

This issue of *Broodings* is devoted to a small annotated selection of locust (L) originals. Hoppers in general are well suited to the helpmate because they require the cooperation of another piece in order to move; in the case of Ls that piece must be of the opposite colour since all L moves are captures. Like the grasshopper (G), the L hops on Q-lines to the next square beyond another piece, but unlike the G it captures that piece and must therefore arrive on an empty square. Thus L-moves are not normally reversible, a characteristic which can be very useful to the composer.

In 1 none of the three Ls can move in the diagram position. The d- and e-Ls are pinned and the g-L has no available capture. The solutions start with blocks on b7, but these also unpin the d-L, by occupying the square which lies beyond the BK from the viewpoint of the Lg2 and thus preventing the potential move Lg2xc6-b7, because the arrival square b7 must be empty. Next the WK unpins the Ld2, but which square must he choose, g3 or f4? The subsequent play reveals the answer. The Ld2, once unpinned, can mate by reaching a6 or e8, capturing on b5 or e7. Before this, the unpinned Ld5 must clear the way by removing the Sc4 or the Pe6, but by arriving on b3 or f7 it will attack g3 or f4. So the only possible sequences are 1.Rb7 Kg3 2.Lxe6f7 Lxe7-e8# & 1.Qb7 Kf4 2.Lxc4-b3 Lxb5-a6# But why not 3.Rd7? or 3.Qb6?, stopping the mate? The R & Q are now pinned by the Lg2, and in fact the central idea of the problem was this change of pin. Another interpretation of the change of pin idea is seen in 2, where the Lf7 pins the Lf6. Playing the Bh1 or the Rh3 to f3 unpins this L and if it could then disappear a battery would be created, in which the capture of the piece on f3 by the Lb3 or the Lb7 would give check from the Lf7 (and the L arriving on g3 or g2 would usefully control the rest of the g-file). But how do we get rid of the Lf6? It must capture a self-sacrificing WL and of course its move will be irreversible. So we have 1.Bf3 Lxd7-e7 2.Lxe7-d8 Lxf3-g3# & 1.Rf3 Lxb5-b6 2.Lxb6-a6 Lxf3-g2#. Now why are the first white moves not interchangeable? Because the move to the g-file must prevent the unmoved BR or BB from reaching f3 and stopping the mate! For example: 1.Bf3 Lxb5-b6 2.Lxb6-a6 Lxf3-g2?? 3.Rf3!

By now it should be easy to recognise the potential change of pin in **3**, where 1.Se3 & 1.Sg5 unpin the Rd2. The black halfpin on the f-file can be transformed into a battery if one of the Ss moves. The Le4 captures the other S and gives check from the Lf8. White's first moves (with the h-P) guard squares; all Black then has to do is move the Rd2 away... but where? All moves but 2.Rd3 or 2.Rd5 stop the mate, but why one or the other? With a L guarding e4 from g6, the potential arrival square d3 must be vacant, and similarly for d5 if the L guards e4 from g2. So 1.Sg5 h3 2.Rd5 Lxf5-g6# & 1.Se3 h4 2.Rd3 Lxf3-g2# (Sh1 guards g3, Lg2 guards g4), again with pinmates.

The next problem (4) concentrates on battery firing by a L-move. The moves 1.Lxd4-e5 & 1.Lxd4-d3 do not give immediate mate from the La7 because a) they are illegal, putting the WK in check & b) they allow the Lh8 or the Ld1 to intervene on d4, stopping the mate. To eliminate these difficulties the BQ interferes on d2 or g7 and a WL sacrifices itself to allow a BL to shield the WK: 1.Qd2 Lxf3-g3 2.Lxg3-f4 Lxd4-d3# & 1.Qg7 Lxe6-f5 2.Lxf5-f4 Lxd4-e5# The Q interferences work because the Q is denied access to d4 by the WL arriving on d3 or e5, whereas initially the Ld1 or Lh8 would be *given* access to d4 by the same arrivals. This distinction between Q- and L-powers was the main idea of the problem, producing curious double interferences between d1 and d4 & h8 and d4. In the mates, the pin of the Rb4 prevents 3.Rd4.

Grasshoppers work well with Ls. The effects in **5** centre around G mates using a unit on e6 pinned by a L on h6, behind the BK: 1.Lxd2-d1 Lxg5-h6+ 2.Re6 Lxb6-b5# (2.Be6?...3.Gb6!) & 1.Lxe3-f2 Lxg5-h6+ 2.Be6 Lxd6-d5# (2.Re6?... 3.Gc6!) The dual avoidance is determined by the opening of a black G battery.

In longer problems the L's need to capture can be a difficulty. One answer is Circe, which enables the captured pieces to be used again. In **6** the BB is repeatedly reborn on f8. If the BK were on a5 and b6 were blocked, Lxb4-a4 would be mate, since if captured the L would check the BK from its rebirth on a8. A lengthy but simple switchback process gets us there: 1.Bc5 Lxc5-c6 2.Bd6 Lxd6-e6 3.Be7 Lxe7-e8 4.Kb4 (tempo) Lxf8-g8 5.Bg7 Lxg7-g6 6.Lxg6-f6+(>WLg8) Kg5 7.Ka5 Lxf8-e8 8.Be7 Lxe7-e6 9.Bd6 Lxd6-c6 10.Lxc6-b6+(>WLc8) Kf5 11.Bc5 Lxc5-c4 12.Bb4 Lxb4-a4#

