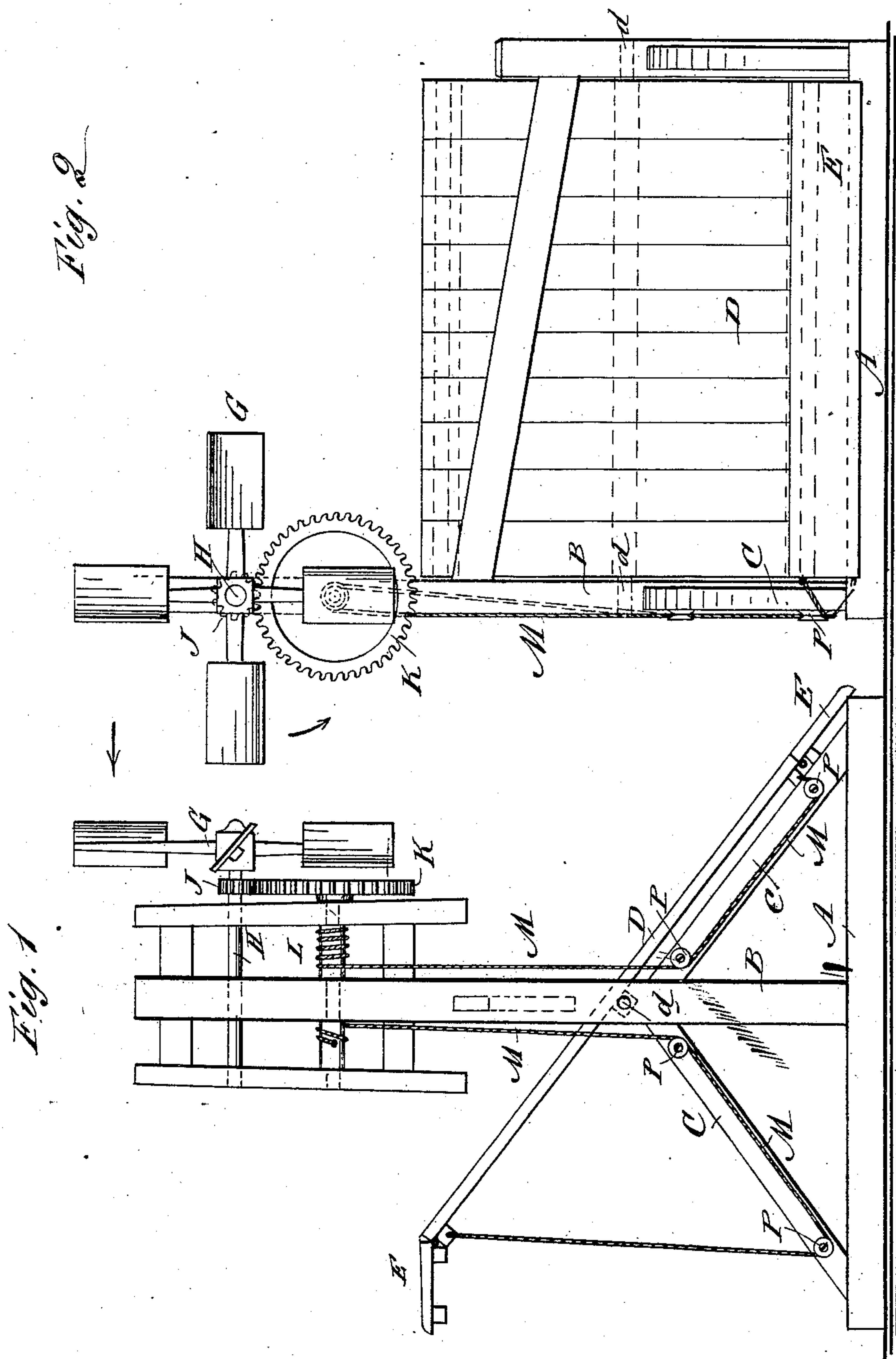


(No Model.)

M. THORP.  
Cattle Shed.

**No. 237,639.**

**Patented Feb. 8, 1881.**



**WITNESSES:**

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# UNITED STATES PATENT OFFICE.

MAJOR THORP, OF FRENCH CREEK, WEST VIRGINIA.

## CATTLE-SHED.

SPECIFICATION forming part of Letters Patent No. 237,639, dated February 8, 1881.

Application filed July 24, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, MAJOR THORP, of French Creek, in the county of Upshur and State of West Virginia, have invented a new and useful Improvement in Cattle-Sheds, of which the following is a specification.

My invention relates to a device to be employed in an open field or pasture for the purpose of serving as a temporary shelter for protecting sheep or cattle from winds and storms.

The invention consists in a novel construction of a pivoted roof and a wind-wheel and connecting devices operating in connection therewith, whereby said pivoted roof is automatically shifted in the direction from which the wind is blowing and is held in position by the force of the wind.

In the accompanying drawings, Figure 1 is an end view of a device embodying my improvements. Fig. 2 is a side view of the same.

Similar letters of reference indicate corresponding parts.

The apparatus is supported by a frame-work consisting of horizontal sills A, upright posts B, and diagonal braces C. Between the posts the roof D is pivoted by means of gudgeons or trunnions *d d*, so as to allow it to oscillate, after the manner of a "seesaw." This roof D is composed of boards secured together in any suitable manner. It is quadrangular in form, preferably with its length considerably greater than its width, and the trunnions *d* extend from its two ends or vertical edges. The other two edges of the quadrangle run horizontally, and each edge has a board, E, hinged to it, so as to allow it to drop downward, but not to rise upward beyond a line, forming a continuation of the plane surface of the roof.

In the upper part of the frame is journaled a horizontal shaft, H, on one end of which is a wind-wheel, G. This shaft also carries a pinion, J, which engages with a gear-wheel, K, carried by a shaft, L, under and parallel with the shaft H. To the shaft L are attached the upper ends of two ropes, M, one of which is wound in one direction and the other in the

opposite direction. These ropes pass downward and under pulleys P, attached to the diagonal braces C, and their lower ends are attached to the under side of the roof D, at points near where the boards E are hinged thereto.

When the wind blows in the direction of the arrow the revolution of the wind-wheel G turns the shaft L in one direction, so as to wind up one of the ropes M and unwind the other. This pulls downward on one edge of the roof D and inclines it to the position shown in Fig. 1. The uppermost one of the boards E drops and the lowermost one straightens out and forms a continuation of the plane surface of the roof D, by which means a larger surface is presented to the wind below the pivots *d* than above, and the holding of the roof in the position shown is insured as long as the wind blows in the aforesaid direction. When the wind blows in the opposite direction the motions of the wind-wheel and shafts are reversed, so as to reverse the position of the roof and incline it in the opposite direction.

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

1. In a cattle-shed, the combination of a pivoted roof, D, a wind-wheel, G, and connecting mechanism, arranged and operating substantially as described, whereby said roof is automatically adjusted and held in place by the action of the wind, as and for the purpose set forth.

2. The combination, with the pivoted roof D, of the wind-wheel G, pinion J, gear-wheel K, shaft L, and ropes M, as shown and described, for the purpose specified.

3. The combination, with the pivoted roof D, the wind-wheel G, and the connecting mechanism, of the hinged boards E, arranged and operating as shown and described, for the purpose specified.

MAJOR THORP.

Witnesses:

BEECHER W. PHILLIPS,  
J. B. BUNTEN.