

crator; they usually break out on the sides of the mountain, accompanied with the eruption of vast clouds of smoke and ashes. The production of lava from Vesuvius is much smaller, proportionately, than that from Etna. Etna, of course, is a greater mountain, being 12,000 feet high as against the 4,000 feet of Vesuvius; and its lava is much more copious and also more fluid than that of the smaller volcano."

Dr. Washington scouted the idea that the volcanic activities in Alaska had anything to do with those in Italy. "Not only are these two widely separated regions quite independent of each other so far as their volcanoes go," he said, "but even in Italy the earthquakes that have been shaking Tuscany have nothing to do with the eruption of Vesuvius. The earthquakes of northern Italy are normal earthquakes, caused by the slipping of faults, or blocks in the crust of the earth, just as the Montana and Santa Barbara quakes were caused. Volcano tremors are local affairs, and are rarely felt even at moderate distances."

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#### PLAN TO ALTER SOUTH AFRICAN CLIMATE

"Rainfall over the whole of the central portion of the Union of South Africa is steadily decreasing year by year, and if this goes on at the present rate, the time will come when vast areas now supporting a farming and grazing population will be given over to the wild beasts of the desert. This process can, however, be checked. Its causes are known, and, being known, can be remedied."

This startling statement is not that of a sensational journalist in search of a thrilling story, but the considered judgement of a scientist, Professor Schwartz, of the University of Stellenboach.

Put in a nutshell, the reason for this gradual decrease in rainfall is the drying up of the big tract known as the Kalahari, 400 miles from the Orange River, in the south to Lake M'gami in the North.

Up to comparatively recently this area was traversed by a whole system of rivers dotted with several lakes. This water system connected Lake M'gami with the Orange River. But the lake which acted as a feeding reservoir for this system is drying up owing to the silting up of the streams that fed it from the north. What water it still gets and holds has been diverted by some mysterious play of Nature and now, instead of flowing towards the South directly, flows eastward into the Zambesi and westward into the Kunene and Okarango rivers.

So far has this process gone that of recent years the term "desert" has come to be generally applied to the Kalahari, although the word is a misnomer. The area is not by any means waste land yet; it is a vast undulating plain, partly covered with forest and partly with rich long grass whenever there is the slightest rainfall. It borders on one of the best cattle raising districts in South Africa, Bechuanaland. The forests are, however, fast dying; there is ample underground water supply which may be tapped by artesian wells, but the water lies too deep to affect the roots of the trees. For mile after mile, one may see wilted and withered remains of what once were luxuriant growths.

To remedy this state of affairs, three schemes have been proposed, and

the time is fast approaching when the Union Government will have to make its choice between them.

The first is a vast system of irrigation of the Kalahari, feeding the canals out of artesian wells. This would, however, require the presence in the area of a considerable population of settlers of which there is so far no sign. The initial expense would, moreover, be prohibitive.

The second scheme consists in the building of dams across the Okarango River and one of the tributaries of the Zambesi, the Chobe River. This would retain masses of water in the M'gami lake and, while blocking its present ways of outflow, force the surplus water into the old, dried up channels passing through the Kalahari. There is little likelihood of this project being adopted, on the score of expense, which would be enormous.

There remains the third scheme, which, in default of the more ambitious ones, stands the best chance of being adopted, and is backed by Professor Schwartz and other South African scientists. It provides for the construction of a dam across the Kunene River, which, it is calculated, would restore a great part of the old scheme of nature for the irrigation of the Kalahari.

Owing to the fact that labor, machinery, and to a certain extent, materials, would have to be brought to the spot from very great distances over difficult country lacking proper means of communication, the expenditure of money and time is likely to be very considerable, but the importance of the issues at stake are believed to justify it. Not only would the reclaimed area of Kalahari open up a vast stretch of magnificent grazing land, forest, and valleys suitable for orange growing, but the process of drying up that is threatening central South Africa with eventual economic and social ruin would be arrested.

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#### NEGRO SKIN GETS DARKER WITH AGE

Until he goes to heaven, the American negro is probably whiter when he is born than at any other time, Dr. Melville Herskovits of the department of anthropology of Columbia University has shown that the skin of the negro gets darker as he grows older and that this is not due to sunburn.

A child's toy top, the kind that is used to teach kindergarten children the principles of color mixture, is used to detect the differences in color. The tops are fitted with disks of spectrum red, yellow, black, and white which can be superimposed one on the other and leave slices of each color visible. When the top is spun the colors appear to the eyes to merge into one. By trial, the amounts of each color exposed on the color top are manipulated until the combination to match the skin is found. The amount of black in the color can thus be determined.

The skin color of New York City colored boys five and a half years old had about 64 per cent, black, that of boys ten and a half years old 70 per cent., and that of seventeen and a half year old boys 74 per cent.

When Dr. Herskovits compared the skin color of adult negroes from New York City and Howard University in Washington, he found that the amount of