

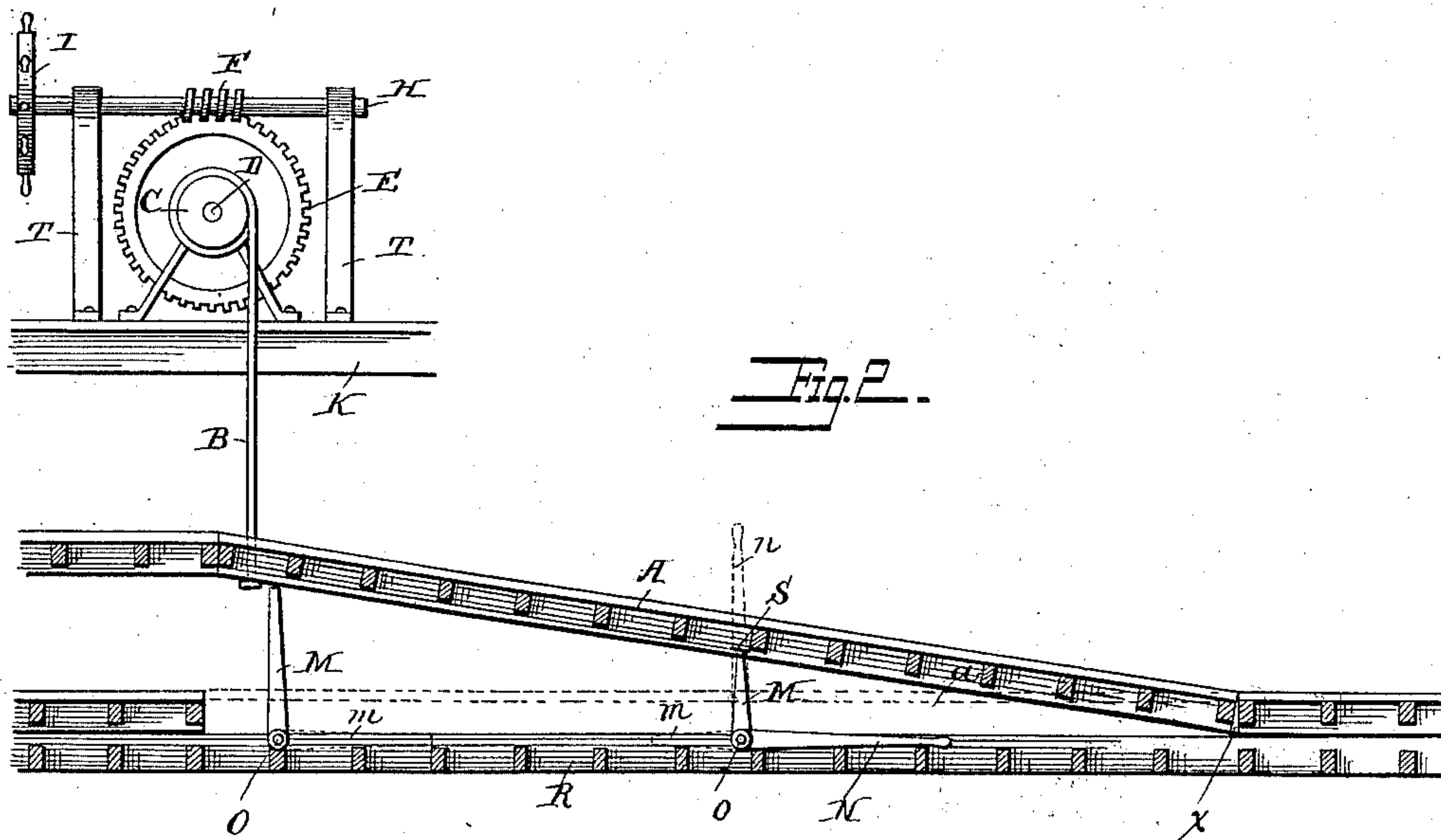
