

ations of creeks at the surface could have no bearing on the underground distribution of petroleum. The junction of two streams and the location of a sand-flat could sustain no relation to strata three or four hundred feet beneath. Whether the situation were in a ravine or on the upland could make no difference except in the depth of the boring. The notion of "ranges" and "lines" in the distribution of productive territory was illusory; since this is determined by the direction, the length, and the breadth of the formations which furnish the requisite conditions.

7. Petroleum is not confined to any particular formation. For many years it has been known in limited quantities, from the Eozoic gneisses to the Tertiary. The assumption was misleading, therefore, that every oil region must be supplied under the same stratigraphical and topographical conditions as Venango county, Pennsylvania. It was a matter of scientific certainty that another region might be fed from strata of a different geological age, of a different lithological constitution, dipping in a different direction, trending to other points of the compass, and overlaid by different topographical features at the surface.

All these principles, I have said, were known to science, and secured to the scientific man, certain important advantages in arriving at judgments concerning prospects of success in a proposed enterprise. All of these principles were disregarded by a majority of the "oil-prospectors." Some men under pay from capitalists, even resorted to the witch-hazel fork in quest of knowledge on which capital might venture investment.

Let me now add some principles which experience and observation have pretty well established, and you will have the whole philosophy of oil-finding and oil production. It is generally admitted that the porous stratum in which oil accumulates must have an arched or anticlinal form. Otherwise, the oil will spread laterally to an indefinite distance, and no local accumulation will take place. On the contrary, the oil will somewhere find an outlet to the surface.