

(No Model.)

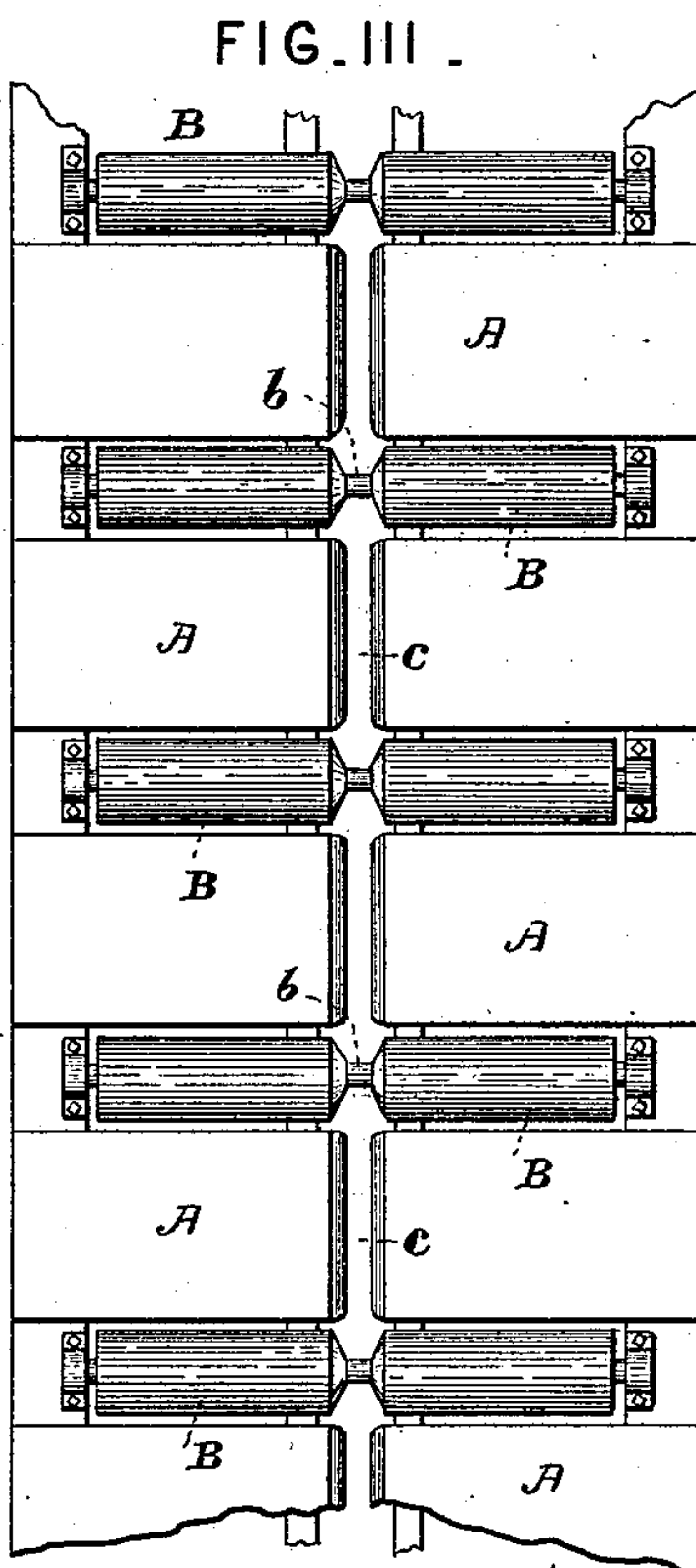
