

No. 639,787.

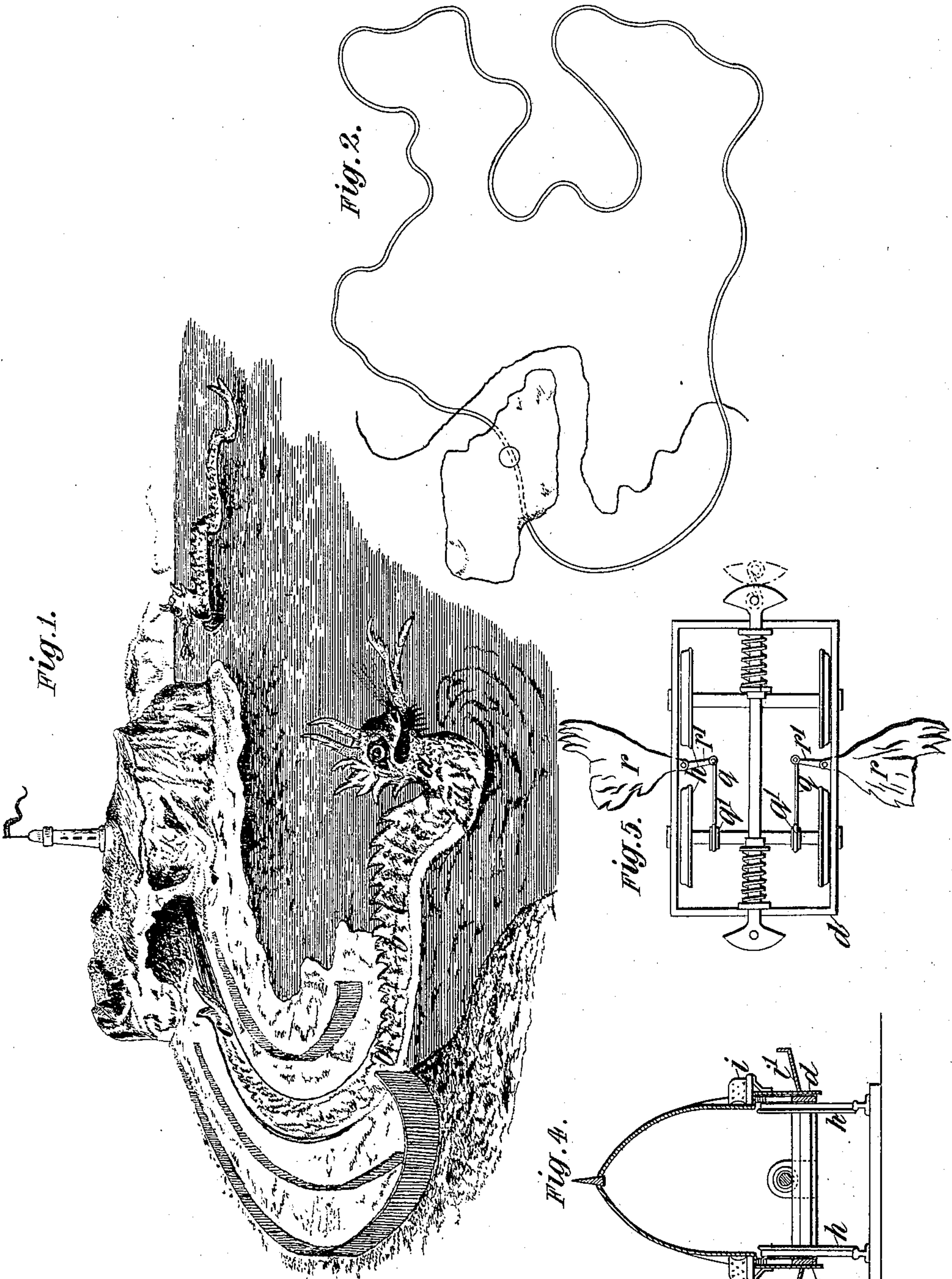
Patented Dec. 26, 1899.

