

(No Model.)

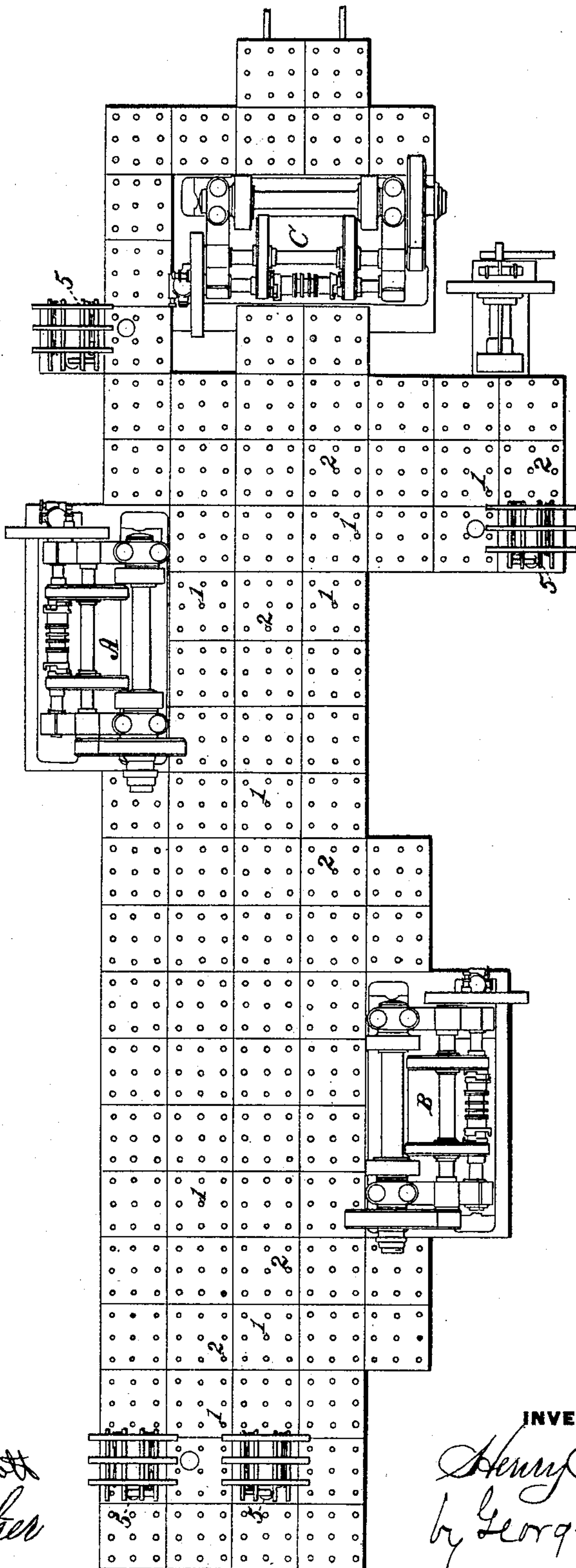
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H. AIKEN.  
MILL APPLIANCE.

No. 415,401.

Patented Nov. 19, 1889.

FIG. 1.



WITNESSES:

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J. C. Gaither

INVENTOR,

Henry Aiken  
by George H. Christy  
Att'y.

