

(No Model.)

A. WITSCHOLD.
GRAVITY RAILWAY.

No. 525,882.

Patented Sept. 11, 1894.

FIG. 1.

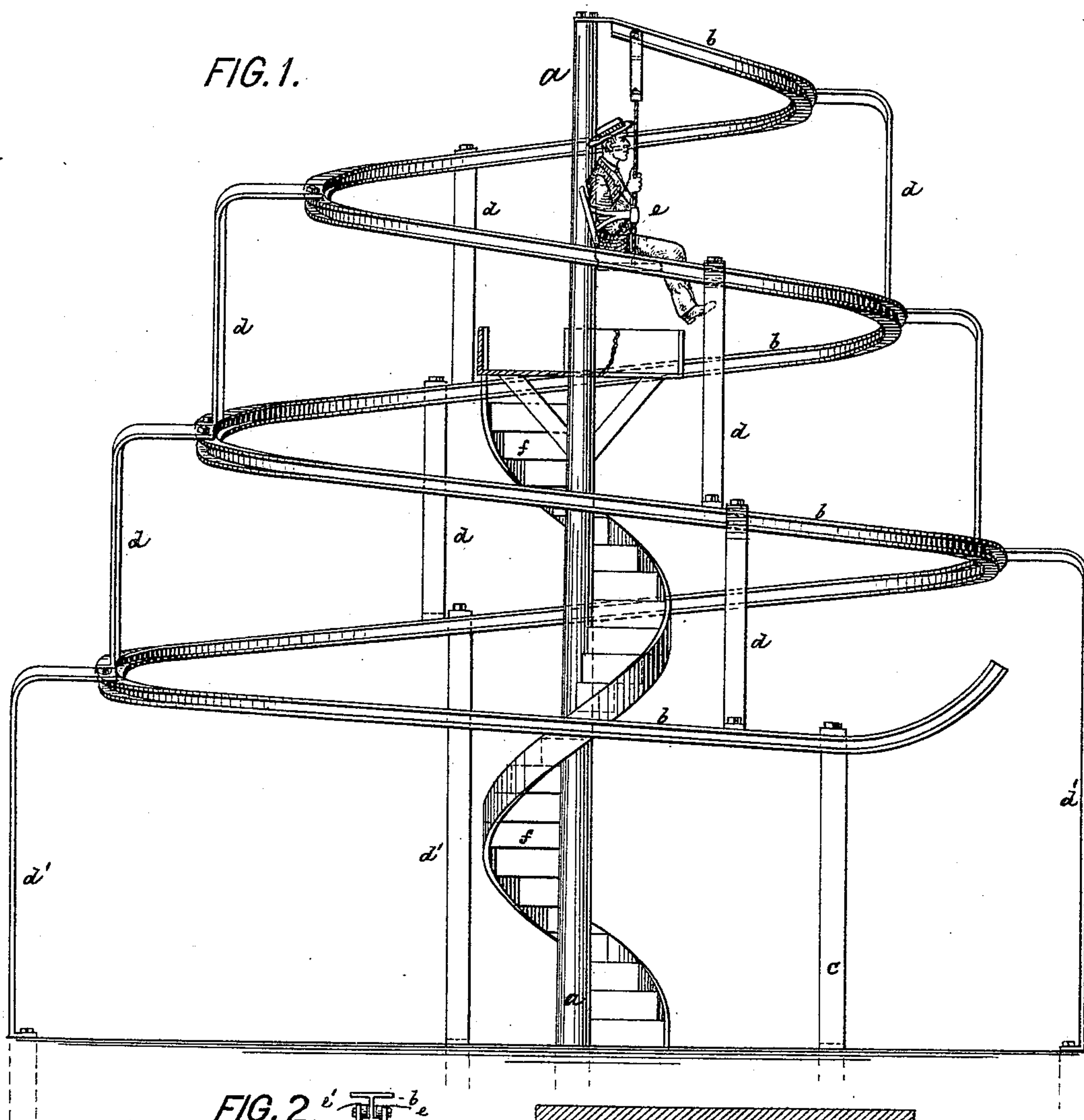


FIG. 2.

