

before the latter published his results.

So to date there has not been brought any valid argument, either theoretical or

experimental, against the General Theory of Relativity.

Science News Letter, March 21, 1936

GEOLOGY

Great Lakes Harbors Growing Deeper Due to Tilt

American Side Gaining at Expense of Canada Through Natural Laws Beyond Control of Either People

CANADA and the United States may have reciprocal trade agreements but the United States is benefiting at the expense of Canada in another matter over which man-made laws have no control. Harbors on the American side of the Great Lakes are getting deeper and those in Canada are becoming shallower.

The reason, as revealed by Capt. H. V. Canan, U. S. Corps of Engineers, is that the region about the Great Lakes is tilting about a "hinge line" which roughly is in the direction of 20 degrees west of north.

This tilt, says Capt. Canan (*The Military Engineer*, March-April), is generally improving conditions in harbors on

the American side of the Great Lakes. He said:

"This action is material rather than merely of scientific interest and amounts to as much as 0.3 feet in some harbors. Considering vast harbor areas which are maintained to prescribed depths, a large saving in maintenance dredging costs will result when the effect of tilt on American harbors is given proper consideration.

"This uplift also affects the flow and the flow equations in the connecting rivers of the Great Lakes, and in computing flows for these rivers over extended periods its effects are clearly recognizable. Tilt has also been a factor in decreasing

the available depths over the sills of the locks at Sault Ste. Marie, Michigan.

"Much of the evidence presented of decreasing lake levels is in reality the effect of tilt. Reports indicate that in about 1860, North Bay, Wisconsin, was an important harbor for schooner navigation, as many as 35 boats tying up there at one time. Adjoining a rock ledge, old ring bolts used for mooring these boats can still be found. Correcting the present charts for the stage of 1860, only about 3 feet of water would have been available. This loss of depth can only be attributed to earth tilt."

Describing what effect the observed land tilting will have on the future of the Great Lakes, Capt. Canan says:

"There has been much sensational speculation as to the geological future of the Great Lakes. Rather than the danger of the lakes draining down the St. Lawrence through failure of the outlet plugs, the more apparent danger, if tilt persists, is the draining of the Great Lakes above Niagara down the Mississippi system. While speculation of this sort may be mentally stimulating, any danger is so remote, and the engineering steps necessary for prevention are so relatively simple, that there is little danger of losing the vast investment made by the United States and Canada on the Great Lakes."

Generally accepted explanation for the land tilt on a line passing through the Great Lakes is that the land to the north, in Canada, is still rising from the enormous squeezing which it received during the last Ice Age.

Science News Letter, March 21, 1936

CRIME DETECTION

Demonstration Shows How Science Aids Against Crime

A GRIM exhibit awaits visitors to the scientific exhibit halls of historic Franklin Institute in Philadelphia this spring.

There, beside the Planetarium that can transport you thousands of years in time or millions of miles in space, will be a new series of demonstrations emphasizing the hard realities of the present-day social problem of crime.

The dull footfalls of half a million armed men may be heard walking abroad in this land today, Director Henry Butler Allen of the Franklin Institute said at the ceremony opening the new exhibits. No neutrality law can be invoked to protect America against becoming involved in the depredations of



KIT OF MODERN "SHERLOCK"

L. C. Schilder (left), chief of the Identification Division, Federal Bureau of Investigation, shows W. Chattin Wetherill, Vice-President, and Henry Butler Allen (right), secretary and director of the Franklin Institute, the field office equipment used by Department of Justice crime fighters. Mr. Schilder, as personal representative of J. Edgar Hoover, director of the Bureau of Investigation, took part in the ceremonies opening a new series of demonstrations on "Science in Crime Detection" at Franklin Institute.