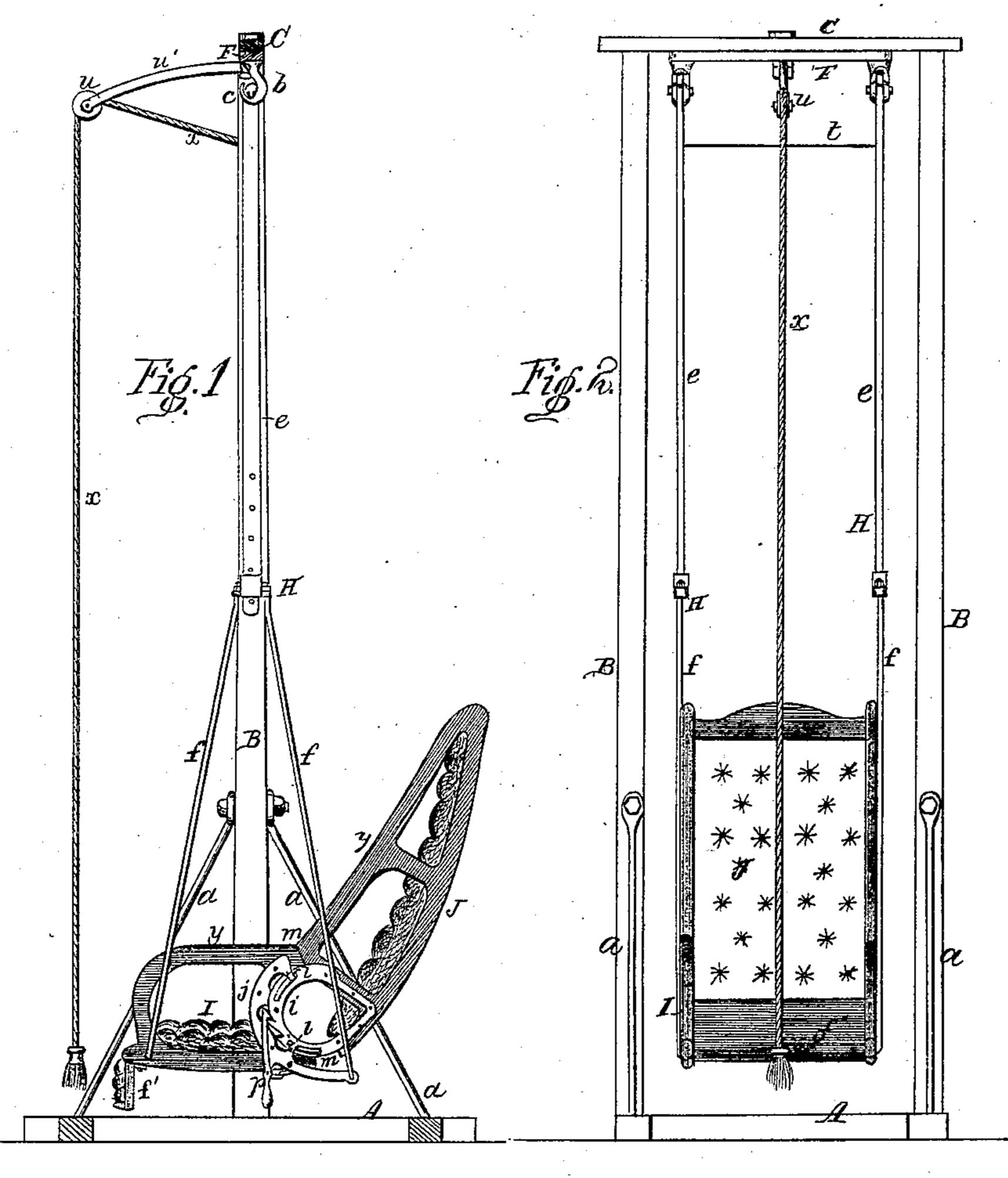
