July 12, 1949. M. S. WITTNER 2,475,771

TRACK CLEANER

Filed July 10, 1947

FIG. 1.

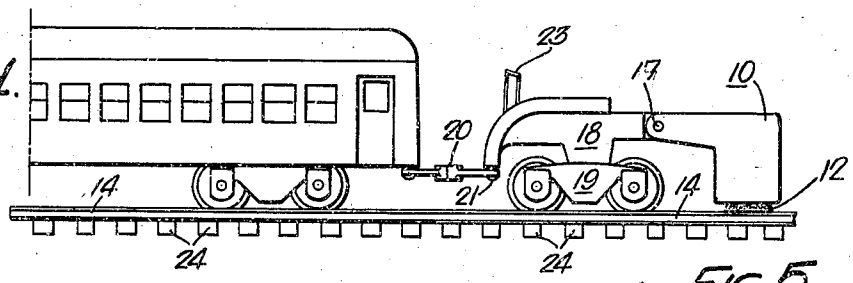


FIG. 2.

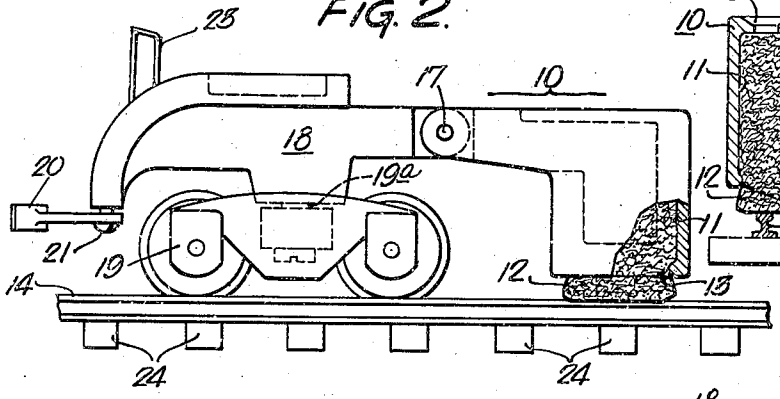


FIG. 5.

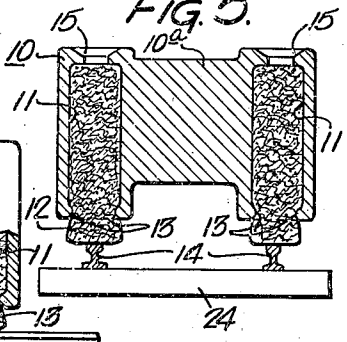


FIG. 6.

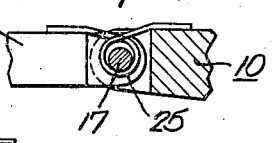


FIG. 3.

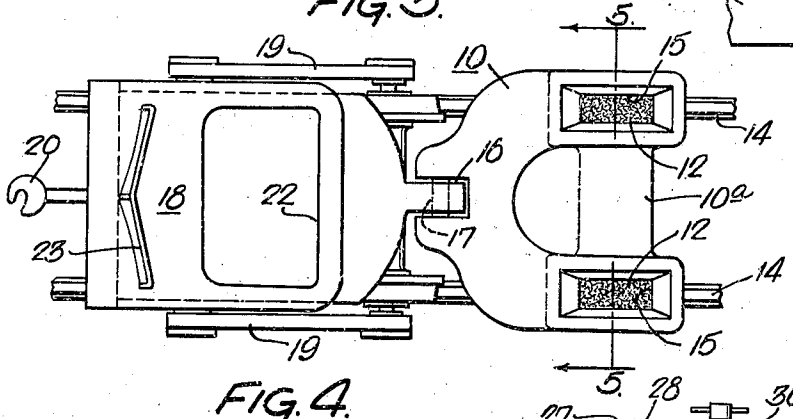


FIG. 4.