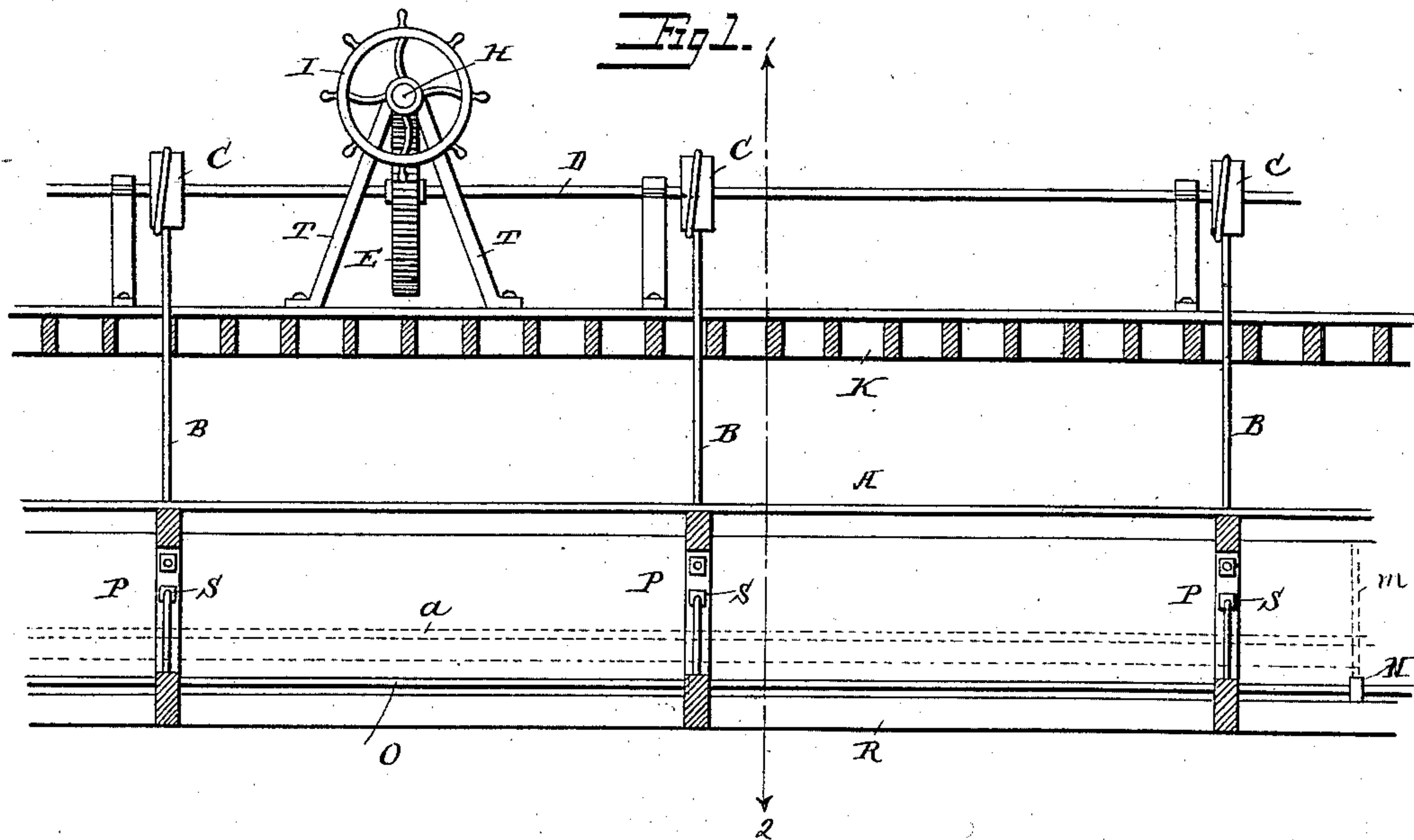
(No Model.)

