$(.02+.04)=0.06$; $\triangle=48^\circ$; $R=\frac{5730}{6}=955$. Substituting in the equation

$$R^1=\frac{799.90-846.69-0.12}{0.83760-0.89046}$$

$$=\frac{-46.91}{-0.05286}=887.43.$$

therefore from Searles' Table VI we get

$$D^1=6^\circ 28'=6^\circ.466.$$

$$L^1=48\div 6.466=742.35 \text{ ft.}$$

$$T^1=(887.43+3.92 \tan\frac{\triangle}{2}=396.85 \text{ ft.},$$

which is the data required. Other problems might be taken, but we believe enough has been given to show the working of the curve.

Some engineers, it might be remarked, seem to think that using what they call "elaborate transition curves" is a waste of time. No reason is offered, however, to show why it should take more time to do it right than wrong. At any rate, present railroad practice demands the best, and a properly qualified engineer is one able to respond to these demands. Surely, if a thing is worth doing at all, it is worth doing well.

In conclusion the writer wishes to extend thanks to Prof. Crandall for his kindness in allowing the use of his notes and tables.