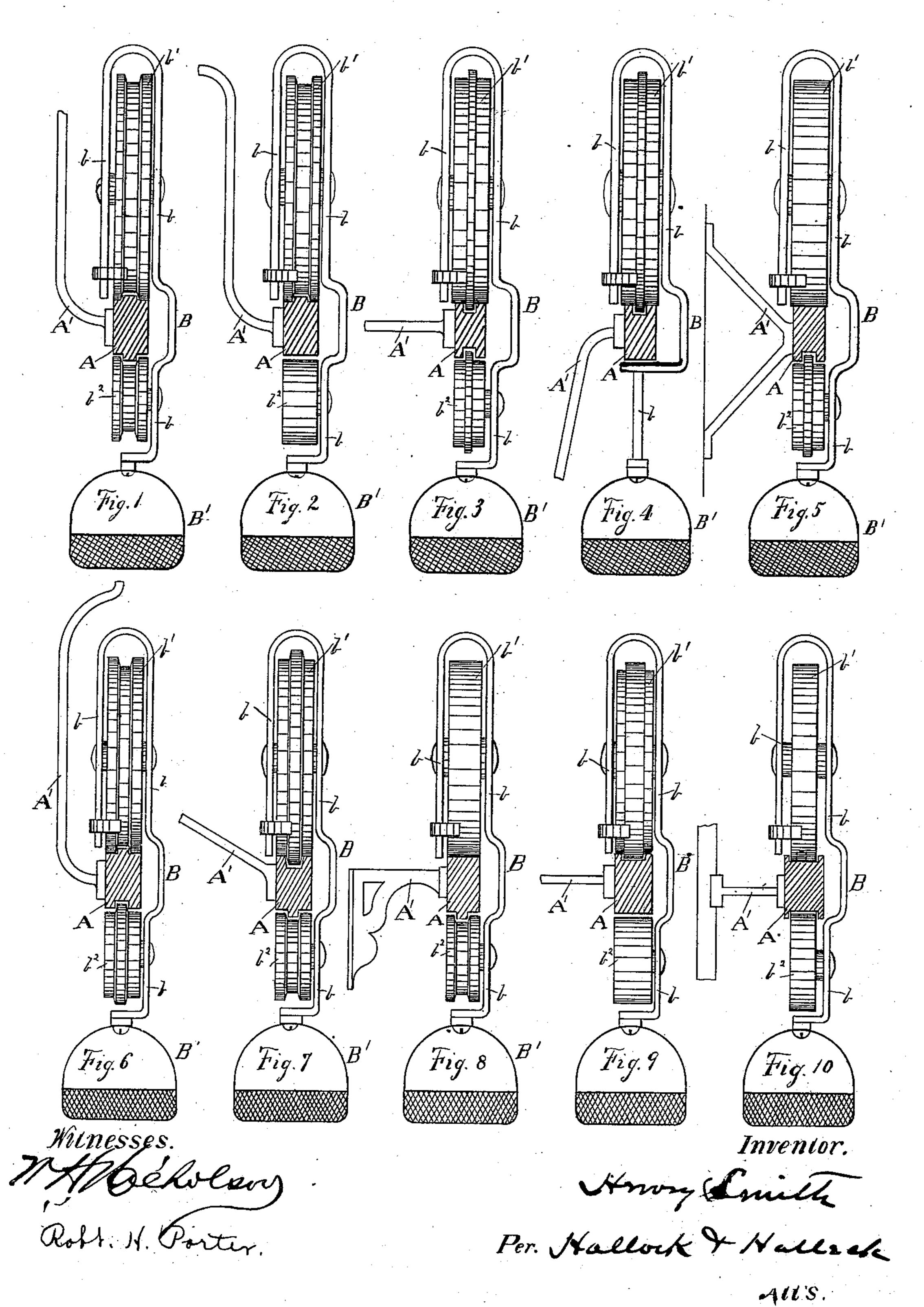
H. SMITH. CARRIER APPARATUS.

No. 332,961.

Patented Dec. 22, 1885.



United States Patent Office.

HERVEY SMITH, OF ERIE, PENNSYLVANIA.

CARRIER APPARATUS.

SPECIFICATION forming part of Letters Patent No. 332,961, dated December 22, 1885.

Application filed November 18, 1485. Serial No. 183,221. (No model.)

To all whom it may concern:

Be it known that I, HERVEY SMITH, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Carrier Apparatus; and I do hereby 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.

This invention relates to carrier devices—such as are used in stores and other like places—in which the track is suspended and the car consists of a trolley running on the track and a receptacle suspended below the track from the trolley; and it consists in certain improvements in the construction thereof, as will be hereinafter fully described, and pointed out in the claim.