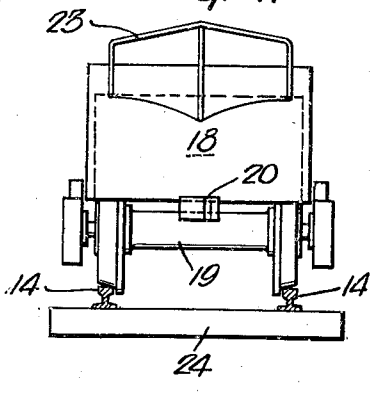
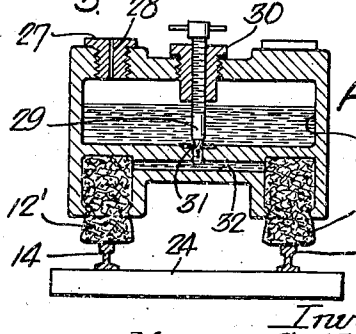


FIG. 7.



Inventor:
Murray S. Wittner
by his Attorneys
Howson & Howson

Patented July 12, 1949 2,475,771

UNITED STATES PATENT OFFICE

2,475,771

TRACK CLEANER

Murray S. Wittner, Ambler, Pa.

Application July 10, 1947, Serial No. 760,142

3 Claims. (Cl. 104—279)

1

This invention relates to a track cleaner designed especially for model railroads.

Model railroad equipment, particularly the smaller sizes such as "HO," "OO" and "O" gauge are operated on low voltage direct current. The track is scale size brass rail and the layout in general is an exact duplication of full sized equipment, and therefore no third rail is used as is customary with the larger or "tin plate" variety of electric trains.

The relatively low voltage direct current carried by the two rails is transmitted to the electric motor in the locomotive through the locomotive wheels and I have found that oil, dust and corrosion on the rails effectively insulates the rails and prevents proper contact with the locomotive wheels.

It is often necessary that this deposit be removed from the tracks before each operation of the train, and where extensive layouts including tunnels and inaccessible track arrangements are employed, it is practically impossible to clean all the track sufficiently well to make good electrical contact.

An additional piece of rolling stock designed to clean the rails as it is pulled over the track system not only provides the solution to the cleaning problem, but also is an attractive addition to the model railroader's equipment.

The primary object of the invention, therefore, is to provide a track cleaner adapted to be attached to a piece of rolling stock on a model railroad.

A further object is to provide a track cleaner for a model railroad having a spring loaded member adapted to resiliently press a pair of track cleaners against the track. The invention also includes means for saturating the cleaning elements with a suitable solvent or cleaning fluid.

Further objects will be apparent from the drawings in which:

Fig. 1 is a side elevation of my track cleaner attached to a piece of model railroad equipment;

Fig. 2 is an enlarged elevation partly broken away of the track cleaner itself;

Fig. 3 is a plan view of Fig. 2;

Fig. 4 is a front view of Fig. 2;

Fig. 5 is a section taken along lines 5—5 of Fig. 3;

Fig. 6 is an enlarged detail of the resilient pivot of the cleaner; and

Fig. 7 is a sectional view illustrating a modified form.

The invention comprises essentially a carrier adapted to retain and position a pair of felt wicks

2

above the rails of the model railroad layout in such a manner that the wicks may be saturated with a suitable cleaning solution and thence pulled along the rails under predetermined pressure to remove all foreign matter from the upper surface of the rails thereby providing proper electrical contact.

The felt wicks or pads in one form may be saturated with a cleaning solution manually, or if desired, the solution may be stored in a valved tank above the wicks so that the solution need only be replenished from time to time as required.

Referring more particularly to the drawings, the cleaning element proper is a yoke shaped member 10 having a pair of vertically disposed recesses 11 near the tip of each end of the yoke. A felt pad 12 is carried in each recess 11 and is prevented from dropping out of the recesses by means of a restriction or shoulder 13 at the bottom edge of the recesses. The recesses are spaced one from another at a distance equivalent to the spacing between rails 14 of the track system. The sides of recesses 11 may extend directly upward leaving felts 12 exposed at their upper ends or member 10 may be constructed to provide a funnel shaped opening 15 above each end of pad 12.

