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A Science Service Feature

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? WHY THE WEATHER ?

Dr. Charles F. Brooks,  
Secretary, American Meteorological Society,  
tells about:

WEIGHT OF RAINFALL

One does not usually associate rain with great weight. Even when the clouds let loose a torrential downpour the mind reckons it in ounces rather than in tons. Yet one inch of rainfall deposits 113 tons of water on each acre of ground surface. The 7.24 inches which fell at Richmond, Va., the night of July 30-31, 1923 was 818 tons to the acre, an immense weight.

To take the extreme case, so far as known rainfalls go, that of Cherrapunji in India, on the watershed of the Ganges, nearly 30,000 tons to the acre has fallen in the one month of August. The average annual rainfall of 426 inches there comes to nearly 50,000 tons.

Reckoning rainfall by weight gives an impressive idea of the power of the sun's heat through evaporation and the power of plants in drawing water from the soil and discharging it into the atmosphere. An inch of rain does not last long when the sun is bright and plant life is functioning. The 113 tons per acre soon disappears. The great weight is quickly returned to the air.

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(Tomorrow: Air Cooled by Ascending)

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