

tion of the moon with reference to the stars at its eclipses, by which they determined the position of the sun and the solstices with reference to the stars. They had even some instruments suitable for measuring angular distances between the stars. By these means united they discovered that a solar year exceeds by about a quarter of a day three hundred and sixty-five days. Their year began at the winter solstice; their civil year was lunar; and to make a correspondence between the civil and solar year they made use of nineteen solar years, equivalent to two hundred and thirty-five lunations, the same period which Callippus introduced into the Greek calendar more than sixteen centuries later. Their months were alternately twenty-nine and thirty days; their lunar year three hundred and fifty-four days, consequently too short by eleven and one-fourth days; in the year when the number of days exceeded a lunation they intercalated one month. They had divided the equator into twelve immovable signs and into twenty-eight constellations, in which they determined the position of the solstices. The Chinese had instead of a century a cycle of sixty years, and a cycle of sixty days instead of a week; the small cycle of a week, or seven days was known to them in the earliest ages, as to all other nations of the East. The division of the circumference in China was always subordinated to the length of a year, so that the sun described exactly one degree per day; but the divisions of the degree, of the day, and of all weights and measures were decimal; and this example, set by a great nation and in use for four thousand years, shows its advantage over all other methods of enumeration, and accounts for its extreme popularity.—(From May "Home and School," Louisville, Ky.)

FIVE MAXIMS FOR TEACHERS.

Maxim I.—What is seen is best understood. Apparatus, teaching by the eye, and giving more definite and correct impressions than can possibly be conveyed by language, is the best means for making the sciences well understood.

Maxim II.—What is understood interests.—Hence, apparatus increases a love of schools; promotes industry and good order in pupils, and secures their continued im-

provement after closing their school education.

Maxim III.—What interests is best remembered.—The knowledge acquired by the aid of apparatus will be permanent. It does not depend on the memory of certain words, which, when learned, convey no clear conception of what they were designed to teach; but the pupil having seen, understood and been interested in the matter taught, will retain it vivid and distinct through life.

Maxim IV.—Principles are better than rules.—By giving the principle—i.e., the reason of the rule—instead of the rule, apparatus imparts knowledge in place of mere information.

What the mind thus acquires is not inert, like a collection of dates and statistics, but a living power, suggesting thought, leading to investigation, analysis and combination of principles and powers, and to consequent invention.

On the foregoing it is easy to base

Maxim V.—Illustration is the basis of successful teaching.—"The abundance of one's intellectual knowledge, and the degree of his mental improvement, will depend somewhat on the number of his ideas of sense, but more on the distinctness with which the mind perceives them."—*Maryland School Journal.*

THE ARTIST TEACHER.

I saw a builder near a pile

Of massive blocks of polished stone.

Wherein a monarch ruled awhile,

And sat upon a regal throne;

The monarch laid his sceptre by,

The kingdom passed, and lost its name,

The throne was vacant and a sigh

Was all that spoke of cherished fame;

The kingdom vanished, and the palace fell,

And king and builder lost their name as well.

I saw the sculptor rift the rock,

And hew therefrom a mighty mass,

And slowly chisel out a block

That might all other works surpass;

He toiled with long and patient skill,

Until I saw the vision fair

Before his genius and his will

Spotless and perfect standing there.

The polished marble crumbled into dust,

Nor left the artist's name it kept in trust.