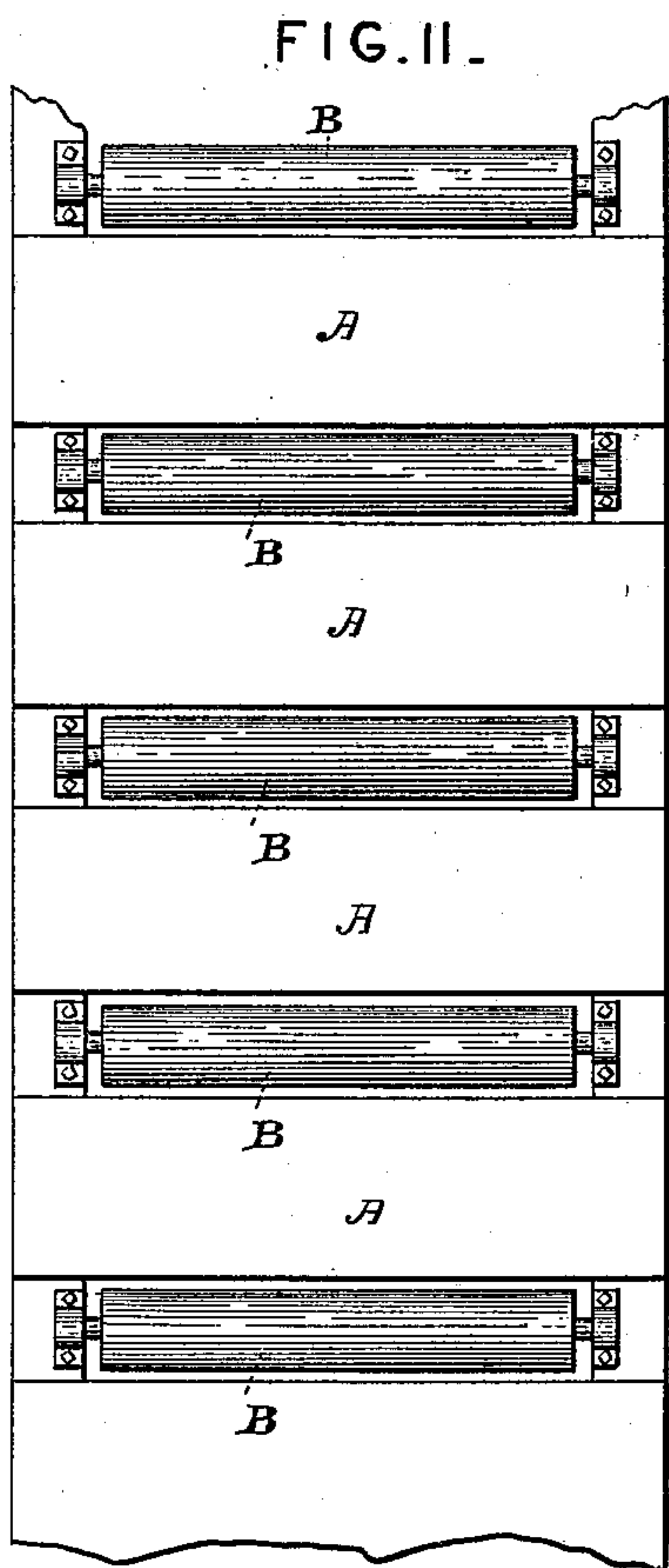
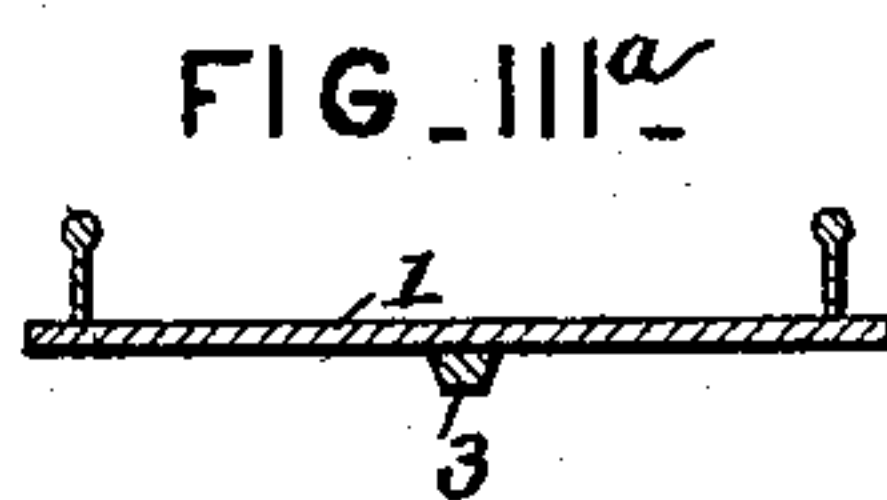
