2 Sheets—Sheet 1.

J. & H. MURDOCK.

GUIDES FOR BUILDING RICKS AND STACKS.

No. 184,415. Patented Nov. 14, 1876.

Fig. 1

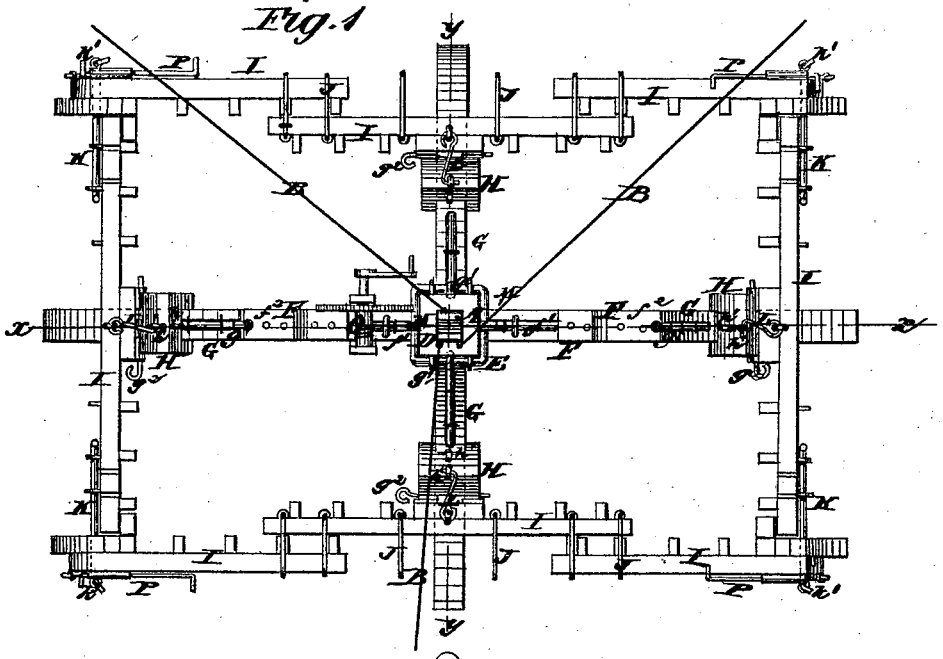
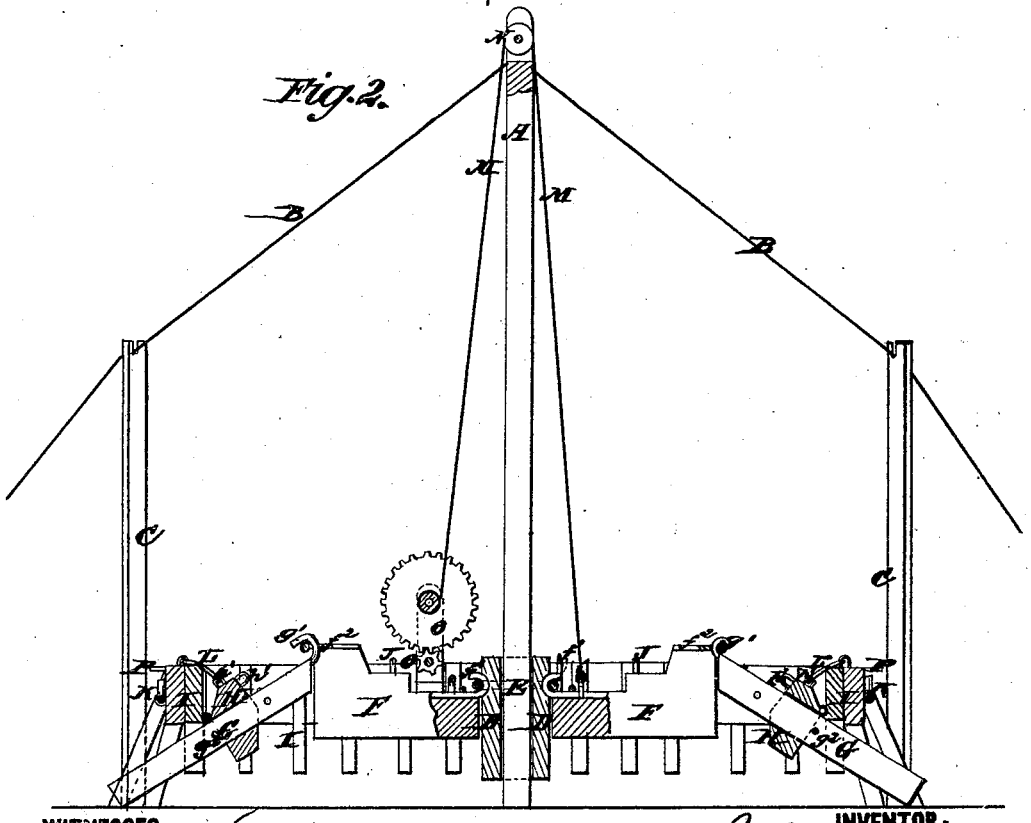


Fig. 2.