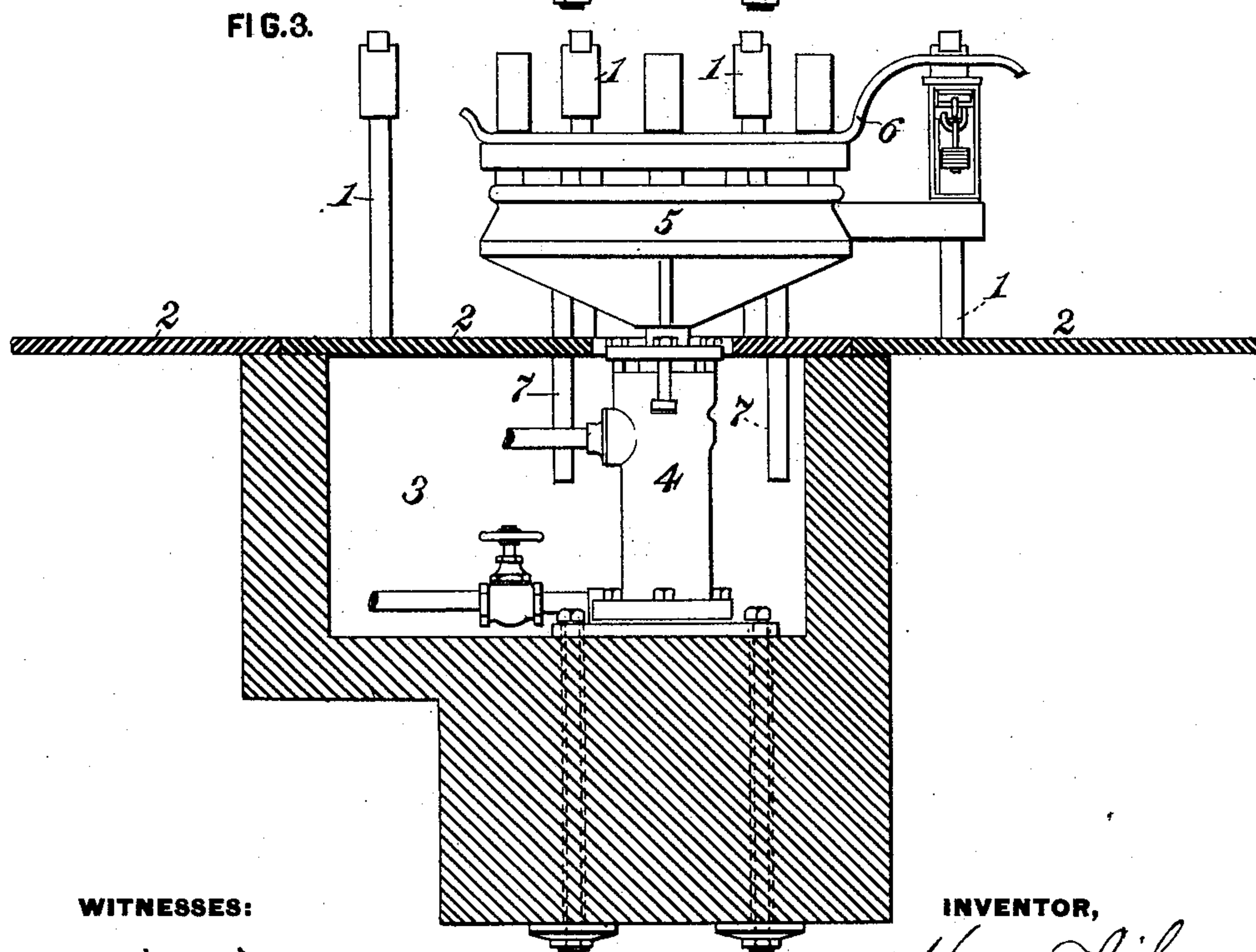
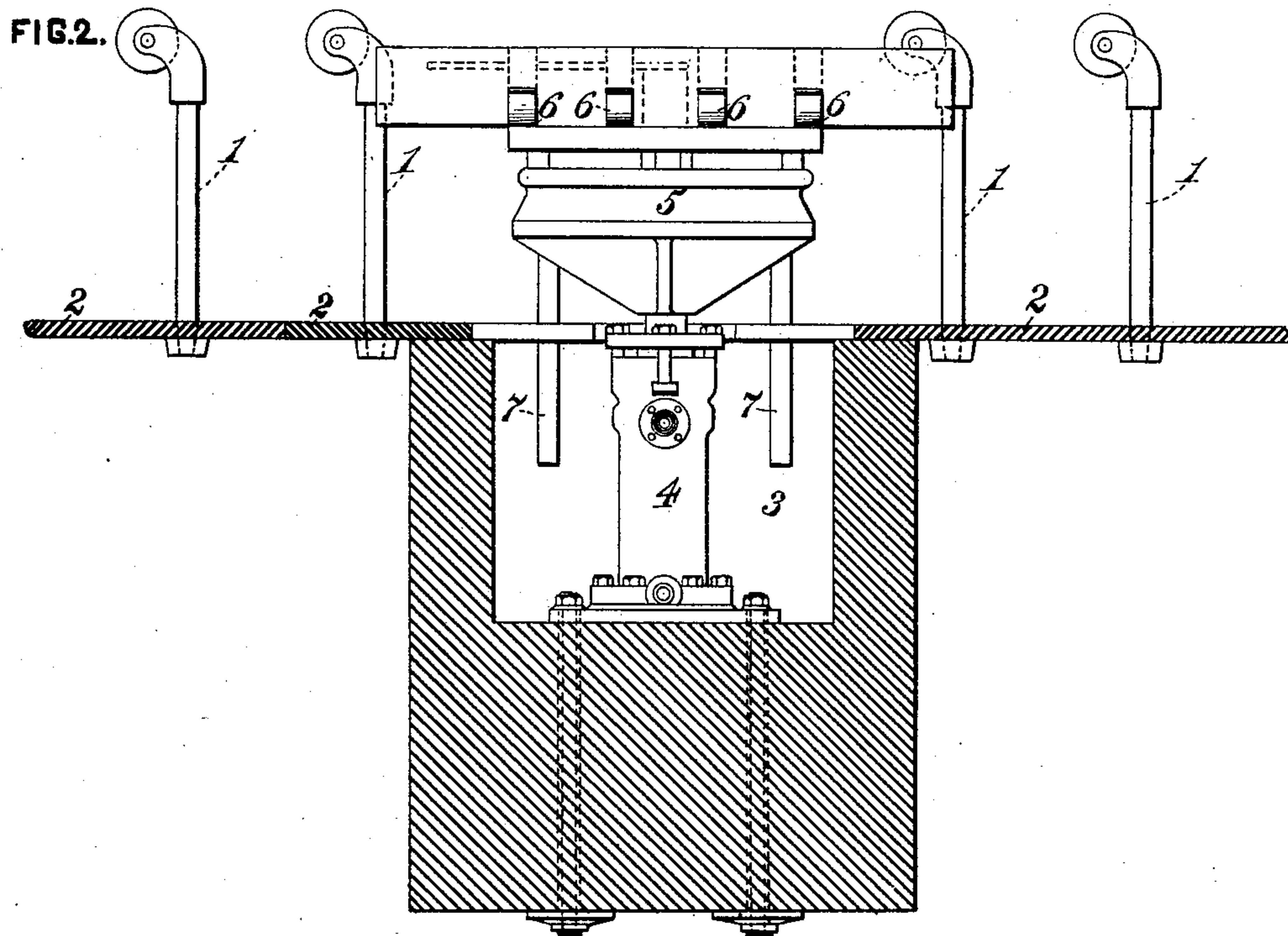
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WITNESSES:

