

(18)

NORTH EASTERN RAILWAY

CE'S P.WAY CIRCULAR NO.60 OF 1972.

USE OF M.S.LINERS IN STEEL TROUGH SLEEPERS
TRACK TO PREVENT LOOSENESS OF KEYS:

Recently it has been noticed that a large number of steel keys are getting loose in track laid with steel trough sleepers and special efforts are necessary to keep the keys properly tight to ensure safety.

The keys become loose due to one of the following reasons:-

- (i) development of wear on the top surface of the steel trough sleeper close to the edge of the rail where the key bears on the sleeper,
- (ii) wear on the underside of the sleeper by the side of the hole where the spring steel jaws bears on the sleepers.

In each case the problem must be specifically analysed to determine the cause of looseness. Where the problem is only due to elongation of holes use of moon washers would be sufficient. Moon washers are standard fittings approved vide RDSO's drawing No.EDO/899, EDO/901 for 1mm, EDO/903 and EDO/905 for 3.0mm. At present these have been stocked in Kanpur Track depot for the thickness of 1.6mm, 3.0mm and 6mm as per CE's sketch No. 13/1967. Washers of such thickness should be used as would completely take up the elongation of the hole. Before deciding upon a specific thickness measurement of wear or trial in the field with washer of relevant thickness would be necessary.

Where the problem of loose keys has arisen due to wear on the top of the steel trough sleeper with or without elongated holes liners 'A' made to CE's sketch No.1/1972 have been found to be effective.

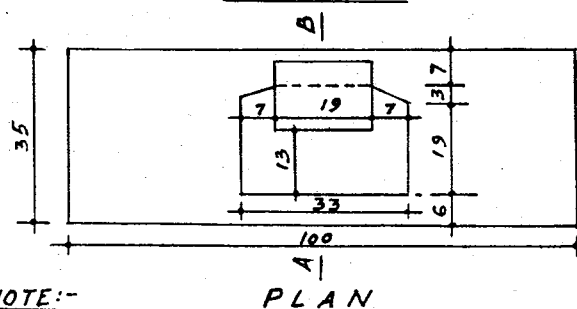
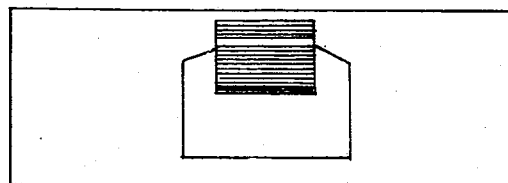
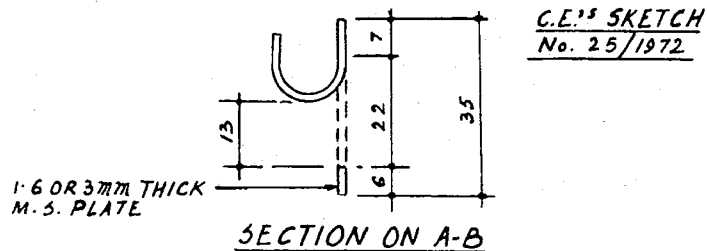
Where the addition to this, a wear on the underside of the steel trough sleeper has taken place liner B to CE's sketch No.22/1972 would have to be used alongwith liner. A. Copies of CE's sketch No.1/1972 and 22/1972 for these liners are enclosed. These liners should be made locally and used in track.

Efforts are also being made to get these manufactured in the Bridge Workshop to meet the immediate requirements. Immediate action should, however, be taken to get these made by PWI's Black-smith to prevent falling of keys and any serious consequence that may follow. Moon washers already available in Kanpur track depot can be indented as per requirement and made use of.

Liners A & B are also being made stock items and will be obtained through COS for future use.

CC

(JAI)



NOTE:-

1. SPECIFICATION:- STEEL GRADE "A"
- 1:5:5. No. 226.
2. 1.6 OR 3mm THICK M.S. PLATE TO BE USED.
3. ALL DIMENSIONS ARE IN MILLIMETRES.
4. THIS LINER IS TO BE USED IN CASE OF WEAR BETWEEN THE KEY & TOP OF THE STEEL TROUGH SLEEPER.
5. THIS LINER MAY BE USED INDEPENDENTLY OR ALONG WITH LINER "B" (C.E.'S SKETCH No. 22/1972).
6. 1.6 OR 3mm THICK LINER SHOULD BE UTILISED DEPENDING UPON THE EXTENT OF WEAR ON THE STEEL TROUGH SLEEPER.

M.S. LINER (A)

(SCALE:- FULL SIZE)

