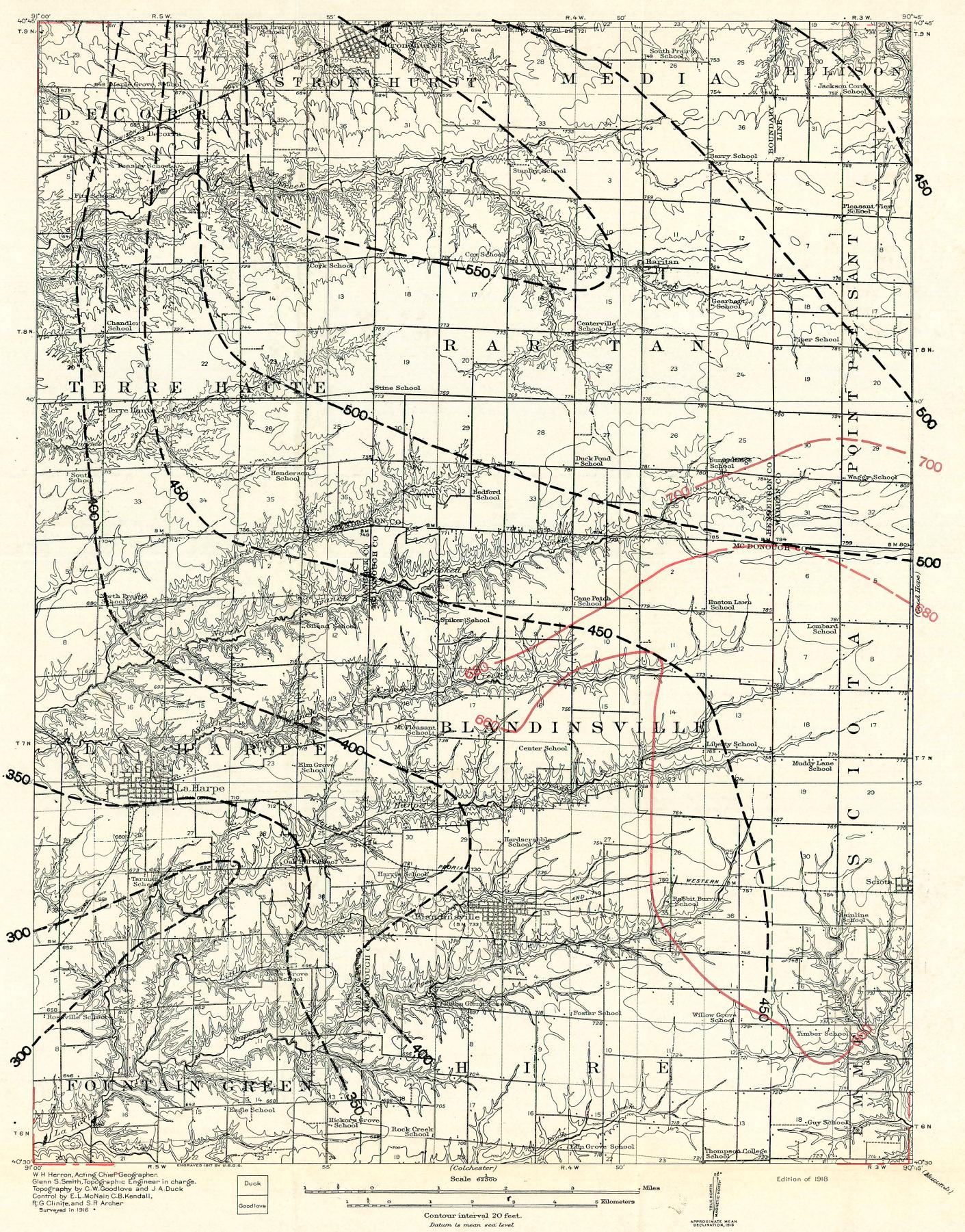
ILLINOIS STATE GEOLOGICAL SURVEY BULLETIN NO. 40, PLATE III.



MAP OF LA HARPE QUADRANGLE

Showing structural contours based upon the elevation of No. 2 coal (red) and upon the elevation of the Burlington limestone (black) above sea level

DESCRIPTION OF MAP

The heavy black lines show the position of the base of the Burlington limestone above sea level, and are to be considered apart from the fine black lines which represent the surface of the region

The reader is requested to imagine that the Burington limestone and all the beds that overlie it are removed so that the upper surface of the underlying Kinderhook is exposed, and that the area is invaded by a sea three hundred feet above present sea level. The 300-foot black contour line would be the shore line at this stage, but if the level of the sea would rise 50 feet the shore line would creep to the position of the 350-foot contour, and similarly with each 50 foot rise the shore line would advance to the next higher contour line. Thus the surface of the top of the Kinderhook (or base of the Burlington) is high underlying section 33 of Point Pleasant Township and would remain above water until the water raised to almost 550 feet. The general dip of the beds is to the east.

In a similar manner the red contour lines show the position of No 2 coal above sea level and the reader may follow a method in picturing its surface similar to the method just described for the Burlington limestone.

SPECIAL NOTICE It is impossible to predict the presence of oil in any given area. The fact that the Hoing oil sand is present at only a comparatively few places adds an additional element of uncertainty in the western counties of Illinois. Since in most fields the oil accumulates where the sand has been folded upward, and since the downward folds or synclines are usually filled with salt water, a map which shows the position of the beds previous to drilling is very valuable. The operator can then confine his tests to territory where accumulations would take place if the other conditions were favorable. Thus one element of chance is eliminated.