

## EARTH BUILT OF WEDGES NEW GEOLOGICAL THEORY

A world built of wedges, like an orange, only with the wedges more irregular and probably not running all the way to the center, is the gist of a theory which is set forth in recent issue of the Journal of Geology by Dr. Rollon T. Chamberlin of the University of Chicago. According to this new theory, the more level parts of the earth's surface represent the broad ends of these great wedges, and the mountain chains are due to the crumpling up of their sides, where they are crushed against the sides of neighboring wedges. Not all mountain ranges were necessarily formed in this way, but wherever they occur in pairs, with a broad highland in between, there is a strong probability that such forces have been at work. Examples are pointed out in the Rockies and Sierras in America, with the Great Basin highland between; and in Asia the Tibetan plateau lying between the Himalaya and Kuen Lun mountains.

This theory, was first given wide prominence by a German geologist, Dr. Leopold Kober though Dr. Chamberlin first called attention to it in this country a number of years earlier. Dr. Chamberlin has tested it out not only by studies in the field but by laboratory experiments. He placed wedge-shaped masses of material in a triangular frame of massive steel, and slowly squeezed in the sides. Under the pressure the material buckled and broke in wedge-shaped fractures. The same kind of results were also obtained when layers of loose sand were pushed between wooden blocks. Not only did wedge-shaped "faulting" occur, but miniature mountain ranges piled up on the surface, as called for by the theory.

## GREATER TORNADO DAMAGE SEEN AS POPULATION INCREASES

Tornadoes will do more damage as the United States becomes more thickly populated, was the forecast made by two U.S. Weather Bureau meteorologists, Clarence J. Root of Springfield, Ill. and S. D. Flora of Topeka, Kansas, before the recent meeting of the American Association for the Advancement of Science.

"There is no reason to believe that in prehistoric days tornadic storms were fewer or less severe than today," Mr. Root said. "Before the white man came these storms sweeping over treeless prairies could do little harm. The living conditions of the Indians were such that loss of life was slight. The early settlers in isolated cabins were for the most part ignorant of the real menace of the tornado."

As the country becomes still more thickly populated the point will be reached, according to Mr. Flora, where construction will be perfected to resist wind stress more.

"Just as the modern fireproof building was evolved to reduce the enormous fire loss, so we may expect to see buildings in the future withstand violent storms," he said. "A study of the tornado which hit Murphreesboro, Illinois, in March, 1925, showed that better construction would have saved many lives and much property."

According to a compilation of data on storms made by Mr. Root, the state of Iowa leads in important tornadoes, having nine percent. of them all. Missouri, Kansas, Tennessee, Alabama, Minnesota, Illinois, and Wisconsin follow in order.