

THE EFFECTS OF FAULTS AND DYKES IN THE SALINE COUNTY COAL FIELD

CLARENCE BONNELL

HARRISBURG TOWNSHIP HIGH SCHOOL, HARRISBURG, ILL.

(Synopsis Only.)

At Carbondale this paper was accompanied by a large map of Saline County showing the coal fields, existing workings, and the faults and dykes known when Co-Operative Mining Bulletin No. 19, Coal Resources of District V., was issued from Urbana. Additional faults and dykes, discovered or indicated in the workings and drillings since that time, were added. The effects of these dykes and faults in working the field in the past and the difficulties to be overcome in future operations were discussed. The value of published geological facts concerning such features of a mining field was pointed out. It was shown that the data collected and chiefly published by the Department of Geology of the University of Illinois, working with the United States Bureau of Mines, is of great value in determining the location of new mines and especially of shafts.

Since the main lines of faulting are now pretty well known in this field, future operations will be carried on without the losses formerly sustained in encountering unsuspected dykes and faults. Since dykes are more local, their size and character and, in fact, their location cannot be foretold except by actual boring. The largest dyke so far found in Saline county was discovered in sinking a shaft a short distance from a drill hole which showed no evidence of such a geological feature. The work was made much more expensive due to the hardness and extent of the igneous rock encountered.

Since the general trend of the large faults is now fairly well known, as they are found in actual workings or shown by drill hole records, it is not probable that the mistake of sinking a shaft near a 150 foot fault will be repeated.

DISCUSSION BY H. E. CULVER OF CLARENCE BONNELL'S PAPER
"THE EFFECTS OF FAULTS AND DYKES IN THE
SALINE COUNTY COAL FIELD."

"The presence and position of the dykes on the property of No. 5 of the Saline Co. Coal Co. has been suggested as a determining factor on the sulphur content of No. 5 seam. It is therefore desirable that the exact position and character of the dykes, their relation to No. 5 and No. 6 seams and the character of the seams be carefully noted in order that the problem may be settled."