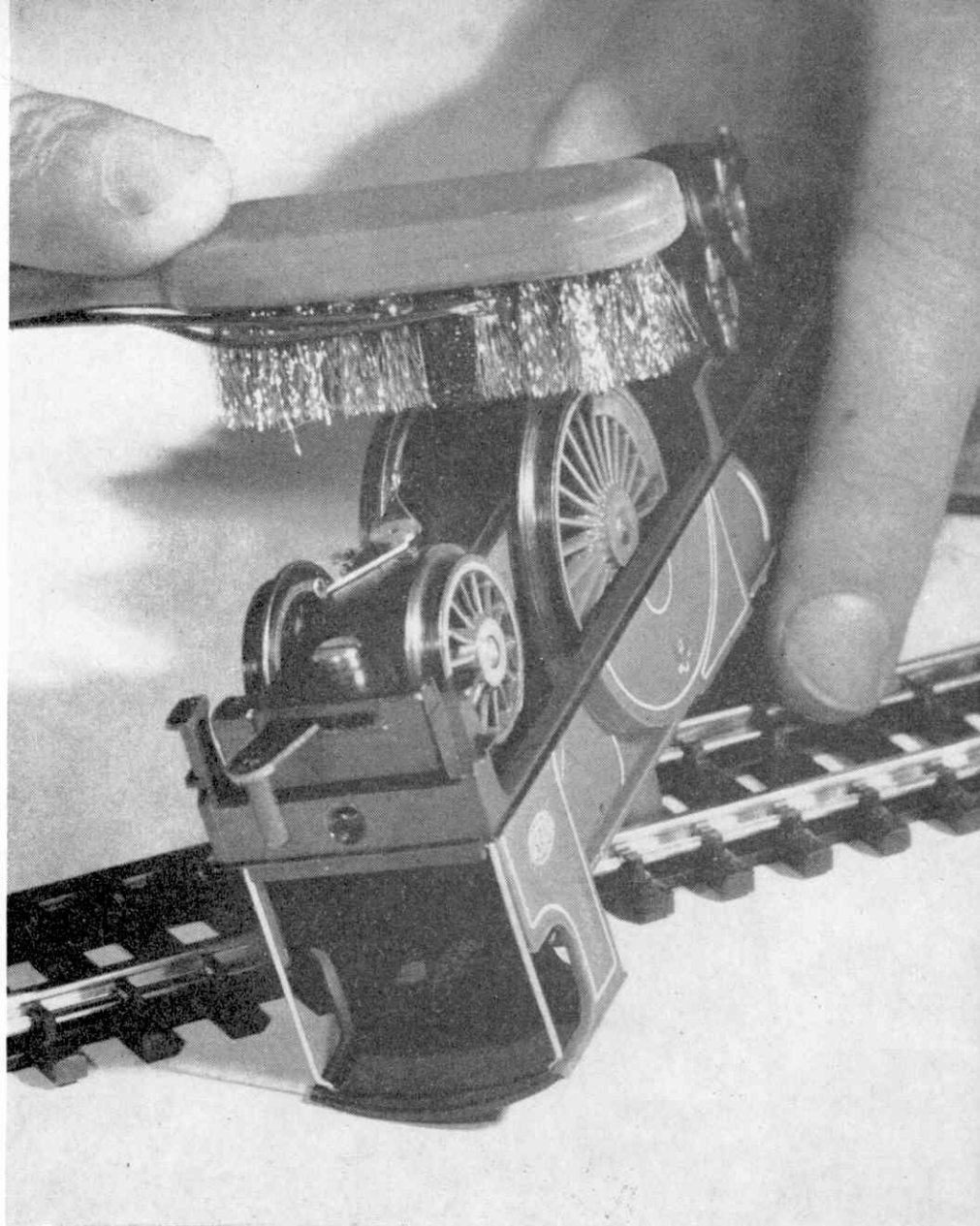


WHY NOT SPRING CLEAN

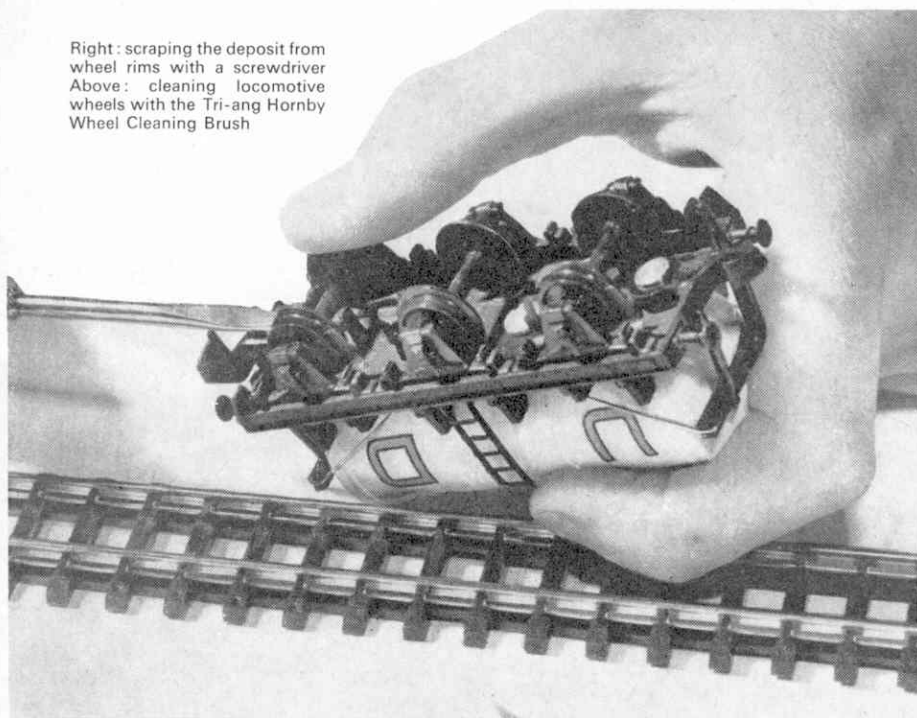
by Mike Rickett

Have you ever stopped to consider why your model railway operates faultlessly hour after hour, occasionally under the most adverse of conditions, or do you wonder why 'gremlins' unaccountably appear to cause derailments and other annoyances? The fact that a complex machine like a Tri-ang Hornby layout will operate for long periods without attention, is a major electrical and mechanical achievement. Like all machines, however, its greatest enemies are dirt, dust and corrosion which, if not the subject of occasional attention, can eventually ruin all working parts of a layout.

Without regular cleaning and maintenance, you will find mysterious faults developing for no apparent reason. The most common are trains slowing down abruptly on a certain