In three companion applications I have shown variously-constructed tracks and cars adapted thereto, similar to what I now show, and in said applications I stated that certain features there illustrated would be fully explained and properly claimed in this application.

The leading object of this invention is to construct the cars and the track so the car cannot swing or sway while running on the track oner be thrown from the track.

In Letters Patent No. 326,928, issued to my assignee on September 22, 1885, I show a bartrack with a car-trolley having two sets of grooved or double-flanged wheels, which embrace both the upper and the lower side of the track. In the construction there shown the car will swing or sway unless the flanges fit so closely to the track as to impede the car, and unless the flanges are very long or fit very closely to the track the car may be derailed.

I have found by actual experience that in order to prevent possible derailment and swaying or swinging of a car adapted to run on a single elevated bar-track, the following features of construction are essential: The track must be supported wholly from one of its vertical sides, leaving the three other faces unobstructed; the track must have a wide upper and lower bearing-face, one of which, at least, must be ribbed, grooved, or otherwise adapted to engage with flanges on the wheel or trolley-frame to keep the car from running off the

track; the wheels of the trolley must have a wide tread, so as to bear upon the track near its edges; the trolley-frame must have a lateral extension under the track, on which may be journaled a friction-wheel, as shown in the drawings, to operate against the lower face of the track, to prevent the car being swayed or lifted up off the track. A trolley thus constructed will embrace the three unobstructed sides of the track.

I have in the accompanying drawings shown a variety of track-forms and cars thereon, each of which embodies the essentials of construction I have above set forth.

In each figure the track is in vertical transverse section, and is marked A. The car is in rear elevation, and its trolley is marked B, with its frame marked b, and its traveling wheels b'. 70 The friction-roller on the lateral projection from the frame under the track is marked b^2 . The said lateral projection, when not provided with a roller, as in Fig. 4, is marked b^3 ; and the receptacle which is suspended from the 75 trolley is marked B'. The support of the track is marked A'.

The various constructions are as follows:

Figure 1 shows a track with a rib on both its upper and lower faces and doubled-flanged 80 wheels. Fig. 2 shows a track ribbed on top and smooth on the bottom and a car having double-flanged traveling wheels and smoothfaced friction-rollers below the track. Fig. 3 shows a track having a central groove on both 85 its upper and lower faces and a car having centrally-flanged wheels. Fig. 4 shows a track with a central groove in its upper face and its lower face smooth and a car having centrallyflanged traveling wheels and no friction-roller 90 below the track; but the lateral projection lies so close to the track that the car cannot be swung nor lifted up. Fig. 5 shows a track having a smooth upper face and a grooved lower face and a car with smooth traveling 95 wheels and centrally-flanged friction-rollers. Fig. 6 shows a track with a central rib on its upper face and a central groove in its lower face and a car having double-flanged traveling wheels and centrally-flanged friction-roll- 100 er. Fig. 7 shows a construction the reverse of thatshown in Fig. 6. Fig. 8 shows a track with a smooth upper face and a centrallyribbed lower face and a car having smooth-

faced traveling wheels and double-flanged friction-roller. Fig. 9 shows a construction like Fig. 4, except the groove in the track and the flange on the wheel are wider, and there 5 is a friction-roller below the track. Fig. 10 shows a track having ribs on its edges both above and below and a car with smooth wheels.

It will be observed that wherever the traveling wheels are double-flanged they tread on ro the flanges at the edges of the track-face, and that wherever the traveling wheels are centrally flanged they tread on the faces at the side of the flange and on the edges of the track, and where the traveling wheels are smooth or 15 flat-faced they are wide and bear on the edges of the track, except in Fig. 10, and in that construction the tread-faces of the track and the wheels will be so wide as to effectually prevent swaying.

I shall not here claim as new any of the track-forms shown.

I am aware that railway-tracks on which the car or traveler is wholly above the track l

have been made with central ribs and with central grooves, and I therefore do not desire 25 to be understood as claiming such formation of track as new.

What I claim as new is--

In a carrier apparatus, the combination, with a track which is supported from one of 30 its vertical sides, leaving its three other sides unobstructed, and is provided with wide upper and lower faces, one of which is adapted, as set forth, to receive a flanged wheel, of a cartrolley which embraces the three unobstructed 35 sides of said track, bears with its wheels on the edges of the track-face and operates against both the upper and lower faces of the track, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in 40

presence of two witnesses.

HERVEY SMITH.

Witnesses:

JNO. K. HALLOCK, ROBT. H. PORTER.