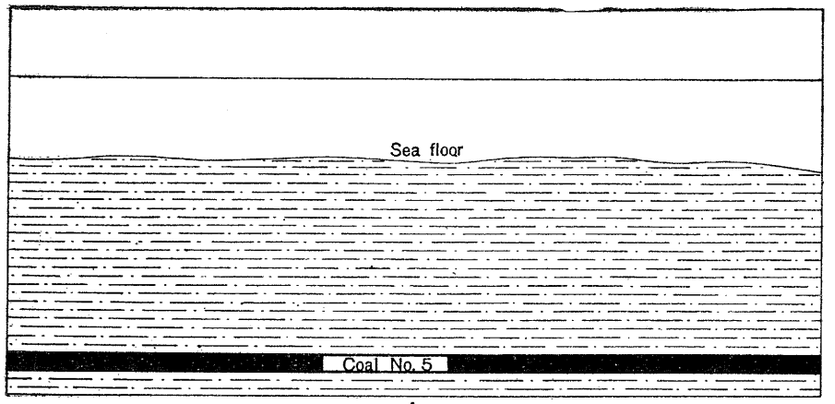
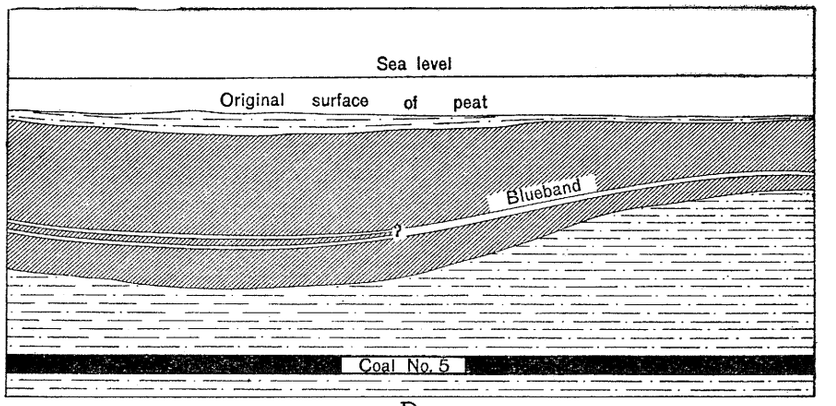


A



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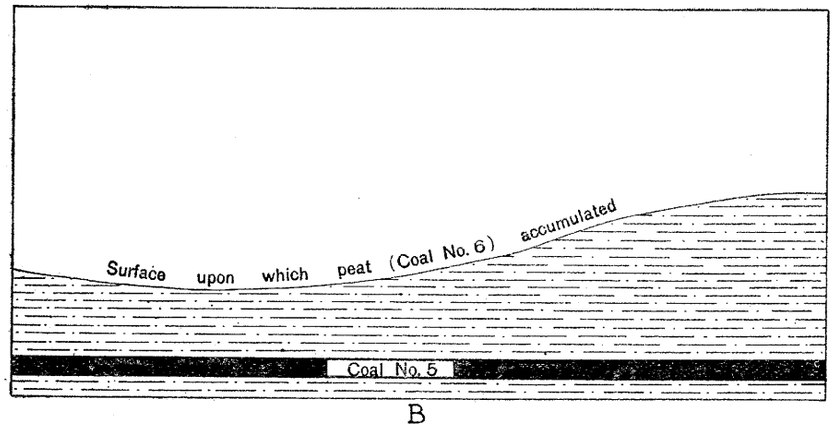

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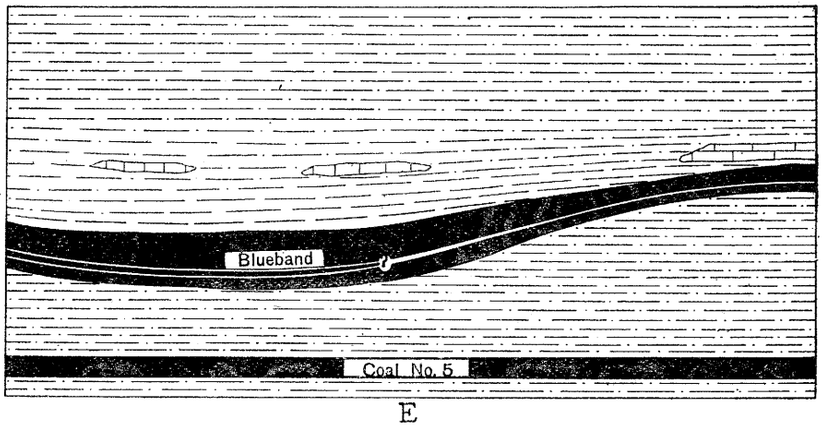