section of track, derailments occurring at certain locations on points or curves, or that most annoying of troubles—a locomotive that simply refuses to move until full power has been applied, and even more annoying, shooting off at a scale 200 m.p.h. when it is applied. Most of these faults, or 'gremlins' can be readily traced to lack of maintenance in one way or another. All the troubles that I intend



Right: scraping the deposit from wheel rims with a screwdriver
Above: cleaning locomotive wheels with the Tri-ang Hornby Wheel Cleaning Brush

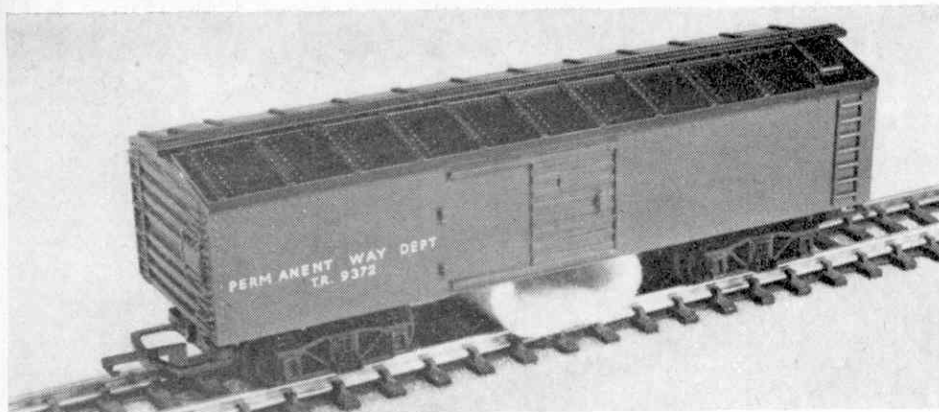


talking about concern either the track or points, which between them need the most attention. The cleaning of rail surfaces, the most onerous and most important job, is one that requires to be done very regularly—at least before every operating session, and preferably afterwards as well.