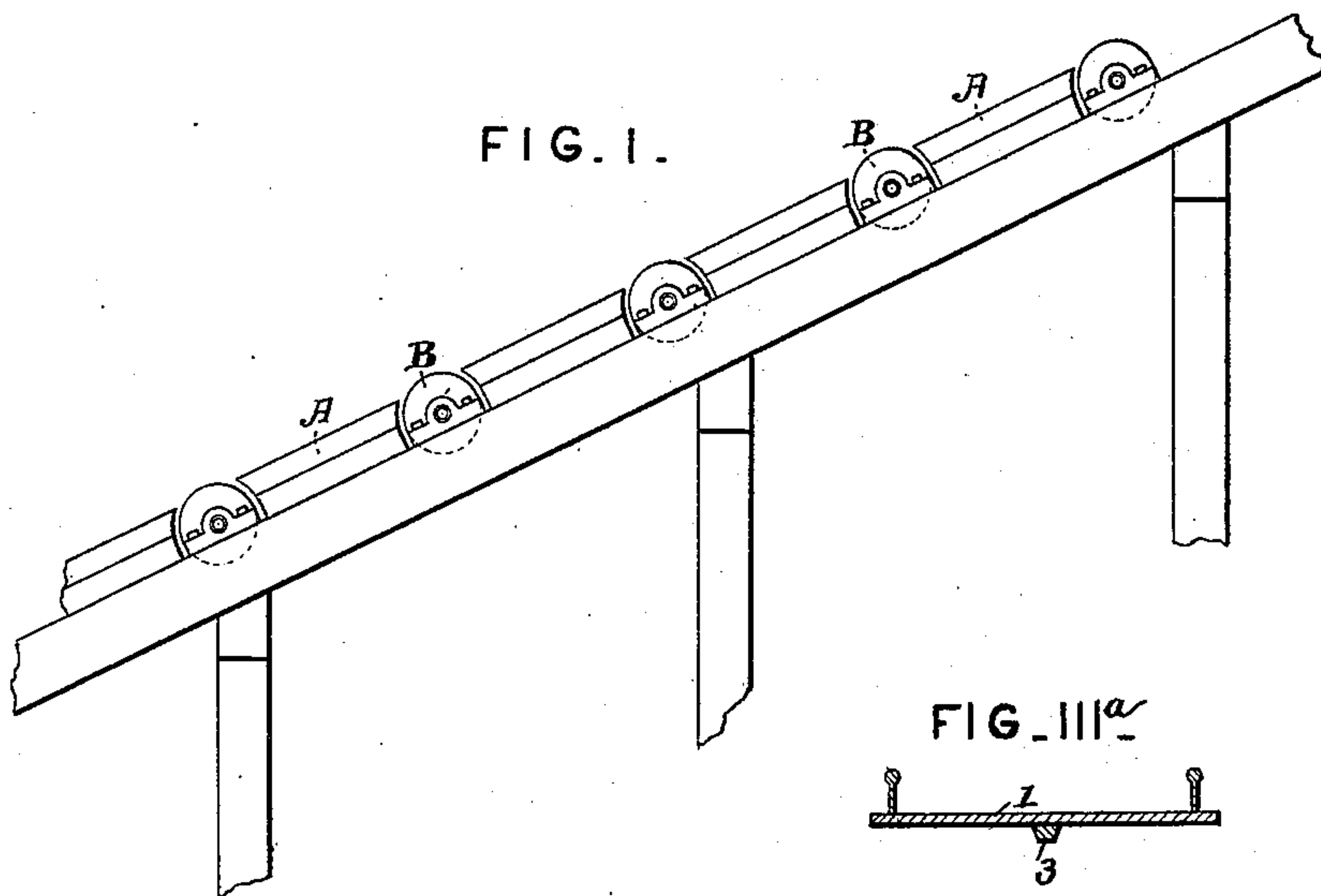
2 Sheets—Sheet 1.

