns, clothes-washers, wool-washers, fulling-machines, clipping-machines, reapers, straw-cutters, sawing-machines, &c., and which shall be simple in construction and effective in operation; and it consists in the construction and combination of the various parts of the movement, as hereinafter more fully described.

A represents the longitudinal bars of the frame, which are connected by cross-bars B, and supported by legs C of suitable length. D are levers, four, more or less, in number, which are pivoted to a bar or shaft, E, attached to the frame A B, and which are kept in proper relative position by washers placed upon the rod E, between the said levers D. F is a hand-lever, which is pivoted at its central point to the end of the central bar A, or to some other suitable support. To the lever F, at equal distances from its central or pivoting point, are attached two cross-bars, G. To the upper ends of the cross-bars G are pivoted the outer ends of the upper connecting-rods H, the inner ends of which are pivoted to the upper ends of the first and third levers D. To the lower ends of the cross-bars G are pivoted the outer ends of the lower connecting-rods H, the inner ends of which are pivoted to the second and fourth levers D, as far

below the shaft E as the other rods H are above it. By this construction, by working the lever F, which may be done by hand-power or by any other convenient power, the levers D will be oscillated. If desired, the lever F may be pivoted to a standard between the two inner levers D, and may be connected with the ends of said levers D by staples *f'*, or other equivalent means. This arrangement can be employed when only one or two levers D are to be used. To the upper ends of the levers D may be attached, or upon them may be formed, weights I, to increase the working effect of said levers D. J are rubber or metallic springs, secured to the frame-work of the movement in such a position that the upper ends of the levers D may strike against them and receive an impulse from the elasticity of the said springs. With the lower ends of the pivoted levers D may be connected the dashers of a churn, the rubbers of a washer, a saw or saws, cutters, or any other tool, which does its work by a reciprocating movement.

By this movement one or more of the levers D may be used, as the work to be done or the power to be applied may render necessary. By this arrangement, also, should any one of the levers or rods fail, it will not affect the operation of the other parts, each of the levers D working independently of the others.

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

1. An improved mechanical movement, formed by the combination of the horizontally-vibrating driving-lever F and vertically-vibrating levers D, four, more or less, with each other, substantially as herein shown and described, and for the purposes set forth.

2. The combination of the weights I and springs J, either or both, with the levers D and F, substantially as herein shown and described, and for the purpose set forth.

CHARLES W. HURD.

Witnesses:

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