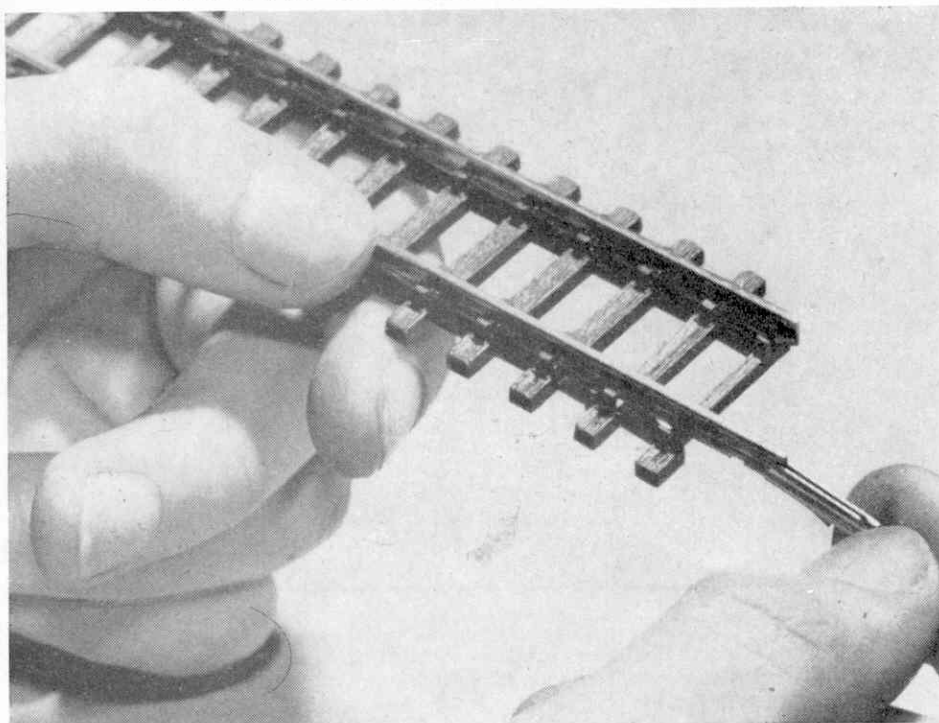
You may have read in other magazines that chemical compounds such as carbon tetrachloride and trichlorethylene are suitable for this purpose, and so they are, but unfortunately if you do use them, you stand a chance of damaging the sleepers on your track. Both materials have the affect of melting polythene or polystyrene, the material used for your sleeper base. These substances can also have a harmful affect if inhaled deeply, and it is not therefore advisable to use them.

Where only a slight layer of dust lies on the rail surface, the Tri-ang Hornby Rail Cleaning Wagon (R344) is ideal, since it can be coupled into a train and pushed round the layout. The suggested liquid recommended to saturate the pad in the Track Cleaning Car is methylated spirits, which will clean the track and not react with the plastic sleeper base.

Under no circumstances should an abrasive



Above: the Tri-ang Hornby Track Cleaning Car. Below: sliding a new fishplate on to the end of the rail. Note how the rail has been pushed out beyond the sleeper



such as *sandpaper* or emery cloth be used, since these will remove the protective coating of tin from the rail, making it more liable to rust if the atmosphere is at all inclined to be damp. Although this coating is adequate under all normal circumstances, a very humid atmosphere will damage the rail, and for that matter, any other metal surface. It would be best under such conditions to move the layout to another location.

