It will be readily recognized as a myth of wide dispersion. Perhaps the delicate fur and the grovelling habits of the little animal account for it.

3. Once the mole had eyes like other animals, but no tail. He met a creature which ridiculed him for his poverty in this latter respect. The derision preyed on his mind, and, when he met a being who could help him, he petitioned for aid. He was told that he must give up his eyesight 'So he sold his eyes for his tail.' W. H. BABCOCK.

Washington, D.C., April 16.

Some hardy buds.

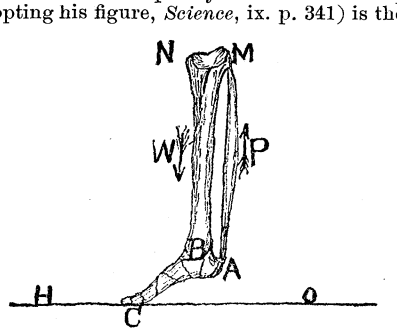
While in the country two weeks ago, my wife cut some branches from a pear and a cherry tree, and also from a lilac-bush, and brought them to the city. At that time the buds looked as they had all winter; in fact, we thought the pear cutting was dead. In a few days the buds commenced to open, and to-day the cherry-blossoms are out, as they would be on the tree, the blossoms of the pear are just opening, and those of the lilac are beginning to show. The water in which they were placed has been changed daily, and the cuttings kept in the sun as much as possible. It has occurred to us that such cuttings might be placed in rooms where there are invalids, both in homes and in hospitals, and give the sick a taste of the country which they could otherwise not get. It is no less an object of interest and instruction to the well: the daily, and I might say hourly, changes in the buds as they unfold are fascinating to watch, and even those whose lives have been spent in the country have never seen the gradual development of the blossoms as they can thus see them on the severed branches. J. H. R.

Brooklyn, April 8.

On tiptoe.

While feeling honored that the attention of so eminent a physicist as Professor LeConte should be attracted to the question which has been recently discussed in *Science* under this heading, it still seems to me, as it did when I called the attention of Professor Van Dyck to the matter, that the lever is of the first order,

Professor LeConte quietly assumes that the point *C* (adopting his figure, *Science*, ix. p. 341) is the fulcrum, but just there is the question. Suppose a person sitting down to put his toe against some object, and, by the same muscular action which raises the body on tiptoe, to push the object away. Here the case is evidently a lever of the first class, the fulcrum being the ankle-joint (*B*), and the weight the point of the toe's pressure (*C*).



Now suppose, that, in precisely the same way, he presses his toe against some firmer object, as a wall, and, instead of pushing it, pushes *himself* away.

I fail to see how it is other than an unnecessary complication, at least from a physiological standpoint, to suppose the fulcrum and weight to change places, so as to make the lever one of the second class. Further, in cases where the result is partially a movement of the object, and partially of the person's body, — as in rising on tiptoe upon a yielding object, — the complication of the solution upon the hypothesis that the lever is of the second class is further increased; whereas in every case, since the foot still turns upon the ankle-joint *B*, by regarding it as a fulcrum and the lever as of the first class, the conclusion reached by Professor LeConte, that $P : W :: CB : AB$, becomes an evident application of the general law of mechanics. EDWIN J. POND.

Austin, Tex., April 12.

Winds in Denver.

H. A. Howe, in *Science*, No. 216, asks "why winds blow at Denver from the north during the day, and from the south at night."

It is for these reasons: Denver is in a cañon running north (the mountains on the west, a slight elevation on the east, and a 'divide' on the south), through which flows Cherry Creek. Now, winds *invariably* blow up cañons during the day, and down them at night. This brings the question to, "Why do winds blow up cañons during the day, and down at night?" which I take to be the intended interrogatory. During the day, the sun heats the air, which, becoming light, rushes up the cañons, while at night the air becomes cool and seeks lower altitudes. Of course, the disturbed equilibrium increases the wind's velocity. I think I have crudely answered the question. F. F. WYMAN.

Silver Reef, Utah, April 7.

Geographical centre of the United States.

If an area or district of country is mapped on a projection of small areal distortion, the geographical centre of the area may be defined to be the centre of gravity of the figure.

The problem to determine the centre, would, under this definition, resolve itself into the question of determining the centre of gravity of a plane figure of irregular outline. Of the various ways in which the centre of such an area may be found, the mechanical ones are perhaps of easiest application, and, on the whole, yield the most satisfactory results.

One method consists in tracing the outline of the area whose centre is to be determined, on stiff cardboard, then cutting out the figure along the boundary so traced, and balancing the resulting cardboard on a point; which point so found is the point sought.

Another way consists in cutting out the map, as before, along the boundary-line, and then suspending it behind a plumb-line, so that map and plumb-line hang from the same support: the projection of the plumb-line on the map is a line which passes through the centre of gravity of the area. By suspending the map successively from several differ-