The Heavens in February.

The two objects in the heavens that attract the attention of all observers are Venus and Jupiter. Venus is now farther up in the sky, and the two planets are nearing each other. By the middle of the month they are fifteen, and at the end scarcely five, degrees apart. (This presents an opportunity to estimate degree distance in the sky). Why is Venus brighter than Jupiter? Which is the larger planet? Does each shine by its own light? If not, how? Is the color of the light the same in each? How do you account for the difference? (It is due chiefly to the variance between the nature of the reflection from the surfaces of these two planets, and may depend, as to intensity of light, on the conditions in our own atmosphere).

Venus attains her greatest apparent distance from the sun on the 14th of the month. In that position half of her disc is illuminated, and a telescope would show her in the form of a half moon. After that she will gradually assume the crescent shape, or the form of a new or old moon, but will continue to increase in brightness for more than a month, because she is still approaching the earth and the effect of this approach will more than counterbalance the decrease in the illuminated surface exposed to our view.

Saturn is no longer visible in the western skies, being in conjunction with the sun on the 12th. In the spring and early summer he will appear as morning star.

Mars is in the east, and may be seen between two and three o'clock in the morning. He is growing brighter each month, but will not be at his brightest until May and June.

Those who observe the heavens from night to night will notice that Sirius, the dog-star, and the brilliant stars which compose the constellation of Orion are "sloping slowly to the west." What a perennial delight it will be for young people to learn the names of the stars and constellations, and welcome them, as old friends in the bright, ever-recurring procession from year to year!

How many degrees has each star moved in the space of a month? Other stars are appearing above the eastern horizon as those visible in January are disappearing behind the western horizon. That bright reddish star in the north-east, seen late in the evening, is Arcturus. By tracing an imaginary arc, formed in part by the handle of the dipper, towards the horizon this star may be found at the lower extremity of the curve. It will be interesting to trace Arcturus by this curve throughout the year. If it be done from week to week, another great group of stars will be seen to circle in endless succession about the North polar star, some always in view, others, like Arcturus, disappearing below the horizon for a time, then reappearing. Do the stars of the Great Dipper ever disappear below the horizon? It will be a source of the greatest interest to pupils to watch this group of stars through the year and notice the curious turnings of the Dipper. Are your pupils able to find the Little Dipper with the North Star situated in the end of the handle? In what direction do the stars in this circumpolar area move—in the direction of the hands of a clock or watch, or opposite? Are there any planets in this area? Why not? What is the star that has "no fellow in the firmament," referred to in Shakespeare's Julius Cæsar?

Vertical writing has done a great deal to make the teaching of writing easier. It has given us a better position for pupils, simpler letters, has done away with shading and guide lines, and it allows the youngest pupil to make his letters large and coarse. The youngest pupils seem to take to it naturally and within a few months are able to write more legibly than was ever possible under the old slant. The average writing has very much improved. While under the slant we had some pupils whose writing was absolutely illegible, we have none at the present time whose writing cannot be easily read. The question of speed depends very little upon the system taught, but very much upon how it is taught. Extensive speed tests taken throughout the country show that public school pupils using the vertical can and have written more words in a minute than professional penmen using the slant. A test taken in a large number of cities, including Omaha, Des Moines, St. Louis, and others gave a rate of 130 letters per minute for public school children, who have had vertical writing from two to five years, while the average of business colleges and professional penmen in the same cities gave an average of only 103 letters per minute.—*Supt. B. W. Tinker, Waterbury, Conn.*

Two hundred pounds of grain and a liberal quantity of suet were fed the birds in the Middlesex Fells by pupils of the Stoneham schools (Mass.) in one week last winter. The crust on the snow prevented the feathered flock from reaching their food. —*Primary Education.*