If the layout concerned has not been in use for some considerable period, the probability is that a layer of dust and fluff will have formed, and it is, of course, essential that this be removed before operation is commenced. I have always found it best to move any items not fixed down to the baseboard so that they may be cleaned separately. A vacuum cleaner with the brush fitment removed is undoubtedly the quickest way of clearing loose fluff and grit. Also the possibility of damage occurring to structures is minimised, and a fine brush can be used to do any additional cleaning that may be necessary. Where a layout has not been in use for a considerable time, it is always best to inspect the track to make quite sure that the fixing pins have not worked loose up to, or over, the rail surface. These can easily cause derailments and it is always worth pressing the pins

well home with a pair of pliers.

Faulty fishplates may be the cause of mysterious electrical faults, usually dead sections or voltage drops. These will become noticeable when a locomotive suddenly slows down for no accountable reason, or simply stops altogether and refuses to move. Once the approximate location has been discovered, the fishplates can be examined and tightened if loose. Should this not result in any immediate improvement, it is possible for dirt to be acting as an insulation between the fishplate and the rail, and it will be necessary to remove the piece of track from the layout and to clean both the fishplate and the rail. The fishplate may also have become corroded, and in this case I would personally be inclined to replace the fishplate with a new one, rather than to spend time cleaning the other items. Fishplates are, after all, inexpensive, and easily obtainable from most Tri-ang Service Agents and other regular stockists.

Once the offending fishplate has been located and the piece of track concerned lifted from the layout, the rail itself can then be pushed out of the plastic base by bending down the end sleeper. The position of the old fishplate is scratched on the underside of the rail and a pair of small pliers, preferably of the round nose type, used for extract-

ing the old fishplate from the rail end. Should this have been welded on during manufacture, any roughness on the underside of the rail should be filed down before the new fishplate is pushed on. When sliding this on, try to avoid pushing the fishplate over the mark scratched on the underside of the rail. The fishplate will normally be a tight fit, but you may find it necessary to lock it to the rail by making an indentation with a centre punch. Once you are quite satisfied with the fit, the rail can be threaded back on the sleeper base, making sure that the chairs actually grip the rail web.

Checking Points

Points that do not function properly are infuriating, and time spent in cleaning and checking the action of the mechanism is time well spent. If the point is electrically operated, it would be as well to examine the leads to make sure that the plugs are bright and clean, and that no fluff or grit has entered the mechanism sockets. Push the leads back firmly into these sockets. Check the mechanical action of the mechanism and if the blades do not close up tight against the stock rails, examine the space between to make sure that no dirt is preventing the blade from closing properly. Any loose material can be removed with tweezers, and the backs of the blades and stock rails scraped with a screwdriver to ensure that no resistance is offered to the current. The plastic frog at the other end of the point is just as, if not more, important, and this should also be scrutinised carefully to make sure that no deposit has built up sufficiently to raise the wheel flange and cause a derailment. This may sound improbable, but I have known it to happen. Any deposit that may have formed can be carefully scraped off with a screwdriver, but it is important that the plastic itself is not damaged. Tweezers will also be found very useful for removing fluff and other material from under stock rails, and between the check rails at both sides of the point.

Wheel care

Rolling stock wheels are often to blame for derailments, and it is amazing how quickly a deposit can build up. If you make a habit of examining your layout and rolling stock regularly, the work of removing any deposit will be slight, but if this is only done occasionally, the task is likely to be a considerable one. All fluff and hairs should be cleared from axles, and any deposit of carbon on the wheels scraped off with a knife or screwdriver.

Locomotive wheels should also be examined and cleaned if their performance is not to suffer. An engine that runs jerkily, emitting sparks as the wheel rims touch the rail, will probably be long overdue for wheel cleaning. I have found the RT279 Tri-ang Hornby Wheel Cleaning Brush excellent for this purpose. In the past it has been necessary to revolve the wheels by first connecting the current, and then scraping any dirt off as they revolve. The Wheel Cleaning Brush serves both these purposes, and has the added advantage of not doing any damage to the wheel surfaces. All that is necessary is for the power leads to be connected into one of the Power Connecting Clips on your layout—provided that there are more than two—and switching the current on. Place the brush across the locomotive on one pair of wheels and press lightly. The brush will clean the wheels as they revolve.