

(No Model.)

A. L. BINGHAM.  
HAY RACK.

No. 350,474.

Patented Oct. 12, 1886.

FIG. I -

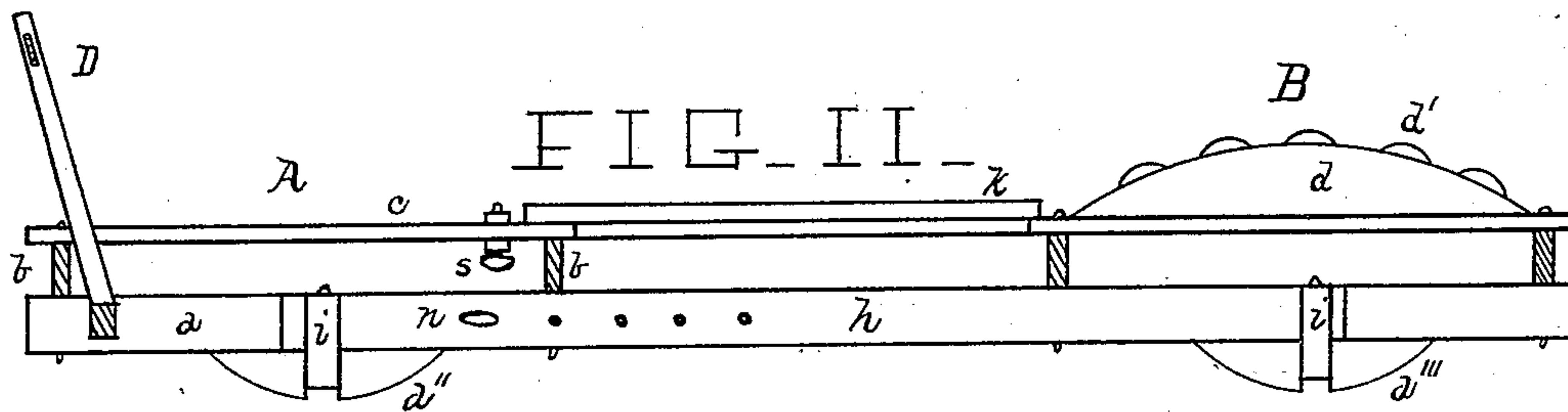