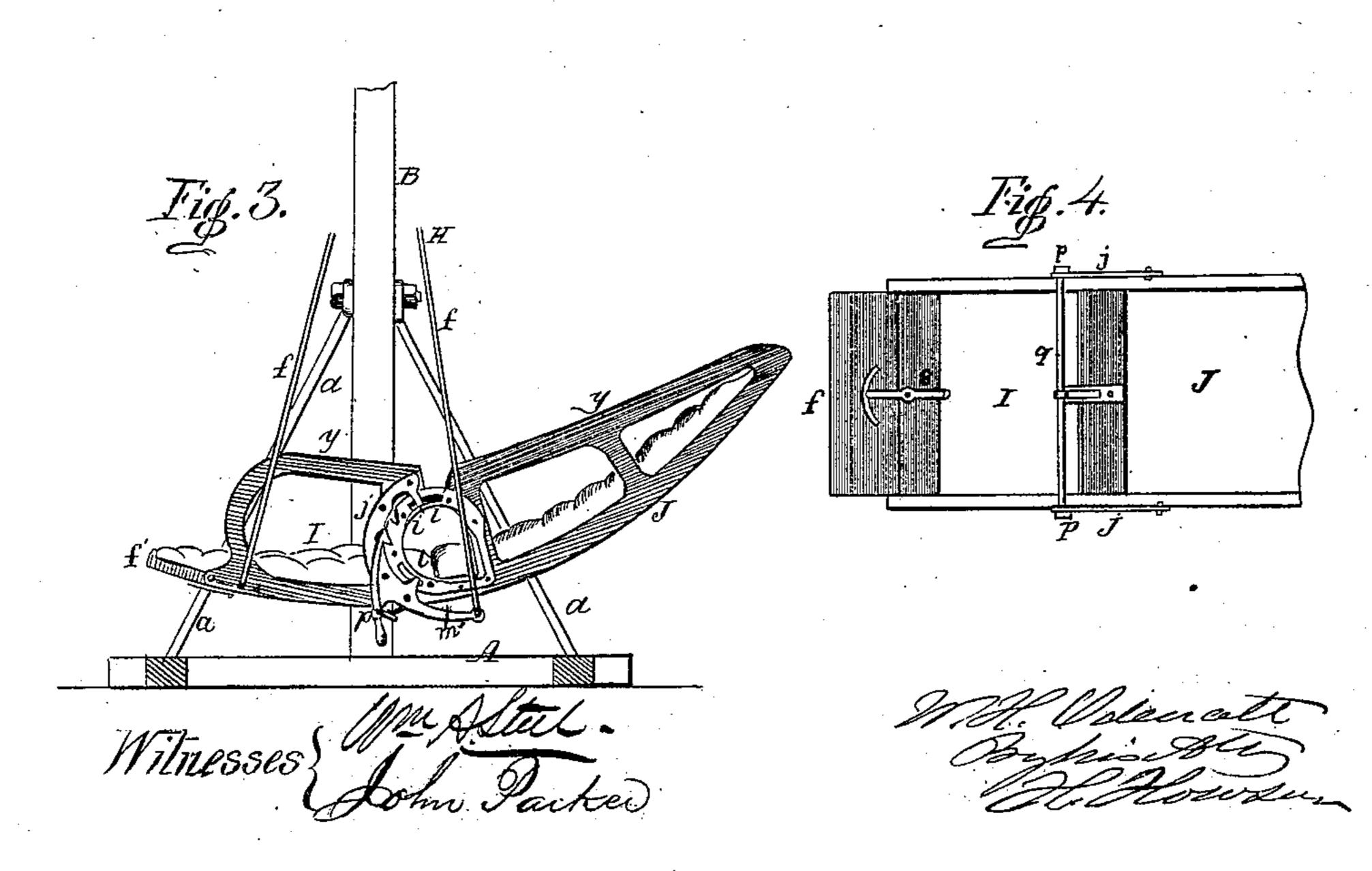
## M.H. Oderrall,