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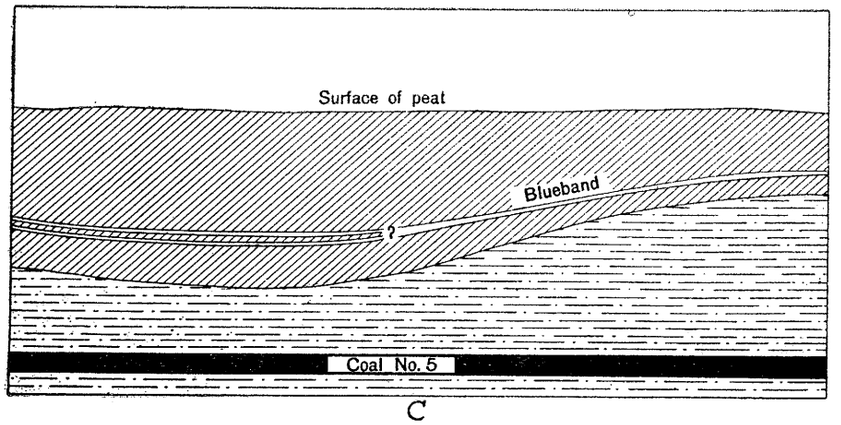
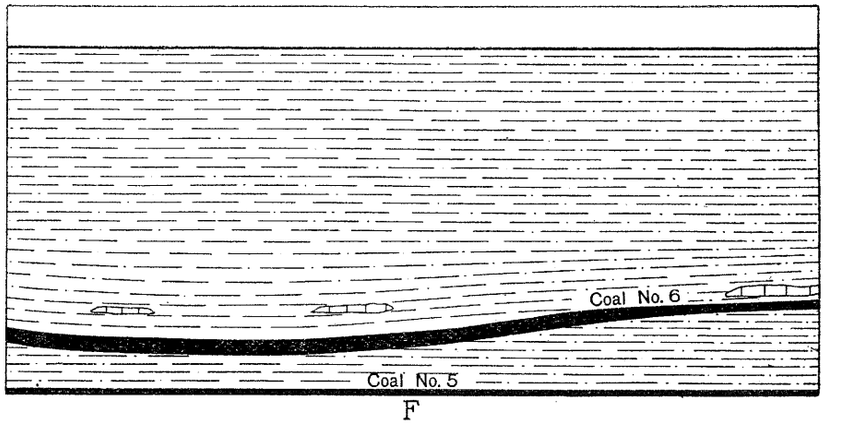


C



F

Graphic history of the area showing probable conditions of accumulation of coal No. 6

The diagrams are sections which extend across District VI in an east-west direction. The vertical scale is much exaggerated but is about one-half as great in F as in the other diagrams. The horizontal distance represented is about 25 miles and the maximum interval between coals No. 5 and No. 6 is about 90 feet.

A shows coal No. 5 with shale deposited above it. In B a basin is shown in the shales lying above coal No. 5. The basin may be due to erosion or to lack of deposition. In the latter case the sediments of course never extended across the region in full thickness as is shown in A. Conditions being more favorable for peat accumulation in the basin that without, a greater thickness collected there until finally the swamp was completely filled, as in C. Since shrinkage would be more rapid where the peat was thickest, upon subsidence sediments would first collect in such a basin above the thick coal, as in D. The additional weight of this sediment would tend to continue the basin in existence for a certain time. Because of the unstable conditions above the thick coal, limestone would not be as probable a deposit as mud and sand. Eventually, as in E, the differences in the rate of shrinkage of the thick and thin coal would be too small to affect the character of the deposits and the successive beds would be widespread. The last diagram, F, shows the final relationship of coals No. 5, No. 6, and No. 9, with the upper and lower coals parallel but the middle bed, No. 6, varying in position relative to the other two.