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2 Sheets—Sheet 2.

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GUIDES FOR BUILDING RICKS AND STACKS.

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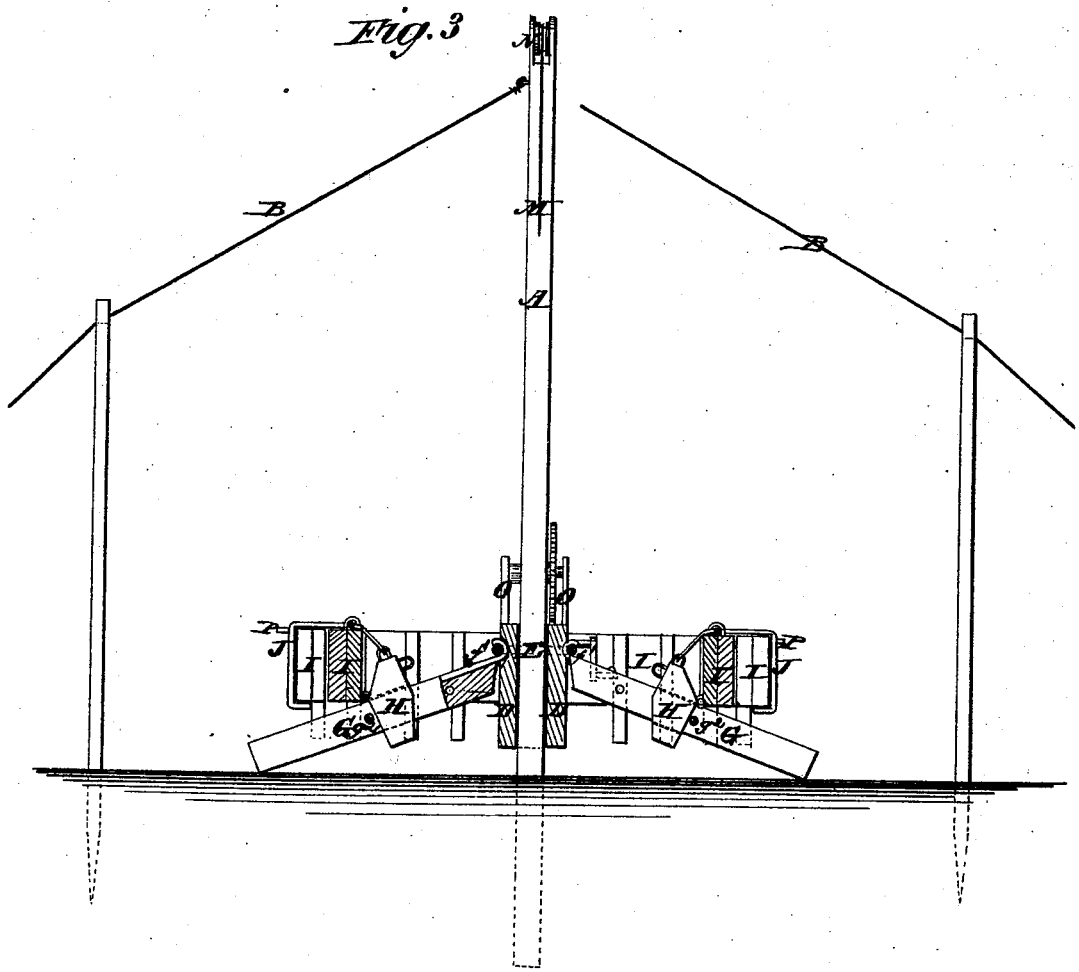
Fig. 3



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JOHN MURDOCK AND HENRY MURDOCK, OF POSEYVILLE, INDIANA.

IMPROVEMENT IN GUIDES FOR BUILDING RICKS AND STACKS.

Specification forming part of Letters Patent No. **184,415**, dated November 14, 1876; application filed May 27, 1876.

To all whom it may concern:

Be it known that we, JOHN MURDOCK and HENRY MURDOCK, of Poseyville, county of Posey, and State of Indiana, have invented a new and Improved Guide for Building Ricks or Stacks, of which the following is a specification:

In the accompanying drawing, Figure 1, Sheet 1, is a top view of our improved device arranged for use. Fig. 2, Sheet 1, is a vertical longitudinal section of the same taken through the line X X, Fig. 1; and Fig. 3, Sheet 2, is a vertical cross section of the same taken through the line Y Y, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of our invention is to furnish a guide for use in building ricks or stacks of grain and straw, which shall be simple in construction, effective in use, and easily adjusted as the rick increases in height.

