Early Steam Ploughing by Pat Freeman Steam Plough Times June 1989

Whilst researching the early history of two Chelmsford firms, R.Coleman and Eddington & Steevenson, in the Essex Record Office, I read with interest in a local paper of that era a report of the very first trial of R.Coleman's Steam Plough and comments on the Eddington portable engine and windlass. The Coleman steam drawn plough was stated in Haining and Tyler's book "Ploughing by Steam" to be based on the vee principle.

"The Chelmsford Chronicle" of 11th July 1856 said in the foreword of its report 'those who were present on Saturday at the first experimental trial of Mr Coleman's Steam Plough will confirm us when we say the principle has been discovered and that it has been satisfactorily tested and that there was nothing to disappoint but everything to justify hope."

It therefore seems that the exact date of this first public trial took place on Saturday 5th July 1856 at Writtle, which is but a couple of miles from the site of R. Coleman's works in New London Road, Chelmsford.

The article goes on to describe in detail the Boydell engine used in the trial. There are also some interesting comments concerning the engines operation both immediately before and after the trials. The Boydell engine was steamed from London to Chelmsford on the Friday before the trial and it completed the journey in nine hours, in spite of having to negotiate several steep hills en route. The reporter goes on to say that he was impressed with the way the engine turned sharp corners, went over an undulating stock yard and proceeded up a 3ft slope that rose $1\frac{1}{2}$ ft.

A description of the trial was given as follows.

"The implement was first tried upon a piece of clover ley which had been fed off by sheep and was laid down nearly two years since. We need scarcely say the surface of the earth was as hard as a brick, indeed so baked that we heard more than one farmer question if in its present state the ordinary plough would enter it. Here there was a difficulty In getting the steam plough to enter and it being deemed hardly a fair opportunity for the implement to display its capabilities, the engine towed it to a softer piece adjoining the road where it got to work in much better style and even on the harder soil Mr Coleman said a slight alteration in the form of the share would overcome the obstacle. Several stretches were ploughed and the result of the experiment was such as to justify the hopes of success indulged in by its ingenious inventor."

After the trials it dragged a plough with several men on it, besides nine or ten men on various parts of the engine, into Chelmsford. It was the first engine ever to steam down its streets and it attracted a large public gathering. As the paper said, "In turning the Half Moon Corner, the steersman (an amateur) took too wide a sweep and caused a short delay but was subsequently guided through Mr Coleman's gates with the plough attached without let or hinderance."

Incidentally, the first reference in the Chelmsford Chronicle to R. Coleman that I could find was an illustrated advertisement in the July 27th 1849 edition. This showed the "newly invented Patent Drag Harrow and Scarifier" Prices were, with cast iron frames, from £7 to £14 and with wrought iron frames £10 to £18.

If reference is made again to "Ploughing by Steam", on Page 115 is a mention of A & V Eddington's (of New Street Iron Works, Chelmsford) portable engine and windlass hauling a draining plough in 1859. This tackle was also shown at the R.A.S.E Warwick Show. It also says that "Testimonials sing the praises of the equipment, which seems to have been used solely for mole draining." However in the Chelmsford Chronicle of Oct 17th 1859 there is a report of a visit to the farm of Mr William Impey of Broomfield, Chelmsford, "to witness the practical operation of Mr Eddington's patented invention in connection with steam ploughing." Mention is made of the trials at Warwick of a draining plough and the trials at Broomfield were "an adaptation of the same principles to steam ploughing; involving of course many

alterations in detail to render it suitable to the altered nature of the work. By this plan, Messrs Eddington have, since harvest, ploughed upwards of 150 acres in the neighbourhood of Chelmsford." It concludes by saying "we understand Mr Eddington's windlass, as applied to the steam plough, is attracting considerable attention. Many visitors of authority are expected to witness it in operation at Mr Perry's Warren Farm, Writtle, Chelmsford, from the next day onward."

Further information on this firm and its exploits can be found in the books "Steam Engine Builders of Suffolk, Essex and Cambridgeshire" by R.H.Clark and "Alfred Yarrow, his Life and Work" by Eleanor Barnes (Lady Yarrow). Published by E. Arnold & Co.,1923.

Note: "Ploughing by Steam" by John Haining and Colin Tyler is available currently on eBay. The R.H. Clark books are currently listed on ABE books also to be found on the internet. JB.