The two ends of the yoke 10 are connected by means of a spacer web 10a and the front portion of the yoke is pivoted at 16 by means of pin 17 to the main body 18 of the cleaner. The cleaner body 18 is pivotally mounted on a standard model railroad truck 19 at 19a and has a standard coupling 20 attached to its forward end by means of screw 21. The top of the cleaner is provided with a recess 22 and a hand rail or windshield 23, both of which perform no function in the track cleaning operation but add to the attractiveness of the cleaner ensemble.

In constructing a track cleaner in accordance with the invention, I have found that for some sizes of track, and where the layout has relatively sharp curves, it may be desirable to shorten the distance between the felt pads 12 and the center of truck 19 as much as possible. In this event, pin 17 may be located nearer the center of truck 19 to prevent the pads 12 from leaving the track when rounding a curve.

Sufficient pressure between the pads and tracks 14, which are secured to ties 24 in the customary manner, may be obtained by weighting the member 10, or this element may be fabricated from a relatively heavy material such as lead; but in the preferred form I provide a fly spring 25 (Fig. 6) which is coiled around pin 17 in such a way that

body member 10 is urged downwardly to compress pads 12 against rails 14.

The form of Figs. 1–6 contemplates the introduction of a cleaning fluid or solvent to pads 12 by means of an eye dropper or squirt can applied to funnels 15, however, a semi-permanent type of cleaner having a fluid reservoir 26 (Fig. 7) permits the storage of cleaning fluid. The reservoir 26 is filled through cap 27 which is vented at 28 and fluid is introduced to modified pads 12' by means of needle valve 29 threadedly mounted in bushing 30 and cooperating with valve seat 31. The fluid then passes through bore 32 which communicates with each pad.

The construction of Fig. 7 is adapted to replace strut 10a and the view of this figure would be one taken along lines 5—5 of Fig. 3 of the modified form.

I have, therefore, provided a track cleaning device for model railroad tracks which not only enables the rails to be adequately cleaned regardless of their accessibility, but in addition, adds a desirable new piece of rolling equipment to the model railroader's stock and at the same time enables him to clean the tracks while operating the train.

Ordinarily it is only necessary to connect the track cleaner for a single run over the layout, but if desired, it may be added as a permanent piece of equipment.

I claim:

1. A track cleaner for model railway systems comprising an articulated body member having a front portion and a rear portion, means for resiliently articulating the rear portion with respect to the front portion in a vertical plane, a connection at the forward end of the front body portion adapted to engage the end of a model railroad train, a truck vertically pivoted to the front body portion between the connection and the articulating means, and a pair of pads mounted in the rear body portion adapted to contact the rails rearwardly of the truck.

2. A track cleaner for model railway systems comprising an articulated body member having a front portion and a rear portion, means for resiliently articulating the rear portion with respect to the front portion in a vertical plane, a connection at the forward end of the front body portion adapted to engage the end of a model railroad train, a truck vertically pivoted to the front body portion between the connection and the articulating means, a pair of pads mounted in the rear body portion adapted to contact the rails rearwardly of the truck, and means for supplying solvent to each pad.

3. A track cleaner for model railway systems comprising an articulated body member having a front portion and a rear portion, means for resiliently articulating the rear portion with respect to the front portion in a vertical plane, a connection at the forward end of the front body portion adapted to engage the end of a model railroad train, a truck vertically pivoted to the front body portion between the connection and the articulating means, a pair of pads mounted in the rear body portion adapted to contact the rails behind the truck, a reservoir in the rear body member, a supply of cleaning fluid in said reservoir, a conduit from the reservoir to each of the pads, and a valve for opening and closing said conduit to permit metering of the fluid to the pads.

MURRAY S. WITTNER.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
196,150	Isaacs	Oct. 16, 1877
944,464	Robinson	Dec. 28, 1909
1,436,837	Wallace	Nov. 28, 1922