

(No Model.)

V. HOERSCHELMANN.

SWITCH FOR SUSPENDED RAILWAYS.

No. 390,600.

Patented Oct. 2, 1888.

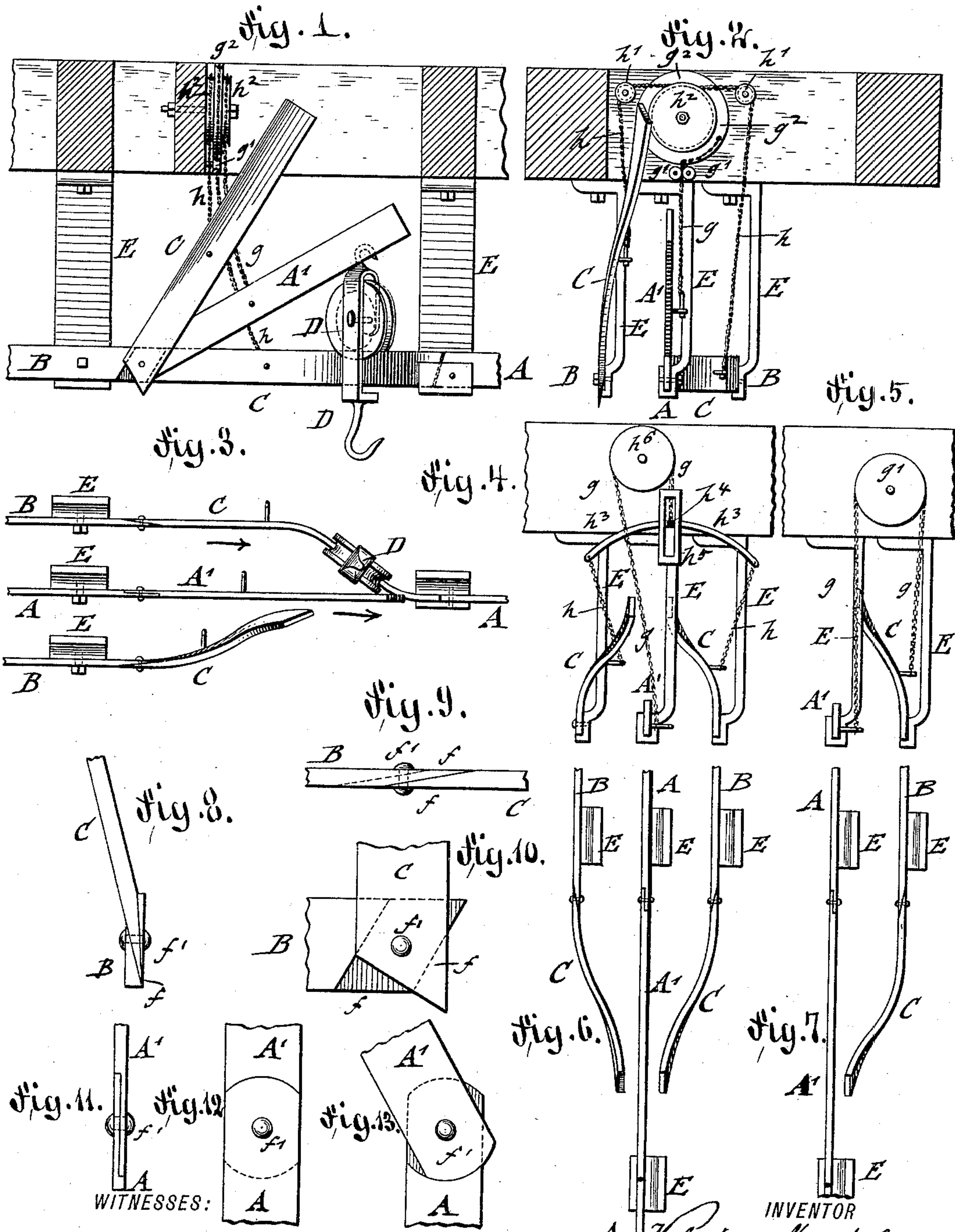


Fig. 11.

Fig. 12.

Fig. 13.

WITNESSES:

W. H. Rosenbaum.
Carl Kars

INVENTOR
Valentine Hoerschmann
BY
G. H. R. R. R.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

VALENTINE HOERSCHELMANN, OF BROOKLYN, NEW YORK.

SWITCH FOR SUSPENDED RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 390,600, dated October 2, 1888.

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To all whom it may concern:

Be it known that I, VALENTINE HOERSCHELMANN, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Switches for Suspended Railways, of which the following is a specification.

This invention relates to certain improvements in switches for suspended railways, such as are used in store-houses and refrigerator-buildings for carrying and transferring meat and other bulky articles; and the invention consists in the combination, with the main rail suspended by hangers, of branch rails and of switch-rails pivoted to the main and branch rails, the branch switch-rails being curved toward the main rail and connected with the main switch-rail by chains and pulleys or by chains and levers, so that the lowering of the main or one of the branch switch-rails raises automatically the other switch-rails, so as to permit the passage of the loaded carrier without requiring the setting of the switch rails by hand for the passage of the load.

