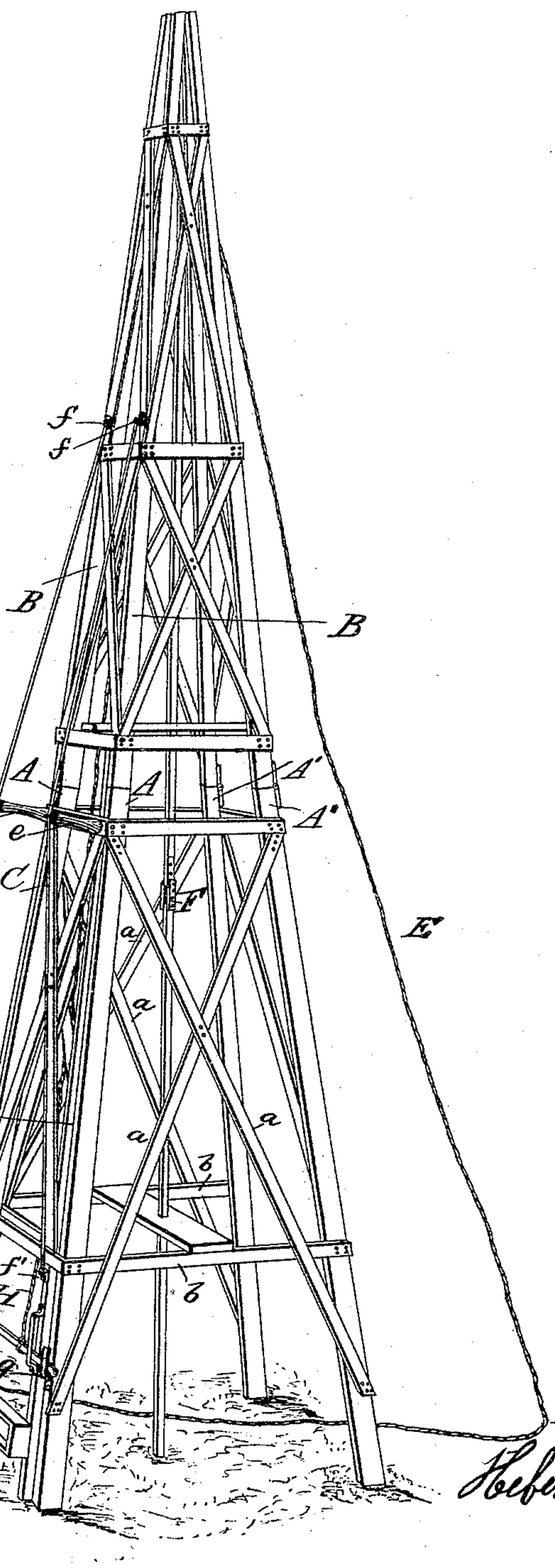
(No Model.) 2 Sheets—Sheet 1.

H. ROBINSON.

WINDMILL TOWER.

No. 446,744. Patented Feb. 17, 1891.

Fig. 1.



Witnesses:
John F. Dayton
D. H. Reed

Inventor:
Heber Robinson

(No Model.)

2 Sheets—Sheet 2.

H. ROBINSON.

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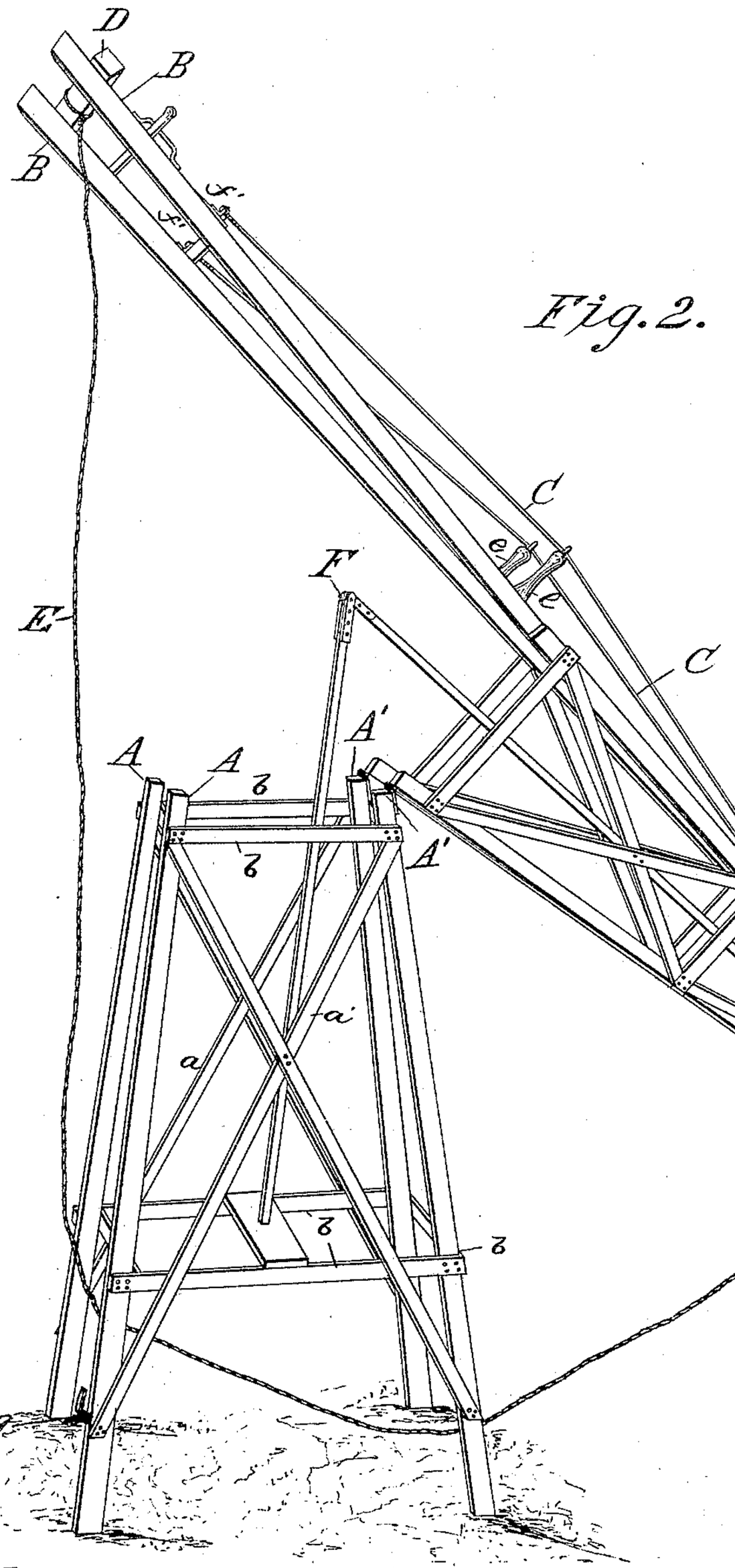