W. STENNING.
RAILWAY FOR RECREATION.

(Application filed Aug. 28, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:
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INVENTOR:
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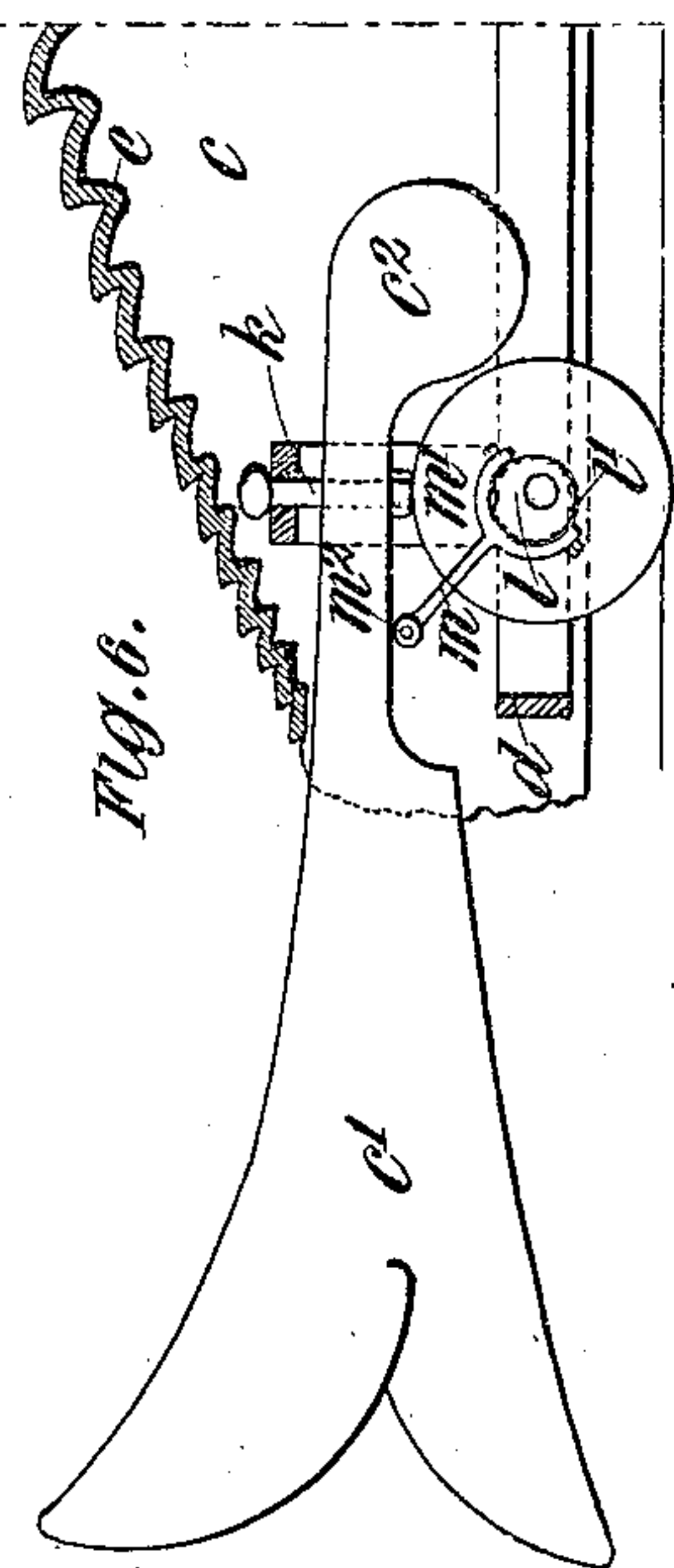
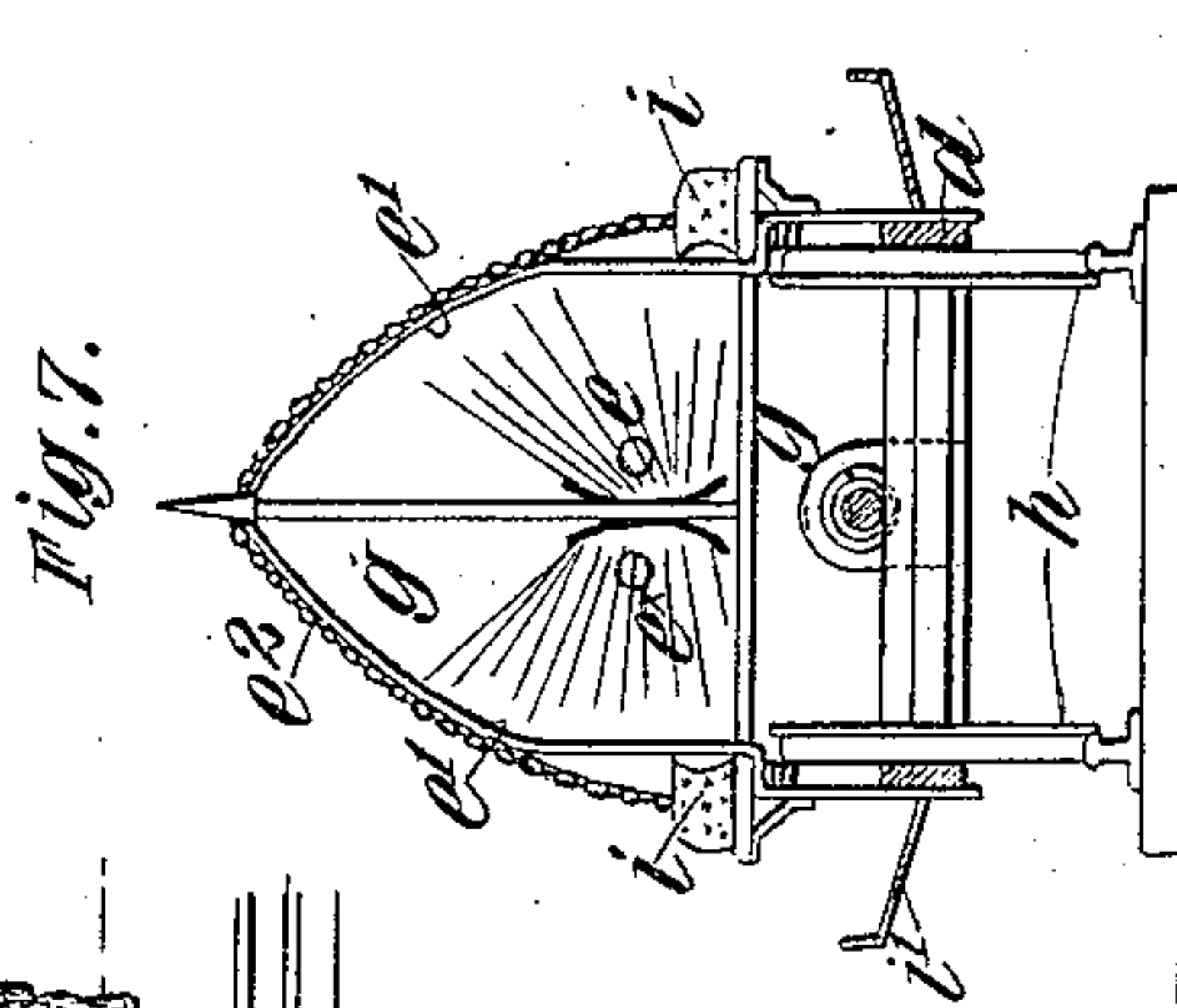
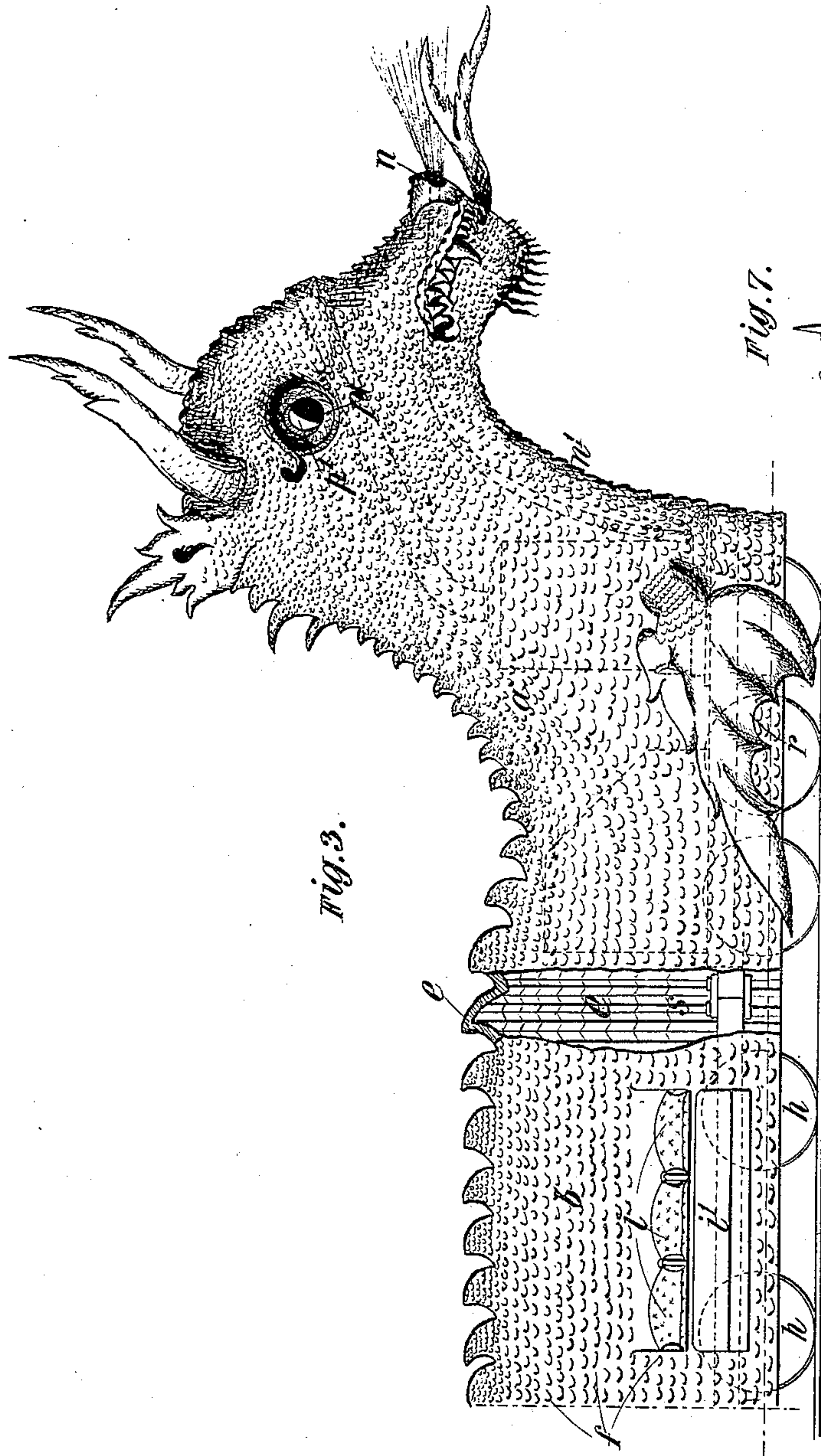
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WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

