No. 703,275. Patented June 24, 1902.

R. W. JORRES.

COUNTING APPARATUS.

(Application filed Nov. 15, 1901.)

(No Model.)

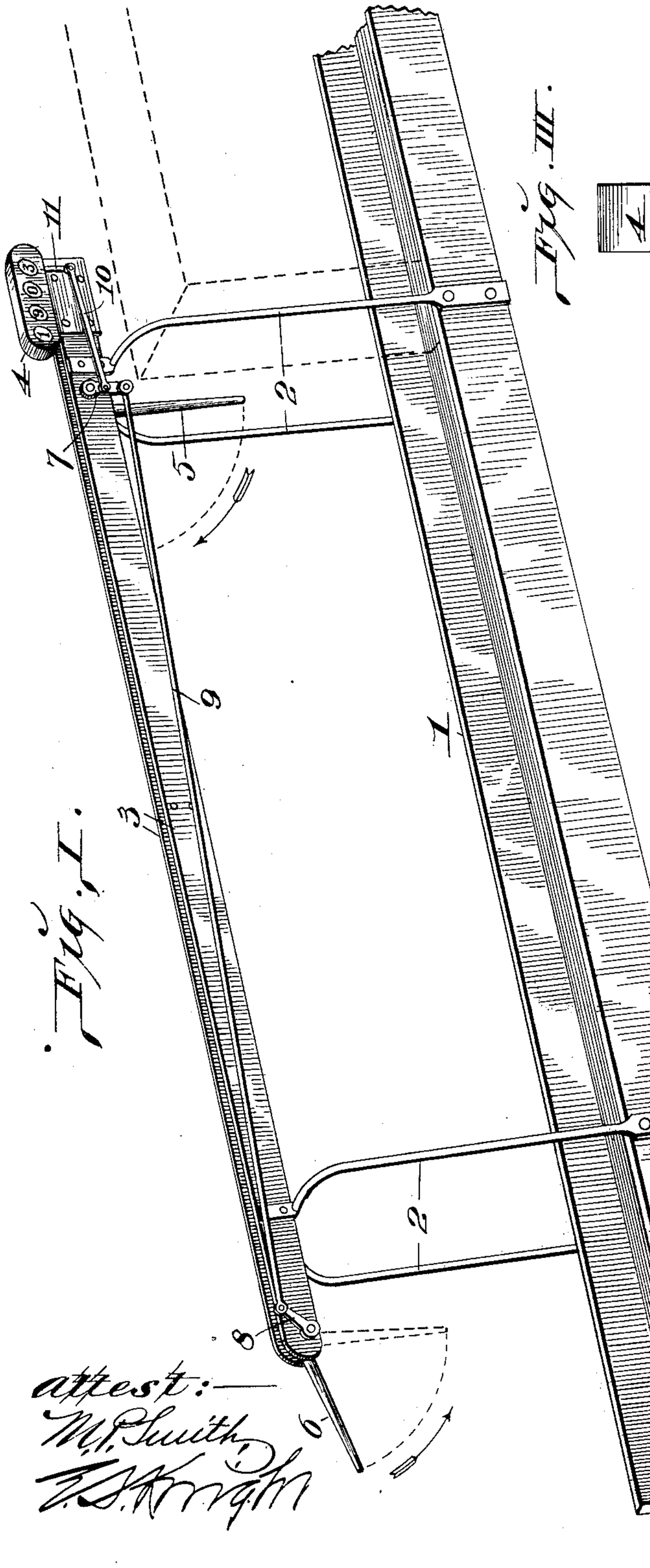

Fig. 1.

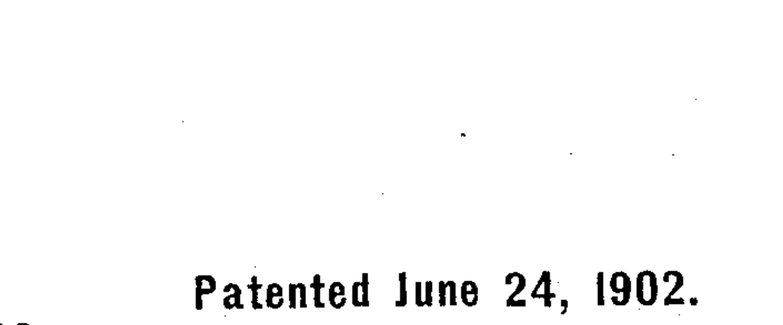

Fig. 6.