The invention consists, further, of an oblique and beveled joint of the branch switch-rails with their branch rails, whereby the branch switch rails are moved out of the way of the traveling carrier, as will be described fully hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of my improved switch for suspended railways, showing one of the branch switch-rails in lowered position and the other switch-rails raised. Figs. 2 and 3 are respectively an end elevation and a plan of Fig. 1. Figs. 4, 5, 6, and 7 show end elevations and plans of modified constructions of my improved switch. Figs. 8, 9, and 10 are details of the oblique and beveled pivot-joint between the branch rails and the switch-rails, and Figs. 11, 12, and 13 are details of a plain pivot-joint for the main switch-rail and main rail.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the main rail, and B B the branch rails, of my improved switch for suspended railways. The

branch rails connect with the main rail A by means of branch switch-rails C C, while the gap in the main rail A is closed by the main switch-rail A'. The rails A and B are suspended from the beams of the store-house or refrigerator-building by means of hangers E, attached to said beams. The load-carrying pulley-block or carrier D is arranged to travel on the rails A or B, and is made open at that side facing the rails and hangers, so as to move past the hangers without being obstructed in its motion.

The branch switch-rails C are applied to the branch rails B B by a pivot-joint, which is shown in detail in Figs. 8, 9, and 10, and which is formed of obliquely-beveled ends, *ff*, which are connected by a pivot, *f'*, at right angles to the rails, said pivot joint having the advantage of quickly moving the curved branch switch-rails C C out of the way of the carrier D when the same passes over the main switch-rail A'. The main switch-rail A' is connected by a chain or wire rope, *g*, which passes over suitable guide rollers or pulleys, *g'*, with a pulley, *g*², to the circumference of which the chain is attached, as shown in Fig. 2.

The branch switch-rails C C are also connected by chains or ropes *h*, which pass over guide-pulleys *h'*, with pulleys *h*², which pulleys *h*² are attached to the pulley *g*², so as to turn therewith on the pivot of the same, as shown clearly in Figs. 1 and 2. The ends of the chains or ropes *h* are attached to the circumference of the pulleys *h*², so that the passage of the carrier over one of the branch rails will lower its switch-rail and automatically lift the main switch-rail and the other branch switch-rail out of the way of the carrier, while the passage of the carrier over the main rail will lower the main switch-rail and lift the branch switch-rails, as shown in Figs. 1 and 2, so that the load can be transferred from either one of the branch rails to the main rail in a reliable and automatic manner without requiring the setting of the switch-rails by hand and the locking of the switch-rails into raised position by special locking devices.

When only one branch rail is used in connection with the main rail, the simplified construction shown in Figs. 5 and 7 is employed,

in which case the suspending chains or ropes of the switch-rails are passed over one pulley, the switch-rails balancing each other thereby in a simple and effective manner. When two
 5 or more branch rails are used, the chains or ropes of all the branch switch-rails are applied to the pulleys h^2 . (Shown in Figs. 1 and 2.)
 In place of the same, the construction shown in Figs. 4 and 6 may be used, in which the
 10 chains or ropes h of the branch switch-rails C are applied to a lever, h^3 , which is fulcrumed by a center pin, h^4 , to a slotted guide-piece, h^5 , while the chain or rope g of the main switch-rails A' is passed over a pulley, h^6 , arranged
 15 above the fulcrumed lever h^3 and attached to the middle part of said lever, so as to produce by the lowering of the main switch-rail the raising of the lever h^3 and both branch switch-rails and by the lowering of one of the branch
 2 switch-rails the raising of the other branch switch-rail and main switch-rail.

The joint of the main switch-rail with the main rail is a simple straight pivot-joint, and is shown clearly in Figs. 11, 12, and 13, the
 25 main switch-rail being straight, so as to form a direct connection or bridge from one section of the main rail to the other.

In case the load is to be moved over the main or branch rails in an opposite direction to the
 30 one in which the switch is worked, the switch-rails have to be set by hand into the required position, as the switch can only be worked automatically in the direction indicated by arrows in Fig. 3—that is to say, from the branch
 35 rails to the main rail.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the main and branch rails and their supporting hangers, of pivoted main and branch switch-rails, chains
 40 attached at one end of said switch-rails, and pulleys to which the other ends of the chains are attached, so that the lowering of either one of the switch-rails produces automatically the raising of the other switch rails, substantially
 45 as set forth.

2. The combination, in a switch for suspended railways, with the branch rail, of a switch-rail connected to the branch rail by a pivot-joint formed of tapering and obliquely-
 50 beveled ends and a pivot at right angles to the branch and switch-rails, substantially as set forth.

3. The combination, with the main rail, branch rails, and their supporting hangers, of
 55 main and branch switch-rails pivoted to the main and branch rails, chains attached at one end to the switch-rails, guide-pulleys for said chains, and pulleys to which the other ends of the connecting-chains are attached, substan-
 60 tially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

VALENTINE HOERSCHELMANN.

Witnesses:

PAUL GOEPEL,
 SIDNEY MANN.