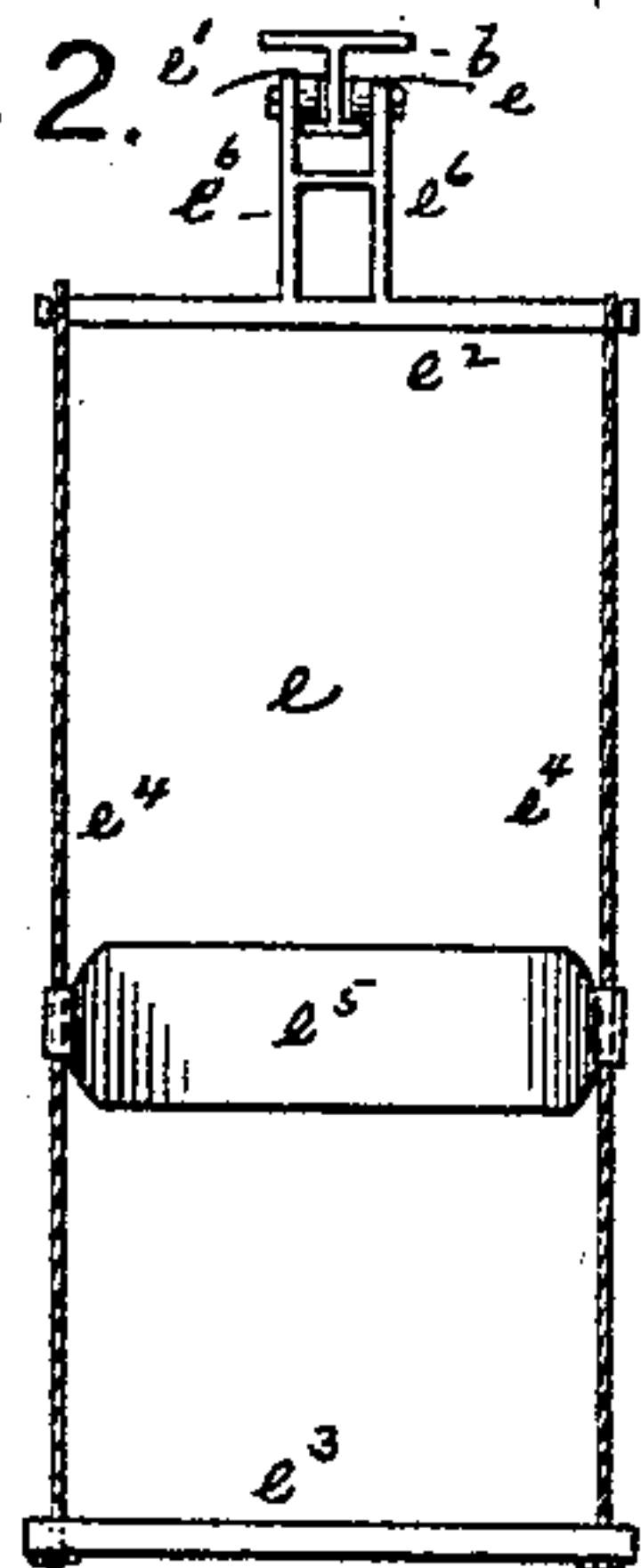
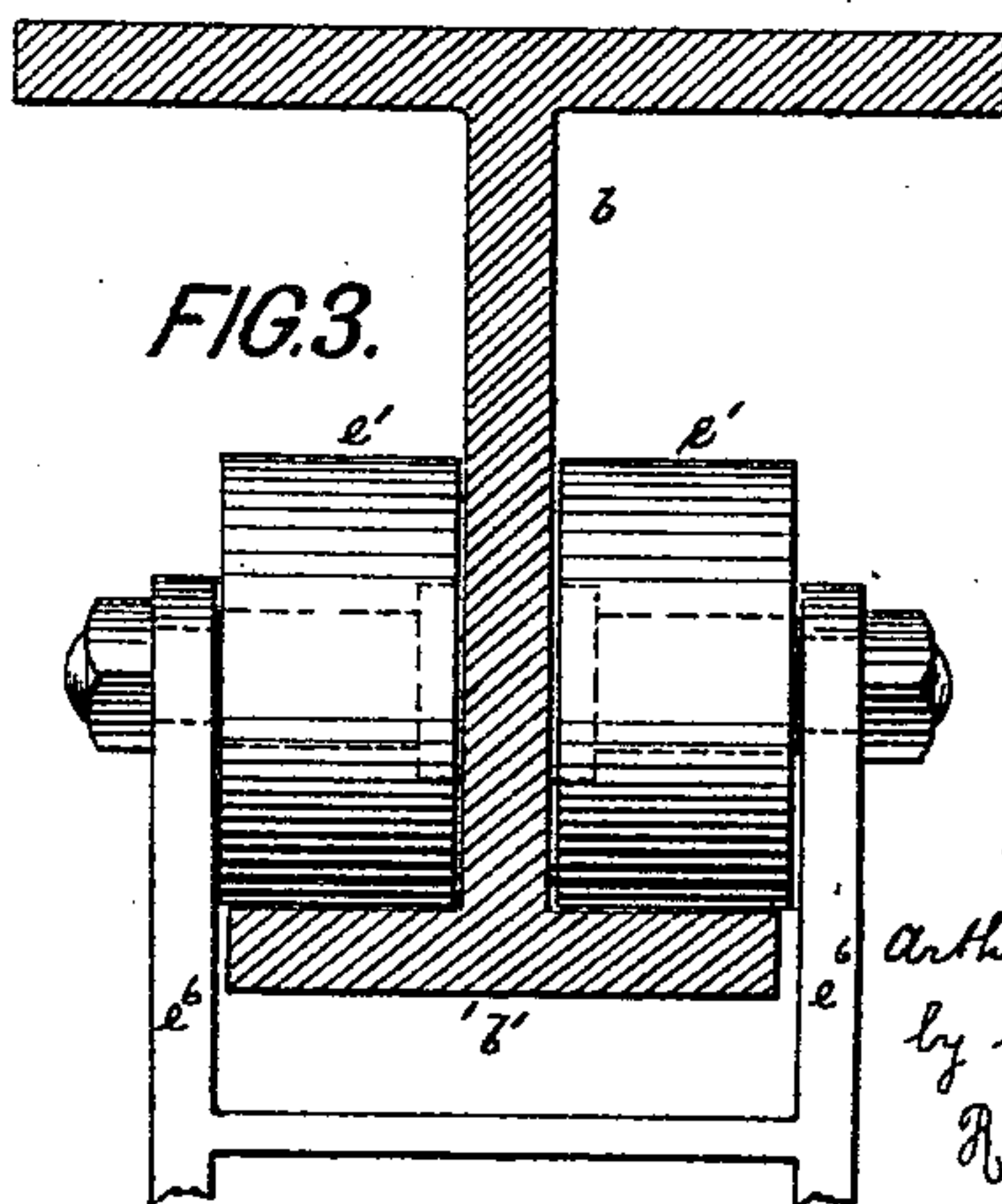