WALTER STENNING, OF LONDON, ENGLAND.

RAILWAY FOR RECREATION.

SPECIFICATION forming part of Letters Patent No. 639,787, dated December 26, 1899.

Application filed August 28, 1899. Serial No. 728,681. (No model.)

To all whom it may concern:

Be it known that I, WALTER STENNING, gentleman, a subject of the Queen of Great Britain, residing at 46 Dewhurst road, West Kensington, London, England, have invented certain new and useful Improvements in and Relating to Railways for Recreation, of which the following is a specification.

This invention relates to railways for recreation, and is designed to provide a novel form of railway-train adapted to imitate in appearance and in its movements a sea-serpent, snake, or other monster.

According to my invention I provide a train adapted to run upon a serpentine track and composed of a number of vehicles each representing a section of the body of a sea-serpent or other snake-like monster, the front or first vehicle or vehicles being made in the form of a head and the last vehicle or vehicles in that of a tail. The train is provided with a continuous covering which represents or imitates as nearly as possible the generally-accepted idea of the monster which it is desired to imitate. Accommodation for passengers is provided on or in some or all of the vehicles. The track is laid beneath the surface of a bed of suitable material, so as to be practically invisible, and the aforesaid covering of the train terminates below the upper surface of said bed. Consequently when in motion the monster has the appearance of meandering over or through the bed. In the case of a sea-serpent this bed may consist of water and in the case of a snake or other land monster it may consist of long grass, moss, or the like, either natural or artificial.

In order that my invention may be clearly understood and readily carried into effect, I will describe the same more fully, with reference to the accompanying drawings, which show by way of example a sea-serpent constructed according to my invention, and in which—

Figure 1 is a view of two of the trains upon a sheet of water surrounded with natural or artificial rocks and sands. Fig. 2 shows in plan a suitable form of track upon which the trains are run. Fig. 3 is an elevation of the head-section and an adjacent body-section of the serpent, drawn to a larger scale than Fig.