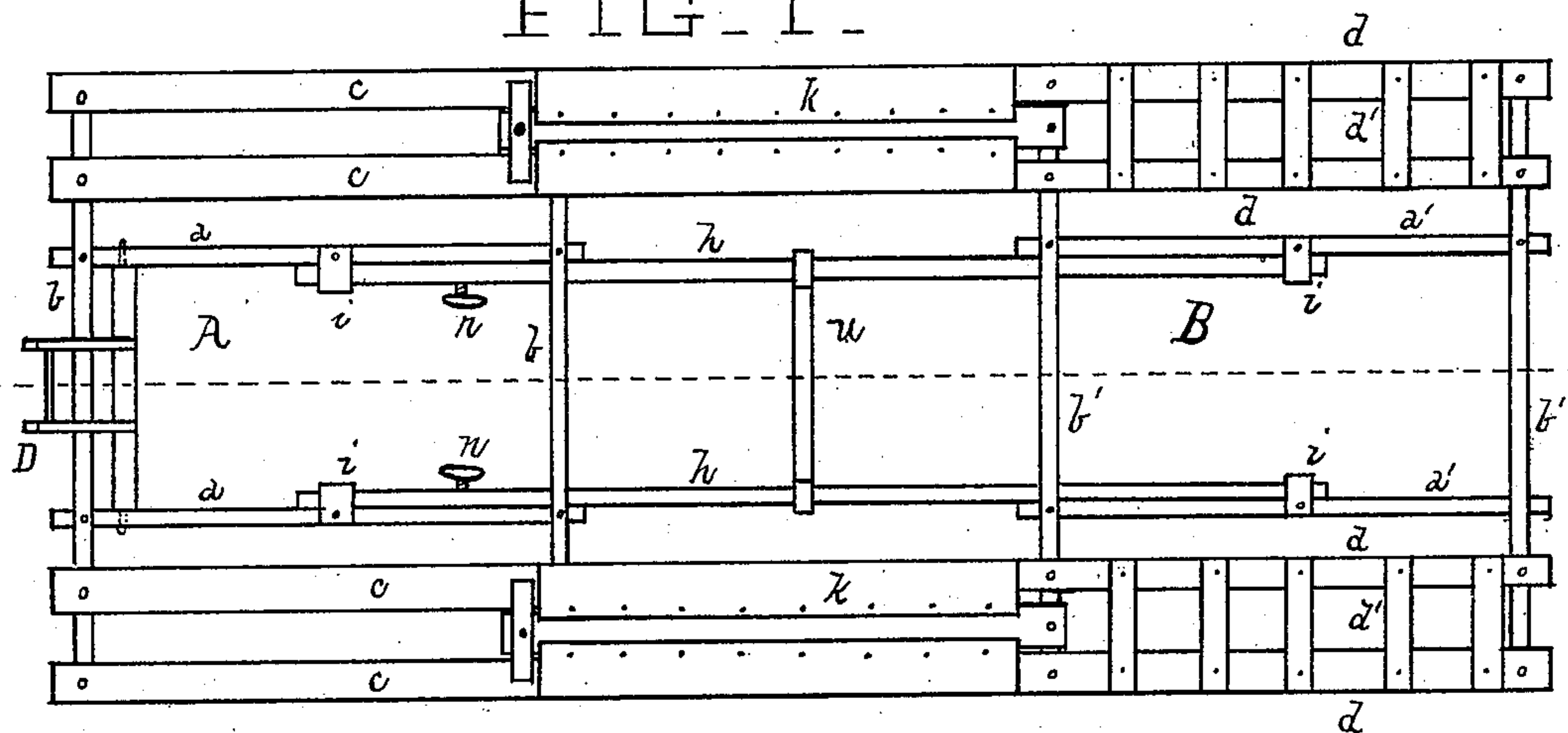
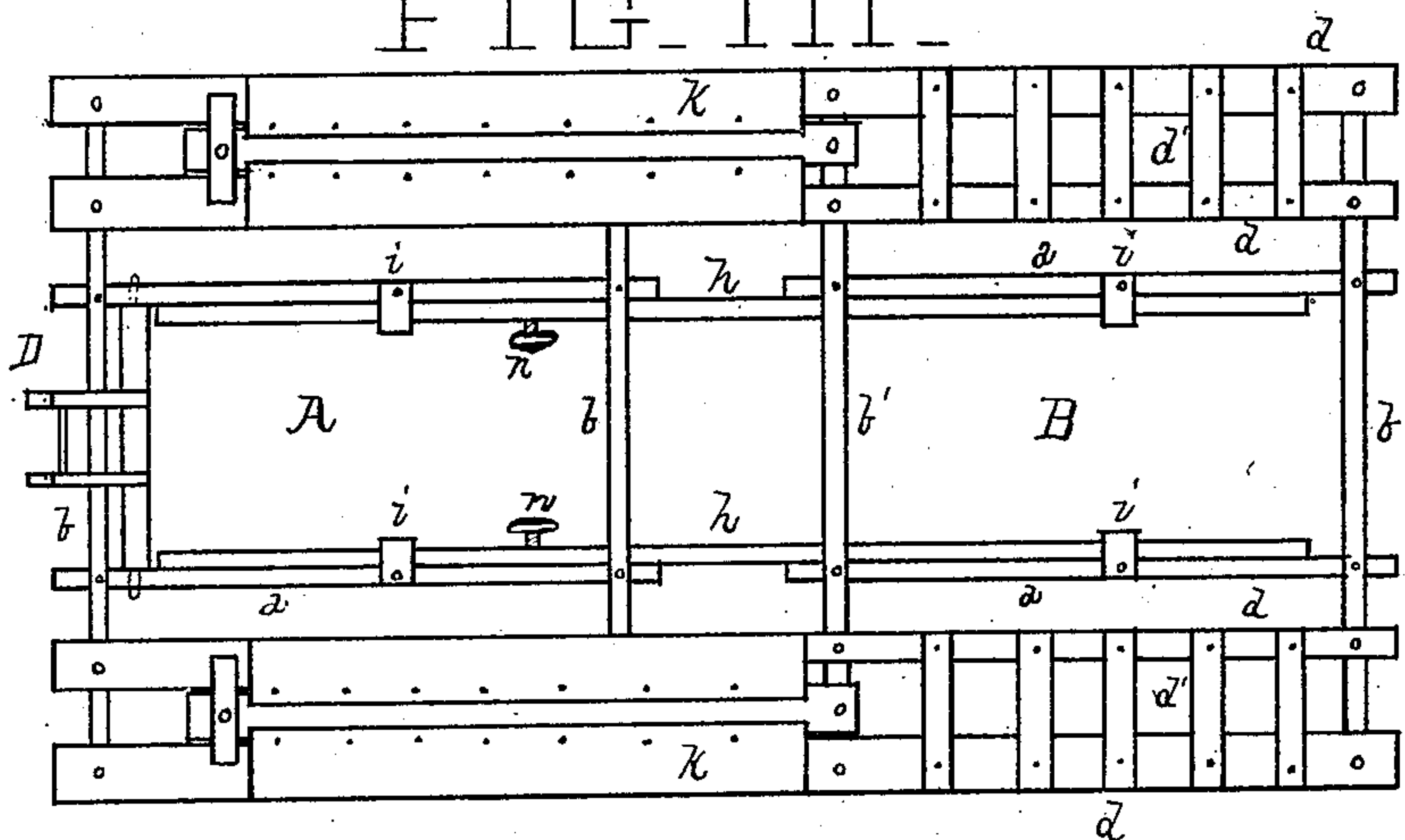


FIG. III -



Witnesses.