L. H. ROGERS.

TOBOGGAN SLIDE.

No. 363,914.

Patented May 31, 1887.



Attest.

Geo. T. Smallwood.
Philip H. Howard.

Inventor:
Lebbeus H. Rogers by
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his attorney.

(No Model.)

2 Sheets—Sheet 2.

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FIG. IV.

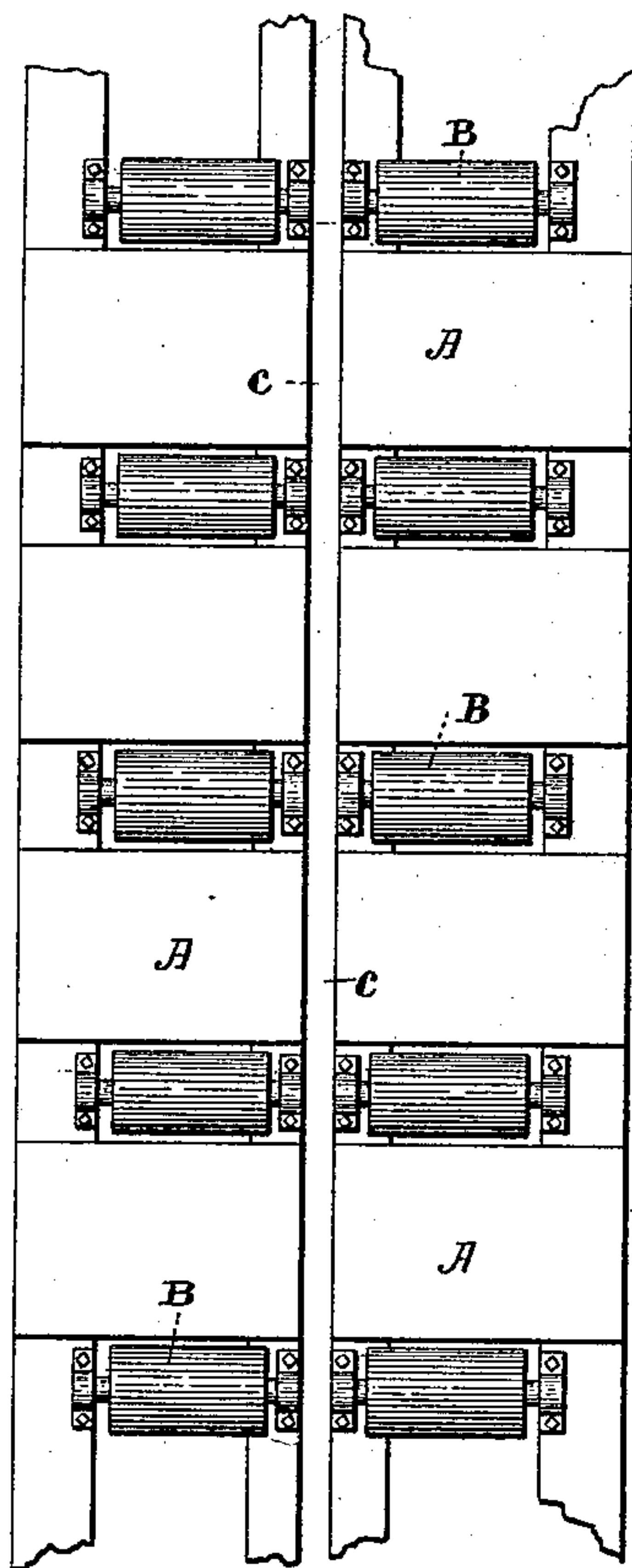


FIG. V.