1. Fig. 4 is a transverse sectional view of one of the body-sections of the serpent. Fig. 5 is a plan of a suitable form of truck or under-carriage for the body-sections. This last figure also shows the means for moving the fins or claws of the monster. Fig. 6 is a sectional side elevation of the last or tail vehicle. Fig. 7 is a view similar to Fig. 4, showing a modified form of covering, with means for illuminating the same.

a is the front vehicle or section of the train, *b b* intermediate vehicles or sections, and *c* the tail vehicle or section. The vehicle *a* carries or is constructed to form the head of the sea-serpent. It also in the present instance carries a motor of any appropriate form, said vehicle thus constituting a locomotive by which the train is drawn. I may, however, employ several motors arranged at suitable distances apart throughout the train, or each vehicle or section may be provided with a separate motor—say an electric motor.

The covering or skin *e* is formed of leather or other appropriate substance and is provided on its outer surface with a number of scales *f*, of metal, glass, or other suitable material. In cases where a steam or oil motor is employed the parts of the skin adjacent thereto preferably consist entirely of metal. At the portions *e* of the skin between adjacent vehicles said skin is folded or plaited for the purpose of enabling it to readily expand or contract as the train moves along the serpentine track or as the vehicles separate slightly or approach one another. The scales *f* are attached to the outer points or edges of the folds, and thus serve to hide said folds. When a material not susceptible of being folded is employed to form the skin—as, for example, metal—the portion between the adjacent vehicles may be composed of a number of short telescopic pieces connected together by pins and slots or other means and normally maintained in a median position by springs. The skin is attached to the framework *g*, carried by the truck *d* of each vehicle.

In some cases I form the cover or skin of perforated or transparent fabric and provide lamps within such cover for the purpose of illuminating the same. Fig. 7 illustrates such a construction. In this example the cover con-

sists of a suitable framework e' , supporting plates, prisms, or other shapes of glass e^2 , which may be of various colors. Lamps e^x are placed at suitable distances apart along the middle of the vehicles and are provided with reflectors directing the light toward the skin or cover. The lamps may, however, be arranged at a short distance only from the cover, the number of them being in such cases increased.

The trucks d and wheels h may be of any appropriate construction. I preferably employ centrally-arranged combined buffing and coupling devices.

For the accommodation of passengers seats i and foot-boards i' are provided at the sides of the vehicles, being attached to the framework g . Obviously seats may also be arranged on the top of the vehicles if desired, and where the size permits of it two rows or tiers of seats may be arranged at the sides of the vehicles. Passengers may also be accommodated inside the cover e if desired.

The track, which except as regards its sinuous or serpentine nature is similar to that of an ordinary railway, is laid upon a suitable foundation at the bottom of the sheet of water, or where the depth is too great for this it is laid upon a suitable embankment or trestle-bridge. Said track is banked or raised at the outer side of the curves, and it may sometimes be constructed with vertical as well as lateral undulations.

The flanges of the wheels h are formed rather deep in order to decrease the liability of such wheels to leave the track in going around the curves thereof. I may, however, provide special means for preventing the vehicles from being derailed.

The last vehicle of the train c carries the tail c' , suspended therein by the pivot k in such a manner that it can sway from side to side under the influence of the sinuous movement of the train. c^2 is a balance-weight tending to maintain the tail portion c' in a horizontal position. The pivot k is arranged over one of the wheel-axes of the vehicle, which axle is provided with an eccentric disk l , surrounded by a strap l' . To opposite sides of this strap is pivoted the yoke m' , situated at the end of the link m , whose opposite extremity is connected to the tail c' at m^2 . When the train is moving, the revolution of the axle will cause the tail to move vertically, the connection of the link to the strap enabling this movement to take place without hindering the longitudinal swaying movement of said tail. In some cases the tail part of the monster may comprise two or more vehicles or sections.

When steam is employed as the motive power, the holes n , representing the nostrils of the sea-serpent, may be connected by a pipe n' with the exhaust-chamber of the engine, so that exhaust-steam may escape from such holes. The eyes p contain an electric

or other lamp or lamps and, if desired, may be mounted at the extremity of flexible horns or supports p' , by means of which the eyes can be moved or turned.

