About thirty miles north-northwest of the town of Delta, Millard County, near the Juab-Millard County line, there are several hot springs still flowing and forming bodies of tufaceous material like those found in Tule Valley. These active springs are at the edge of a recent flow of basaltic lava which is several square miles in area and varies in thickness from twenty to forty feet at its edge to perhaps three or four hundred feet near the cone from which it issued. It seems probable that these springs, as well as the springs in Tule Valley, are connected genetically with the igneous activity of which there are such abundant evidences in this part of the state.

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THE EFFECT OF ETHYLENE UPON THE VITAMIN B CONTENT OF CELERY

THERE appeared in SCIENCE for September 30, 1927, an article entitled "Artificially Ripened Fruit" in which it was questioned whether the employment of ethylene gas to speed up the ripening process in fruits and vegetables might not result in a reduction in their food value. The following excerpt will refresh the reader's memory and express the problem:

> The food value of the tomato, ripened by the application of ethylene gas rather than through natural agencies, is under question by the American Medical Association. During the last three or four years the use of ethylene gas to ripen fruits and vegetables . . . has increased by leaps and bounds. . . . The American Medical Association points out that while this development is of vast importance commercially, the health phases of the question have as yet received little attention. Certain fruits and vegetables are recommended by physicians largely because of their vitamin content; whether or not this has been altered by ethylene has not been determined.

The results of recent experiments indicate that ethylene used in blanching celery may exert no effect upon its vitamin B content. Young rats of the same litter were paired closely as to weight and placed upon a standard vitamin-B-free ration. Ethylene and board-blanched celery, for comparison, were fed in known quantities apart from the basal ration, and check animals from each litter were maintained.

When the differences in the percentage increases in growth of paired rats were compared by Student's method, odds of 17.8:1 were found to exist in favor of the ethylene-blanched product. The odds being insignificant, it can not be concluded that either method of blanching is superior from the standpoint of conserving food value. It does indicate, however, that the treatment, under the conditions existing in this experiment, can not be considered injurious to the vitamin B content of celery.

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TUBERIZATION OF POTATOES INCREASED BY X-RAYS

INCREASE in the number of tubers per hill was obtained by irradiating potatoes with one very light dose of X-rays before planting. Early Ohio potatoes from certified "seed" were used, and care was taken to select comparable pieces for both the controls and the experimental material. The irradiated tubers and controls were planted in alternating rows in the same plots of soil, so that all were subjected to the same environmental conditions with the exception of the X-ray treatment.

When the crop was harvested, it was found that 95 per cent. of the irradiated tubers had produced plants. Those irradiated before sprouting produced 27 per cent. more tubers per hill than did the controls. The average weight of these tubers, however, was 18 per cent. less than that of the controls. Consequently the average total weight of tubers per hill was practically the same for controls and experimental plants. There was no evidence that irradiation would result in an increased weight for the total crop.

A number of sprouted tubers were irradiated with a light dose of X-rays before planting and these also produced plants having a greater number of tubers per hill than the controls, but with a smaller weight per tuber.

A more detailed account of this investigation together with the results obtained by irradiating tomatoes is being prepared for publication in a botanical journal.

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THE ALUM QUESTION

I NOTE that the columns of SCIENCE have been opened to a discussion of the "alum" question. In view of the statements so frequently and widely made and the acrimonious disputings that have marked the discussion—suggesting the "war of the experts" so often seen in criminal trials—I would like to call attention to a serious neglect of correct terminology. In a recent letter in SCIENCE several statements are made in which "alum" is put for "aluminum." Thus, it is said on page 162 (August 17) that the chemists of the Department of Agriculture have found the quantities of alum in our agricultural food products "extremely minute." The quantities of "alum" in these foods will be represented by 0.0.

In these discussions which cover hundreds of pages and have cost in expert and lawyer fees thousands of