Solution to Problem 51

The surveyor should start at the southwest corner of Section 36 and proceed northerly to the northwest corner thereof (shown as mile 1), then go easterly on a random line to the northeast corner of Section 36 which was previously set on the township boundary and correct on a true line back to the northwest corner (shown as miles 2,3). This is repeated in a “Γ” pattern to the southwest corner of Section 1 as shown by the mile numbers and then interrupted with a check along the westerly line of the last section in the tier, in this case Section 1.

After completing a tier the surveyor is required to return to the south line of the township and repeat the “Γ” pattern, up to and including the line between Sections 4 & 5. The reason mile 24 follows mile 16 is because he has to walk 7 miles back to the south line to start all over.

After mile 93 starts a new pattern: the line is run easterly as before on a random and then true line back, but before proceeding northerly the line is run westerly to the township line, again on a random and back on a true line. This “T” pattern is repeated for the entire tier and ends with a check on the line between Sections 5 & 6, for a total of 118 miles.