Fins, claws, or legs, such as those shown at r in Figs. 3 and 5, can in the case of a sea-serpent be provided at suitable points along the train. They are pivotally supported and have an extension r' beyond the pivot, Fig. 5, to which extension is connected a link q , secured at its other extremity to a strap q' , working on an eccentric disk upon the wheel-axle. The revolution of the wheels will thus cause the fins or the like to move backward and forward. These fins may also be adapted to constitute brake devices by being caused to lie beneath the surface of the water, so that the resistance they offer to their passage through the water will tend to check the progress of the train. For this purpose I provide means for depressing the said fins or claws. Such means may consist of vacuum-cylinders under the control of the driver, the pistons of such cylinders being connected to the fins and operating to retain them in a horizontal position so long as the vacuum is maintained, or compressed air may be used for this purpose. In place of the fins, claws, or legs, however, or in addition thereto I may employ ordinary brake-blocks, such as those shown at s , Fig. 3.

What I claim is—

1. A railway-train comprising a number of connected vehicles provided with a covering imitating a snake-like animal or monster.

2. A railway-train comprising a number of connected vehicles, a single covering for said vehicles flexible and extensible at those portions between adjacent vehicles and representing or imitating a snake-like animal or monster, and means for propelling said train.

3. The combination of a serpentine railway-track, a train comprising a number of connected vehicles, a single continuous covering for said vehicles said covering being flexible and extensible at those portions between adjacent vehicles and representing or imitating the skin of a snake-like animal or monster, and means for propelling said train along said track.

4. The combination of a serpentine railway-track, a train comprising a vehicle or vehicles representing the head, a number of vehicles representing sections of the body, and a vehicle or vehicles representing the tail, of a snake-like animal or monster, a continuous covering for said train reaching from the head to the tail and being flexible and extensible at those portions between adjacent vehicles, means for propelling said train along said track, and means for moving said tail with respect to the other portions of the train.

5. The combination of a serpentine railway-track, a train comprising a vehicle or vehicles representing the head, a number of vehicles representing sections of the body, and

a vehicle or vehicles representing the tail, of a snake-like animal or monster, a continuous covering for said train reaching from the head to the tail and being flexible and extensible
 5 at those portions between adjacent vehicles, means for propelling said train along said track, movable projections on said train representing fins or claws, and means for moving said tail and said projections automatically when the train is traveling, substantially as described.

6. The combination of a serpentine railway-track, a train comprising a vehicle or vehicles representing the head, a number of vehicles representing sections of the body, and
 15 a vehicle or vehicles representing the tail of a snake-like animal or monster, a continuous covering for said train reaching from the head to the tail and being flexible and extensible
 20 at those portions between adjacent vehicles, means for propelling said train along said track, and accommodation on said train for passengers.

7. The combination of a serpentine railway-track, a train comprising a vehicle or vehicles representing the head, a number of vehicles representing sections of the body, and a vehicle or vehicles representing the tail of a snake-like animal or monster, a continuous
 30 covering for said train reaching from the head to the tail and being flexible and extensible at those portions between adjacent vehicles, means for propelling said train along said track, movable projections on said train representing fins or claws, means for moving said
 35 tail and said projections automatically when the train is traveling, accommodation on said

train for passengers, and means for checking the progress of said train, all substantially as described.

8. The combination of a serpentine railway-track, a bed beneath the upper surface of which said track is laid, a train comprising a number of connected vehicles, a single continuous covering for said vehicles said covering being flexible and extensible at those portions between adjacent vehicles and representing or imitating the skin of a snake-like animal or monster, and means for propelling said train along said track.

9. The combination of a serpentine railway-track, a bed beneath the upper surface of which said track is laid so as to be practically invisible, a train comprising a number of connected vehicles, a single continuous covering for said vehicles said covering representing or imitating the skin of a snake-like animal or monster and terminating below the upper surface of said bed, and means for propelling said train along said track.

10. A railway-train comprising a number of connected vehicles, a single transparent covering for said vehicles representing or imitating a snake-like animal or monster, and lamps for illuminating said covering from within, substantially as described.

In testimony whereof I have hereunto set my hand, in presence of two subscribing witnesses, this 11th day of August, 1899.

WALTER STENNING.

Witnesses:

H. ASHBY-NORRIS,
 F. J. SHERRINGTON.