Our invention consists in the combination of the sliding hub, provided with the band, the two blocks provided with hooks at their inner ends, and the eye-plates at their outer ends, the four inclined bars provided with the hooks at their inner ends, the four sliding hubs, the end gates, and the extension side gate, made with inclined ends, with each other and the post; and in the combination of the rope, the pulley, and the windlass with the post and the two blocks of the guide, as hereinafter fully described.

In the annexed drawing, A is a post of suitable height, the lower end of which is set in the ground to the depth of a foot or more. To the upper end of the post A are secured the upper ends of three or more guy-ropes, B, the lower ends of which are secured to stakes driven into the ground, or to other suitable supports. The guy-ropes B are held out of the way by props C, the lower ends of which rest upon the ground, and their upper ends rest against the side guy-ropes. Upon the post A is placed a hub, D, which slides up and down freely, but cannot turn upon it. Around the upper part of the hub D is passed, and to it is secured, a band, E, upon which, at the sides of the hub D, toward the ends of the rick, are hooks f^1, attached to the upper corners of the inner ends of the blocks F, which inner ends rest against the sides of the said hub D, so that the said blocks may be held in a horizontal position. To the upper corners of the outer ends of the blocks F are attached eye-plates f^2, into the eyes of which are hooked hooks g^1 attached to the upper corners of the inner ends of the bars G. The inner ends of the bars G are beveled off, and rest against the outer ends of the blocks F, so that the said bars G may have the inclination which the bundles of grain should have to carry off the water, and may thus serve as guides in laying the bundles. Similar bars G g^1 are hooked upon the band E at the sides of the hub D, toward the sides of the rick, as shown in Fig. 3. Upon each of the bars G is placed a hub, H, which is kept from slipping downward by a pin, g^2, passed through a hole in the bar G at the lower end of the said hub H, several holes being formed in the said bar to receive the said pins, so that the said hubs can be adjusted as required. The upper outer corners and the inner lower corners of the hubs H are beveled off, as shown in Figs. 2 and 3. To the outer sides of the hubs H, at the lower edge of the bevels, are hinged gates or guides I, the pivots of said hinges being detachable, so that the gates can be removed when desired. The side gates I are made in three parts, the end parts sliding in keepers J attached to the middle part, so that they can be extended and contracted according as a longer or shorter rick is to be built. K represents bolts, sliding in keepers attached to the end parts of the end gates I, and which pass through holes in the end parts of the side gates I, and have holes through their ends to receive the pins k', by which they are secured in place. To the inner and upper sides of the hubs H are attached staples h to receive the hooks L attached to the upper sides of the gates I. To one of the blocks F is attached the end of a rope, M, which passes over a pulley, N, pivoted in a slot in the upper end of the post A. The other end of the rope M is secured to the windlass O attached to the other block F.

In using the device the gates I are adjusted in position to give the desired size to the rick. The pins g^2 are inserted into the bars G below the hubs H, and the hooks L

are hooked into the upper staples h'. When the rick has been built to the top of the gates I the windlass O is operated, and the device is raised to the top of the built portion, and the rick is again built to the top of the gates I. When the sides of the rick have been carried vertically up to the desired height the bolts K are unfastened and drawn back. The inclined ends of the side gates are placed against the inner sides of the end gates, the hooks L are hooked into the inner staples h', the hubs H are slipped up on the bars G, the pins g^2 are inserted beneath them, and the ends of the side and end gates are secured to each other by hooks P attached to the ends of the side gates, and which enter notches or holes in the end gates. In this way the guide is contracted as the building is continued until the hubs H strike the outer ends of the blocks F. The guide is then taken down, and the rick is topped out without a guide.

In the case of large rickers the center-post A may be made in two parts, spliced to each other by a square tenon attached to one part, and fitting into a square hole in the other part, where it is secured in place by a key passing through the said part and the said tenon.

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

1. The combination of the sliding hub D, provided with two blocks, F, provided with the hooks f^1 at their inner ends and the eye-plates f^2 at their outer ends, the four inclined bars G, provided with the hooks g^1 at their inner ends, the four sliding hubs H, the end gates I, and the extension side gates I, made with inclined ends, with each other and the post A, substantially as herein shown and described.

2. The combination of the rope M, the pulley N, and the windlass O with the post A and the blocks F of the guide, substantially as herein shown and described.

JOHN MURDOCK.
HENRY MURDOCK.

Witnesses:
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