

*only on the forest, not on the adjacent cultivated fields* which were covered with various growing crops, mostly wheat, headed out but green.

It is well known that the summer temperature in forests is lower than that in the open. This lower temperature occurs not only within the forest itself, but also extends for some distance above the forest. Just how high the cooling effect is exerted is not known, but the writer was informed in 1908 that French army officers, in passing over a forest in a balloon, noticed the cooling to such an extent that ballast had to be thrown out to keep the balloon from descending too much. Obviously, then, under certain atmospheric conditions, moisture-laden winds which pass over open country without giving rain will cause precipitation to fall as they pass over forests.

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#### THE INTERNATIONAL GEOLOGICAL CONGRESS IN PRETORIA AND A GEOLOGICAL MAP OF THE WORLD

FROM July 29 to August 7 there will be held in Pretoria the International Geological Congress. This congress is bound to prove of the greatest interest to all the peoples of the world. Besides other important matters, it deals with the first geological map of the entire earth.

The manner in which this truly comprehensive work came into being is very noteworthy. The first International Geological Congress, which was held at Bologna in 1881, requested the Prussian Geological Survey in Berlin to prepare an international geological map of Europe. This enormous map, constructed on a scale of 1 to 1,500,000, or one millimeter to one and one half kilometers, and executed in forty-nine sheets, was recognized to be an achievement of such importance in the field of geological cartography that the Prussian Geological Survey was entrusted with the construction of an international geological map of the world. The work, however, was completely suspended by the rupture of international relations in consequence of the war. But, on the occasion of the International Geological Congress held at Madrid in 1926, the Prussian Geological Survey was entrusted both with the issue of a fresh edition of the map of Europe and with the production of a geological map of the world on the scale of 1 to 3,000,000, or one millimeter to three kilometers.

Since that time difficult preparatory work has been done. In February of the present year, the International Cartographic Commission met in the Prussian Geological Survey under the chairmanship of President Krusch for the purpose of determining various particulars, such as the colors to be adopted, etc. So

far the following countries have promised their cooperation: France, Russia, Switzerland, Denmark, Sweden, Czechoslovakia and certain South American states.

The geological map of the world, with its eighty sheets (forty for each hemisphere) will provide an accurate presentation of the rocks forming the surface of the earth; it will indicate their age; it will show the various faults and folds in the earth's surface, and it will give information as to the ocean depths. For the construction of the map, use is being made of the various special maps existing in the various countries, as well as of all the literature available concerning the character of the earth's crust. So far the first two sheets of the new map of Europe (Germany and the Alpine countries), as well as the first two sheets of the World Map—namely, Southwest Africa—have been completed; they will be laid before the congress in Pretoria by Professor Dr. Krusch, the president of the Prussian Geological Survey.

Professor Krusch, who is at the head of the German delegation, is well known as an authority on ore deposits. He will lecture to the congress on the various theories concerning the origin of rock-oil. The German Reich takes a lively interest in the work of the congress at Pretoria because decisions are expected there concerning comprehensive international scientific work.

Other members of the German delegation are Professor Kloss, of Bonn University, known for his investigations of granite, and Professor Kaiser, of the University of Munich, famous for his studies of South African geology. Dr. Schriel, the expert in whose hands lies the actual production of the two geological maps, and Dr. H. Reich, the geophysicist, also take part in the congress.

Pretoria has been selected as the meeting-place of the geologists because, as the center of some most remarkable mineral deposits, it offers experts a number of extremely interesting excursions. Some striking examples are: the platinum deposits in the neighborhood of Witwatersrand recently discovered by Herr Merenski, a German practical geologist; the new diamond fields in the Orange Delta, and the rich gold deposits of the whole district.

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#### THE PHYLUM IN ZOOLOGY AND PALEONTOLOGY

IN connection with a recent discussion between Dr. Austin Clark and myself, may I point out that the term "phylum" used in zoology to designate the major branches of the animal kingdom has an equally wide use in paleontology to designate what he calls "linear