G. G. ADAMS.

DEVICE FOR RAISING AND LOWERING FLOORS OF THEATERS AND HALLS.

No. 366,290.

Patented July 12, 1887.



Attest:
Jno. B. Hinkley, Jr.
J. S. Barker,

Inventor:
George G. Adams,
by Foster & Freeman
Attys.

UNITED STATES PATENT OFFICE.

GEORGE G. ADAMS, OF LAWRENCE, MASSACHUSETTS.

DEVICE FOR RAISING AND LOWERING FLOORS OF THEATERS AND HALLS.

SPECIFICATION forming part of Letters Patent No. 366,290, dated July 12, 1887.

Application filed May 8, 1886. Serial No. 201,619. (No model.)

To all whom it may concern:

Be it known that I, GEORGE G. ADAMS, a citizen of the United States, residing at Lawrence, in the county of Essex and State of Massachusetts, have invented certain new and useful improvements in tipping floors for theaters or halls and for the device for lowering and raising said floor and maintaining the floor in a raised position; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to an inclined floor for theaters or halls and to the machinery for raising and lowering such floor and maintaining it in an inclined position. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the mechanism across a hall-floor, also showing the floor above the hall on which the raising and lowering mechanism is mounted. Fig. 2 is a section of the line 1 2, Fig. 1.

Same letters of reference indicate like parts in the drawings.

On a floor, K, above the main floor A of the hall, is mounted a shaft, D, turning in suitable bearings and carrying at proper intervals drums C C, on which are wound wire or other ropes B, attached to the movable end of the floor A. This floor is arranged to be inclined as a whole, turning on a suitable bearing or bearings, *x*, along a line toward the stage or platform, as indicated in Fig. 2, such bearing being shown as being upon the ceiling R of the story below the hall, on which the floor rests throughout its whole extent when lowered, as indicated by dotted lines *a a*, Figs. 1 and 2. Secured to shaft D is a worm or other toothed wheel, E, with which gears a worm, F, or driving-pinion on a shaft, H, transverse to shaft D, and supported in bearings T.

I is a hand-wheel by which shaft H is turned.

O O are shafts running from side to side of the hall beneath floor A, and carrying sup-

ports or standards M M. These shafts are provided with handles N, by which the shafts and supports M may be rocked from the position shown in dotted lines to that in full lines, Fig. 2. The standards M are adapted to support the floor when in an inclined position, and when so used metallic plates S, carried by longitudinal sills P of the floor, rest upon the upper ends of the standards. It will be understood that standards or supports of different lengths will be used as it is desired to incline the floor more or less.

By means of the mechanism described the floor of an entire hall may be given any desired inclination; or, if preferred, the floor may be divided into several sections, each of which may be provided with my invention, and all or any one or more of the sections may be inclined, as desired.

I am aware that prior to my invention tipping floors have been made or used, being raised, however, by jack-screws or hydraulics in the cellar of the building, and pushing the floor up from below. I am also aware that theaters have been provided with movable stages having two or more floors arranged one above the other, which movable stage is adapted to be raised or lowered relatively to the main stage, so as to bring one or the other of its floors on a level therewith, and such earlier devices I disclaim; but

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

1. The combination of a movable floor for a hall, having a bearing along one edge, and mechanism, substantially as described, arranged above the floor for tipping the floor on said bearing to give it an incline, substantially as described.

2. The combination, with the ceiling R, of a movable floor resting thereon and having a bearing, *x*, about which it is adapted to turn, and mechanism, substantially as described, arranged above said floor for elevating the end of the floor opposite the said bearing, substantially as described.

3. The combination, with a movable floor having a bearing, as at *x*, along one side, about which it is adapted to be turned, of mechan-

ism for turning said floor on said bearing to give it an inclined position, and supports for maintaining the floor in an inclined position, substantially as described.

- 5 4. The combination of a tipping floor, a shaft carrying drums arranged above the floor, ropes attached to the floor and passing around the drums, rocking shafts O below the floor, and supports carried by shafts O for main-

taining the floor in an inclined position, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE G. ADAMS.

Witnesses:

BENJAMIN F. CHADBOURNE,
LANGDON E. LOCKE.