At the meeting of this Association a year ago, a question was asked regarding the correlation of bottom land soils which had been reclaimed and protected from overflow by the construction of levees; the question indicating the possible feeling that such soils being no longer subject to periodic inundation, should conceivably be classed in a different soil province as "terrace" soils. In our western surveys we have to do a great deal of work on transported soils. In fact by far the major part of the soils possible of agricultural development lying west of the Great Plains are made up of soils that have been transported by wind or water. In California over 75 per cent of the arable land of the state has been covered by detailed or reconnaissance surveys. Of the 25,700,000 acres on which the measurements of the soil areas have been completed and tabulated, we find that about 5 million acres are classed as non-agricultural (rough mountainous land, riverwash, etc.), about 4 million acres are residual soils, over 300,000 acres are peat and muck, and over 15 million acres are transported soils. Of the latter, about 6,600,000 acres are "Recent Alluvial", over 500,000 acres are "Aeolian" or wind-transported soils, about 800,000 acres are "Lacustrine" or lake-laid soils and over 7 million acres are "Old Transported" or "Old Valley-filling" soils, these latter being comparable to the "Terrace" soils of the east. In other western states the relative importance of the transported soils would be about the same as in California.

In the strictly arid portions of the country much of the transported soils consist of alluvial fan deposits. The alluvial fans are great aerial deltas built by streams having an intermittent or greatly fluctuating annual flow. They consist of a mass of water-borne materials of a typical fan or cone shape with the apex at the mouth of the canyon through which the stream emerges from the mountains, spreading out from this point with a decreasing gradient out towards the center of the valley. The individual alluvial fans built out from the many canyons, coalesce to form great slopes of deep alluvial material. Each year streams that form these fans overflow their channels and carry out their annual load of sediment which is spread over the fan through the many distributaries and added to the increment of the previous years. On the upper parts of the fan the soils are coarse and stony. The intermediate slopes are sandy, while the lower, flatter slopes are heavy in texture. Usually the fans from the different sides of the valley lead out to a central basin where the heaviest clays are deposited under semi-lacustrine conditions.

When for any reason there is a change in the regional drainage systems brought about usually by changes in the elevation which would increase the gradient of the land, the streams that have previously built up the alluvial fans begin to cut through these deposits eroding them and carrying the new load of material cut out to be spread on a new lower fan farther out towards the center.