

## LESS HEAT FROM SUN DURING AN ECLIPSE

Look out for a drop in temperature if you are in the northeastern states where the cone shaped shadow of the moon will mark out a path during the eclipse of the sun on the morning of January 24. H. H. Clayton, meteorologist, of Canton, Mass., described at a meeting of the American Meteorological Society, the changes in temperature, humidity, barometric pressure and wind, which accompany the moon's shadow. "It is evident even to the senses that the temperature falls within the shadow of an eclipse," he said. "Part of this is due to the withdrawal of the direct heating effect of the sun's rays, and part to the actual cooling of the air by radiation." The temperature has been known to fall off as much as ten degrees, the coldest time being shortly after the totality of the eclipse.

Records of sensitive barometers have shown that superposed on the usual variations in air pressure is a wave due to the presence of the shadow, which has three crests occurring shortly after the beginning of the phenomenon, at its height, and just at its completion. Disturbances in the moisture content and circulation of the air are likewise reported, but observers do not agree on these points.

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## SCIENTIST DOUBTS FRANKLIN FLEW KITE IN THUNDERSTORM

Did Benjamin Franklin fly a kite in a thunderstorm, and so discover the principle on which the lightning rod is based? Prof. Alexander McAdie, director of the Blue Hill Observatory of Harvard University, discussed this problem in a paper read before the American Meteorological Society, and expressed the opinion that it cannot be answered with certainty.

"I do not know that Franklin did not fly a kite," said Prof. McAdie. "No one else knows, so far as I can find out. Diligent search by students of Franklinian fails to reveal a definite date."

That Franklin did make some experiments with a lightning rod in June, 1753 appears certain from a letter which he wrote to a friend shortly after, and Prof. McAdie believes that these have been confused with the kite work.

"It is more probable that if Franklin did fly a kite", said Prof. McAdie, "it was done during cloudy weather, and not a severe thunderstorm. And he missed one paramount discovery, namely, that sparks can be drawn from a kite string or wire during clear weather, even when there is not a cloud in sight. There is simply a difference of potential sufficient to give small sparks, and if a condenser be thrown into the circuit, quite fat and frequent sparks can be had."

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TABLOID BOOK REVIEWS

NICKEL AND ITS ALLOYS. Issued by the Department of Commerce, as Circular of the Bureau of Standards, No. 100, second edition. Superintendent of Documents. Twenty cents.

This is a very complete technical treatise, giving results of mechanical tests and tables of physical and chemical properties of nickel and its common commercial alloys.

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