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? WHY THE WEATHER ?

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DEW PONDS

"We have no waters to delight
Our broad and brookless vales ---
Only the dew pond on the height
Unfed, that never fails."

Thus writes Kipling of the once mysterious artificial ponds on the summits of the English Downs, where sheep and cattle find water in dry weather when none can be had from wells and springs in the valleys below. These hilltop pools are said to explain why Jack and Jill went up the hill -- rather than down -- to fetch a pail of water, and the oldest inhabitants all agree with the poet that they "never" fail. However, most of them did fail to hold water during the dry summer of 1911.

As their name implies, the ponds are popularly supposed to be fed by dew. Unfortunately for this hypothesis, a water surface, because it cools very little at night, is about the poorest possible condenser of dew. Even vegetation, which functions much better, receives only about an inch or so of dewfall a year in England, according to actual measurements, while a dew pond may lose that much or more in twenty-four hours through evaporation and consumption by cattle. As the ponds are on hilltops and as rainfall generally increases with elevation, they doubtless gather more rain on an average, than do places of lower altitude. They have, however, an undoubted tendency to maintain their water level during long rainless periods, so they must be fed from some source other than dew or rain.

The mystery of dew ponds was solved some years ago. The ponds are all near the coast. During the chilly early morning hours after a hot summer night sea mists roll up over the hills and saturate their tops, but not the valleys, depositing a large quantity of water caught by vegetation growing around the ponds. The process is known as "fog-drip," and is the same one that explains, for example, why beans flourish along the foggy coast of California during almost rainless summer weather.

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