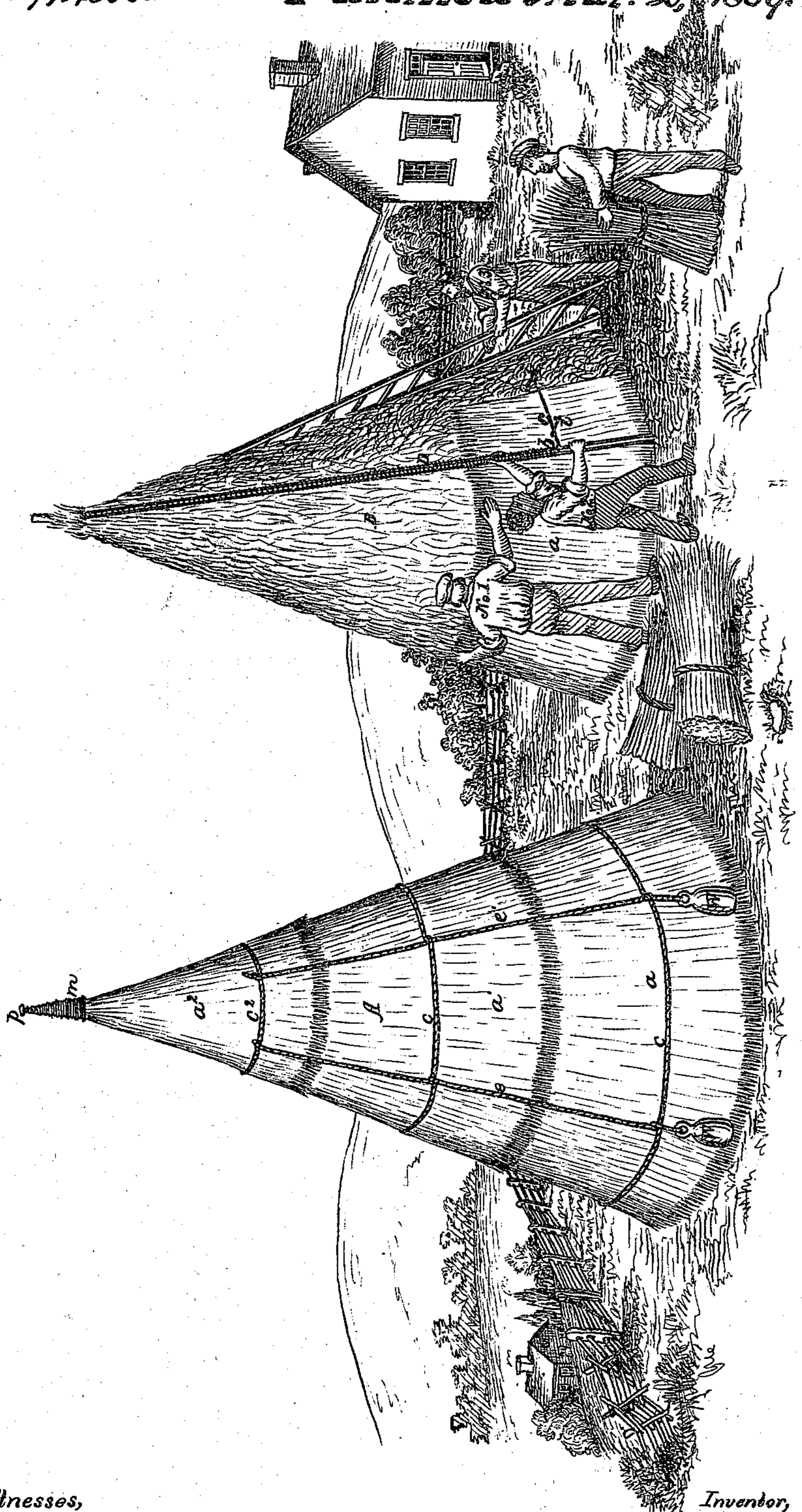


R. McLarn.
Hay & Grain Protector.
Nº 87,425. Patented Mar. 2, 1869.



Witnesses,
J. W. Ellsworth,
E. A. Ellsworth

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ROBERT McLARN, OF SHIRLAND, PENNSYLVANIA.

Letters Patent No. 87,425, dated March 2, 1869.

IMPROVEMENT IN THATCHING FOR STACKS OF HAY AND GRAIN.

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, ROBERT McLARN, of Shirland, in the county of Allegheny, and State of Pennsylvania, have invented a new and useful Improvement in Stacking; 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 my invention is represented by a perspective view.

The object of this invention is so to improve the process of thatching stacks of hay, grain, &c., that the labor can be more conveniently and expeditiously performed than heretofore, while the stack will be neat in appearance, and will be well protected against the weather.

In the drawings—

A is a finished, and

B, a partially finished stack.

In the stack A, the different courses of thatching, or straw, are represented by the letters a a^1 a^2 , the straw being applied with the butts down, and the lower edge of each course overlapping the upper edge of the course below.

At the apex of the stack, a small pin, p , is driven vertically into it, and the upper ends of the straw forming the upper course are drawn in around the pin, and against it, and firmly bound to it, as shown at m' , so as to prevent the water from soaking into the stack at that point.

The courses of straw are fastened to the body of the stack by means of cords, or bands, c c^1 c^2 , passing horizontally around it, the two ends of each band being tied together.

Other cords, e e' e'' , are tied to the upper band, c , thence pass down to and around the next, c^1 , and thence down to and around the others, as seen in connection with the stack A, in the drawing, their lower end hanging beneath the lower band, and a weight, W , being attached thereto, for the purpose of holding the bands down tightly to the stack, and preventing the wind from loosening the thatch.

The stack, thus completed, is water-tight, and its covering is very durable.

My improved process for constructing such stack is as follows:

One workman (No. 1) takes a bundle of straw, and proceeds to apply it around the lower end of the stack, while another, (No. 2,) taking a pole, D , having a cord, C , wound spirally around it, drives a pin, i , into the stack, and fastening the loose end of the cord to it, follows workman No. 1 around, unwinding the cord as he goes, and applying it around the stack, as near as possible to the middle of the course a .

In order to prevent the cord from slipping up, and becoming loose, he occasionally inserts another pin, i' , into the body of the stack, on the upper side of the cord.

When he completes the circuit of the stack in this manner, he ties the ends of the cords at the point i .

Another workman, (No. 3, or No. 1, if no others are present,) taking a bale of straw, and ascending a ladder, applies a second course, a^1 , while workman No. 2, walking on the ground, applies the cord around this course, as before, and so on until the stack is completed.

The cords e e' and weights W W are then applied, as hereinabove described, and the whole operation is finished.

The advantages claimed for this process of thatching stacks of hay, grain, &c., are that it greatly facilitates the work, and that its product is superior, in point of durability and tightness, to anything of the kind heretofore introduced into general use.

Having thus described my invention,

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

The thatched cover a a^1 a^2 , when used in connection with the horizontal bands c c^1 c^2 , the vertical cords e e' , the weights W W , pin p , and the cord m , all said parts being arranged and combined together as described, and for the purpose specified.

Witnesses:

JAMES BIGHAM,

S. H. S. CAMPBELL.

ROBERT McLARN.