

HINTS TO HYDROGRAPHIC SURVEYORS

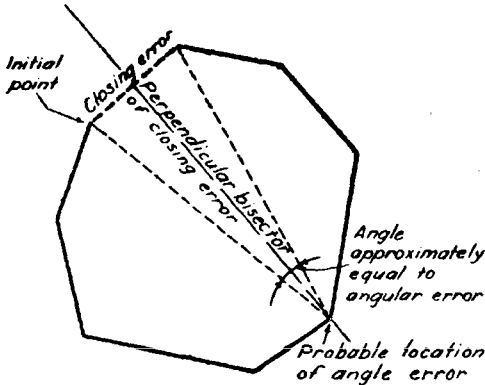
CORRECTING CLOSURE ERROR

by

GEORGE C. COMMONS.

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When, in making a survey, the last course fails to make an angular closure, due to an error in angles at some transit point, the method illustrated will often serve to locate the error, thus giving one angle to check in the field, instead of repeating the entire survey. The principle of the method is that in plotting the survey according to the field notes, the portion made after the angular error may be pivoted about that point to the amount of the error, so as to make a closure.



To apply this method, the survey is plotted in the order in which it was made, and the closing line is drawn in. A perpendicular is erected at the mid-point of this closing line, and the following tests are applied: (a) If the perpendicular bisector of the closing error passes through or near to an angle point of the survey, and (b) if the angle subtended at this angle point by the closing error approximates the angular error of closure, and (c) if pivoting the later portion of the survey about this angle point so as to eliminate the closing error is in the direction required to correct the angular error, then it is very probable that the error is at this angle point.

ASTRO-RADIO POINTS

by

MAJOR K.M. PAPWORTH, R.E.

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London, July 1939, page 153).

" we but teach
Bloody instructions, which being taught return
To plague the inventor; "

MACBETH.

Some years ago there were two or three articles in the *Empire Survey Review* on the subject of astronomical fixation, but although the subject is of general interest to surveyors, no further articles have appeared. The following notes, which refer primarily to surveys on a scale of about 1/500,000 and not to

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