

Malay Peninsula. The following extract describing the flashing in unison of fireflies will be of interest to those who have studied the subject:

One evening I saw a demonstration of insect organization which I believe it is impossible to explain. It was a beautiful night. The air was full of extraordinary fireflies. About every fifteen minutes these flies separated into two armies, one settling on the trees growing on the left bank of the river and the other on the right. Then, when I had decided that the fireflies had gone to bed for the night, the whole army on the left bank gave one big flash in perfect unison, which was immediately answered by another big flash from the right. How those flies managed to keep time absolutely beats me, but they did so, though there must have been thousands of them stretching along the river-banks for a hundred yards or more. The illumination was so strong that the branches of the trees could be seen quite distinctly.

EDWARD S. MORSE

THE PROBLEM OF THE MONKEY AND THE WEIGHT

THE following simple, interesting and instructive problem in mechanics, though old, is still of interest as different answers are given by those whose opinions are to be respected and who ought to agree.

A supposedly weightless rope passing over a frictionless pulley has a 10 lb. weight hanging on one end and a 10 lb. monkey on the other. What will happen when the monkey climbs up the rope.

We are told that the correct answer is that the weight will move up as fast as the monkey and that they will ultimately meet at the top. The monkey, therefore, does twice the work of lifting himself to that height. This is said to have been crudely confirmed by a boy who found it far more difficult to pull himself up in such a case than when the top of the rope was immovably secured.

It seems necessary to distinguish between a jerky and a uniform movement of the monkey; the former involves acceleration, deceleration and inertia. It is claimed that with a uniform motion the weight would not move, as the monkey can not pull with a greater force than his weight. And that with a jerky upward motion of the monkey, involving acceleration and deceleration, the weight would move up and down for each jerk, but its average and ultimate position would remain the same. Others claim that the weight would move up with every jerk, but would not descend again during the deceleration, hence its ultimate upward motion would be equal to that of the monkey. A spring or elastic rope introduces another complication.

For a uniform motion the problem may be put in a simpler form. Suppose a motor suspended on a rope moves itself up or down fast but at a uniform velocity, by winding or unwinding the rope around

its shaft. Will the tension on the rope then be greater or less respectively than that when the motor is at rest?

The problem is not without practical value.

CARL HERING

PHILADELPHIA, OCTOBER 16, 1923

THE PROFESSOR AND HIS WAGES

The Professor, God bless him, he works long and hard,
And diplomas and medals are his sole reward.
On "Love of his work" he must feed his dear own,
With a pleasant smile and never a groan.

He must move in society; live with the best;
He must be very careful of how he is dressed;
He must buy many books and must study at night;
Everything that he does must be proper and right.

He must never have children, it's vulgar and bad,
And besides, who would feed them, supposing he had?
He must not smoke a pipe, for that wouldn't be nice,
And he can't smoke cigars, for he hasn't the price.

To the theater he is permitted to go,
But he rarely does so for it takes too much dough.
He must always be cheerful before every class,
Though bills through his mind ever, endlessly pass.

And while he is teaching, his dear wife must scrub;
She must manage her part with a mop and a tub;
But she has her own pleasures as well as does he,
They are solely the Women's Club's afternoon tea.

These things are quite bad, you in truth will concede,
But to make matters worse, he in SCIENCE must read
That he's paid all he's worth and should be quite content
With a pittance that scarcely pays for his rent.

The Professor, God bless him, I take off my hat
To a man who has courage to face all of that.
Nothing short of a genius could ever pull through
And accomplish what he is required to do.

ANON

CORRECTIONS

THE article entitled "Gels and Theory of Adsorption" given in the December fourteenth issue of SCIENCE reads on page 496 as follows:

pH < 1.217 pH > 1.217

but should read:

pH > 1.217 pH < 1.217

NEIL E. GORDON

In SCIENCE, 1924, p. 10, first column, line 2 up, for "eighteen" read "thirty-one."

F. CAJORI

SCIENTIFIC BOOKS

THE WEBER SEVENTY-YEAR BOOK

A "FEEST-NUMMER" of the "Bijdragen tot de Dierkunde" in an edition de luxe has been lately issued by the Royal Zoological Society, "Natura Artis Magis-