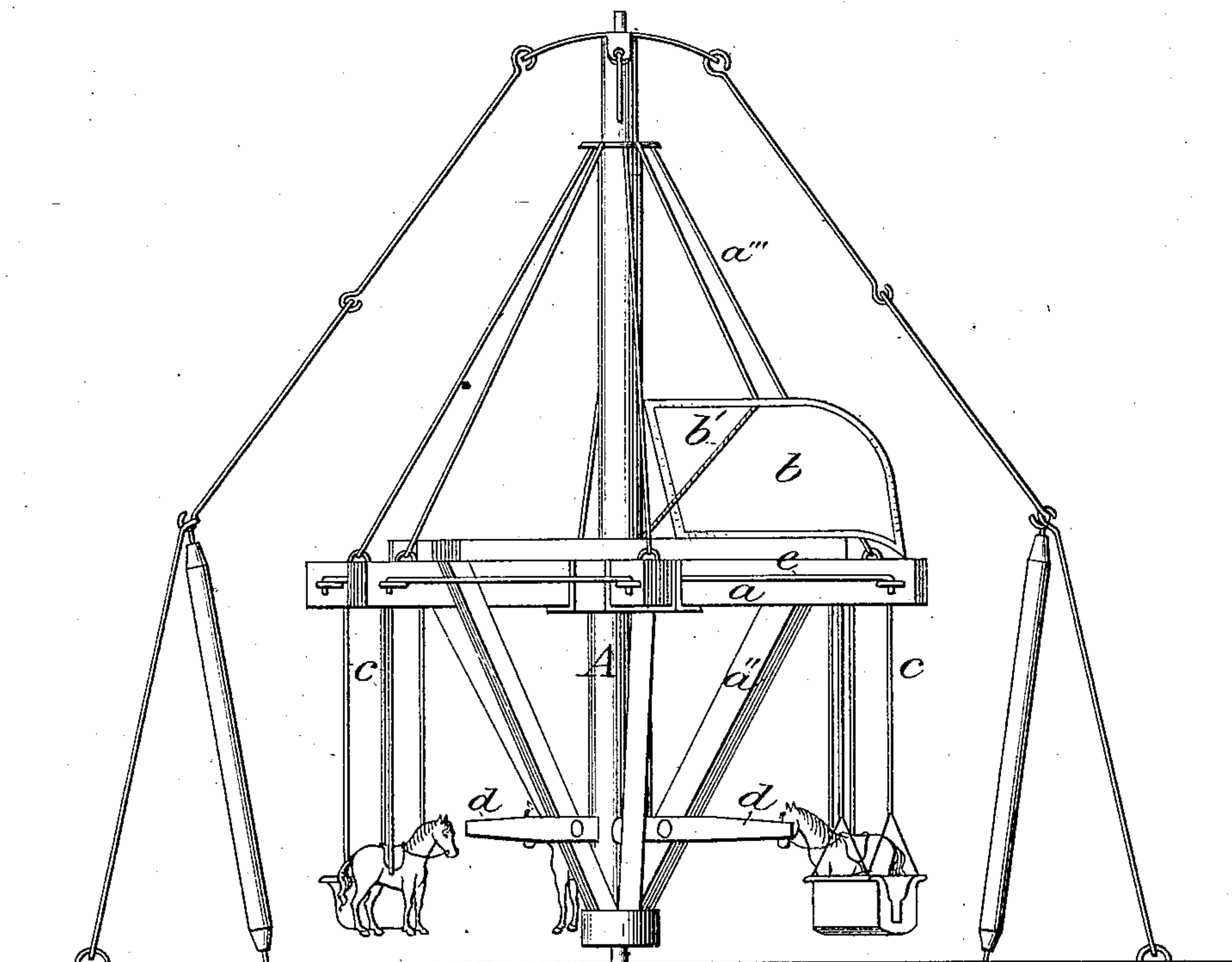


A. GRAVES.  
REVOLVING SWING.

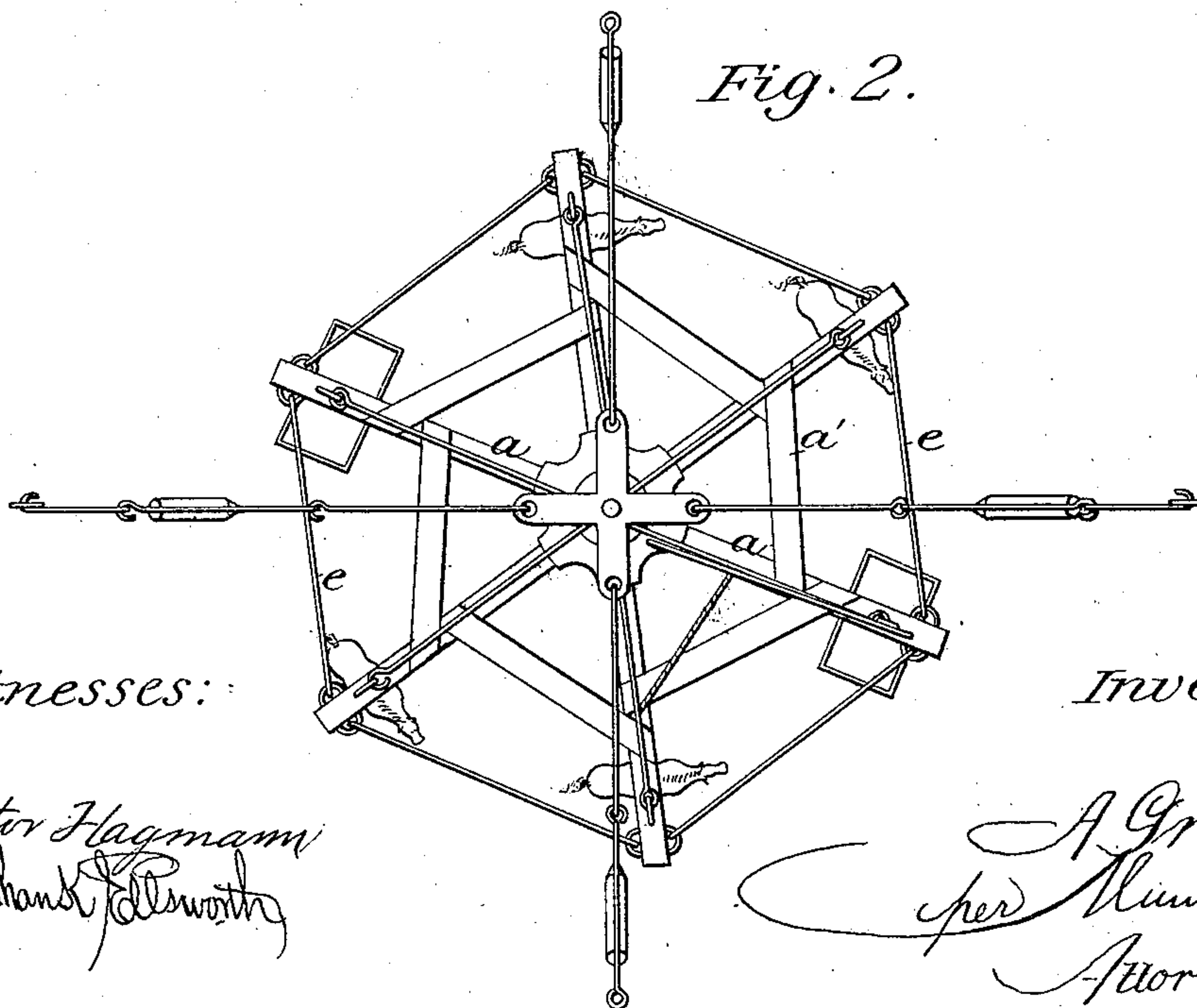
No. 101,609.

Patented Apr. 5, 1870.

*Fig. 1.*



*Fig. 2.*



Witnesses:

*Victor Hagmann  
Richard J. Ellsworth*

Inventor:

*A. Graves  
per Minn & Co  
Attorneys.*

# United States Patent Office.

ALMERON GRAVES, OF ROSCOE, ILLINOIS.

Letters Patent No. 101,609, dated April 5, 1870.

## REVOLVING SWING.

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, ALMERON GRAVES, of Roscoe, in the county of Winnebago and State of Illinois, have invented a new and improved Revolving Swing; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a side elevation, and

Figure 2 is a plan view.

This invention is an improvement upon my patent dated February 18, 1868, for handling animals for slaughtering.

It consists of a revolving derrick, having radial arms projecting about midway of its length, the latter being adapted to the support of sails above and swings below, and capable of being used either with or without the sails, and adapted to discharge, upon occasion, the function of a clothes-drier.

In the drawings—

A is a vertical post, stepped in any suitable foundation, and having a metallic socket securely affixed to it at any desired point, in which are held the inner ends of radial arms *a*, which have horizontal bracing, *a'*, and inclined bracing, *a''*, and stay-rods, *a'''*, the braces *a''* and stay-rods connecting the radial arms with the vertical post in contrary directions.

The arms *a* have eyes in their upper surfaces, which are linked with eyes in the lower edges of sails *b*, placed above the arms.

There may be one sail to each arm, if necessary, or a less number, made of light material, and entirely at the disposal of the wind, standing up against the stay-rods, and sustained by stay-ropes *b'* when the wind takes them, and lying down on the bars when the wind dies away. The sails fit the apparatus, to discharge the ordinary functions of a wind-mill.

Rods *c c*, hung from the lower sides of the radial arms, serve for the suspension of chairs, carriages, horses, or the like, to support the body in swinging.

When the sails are idle, the requisite rotary motion may be imparted manually to the arms by short levers, *d*, projecting horizontally from the vertical post at convenient hand distance.

Rods *e*, stretching horizontally between the outer ends of the arms *a*, make good clothes-lines, and render the apparatus a clothes-drier, in addition to its other offices.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The vertical post *A*, in combination with the radial arms *a*, sails *b*, swing-rods *c*, pushing-levers *d*, and clothes-rods *e*, substantially in the manner and for the purpose described.

ALMERON GRAVES.

Witnesses:

F. WASHBURN,  
SAM. J. GOODWIN.