

"Greek and Latin, French and German, algebra and geometry, as early as ten years," they all cry in chorus.

"Away with the spelling-book, it is a fraud!" cries one; "Congress should appropriate a quarter of a million for spelling schools," echoes a Congressman. And yet the reform craze has not fairly begun. It is in its infancy. Wait, just wait until it gets its growth, and see what will come. Why, it will take a Gatling gun to rattle off the reforms as fast as they are invented.

And the beauty of it is that every man can not only have a reform all

his own, but he can have a whole set of reforms for himself. There will be enough to go round with several left over. America is a great country. She has millions of children in school, and the opportunity to practise reforms is literally limitless. It is a great thing to live in this day and be a part of the "age," which future geologists will style the "Period of Reforms, Reforming Reformations." In ancient times it required ages to make fossils, now a fossil is made in twenty-four hours if he refrains so long from reforming something.—*The Journal of Education* (Boston).

ASTRONOMICAL NOTES—APRIL—MAY.

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A TOTAL eclipse of the sun occurs on April 26th. These events are of the greatest importance to astronomers when they can be conveniently observed; but in this instance the path of the shadow is altogether in the South Pacific Ocean and in a part of it where there is not even a little island upon which to plant an instrument. The limiting curve of visibility of some part of the eclipse passes through New Zealand, the Society Islands, and the Marquesas on the west, and along the western shores of South America on the east. The following considerations will serve to give some idea of the regions of visibility:

The conjunction in R. A. occurs at 9h. 13m. 26s. Greenwich Mean Time. The "central eclipse at noon" will therefore occur somewhere on the circle of longitude which has the sun on the meridian at this moment. Add the equation of time, 2m. 26s. and we have 9h. 15m. 52s. as the difference in longitude, corresponding to

138° 58' west. To find the latitude of the point on this circle where the axis of the shadow cone touches the earth we note the following phenomena:

To an imaginary observer at the centre of the earth there would be no eclipse because the sun and moon would be seen in their true places, and at conjunction in R.A. the moon is 59' 39" south of the sun, whose declination is 13° 52' 47" N. And to an observer having the moon and sun south of the zenith there would be no eclipse, for the parallax in altitude would cause the moon to appear still further south of the sun. But after passing the latitude of about 13° N. we would have the moon north of the zenith and parallax would tend to increase its meridian zenith distance and bring it nearer to the sun's disc. When the parallax would be just equal to the difference in declination, then the two centres would coincide. Before reaching this point, which will be found to be in latitude 64° south, the