Repeaters

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Mr. Myles Morgan
Morgan Construction Co.
Worcester 5, Mass.
U.S.A.

Dear Myles Morgan

I have followed the correspondence on this subject between you and Bill Murray with great interest, and was particularly pleased that Bill got rid of all the structural steel super structure on the Steel Peech repeaters by the judicious addition of a snubber or two.

As I have been "in" on the repeating of ovals from the very beginning and was also present at the inception and conception of the twist pipe and later "invented" the cast iron plugs and trough to replace the twist pipe, I think I can contribute something to this discussion.

The introduction of the twist pipe and twist trough did give more positive control of the oval, but it brought with it the shipping back end, which in some cases caused as many cobbles as we had prevented by using long twisters. The pig tail would pull off unnoticed in the receiving guide of the stand and plug this guide causing the following bar to cobble. In recognition of this problem I was all for the twist roller which was developed for Sparrows Point and which I insisted on having at Columbia Steel. I made it work at Columbia, and twisted both clockwise and counter clockwise depending on whether I wanted an easy jump-out with a loose receiving guide, or needed to have a good push through a tight receiving guide which necessitated a delayed jump out.

For following mills the small twist rollers were abandoned, because operators were too lazy to keep them in good shape by regular maintenance servicing, and now we are back to twist troughs again.

It occurs to me that it might be the time to make a compromise. What about using a twist roller followed by a longish trough in which were laid half castings, having a straight groove, preferably ground for smoothness and alignment. This long guide would not do any twisting, but would be set at the correct angle to hold the oval at the most desirable inclination to make the turn round the repeater and to jump out readily as required. This long guide would be less subject to wear than a guide which has to do most of the work at its point, and the back end would pull out easily as it would be entirely free to twist.

Means of adjustment would be essential so that the whole guide could be turned slightly one way or the other to give the best inclination.

The Florence Cottage
St. Briavels
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England

28th October 1954
When I "invented" the twist trough with cast iron inserts, I ran them dry and was pleased to see them ger red hot because the front ends were less prone to get chilled going through. Needless to say the construction of the troughs themselves was sturdy enough to stand this heat without sagging. The original twist pipe had to be water cooled to prevent it from buckling, and it was hell's own game messing about with water connections and seals in the jacket. As the cast iron inserts of the twist trough were able to accommodate expansion cooling water was unnecessary. Of course you had to handle the parts with tongs, when taking apart, or making adjustments, but so you do with hot steel.

I hope my suggestion is clear without a sketch. The use of a twist roller alone requires very close adjustment and a high degree of intelligence, which under modern conditions seems to be a diminishing quality in rolling mills. By adding a long guide, and I mean a guide as long as the present troughs, slight over twisting or under twisting by the twist roller would be correct, and the twisting action would be killed by the time the first end hit the repeater groove wall.

Sincerely

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Eric H. Fors