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“A1 Peppercorn part 12, smokebox and piston rings”

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Firstly, some good news, I can confirm that at least one member reads my ramblings! Shortly after the publication of the last newsletter I had a call from Lionel Flippance responding to my plea for expert advice on piston rings. Many thanks Lionel, and your advice was well received, and you will see the outcome later (if you are reading this article too?).

So to the build and progress since the last (very recent!) newsletter. The main focus has been to finish the motion work on the last side of the loco. Is it finished? Well not completely; still a couple of parts to do, but almost there. I won't repeat the same explanation that I did previously; instead talk a little about some new parts. One of which falls into the category of “I know that is difficult, so will do it later!!” you know the type. When you are building your first locomotive you are blissfully unaware of which parts throw up the biggest challenges, and therefore blindly charge in, only to find out later how difficult it was. This time around one such job was the smokebox door hinges, and I must confess I had been finding good reasons to do something else instead. Anyway, for some reason I found myself tackling this job and you can see the outcome in the pictures. I am not sure how everybody else goes about this, but I mill the strap section from a single piece leaving the hinge pivot to be shaped at the end. The bit I find difficult is getting the shape of the strap section, so it sits flat on the domed door. Anyway, as you see following a wet afternoon of fiddling and bending it does not look too bad, and it works too!



Now about the “Lionel” piston rings, and I hope I am not divulging any IMLEC secrets here, but following his advice that bronze piston rings worked much better for him, I decided to also try them. Eventually I sourced some bronze tube of a suitable size; tube because it is of course cheaper than buying a lot of expensive bronze which will end up on the workshop floor. Making them to the same dimensions as the cast iron versions, but fitting two 1/16” rather than one 1/8” on the main pistons, and sure enough they seem to work really well. They appear to give a good suction with minimal resistance; I will be really interested to see how they perform with air and then steam. So buoyed by my apparent success I decided to make the piston valves and similarly fit these with the

same ring concept as you can see from the pictures. Once again, the same result, so thank you Lionel.



The final task for this update, which is as I write on the workshop bench, is the inner connecting rod. Another simple looking job that consumes more hours than you first expect, but on the home run now, just need to make and fit the clamping studs and then bore the hole for the main bearing. Of course, then the whole thing needs the obligatory tidy up with emery paper etc.

Just to finish I have included a couple of pictures of the locomotive I am building, 60121 Silurian, it is amazing how much detail you can get from these old photos. As I have also said before when you understand how much they swapped things around whilst servicing these locomotives, like boilers, tenders etc., it is no wonder that the same loco appears to have changed from one picture to the next. Which is the perfect excuse for us modellers to deviate here and there!



And finally, I just wanted to share the last photo I found of A1 Kittiwake after an unfortunate incident. I can't imagine how this happened, but to bend the buffer beam like that you would not have wanted to be on the footplate, even in 5" gauge it would have hurt!