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# UNITED STATES PATENT OFFICE.

ALBERT L. BINGHAM, OF ELYRIA, OHIO.

## HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 350,474, dated October 12, 1886.

Application filed May 15, 1886. Serial No. 202,342. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT L. BINGHAM, a citizen of the United States, residing at Elyria, in the county of Lorain and State of Ohio, have  
5 invented a new and useful Improvement in Hay-Racks, of which the following is a specification.

My invention relates to improvements in hay-racks made in sections and adjustable as  
10 to length.

The object of my invention is to provide such a rack as can be easily adjusted as to length, will permit of the wagon being turned short, and can be separated into sections for removal  
15 or storage. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure I is a plan view of my invention extended. Fig. II is a sectional view of Fig. I in  
20 the dotted line *x x*. Fig. III is another plan view of my invention partially closed.

Similar letters refer to similar parts throughout the several views.

A represents the front section. B represents  
25 the rear section.

*a a* represent side pieces of the front section, which are supported by blocks attached to same and resting on the bolsters of the wagon.

The block to the front side pieces in Fig. II is represented by *a''*. This block is rigidly secured to the side piece by means of a band of iron and bolts. Near and across the ends of these side pieces are placed and securely bolted cross-pieces of timber *b b*, of suitable size  
35 and of proper length for the width of the rack, and near the ends of these and securely fastened are the side boards or strips, *c c c c*. Near the front end of the rack may be placed a ladder or stake, D.

40 In the rear section the side pieces are represented by *a' a'*, the cross-pieces by *b' b'*, and the supporting-block by *a'''*.

*d d* represent the side pieces of wheel-houses on the rear section, so constructed as to reach  
45 from one cross-piece to the other, and rounded or oval on top. There are two of these pieces to each wheel-house, and the upper edges are connected by slats *d' d'*, to brace same, and also prevent the load from pressing through the  
50 space between them onto the rear wheels of the wagon. The form of the pieces *d d* is

such as to give them great strength in supporting loads.

*h h* represent two connecting-bars extending from one section to the other inside of the side  
55 pieces of each section and immediately under the rear cross-piece of the front section and the front cross-piece of the rear section, and sliding through the clips *i i i i*, attached to each section. These bars are of sufficient length  
60 to allow the rack to be extended any desired distance and still connect the sections. These bars may be fastened at any point desired by means of thumb-screws and bolts *n n*, operating  
65 through holes in sides of same. These bars and clips also brace and prevent said sections from tilting.

K K represent adjustable sliding side boards passing under or through a clip on each section, the rear ends of which are secured by a  
70 pin to the rear section, and the front ends of which are provided with an upper and lower cleat or bar, through which a bolt passes and can be fastened by the thumb-nut *s*. This also helps to further brace the rack, and prevents  
75 said boards from rattling when driven without a load.

*u* represents a stirrup or support for holding up the bottom boards when the rack is extended. The blocks or supports *a''* and *a'''* elevate  
80 the side pieces of the sections so far above a line with the bolsters that the side pieces will be out of the way above and not interfere with the turning of the forward wheel around under them in making short turns. The connecting-  
85 bars *h h*, sliding through the clips and at one side of the bed-pieces, with no weight resting on them when the rack is empty, allow and permit the same to be easily closed or extended when the side boards K K are loosened. The side  
90 boards K K are so constructed that no large spaces are left between them and the connecting-bars *h h*, and also form the outside support for the load when fully extended, and hay and grain in the sheaf will not fall through said  
95 spaces. Further, the whole is so constructed that all parts of the rack remain at the same width at whatever point it is extended, and can be easily taken apart, when desired so to do, for storage or other purposes.

100 Having fully explained the operation of my invention, what I claim as new, and desire to



obtain by Letters Patent of the United States, is—

1. In a hay-rack, the combination of the sections A and B, provided with the supports  $a''$  and  $a'''$ , respectively, and connected with each other by the separate detached and adjustable bars  $h h$ , so constructed as to slide inside of the side pieces,  $a a$  and  $a' a'$ , of each section, respectively, and independently of each other, all as above set forth, and substantially as described.
2. In combination with the sections A and

B, the side boards K K, each of sufficient width to extend from the outside edge of the sections to the inside edge of the inner side board,  $c$ , and provided with a thumb-screw,  $s$ , and cleats for securing the front ends at any desired point, all as above set forth, and substantially as described.

ALBERT L. BINGHAM.

Witnesses:

JOHN BLANCHARD,  
E. C. MANTER.