FIG. 3.



Witnesses:
John Becker
William Schuly

Inventor:
Arthur Witschold
by his attorneys
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UNITED STATES PATENT OFFICE.

ARTHUR WITSCHOLD, OF NEW YORK, N. Y.

GRAVITY-RAILWAY.

SPECIFICATION forming part of Letters Patent No. 525,882, dated September 11, 1894.

Application filed July 26, 1894. Serial No. 518,669. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR WITSCHOLD, of New York city, New York, have invented an Improved Gravity-Railway, of which the following is a specification.

This invention relates to a gravity railway in which a suspended carriage descends upon a spirally curved inclined rail.

In the accompanying drawings: Figure 1 is a perspective view of my improved gravity railway; Fig. 2, a front view of the carriage, and Fig. 3 an enlarged cross section through the rail and upper part of the carriage.

The letter *a*, represents a fixed central post that projects upwardly from the ground. This post supports the upper end of a spirally coiled, inclined rail *b*, the convolutions of which increase in diameter from top to bottom. The rail *b*, is supported at its lower end by a short post *c*, and at various points between its ends, by the bent rods *d*, *d'*. The upper rods *d*, are bent outwardly, a distance equal to the horizontal distance between each pair of convolutions, and thus they are adapted to connect the rail head of one convolution with the rail head of the next lower convolution. The lower rods *d'*, are bent outwardly in a similar manner, and connect the lower end of the rail to the ground. The rail *b*, is made of T shape, its head serving for the attachment of the rods *d*, *d'*, while its foot *b'*, serves as a support for the rollers *e'*, of the suspended carriage *e*. This carriage is composed of an upper and lower bar *e²*, *e³*, connected by hand ropes *e⁴*, and provided with a back rest *e⁵*. The upper bar *e²*, is moreover provided with the bearings *e⁶*, of

the rollers *e'*. These rollers are placed at a short distance apart and engage the rail foot *b'*, at each side of the web. It will be seen, that a person seated within the carriage will gradually descend the inclined spiral rail, without any interference from the rods *d*, *d'*, or other parts of the apparatus. The lowermost spiral should run out in an approximately level and then upwardly bent section, so that the speed of the carriage is checked, before it reaches the end of its route.

When the passenger has arrived at the lower terminal of the railway, he folds up the carriage and carries it to the top of the apparatus, by means of the winding stairs *f*, that surround the post *a*.

What I claim is—

1. An inclined railway composed of a central post, a surrounding spirally inclined rail and a carriage suspended from said rail, substantially as specified.

2. The combination of a central post with a surrounding spirally inclined rail, and with bent rods that connect the rail head of one convolution to the rail head of the succeeding convolution, substantially as specified.

3. The combination of a central post with a surrounding spirally inclined rail, bent connecting rods, and a carriage suspended from the rail foot and consisting of bars *e²*, *e³*, hand ropes *e⁴*, connecting the same, back rest *e⁵*, bearings *e⁶*, and rollers *e'*, substantially as specified.

ARTHUR WITSCHOLD.

Witnesses:

F. v. BRIESEN,
WILLIAM SCHULZ.