

Ever since the establishment of Girton College, students in residence have valued their prospective right to have a voice in the management more dearly than would generally be credited, and have held that Girton stood first among colleges for women partly because it conferred this dignity upon its students.

But the dignity conferred by the actual enjoyment of a privilege exceeds that conferred by a prospective right to the same privilege.

ANOTHER CERTIFICATED STUDENT
OF GIRTON COLLEGE

"Suicide" of Black Snakes

IN NATURE, March 13, p. 452, Mr. Edward Hardman, Government Geologist of Perth, West Australia, mentions an instance of the suicide, by its own venom, of a black snake. The snake had been wounded, and, the wounded part having been attacked by black ants, "it instantly turned short round and hit itself twice on the neck with seeming determination; in less than one minute it was dead." Mr. Hardman believed the death to be due to its own venom.

He records further instances, which, though he had not witnessed himself, had been related to him by those who had witnessed the facts.

I believe it to be a generally accepted opinion among thanatophidologists that, from what is known of the virulent properties of snake-poison, though fatal to man and other living beings, it is innocuous in its effects to serpents of like nature. Sir Joseph Fayer, a great authority upon this question, has said: "Strange to say—and this to me is one of its greatest mysteries—a snake cannot poison itself or one of its own species, scarcely its own congeners, and only slightly any other genus of venomous snake, but it kills innocent snakes quickly" (address on "The Nature of Snake-Poison," delivered at a meeting of the Medical Society of London, January 28).

The glands which secrete such venom draw their secretion from the blood; that blood, therefore, must have within itself, as part of itself, the elements which constitute its virulence, and cannot therefore be injuriously affected by a further introduction of these elements. Their presence in the blood gives to this vital fluid a power whereby an immunity is obtained, somewhat similar to that which vaccination and syphilisation give to human beings, and which the vaccination of the cultivated virus of anthrax, of rinderpest, of foot and-mouth disease, gives to animals.

It may, however, happen that the climate of Australia has a special action producing effects different from those observed in India, and, if so, requiring close investigation and study.

The question becomes an interesting one, and, if philosophically prosecuted, may elicit facts which would give to this instance of venom envenoming itself a significance and an established position in the history of natural science.

JAMES DONNET

Unconscious Bias in Walking

THIRTY or more tests in walking, with closed eyes, on a nearly level lawn lightly covered with newly-fallen snow, gave the following results:—My natural gait, in which I step a half to three-quarters of an inch further with my right foot than with my left, always produced a sharp curve to the right. Whenever the step made by either foot was about three inches greater than that made by the other my course was substantially straight. A curve to the left always resulted when either foot stepped more than three inches further than the other. Unnatural toeing out of either foot did not change the result. My right arm is three-quarters of an inch longer than my left, but my legs are of equal length. Both limbs on my right side are stronger and more skilful than those on the left. When but a single action is required, it is my right arm or my right leg that prefers to perform it. When two actions are necessary, the right side chooses that requiring the greater skill, leaving to the left the plainer work, regardless of the power demanded by it. Thus, in mounting a horse, or leaping across a ditch in the ordinary manner, I spring from the left foot; yet if I am to land on the foot from which I start, I can hop higher and farther with my right leg. I can also lift a greater weight with it; and can lower myself to, and raise myself from, a kneeling position with the right leg alone—a feat impossible for me to perform with the left. In my case, at least, the division of labour is decided by skill, and not by strength. The facts, considered in connection with the further

observation that in walking the foot which for the time being supports the person does not rock into a pushing position until the other foot has completed its forward motion and is ready to drop to the ground, incline me to the opinion that walking is a reaching rather than a pushing process. Perhaps photography may help to decide this point.

J. E. SMITH

New York, March 10

Recent Weather in North America

THE ice-storm, as we call it, which we have lately experienced, seems to call for a permanent record. It began at about 4 p.m. on the 7th inst., and until 12 noon of the following day there was a constant drizzle or rain, the thermometer being a few degrees below the freezing-point. The amount of the rainfall at the surface of the ground was 1.10 inches. As the rain fell upon the trees it soon formed a coating of ice upon every exposed branch and twig, and this grew thicker and heavier until saplings were bent to the ground and large branches were broken from many trees over a wide area of country. The wind blowing gently from the north, the coating of ice was much thicker on that side of each twig or branch. Fences were decorated with long icicles hanging at a decided angle towards the south. Telegraph wires were so heavily loaded that many fell, and some of them, besides the coating of ice, had a most curious decoration in the shape of little icicles hanging about two inches apart, some of them appearing horizontal, and some (it is said) actually pointing upwards. The storm is reported as having extended over an area of some 20,000 square miles. It was not immediately followed by a thaw, which might have relieved the trees of their load; a gentle precipitation, partly of snow and partly of sleet, took place at intervals from 5 p.m. on the 8th till early in the morning of the 10th, the temperature remaining below freezing. The view on the 10th, when the clouds broke away and the sun shone on the trees, was beautiful beyond description, but the most remarkable effect was that produced by the moonlight on the evening of that day.

In order to gain something like an accurate idea of the amount of ice which had frozen on the trees, I made measurements of a number of twigs taken from the extremities of branches, in order to compare their diameter in their natural state with that they had when covered with ice. Some of the figures may be of interest. One twig .11 of an inch in diameter was enlarged to .73; another of the same size to .84; one of .12 inch diameter measured .84 with its ice-covering, and another of .12 inch measured 1.03; one of .18 diameter had become 1.21, and one of .21 had become 1.07. The largest ratio of increase which I found on a tree was in the case of a twig .09 of an inch in diameter, which had attained to .97, having gained nearly nine times its original diameter. But some upright stalks of weeds standing about eighteen inches above the ground gave still larger proportional measurements. One 5/100 of an inch in diameter now measured .87, and another of 4/100 of an inch measured .85, having increased its diameter by more than twenty times.

I made another estimate of the quantity of ice on the trees by breaking the ends of some branches from an apple-tree and weighing them with and without the ice that coated them. It appeared that wood which weighed ten ounces was carrying ice which weighed sixty-nine ounces.

Perhaps it should be noted that the ice did not freeze on the twigs or stalks so that the cross-sections would be exactly circular, and that the measurements made were those of the largest diameters in the several instances.

Prof. Brocklesby writes to the papers of a similar storm many years ago, when a piece of branch weighing four ounces carried four pounds of ice.

SAMUEL HART

Trinity College, Hartford, Conn., March 11

EDUCATION IN THE UNITED STATES¹

A SUCCESSFUL effort made to meet a strong desire that this Report should be brought out sooner enables us to call attention to it in less than twelve months after the last, but, as in material food so in the case of the many reports embodied here, thorough digestion has been essential.

¹ "United States Report of the Commissioner of Education for the Year 1881." (Washington: Government Printing Office, 1883.)