Fig. 2.

Witnesses:
John F. Dayton
D. W. Reed

Inventor:
Heber Robinson

UNITED STATES PATENT OFFICE.

HEBER ROBINSON, OF WAUKON, IOWA.

WINDMILL-TOWER.

SPECIFICATION forming part of Letters Patent No. 446,744, dated February 17, 1891.

Application filed August 12, 1890. Serial No. 361,846. (No model.)

To all whom it may concern:

Be it known that I, HEBER ROBINSON, a citizen of the United States, residing at Waukon, in the county of Allamakee and State of Iowa, have invented a new and useful Improvement in Windmill-Towers, of which the following is a specification.

This invention relates to improvements in windmill towers or derricks.

The object of the invention is to provide a support for a windmill, which is so constructed that the wind-wheel can be raised in a position for use or lowered when it is desired to inspect the parts or make repairs.

Prior to my invention it has been proposed to construct a derrick so that a portion thereof would be pivoted to the base, which can be seen by reference to the patents to Perry, dated December 27, 1887, and July 8, 1890, and my invention is designed more particularly as an improvement thereon; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view showing the derrick in a position for use. Fig. 2 is a similar view showing the upper portion of the derrick lowered.

The foundation or base of the derrick is made up of the four corner posts or uprights A A and A′ A′, which are secured to each other by diagonal braces *a a* and horizontal pieces *b b*, those on one side being located within the structure to provide an open space between the uprights A A. To the upper ends of the beams or uprights A′ are secured ordinary strap-hinges, and to the upper leaves of these hinges is secured the superstructure, which is made up of four converging side pieces braced to each other in the usual manner. To a pair of these side pieces are secured beams B B, which extend beyond said superstructure, as shown. To these beams are secured outwardly-extending posts *e*, the ends of which are provided with eyes, through which pass truss-rods C C, the upper ends of said truss-rods being secured to angle-plates *f*, while the lower ends are threaded and pass through angle-plates *f′* and engage tightening-nuts, as shown. The lower ends of the extended beam B are provided with a weighted box D.

H refers to a lever, which is pivoted at one end to the extended ends of the beams B B, the free end of said lever passing under a bail, while its outer end is adapted to engage with a catch *g*, attached near the lower end of one of the uprights A, and by means of this lever the superstructure when raised to a vertical position can be locked.

The pitman-rod is jointed, as shown at F, so that it can be turned upon its hinge when the superstructure is lowered, as shown in Fig. 2. A rope or flexible connection E extends from the top of the tower, passes under the base, and is secured to the weighted box, this flexible connection being of sufficient length to permit the person holding the same to move to one side of the base to exert a downward pull upon the superstructure and cause the same to tilt when the locking-lever is released.

It will be particularly observed that the extended beams B lie within the uprights A when the device is in a position for use, and hold the superstructure so that it will set securely upon the ends of the uprights A A and A′ A′. It will also be noted that the windmill-towers in common use may have my improvement applied thereto by fitting to the structure the beams B B and attaching the hinges, after which the main uprights can be cut. Thus it will be seen that in order to supply my improvement it will not be necessary to do away with towers now furnished to the trade.

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

1. The combination, with the base consisting of the corner uprights, braced as shown, of a superstructure hinged thereto and provided with trussed beams B B, which are adapted to lie between the uprights A of the base, and a locking-lever for connecting said beams to the base, substantially as set forth.

2. In a windmill-derrick, the combination of a base having uprights A A, connected to

each other on their inner sides, and a superstructure hinged to the uprights A′ and provided with trussed beams B B, said trussed beams carrying at their lower ends a locking-lever, the parts being organized so that the ends of the beams forming the superstructure will sit directly upon the ends of the uprights forming the base, and the lower or extended ends of the trussed beams B B lie within the uprights A A, substantially as set forth.

HEBER ROBINSON.

Witnesses:
JOHN F. DAYTON,
WM. S. HART.