

DR HAUDE'S WORK

Asia is very poorly off as regards meteorological stations. Nearly all the meteorological stations in this great continent are to be found in the peripheral parts, especially along the trans-Siberian railway, in British India and in Japan. On the coast of China there are only twelve stations, of which the Central Observatory in Peking and the observatory of the Jesuit Fathers in Sikawei near Shanghai are the largest and most important. In the interior of China T'ai-yüan-fu, the Shansi capital, is the chief station and at the same time that which is nearest the interior of the continent.

If in a map of the northern hemisphere one inserts all the meteorological stations that were in existence in the year 1927 one sees at a glance that innermost Asia, that comprises such an enormous part of the whole continent, is nothing but a great empty space, of whose meteorological conditions we know very little. For a year, it is true, an imperfect yet continuous series of observations were made in Urga, Ude, Uliasutai and Urumchi. As regards the desert-belts and Tibet, my own observations, carried out over a number of years, form the completest series that have been made in these tracts; and of these, those which I made in permanent head-quarters such as Yangi-köl, Charkhliq or Mandarliq are of special importance. But for the rest, our knowledge derives only from sporadic data and notes. From these available data one can, certainly, form a rough general idea of the characteristic features of the continental climate and meteorology. One knows of the terrifically violent storms near Hami and the no less violent E. N. E.-storms that rage in the Lop-nor desert in spring. We can also give theoretical explanations of their origin and the practical result of their effects. But what actual knowledge have we of their causes and characteristics? None. Actually Dr HAUDE's work and that of his collaborators is of such importance, that if on our arrival home we had been unable to show any other results than this, it would still have completely justified the sending out of a large-scale and costly expedition.

HAUDE's observatorium consisted of a cubical wooden cage with a roof and slatted walls constructed on the same principle as Venetian blinds, so that the wind could pass through freely while all direct rays from the sun were excluded. The cage was mounted on four posts, sufficiently high to obviate the possibility of the instruments being affected by the ground temperature. A couple of steps led up to it, so that one could mount to take readings. The whole structure was firmly stayed with ropes at the four corners, and it stood up to the strongest storms we experienced.

Protected minimum thermometers were exposed at different altitudes; these were set horizontally in firmly screwed holders. Insolation thermometers and other delicate instruments were laid out on the ground.

HAUDE had two metal masts of ten meters in height and at a distance of forty