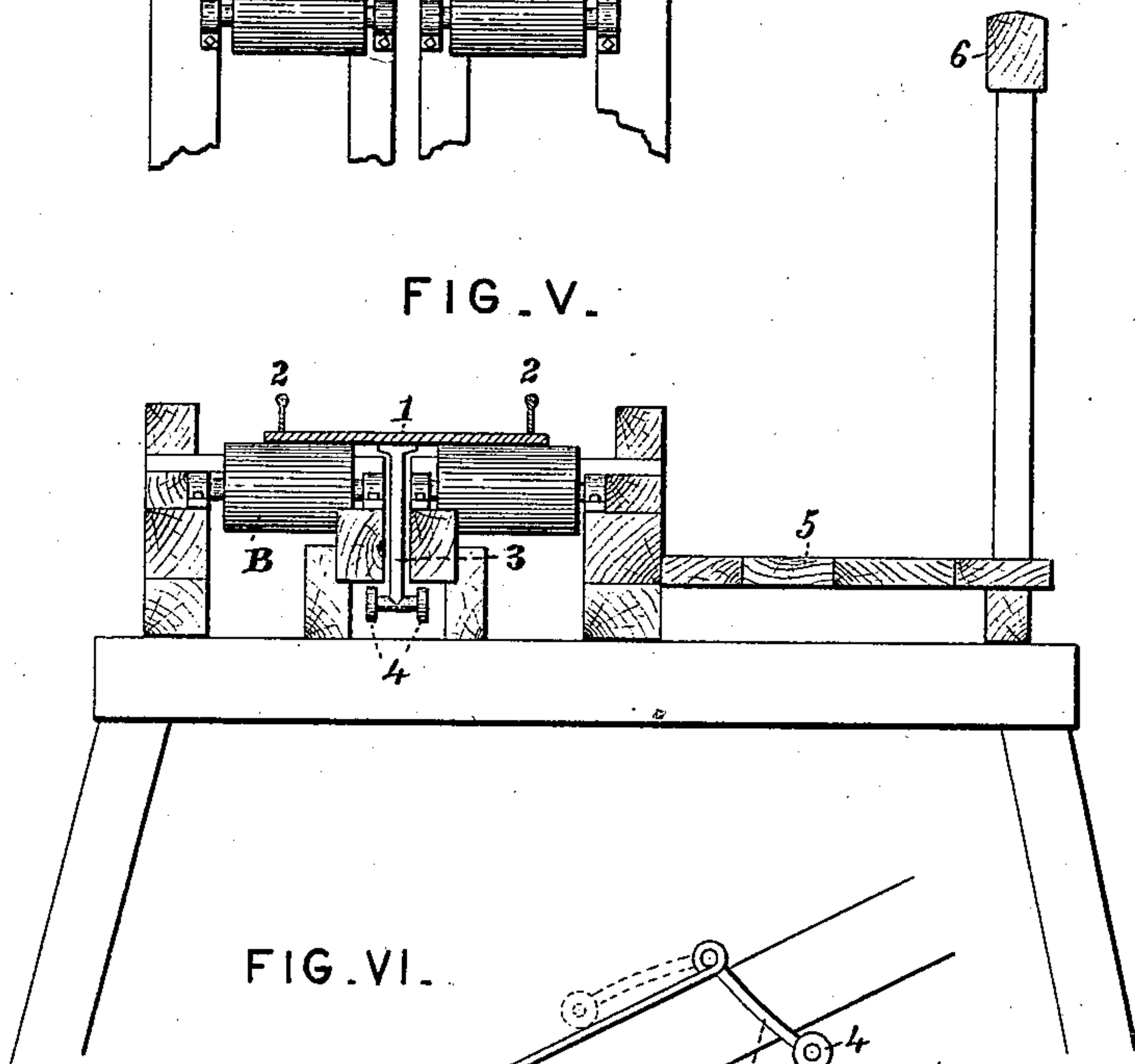
