FOG-SHELTER NET AT KEGON FALL AREA

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Fog hampers all types of transportations, construction works and sight-seeings. The present author participated in the experiment (**) of artificial dissipation of fog at Kegon Fall Area and submitted a method of "fog-shelter net" or "fog-prevention net".

The present impetus for the development of artificial dissipation method has come from sightseeing interests. Nikko is a small city in Tochigi Prefecture, and is one of the chief centres of pilgrimage and sightseeing in Japan. It lies about 160 km North of Tokyo by rail, in the Nikko National Park. Its natural beauties and the splendour of its monuments gave rise to a popular saying: "Do not say "splendid" (Kekko) until you would have seen Nikko". The Kegon Fall, its height being about 100 m, is justly celebrated for his grandeur and beauty, and one of the most interesting sightseeing in Nikko Area. This fall hangs along Dai-ya-gawa River, flowing in a easterly direction from Lake Chuzenji.

In this experiment the Kegon Fall was chosen as the site of experiment. In the neighbourhood of the Kegon Fall from spring to autumn there are so often fog that sightseers must return without enjoying the fall from the viewing-fall station. The present author found that most of fog are of up-slope fog type accompanying with ascending air current creeping from the down-stream of the Daiya-gawa River.

It is by far more easy as well as practicable to shelter fog from intruding or advecting into the Kegon Fall Area from the down-stream of Daiya-gawa River than to dispel fog artificially. Accordingly in the neighbourhood of Nehan Fall (at the side of viewing-fall station) at about 150 m on the down-stream from the Kegon Fall, we have developed a fishing-net, 50 m \( \times \) 50 m, which was used as a fog-shelter net.

So far we can find no articles trying to shelter fog by means of net. Fog can be dispelled by the physical removal of the drops from the interested space of air. The net we used was a sort of fishing net with 1 square centimeter meshes, made of vinylon (50 m long, 50 m wide, 20 kg weight). This net was developed in the neighbourhood of the Nehan Fall. If the wind blew from the down-stream, the speed of the wind will be much decreased in the rear of the net (the side of the Kegon Fall). Therefore the wind cannot blow easily through the meshes,

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(**) This experiment was performed by the group, whose staffs are mainly consisted of members from the Construction Research Institute, Tokyo.
Fig. 1 - Fog-shelter net in front of the Kegon Fall. (Courtesy, Yomiuri Press).

Fig. 2 - Fog flows over the top of fog-shelter net, while it does hardly flow through the net (Photo by Mr. Nobuo Takahashi).