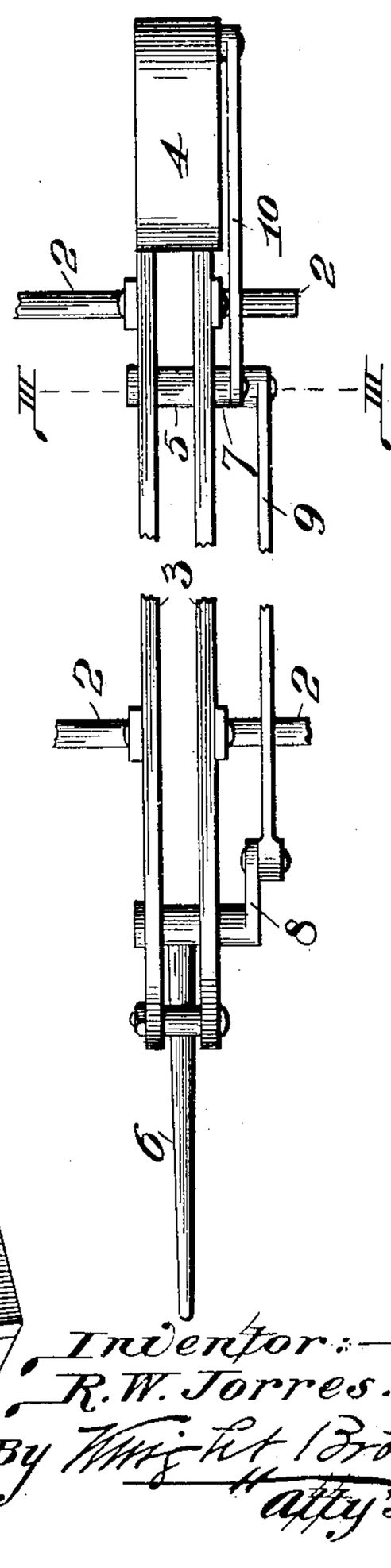

Fig. 2.

Fig. 3.

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UNITED STATES PATENT OFFICE.

RALPH W. JORRES, OF ST. LOUIS, MISSOURI.

COUNTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 703,275, dated June 24, 1902.

Application filed November 15, 1901. Serial No. 82,357. (No model.)

To all whom it may concern:

Be it known that I, RALPH W. JORRES, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Block-Ice-Counting Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an apparatus adapted for use in counting and registering blocks of ice as they move through a chute or gangway, the construction of the device being such that each time a block of ice passes away from the counting apparatus the portion of the apparatus which actuates the register is automatically moved into operative position to be ready to receive the next succeeding block of ice. By this arrangement the receiving and discharge portions of the apparatus are necessarily required to operate in unison with each other to permit the passage of the blocks of ice, and therefore it is rendered impossible for the operators using the apparatus to fraudulently manipulate the parts in such manner as to render the apparatus inoperative by retaining any parts from operation.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claim.

Figure I is a perspective view of my counting apparatus shown applied to an ice-chute. Fig. II is a top or plan view of the apparatus, partly broken out. Fig. III is a vertical cross-sectional view taken on line III III, Fig. II.

1 designates a chute through which the blocks of ice (shown by dotted lines in Fig. I) are passed and on which the counting apparatus is mounted.

2 designates uprights fixed to the chute 1 and serving as supports for a pair of parallel bars 3, located at an elevation above said chute. The uprights 2 straddle the chute 1 in pairs, so as provide a passage-way between them and permit the movement of the blocks of ice through the chute.

4 designates a register that may be of any desirable form or construction.

5 designates a trigger-finger pivotally mounted on bearings seated in the parallel bars 3 at the receiving end of the counting apparatus and arranged in a suspended position to swing beneath said parallel bars in the path of the blocks of ice that move through the chute 1.

6 is a tripper-finger swingingly mounted on bearings seated in the parallel bars at the discharge end of the apparatus, so as to swing in the path of travel of the blocks of ice passing through the chute 1. Attached to one of the bearings of the trigger-finger 5 is a crank-arm 7, and attached to one of the bearings of the tripper-finger 6 is a crank-arm 8, the said crank-arms 7 and 8 being joined to each other by a connecting-rod 9, so united to said crank-arms as to cause the tripper-finger 6 to be swung downwardly into the position seen in dotted lines, Fig. I, when the trigger-finger 5 is moved upwardly on the passage of a block of ice past said trigger-finger. The register 4 is operated each time that the trigger-finger 5 is struck by a block of ice and moved upwardly, such operation being provided for by a link 10, pivotally connected to the crank-arm 7 and joined to the register-lever 11, which operates the mechanism of the register.

As will be seen from the foregoing description, each block of ice that passes the trigger-finger 5 moves said finger upwardly to permit movement of the block of ice through the chute and by which movement the register is operated, as explained, and the tripper-finger is moved downwardly ready to receive the block of ice which is approaching it and strikes it to effect downward movement of the trigger-finger for the engagement of the next succeeding block of ice. By this positioning of the parts and the connection between them it is rendered imperative that the trigger-finger be always returned into the path of travel of the blocks of ice as the tripper-finger is moved out of the path of travel, and any attempt on the part of workmen or others to hold either of the fingers from movement in elevated position for the purpose of permitting free passage of ice through the chute without counting is effectually prohibited, owing to the other fingers being thereby

lowered into the ice passage-way to serve as a barrier against the passage of the ice without registration.

I claim as my invention—

In a block-ice-counting apparatus, the combination with a chute, of a pair of fingers swingingly suspended above said chute and a connection between said fingers adapted to cause either of them to be moved in a reverse direction when the other finger is raised or lowered, whereby one or the other of the fingers forms a barrier against the passage of ice through said chute, and a register having connection with said fingers, substantially as described.

RALPH W. JORRES.

In presence of—
E. S. KNIGHT,
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