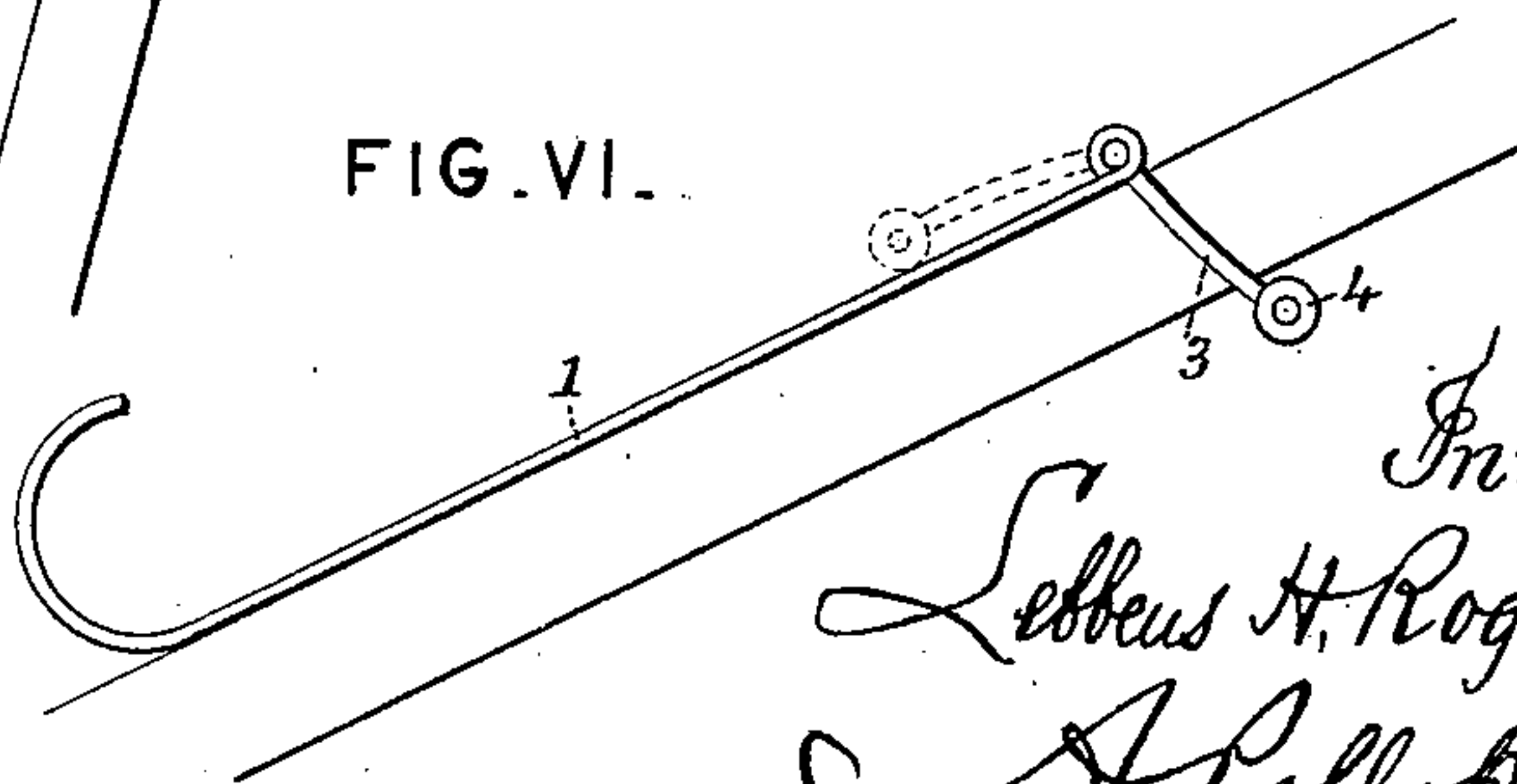


