## NOTE ON THE PRE-GLACIAL DRAINAGE OF THE TRADEWATER RIVER, KENTUCKY.

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In a paper by the author, entitled "The Genesis of the Ohio River", which was published in the Proceedings of the Indiana Academy of Science for 1924, the statement was made that the original course of the Tradewater River was down the present channel of the Ohio to a junction with the old Cumberland River at Bay Creek, a short distance below Golconda, Illinois.

This interpretation was not entirely satisfactory, as it involved a change of direction of the Tradewater from a general northwest to a general southwest trend, but since no gap could be found below the gorge through which the Tradewater now enters the Ohio, it seemed the only solution.

The possibility of the existence of a cut off farther up the stream, by means of which it could have reached the channel now occupied by the Ohio above the divide at Caseyville (see figure 1), instead of be-

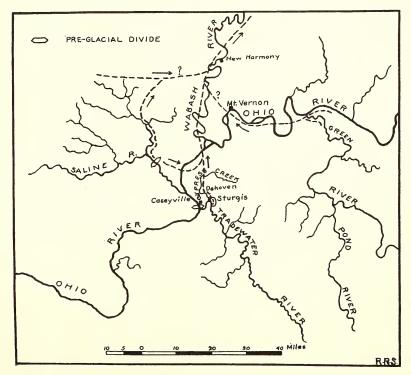


Fig. 1—Map showing the present and pre-glacial drainage routes of the Tradewater River and other streams.

<sup>&</sup>quot;Proc. Ind. Acad. Sci., vol. 34, 1925 (1926)."

low that point, did not suggest itself; consequently, no examination was made in that direction. The abrupt bends a few miles up the river near Sturgis, however, should have been recognized as indicative of a readjustment of drainage at that point. It seems that this was the case, for Leverett has informed me recently, that the lower portion of Cypress Creek, which joins the Tradewater near Sturgis, flows through a wide valley whose floor is of such slight elevation that, as he was told, flood water of the Ohio passed through this valley into the Tradewater. If this is the case, then it is obvious that pre-glacial Tradewater River flowed north through the valley now occupied by the lower part of Cypress Creek, going around the point known as Anvil Rock, and continuing northward, joining Green River somewhere in the vicinity of Mt. Vernon and flowing on northward through the valley of the present Wabash River.

With the damming of the pre-glacial Tradewater River at the north by glacial drift, it became necessary for a new outlet to be found. This outlet was formed west of Sturgis through the present gorge. When the Tradewater abandoned its course to the north, Cypress Creek, which had formerly flowed from the southeast into the Tradewater, was forced to turn south along the abandoned valley, and to join the Tradewater near Sturgis.