"atomic weight/g" would have to be a force divided by a quantity of electricity, which quotient is called the intensity of an electric field. The atomic weight would then have to be taken to represent something more than a mere number or ratio.

It was thought that perhaps the elimination of all terrestrial factors like the atmospheric pressure, temperature, attraction of gravitation, etc., from the value of this electrochemical constant thereby reducing it to absolute terms which are independent of this earth, might perhaps raise its value by this small amount of 3/10 of 1 per cent., though the writer has been informed by very reliable authorities that it seems unlikely that such corrections would equal this amount. Unless this very slight discrepancy can be adjusted it would seem that this curious relation is a mere accidental coincidence of numbers. But when we are asked to believe that masses change with changes of velocities, that is, with accelerations, and that the atoms of the chemical elements are made up of electrons (electric charges) in very rapid orbital motions, again involving accelerations, so-called, it does not seem unreasonable to believe that new and unexpected relations may be found to exist between mechanical, chemical and electrical constants.

Carl Hering

Philadelphia,
October 13, 1920

THE INFLUENCE OF DRY VERSUS FRESH GREEN PLANT TISSUE ON CALCIUM METABOLISM

In Science, 1920, LII., 318, Hart, Steenbock and Hoppert explain negative calcium balances on dry feed in their experiments, as well as those of Forbes and Meigs, on the destruction of a hypothetical antirachitic vitamine by drying. Mellanby brings evidence to show that the antirachitic vitamine is the same as fat-soluble-A, which is not destroyed in plants by drying. On the contrary, the antiscorbutic vitamine seems to be greatly reduced by drying except in very acid foods (fruits). The marrow tissue of the bones increases in proportion to the bone proper in scurvy and calcium is apparently lost from the bones in this way. In order to make more exact studies of calcium metabolism on guinea-pigs, I feed them calcium-free diets during and for two days before metabolism periods of three days in length. One day periods were not long enough for definite conclusions to be drawn, but three-day periods on a large enough series of animals seemed perfectly reliable. The animals were under starvation conditions as regards calcium, but this lasted only five days, and examination of their bones did not show differences from animals fed liberal amounts of calcium. Animals that had been on a diet of dried plants fourteen days before the experiment, eliminated twice as much calcium as those that had been on a diet of fresh green plants and which during the experiment received calcium-free orange juice. In case of animals that had been twenty-one days on a dry diet, the difference from the controls was more striking. Scurvy appeared in all the animals on the dry diet. It seems possible, therefore, that the loss of calcium in the experiments of Hart, Steenbock and Hoppert may have been due to scurvy and that it is unnecessary to postulate rickets or an antirachitic vitamine.

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PURCHASES IN GERMANY

To the Editor of Science: Some of the problems connected with the purchase of books, etc., from Germans at the present time have been alluded to several times in Science, and further information may not be out of place.

Somewhat less than a year ago I was offered by a German firm, with whom I had dealt for a score of years before the war, the file of a journal I was desirous of purchasing, for 3,000 marks. Somewhat later I received another offer from the same firm for $420. A few weeks ago the same was again offered, this time at 22,000 marks, and still more recently at 25,000 marks.

As far as I am concerned, the $420 is a