FIG. VI.



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UNITED STATES PATENT OFFICE.

LEBBEUS H. ROGERS, OF NEW YORK, N. Y.

TOBOGGAN-SLIDE.

SPECIFICATION forming part of Letters Patent No. 363,914, dated May 31, 1887.

Application filed February 4, 1887. Serial No. 226,533. (No model.)

To all whom it may concern:

Be it known that I, LEBBEUS H. ROGERS, of New York city, in the county and State of New York, have invented a new and useful
5 Improvement in Toboggan-Slides, which improvement is fully set forth in the following specification.

My invention relates to toboggan-roller slides, and provides means for lessening the
10 friction between the track and the sled or toboggan, and thereby giving to the persons riding the latter a sense of smoothly gliding over the snow or ice.

Hitherto roller-slides have been constructed
15 with a polished track, and the sled has been provided with wheels, rollers, or ball-bearings; but the sensation produced in this manner is found to be a poor substitute for that obtained by tobogganing on the snow.

By means of my invention—imitating as
20 much as possible the large surface embraced by the real toboggan moving over the snow, the evident cause of the smooth gliding—I am enabled to secure a nearer approach to the de-
25 sired sensation and overcome the irregular motion and the roughness met with in the usual form of roller-slides.

I construct the slide with the necessary rise, so that the toboggan shall readily attain the
30 desired speed. The track is made of smoothly-planed boards, with rollers placed at suitable distances apart and journaled below the surface, so that the top or periphery of each roller shall protrude only so far that the bending of
35 the toboggan under the weight of the riders shall slightly cause it to come in contact with the track between the rollers.

For the purpose of preventing the toboggan from leaving the track, I may construct the
40 rollers in either of two forms which will satisfactorily accomplish the desired end. In the one case I form a recess in each roller by turning it down to a smaller diameter, and construct the toboggan with a lug or guide to
45 travel in the recessed portion of the roller; or, in the other case, I divide the roller into two or more separate parts, journaling each independently, and practically making a double track. In this instance I construct the tobog-
50 gan with a longer guide-arm capable of descending into the slot between the two rollers,

and make projections on the said guide-arm provided with anti-friction rollers, which effectually prevent the toboggan from being raised off the track should it encounter an obstacle. 55

In the accompanying drawings, which form part of this specification, Figure I is a side view of a portion of the track with rollers; Fig. II, a plan view thereof; Figs. III and IV, similar views showing different forms of roll- 60
ers; Fig. III^A, a cross-section of a toboggan; Fig. V, a vertical cross-section of the form shown in Fig. IV, and Fig. VI a detail in longitudinal section.

The surface A of the slide is or may be 65 formed of polished wood, and is inclined at the proper angle to give the desired speed to the toboggan. At suitable intervals—say eight or ten inches apart—are rollers B, extending across the slide at right angles thereto and 70
journaled at their ends in bearings, in such manner that the surface of the roller will project slightly (one-eighth of an inch is sufficient) above the surface of the slide A.

As shown in Fig. III, the rollers B are 75 turned down to a smaller diameter at *b*, and the track is provided with a corresponding groove, *c*. The toboggan 1 (see Fig. III^A) used on this track may be provided with a depending lug or flange, 3, which will travel in this 80
groove and prevent the toboggan from swerving to either side.

I do not restrict myself to one recess, for it is evident that more than one may be turned in each roller and the toboggan provided with 85
a like number of lugs.

Fig. IV represents the track with divided rollers, and Fig. V a section thereof, showing the toboggan 1 provided with hand-rails 2, and with the guide-arm 3, having a cross-piece 90
carrying rollers 4, to prevent it from rising in case of accidents. The foot-walk 5 is shown provided with a railing, 6.

It is not necessary that the cross-piece and rollers on the guide-arm should be used, be- 95
cause their office is simply to keep the guide-arm from rising, and the cases where there is danger of it doing so are not frequent, while it is often the case that the toboggan is caused to deviate from a straight line, which the presence 100
of the guide will effectually prevent.

It is desirable that the toboggan should slide

from one roller to the other without jerking, and therefore it should bear to some extent upon the track. In order that the depending guide-arm 3 may not interfere with dragging the toboggan back to the starting-point, it may be hinged, as shown in Fig. VI, and in returning it may be folded over on the toboggan, as indicated by dotted lines.

Having now fully described my said invention, what I claim, and desire to secure by Letters Patent, is—

1. A toboggan-slide comprising a smooth-surfaced track and a series of rollers journaled therein to bring their peripheries on or nearly on the plane of the surface of the track, whereby the toboggan in traveling over the slide will bear lightly on the track between the rollers, substantially as described.

2. The combination of an inclined track having a longitudinal slot or groove to form a guideway, and a series of rollers journaled in said track, substantially as described.

3. In a roller-slide, a double track provided with rollers, in combination with a sled or toboggan constructed with a guide-arm capable of traveling between the said rollers, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

LEBBEUS H. ROGERS.

Witnesses:

A. B. FERNALD,
HOWARD WHITFIELD.