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NO 85238.

Faterited Dec. 22.1868.







## WILLIAM H. ODENATT, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 85,238, dated December 22, 1868.

## IMPROVEMENT IN SWINGS

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

To all whom it may concern:

Be it known that I, WILLIAM H. ODENATT, of Philadelphia, Pennsylvania, have invented an Improved Swing; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a swing, constructed, as fully described hereafter, so as to be readily oscillated, raised and lowered, and adjusted to form a seat or couch.

In order to enable others to make my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a side view of my improved swing;

Figure 2, a front view of the same;

Figure 3, a portion of fig. 1, showing the scat of the swing differently adjusted; and.

Figure 4, an inverted plan view of the seat.

Similar letters refer to similar parts throughout the several views.

The frame to which the swing is suspended, consists, in the present instance, of a base, A, and posts, B, braced by rods, a, and connected together at the top by a crosspiece, C.

To the under side of this cross-piece is secured a bar, F, having at its opposite ends double-hooked shaped bearings, b, adapted to knife-edged projections, c, on the upper ends of the rods H H, to which the seat of the swing is secured.

The swing, when thus delicately suspended on knifeedge bearings, can be oscillated with little exertion in comparison with that required to operate swings suspended by hooks and staples in the ordinary manner.

Each of the rods H consists of two parts, e and f, one of which is arranged to slide upon the other, so that the seat of the swing can be raised or lowered, and adjusted to any required height.

The seat or chair of the swing consists of the seat proper, which is marked I, and of an adjustable back,

J, and foot-board f'.

A semicircular plate, i, is secured to the lower end of each side of the back, J, and is arranged to slide upon a correspondingly-curved plate, j, secured to the side of the seat-projections l on the latter plate, entering curved slots of the plate i, and securing the two to-

The back is thus hinged to and arranged to turn upon the seat I, the extreme positions, to which it is adjustable, being illustrated in figs. 1 and 3, and the limit of these adjustments being determined by shoulders, m

m', on the seat and back.

The intermediate positions to which the back can be adjusted and secured, are determined by pawls, p, which enter notches formed on the edges of the plates i, these pawls being hung to and operated simultaneously by a handled spring-rod, q, best observed in fig. 4.

The foot-board f' is hung to the front of the seat, and can be adjusted to any of the positions shown in the drawing, either permitted to hang down, or turned up, so as to project above the seat, as seen in fig. 2, or it can be adjusted horizontally, so as to form an extension of the seat, it being held up, while in the latter position, by a button, s, fig. 4.

The swing is caused to oscillate upon its bearings b, by means of a cord, x, which is attached to a crossbar, t, on the rods H, and is passed over a pulley, u, which is arranged to turn in the outer end of an arm, u', projecting from the bar F.

This cord can be operated from any convenient outside point, or by a person on the seat of the swing, it being attached to the bar t, at a point close to the centre of oscillation, so that, as the cord follows the swinging motion of the seat, but little of it will be slackened at any time.

When intended for in-door use, the frame A B C can be dispensed with, and the swing suspended directly from the ceiling of the room or apartment in which it is placed, and the bar F may, if desired, be pivoted centrally, so that the swing can be turned, and caused to face in any direction.

When the seat of the swing is adjusted, as seen in fig. 3, so as to form a reclining-couch, it will be found a very convenient substitute for the ordinary cradle, it being protected on all sides by the arms y, and by the foot-board f', which can then be turned up.

When not in use, the swing can be readily detached from its bearings, and the two portions of the rods H caused to slide one within the other, the seat of the swing being then removed to a convenient place, and occupying little more room than an ordinary reclining-chair.

I claim as my invention, and desire to secure by Letters Patent—

1. The seat, with its rods f f, and slides H, in combination with the suspension-bars e e, on which the slides are adjustable, and having openings to which are adapted detachable pins, all, substantially as described.

2. The bars e, connected to the seat, and having knife-edge projections adapted to bearings b, as de-

scribed.

3. The seat, with its adjustable back, in combination with the notched plate *i* and spring-catch *p*, arranged and operating substantially as set forth.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

WM. H. ODENATT.

Witnesses:

E. W. BAILEY, HARRY SMITH.