

as we are, we see the relative motions of the other planets in a rather mixed-up condition, but the complication due to the motion of our own planet does not affect the fact that the swifter of another pair is seen to pass the slower, then to move off to the east of it, and after a time to come round on the west side of it and pass it again.

A similar question has been sent in about Mars and Saturn as seen in the morning sky last month. On October 12 they were very close together. After that date they were seen farther and farther apart. Which was which, and which was running away from the other? As in the other case, it was the swifter that was running away from the slower, Mars was moving towards the east away from Saturn. In the middle of November they are 16° apart. Saturn is much slower than Jupiter even and creeps over only a small arc in a year. He entered the constellation Leo in 1888 and only passed out of it about six weeks ago. During that time Mars has been all round the Zodiac once and half way round a second time.

But the slowest of all the planets is Neptune, and this makes it very easy to keep trace of him during the season when he is above the horizon in the evening. This is that season. He is in Taurus, has been there for years, and will be there for several years yet. He is much too faint for the naked eye, and a small opera-glass is hardly strong enough to find him, but is quite strong enough to see him with after you know just where he is. Since writing the last sentence I have seen him with a glass whose full length when focused is less than 4 inches and the diameter of its object-glasses less than $1\frac{1}{2}$ inch—and the conditions, both terrestrial and celestial, were none of the best. A good field-glass will easily find him in a clear sky when the moon is out of the way. Point your glass at Epsilon Tauri and look east and a little north of that for three small twinklers close together—two of them very close. About the line joining this group with Epsilon—close above it—look for the two or three brightest dots your glass shows—none of them as bright as the three in the group. Note carefully the relative positions of Epsilon, the group and the other two or three. Repeat the operation two or three or four weeks later. If you have done your work well you will find that one of the dots has shifted its position, that it has moved towards the west. That is Neptune.

Jupiter has stopped retrograding and is now slowly moving east. Some observers report having seen all four moons, sometimes with their binoculars, others say they have not yet been able to see one. The latter must have been looking when the moons were all huddled up close to the planet's disc, or their

eyes or their glasses must be very inferior. Let the unsuccessful ones try again on the last three days of November and on December 14, 15, 16,—never mind the full moon on these last days. Any glass that will not show one of Jupiter's moons in a clear sky on these dates must be a wretchedly poor glass.

Mercury is evening star again, but it a very poor season for him. He is very far off, very far south and very faint. The first half of December will be the best time to see him, but it is a poor best. He will then be very close to Venus. A. CAMERON.

Yarmouth, N. S., November 7, 1891.

FOR THE REVIEW.]

Knotty Questions.

SIR: At the recent entrance examination to the Provincial Normal School there was a question evolved from the gigantic intellect of the man or woman who sets the geography papers, requiring an accurate knowledge of the location of every mile of railway in the Province.

I have no doubt that the framer of the question could not draw a map placing every railway correctly upon it. Why? Because outside the crown-lands office there is not a map containing them. The school maps are particularly deficient in this respect. How, then, are teachers and pupils to obtain such information? We are all quite familiar with the railways in our own section, and would be able to map them, but those of other sections, while we might know their names and have a general idea of their location, yet it would be impossible to map them. This, of course, refers to short or branch lines and not to trunk lines.

This is only a specimen of many questions that have been given at the Normal School. The questions may not be too difficult, but they are certainly more difficult than a student is led to expect from the published requirements for entrance. What is a worse feature, they seem to be framed more with the idea of showing how knotty a question the framer can give for the chance he has than of exercising the judicious discretion of a skilful examiner.

Yours, etc.,

TEACHER.

Winter Trees.

Mrs. M. F. Butts in November St. Nicholas.

Who finds the trees of winter bleak
Has not the poet's sight,
They bear gold sunrise fruit at dawn
And silver stars at night.

All day they prop the lowering clouds,
No respite do they ask,
And they in voices deep and wild,
Like giants at a task.