*Daniel S. Wolcott*  
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INVENTOR,

*Henry Aiken*  
*by George H. Christy*  
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# UNITED STATES PATENT OFFICE.

HENRY AIKEN, OF HOMESTEAD, ASSIGNOR OF ONE-HALF TO DAVID B. OLIVER, OF PITTSBURG, PENNSYLVANIA.

## MILL APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 415,401, dated November 19, 1889.

Application filed October 9, 1888. Serial No. 287,643. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY AIKEN, a citizen of the United States, residing at Homestead, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Mill Appliances, of which improvements the following is a specification.

In rolling-mill practice it is customary to weigh the articles operated on at various stages of their manufacture and also at the end of the finishing operation. This practice necessitates the employment of a large number of laborers to transfer the articles to and from the scales, especially when the articles to be weighed—such as slabs and plates—are large and cumbersome.

The object of the invention described herein is to provide suitable means—such as rollers or casters—whereby the slabs, plates, &c., may be easily transferred from one mechanism to another of the plant, in combination with scales arranged in such relation to the rollers that the articles may be transferred to the platform of the scales by a movement of either the scales or rollers.

In general terms the invention consists in the construction and combination of devices or elements, all as more fully hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a plan view of a portion of a rolling-mill plant having my invention embodied therein. Fig. 2 is sectional view, the scales and its supporting mechanism being shown in elevation; and Fig. 3 is a similar view.

In the practice of my invention I provide suitable rollers or casters 1, arranged on the floor-plates 2 of the mill in such relation to the various mechanisms A B, &c., forming a part of the plant that the slabs, plates, or other articles may be easily moved from one mechanism to another. At such places as it may be desirable to arrange the scales a pit 3 is formed below the level of the mill-floor,

and in this pit is arranged a hydraulic or other suitable lift or elevator 4, adapted to raise the scales 5 above the level of the rollers an amount sufficient to transfer the entire weight of the slabs or plates from the rollers to the platform of the scales and to lower the entire scales below said rollers or casters, so as to permit the slabs or plates to pass over the scales.

Any suitable construction or form of scales may be employed, and they may be arranged singly or in pairs, as shown in Fig. 1, at any desired point in the plant.

It will be readily understood that various changes may be made in my invention without a departure from the spirit thereof—as, for example, the scales may be arranged below the level of the rollers or casters and the floor-plates adjacent to the scales may be arranged in a suitable lift or elevator, whereby said floor-plates, with their rollers or casters carrying the slabs or plates to be weighed, can be lowered until the slabs or plates rest upon the platform of the scales and then raised to normal position.

In order to protect the scale-beam and its support from injury, I provide bars 6, attached to the platform of the scales and extending over the scale-beam, as shown in Fig. 3; and in order to steady the scales while being raised and lowered I provide guide-rods 7, attached to the scales and extending down through suitable openings in the floor-plates.

I claim herein as my invention—

In a mill plant, the combination of a series of inverted casters and platform-scales, the platform of which is located normally at a lower level than the rollers of said casters and is vertically movable to a height above the casters, substantially as set forth.

In testimony whereof I have hereunto set my hand.

HENRY AIKEN.

Witnesses:

DARWIN S. WOLCOTT,  
R. H. WHITTLESEY.