

## WEDDED LOVE.

Live back, most dear, those sweet and varied days  
Have dawned and faded since we twain were one,  
Count, if thou canst, the shimmering sands that run  
To mark not Time's cold flight, but Love's delays;  
Beckon the flowers beside the smiling ways  
By light youth trodden; or, ere night be done,  
Explore her canopy—weigh each orb and sun  
That whirls and burns above thy wondering gaze—  
Then, and then only, shalt thou soundings take  
Of my soul's ocean: then the height shalt scale  
Where, shrouded in silence, dwells my thought of thee,  
Only when miracle the heart shall wake  
Can viewless fingers draw aside the veil  
Between that heart and Love's infinity.

—Annie Rothwell, in *The Week*.

## THE AGE OF TREES.

From an article by Professor F. W. Putnam, on "Pre-historic Remains in the Ohio Valley," in the *March Century*, we quote the following: Of late years several writers have brought forward many arguments showing anew, what every archaeologist of experience knows, that many of the mounds in the country were made by the historic tribes. This has been dwelt upon to such an extent as to make common the belief that all the mounds and earthworks are of recent origin. Some writers even go so far as to imply that tree growth cannot be relied upon, and state that the rings of growth do not represent annual rings. As I am firmly convinced that many of the mounds and earthworks in the Ohio Valley examined by Dr. Metz and myself are far older than the forest growth in Ohio can possibly indicate, it matters little about the age of the trees growing over such mounds. However, as such a forest growth gives us the minimum age of these ancient works, it is important to know what reliance can be placed on the rings. In his report for 1887, Prof. B. E. Fernow, Chief of the Division of Forestry in the United States Department of Agriculture, discusses the formation of the annual ring, when speaking of tree growth. In a letter recently received from him, in which he points out the probable cause of error in counting the rings of prairie-grown trees, he states that he considers anybody and everybody an incompetent observer of tree growth who would declare that in the temperate zones, the annual ring is not the rule, its omission or duplication the exception.

Having received repeated assurances to this effect from other botanists, I recently again asked the question of Prof. C. S. Sargent, Director of the Arnold Arboretum, from whom I received the following reply: I have never seen anything to change my belief that in trees growing outside of the tropics each layer of growth represents the growth of one year; and as far as I have been able to verify statements to the contrary, which have appeared of late years, I am unable to place any credence in any of them. The following sentence, quoted from the last edition of Professor Gray's "Structural Botany," covers the case: Each layer being the product of only a year's growth, the age of an exogenous tree may in general be correctly estimated by counting the rings of a cross section of the trunk. I believe, therefore, that you are perfectly safe in thinking that Dr. Cutler's tree is something over four hundred and fifty years old.

## SIMS REEVES ON THE ENCORE NUISANCE.

Mr. Sims Reeves in a letter to the *Daily Graphic*, strongly denounces "the vicious encore system." He says:—"As to the dishonesty of the proceeding, that goes without saying. The *entrepreneur* engages the singer or player, say, to sing or play twice for a certain fee. Why should the performer do more work than he contracted for? Do bakers, grocers, or butchers give us free more food just because we declare their goods are most excellent? Or do tailors or linendrapers send us in gratis more clothes because we have expressed warm approval of their goods, or literary men supply us with new books free because we admire their last work? Nor do doctors, lawyers, architects, nor professional artists or painters or sculptors give us freely more of their time or their artistic productions just because we bestow on them noisy but costless compliments. And yet such gratis service seems to be expected from musicians. It is a preposterous piece of dishonesty, of which all honest persons should be ashamed. It gratifies the mean man, but in no way exalts the art, and on the whole it does not permanently benefit the artist who yields to the deliberate clamour of a greedy mob. The encore nuisance seeks to take a shabby advantage of the suffering professional; it is to be regretted that few of our performers possess sufficient courage to return to the platform, bow politely, but to indicate firmly, No! If managers, artists, and the musical public would but think the matter out and determine to stamp out this nuisance, this blot on our English musical performances might be effaced. Programmes could contain an announcement, 'No encores will be permitted.'"

The *Christian World*, London, Eng., says: The PRESBYTERIAN YEAR BOOK for Canada and Newfoundland for 1890 has reached us from the Presbyterian Publishing Company, Toronto. A glance at its pages shows that Presbyterianism has taken a firm root in the Dominion

## THE DOG STAR.

It is difficult to conceive that this beautiful star is a globe much larger than our sun; yet it is a fact that Sirius is a sun many times more mighty than our own. That splendid star, which even in our most powerful telescopes appears as a mere point of light, is in reality a globe emitting so enormous a quantity of light and heat that, were it to take the place of our sun, every creature on this earth would be consumed by the burning rays.

Sirius shining with a far greater lustre than any other star, it was natural that astronomers should have regarded this as being the nearest of all the "fixed" stars, but recent investigation on the distances of the stars has shown that the nearest to us is Alpha Centauri, a star belonging to the southern latitudes, though it is probable that Sirius is about four-h on the list in order of distance. For, though there are about fifteen or twenty stars whose distances have been conjectured, the astronomer knows that in reality all of them, save three or four, lie at distances too great to be measured by any instruments we have at present. Astronomers agree in fixing the distance of the nearest star at twenty two million of millions of miles; and it is certain that the distance of Sirius is more than three and less than six times that of Alpha Centauri, most likely about five times; so that we are probably not far from the truth if we set the distance of Sirius at about one hundred million of million miles? What a vast distance is this which separates us from that bright star; words and figures of themselves fail to convey to our minds any adequate idea of its true character.

To take a common example of illustrating such enormous distances: It is calculated that the ball from an Armstrong hundred-pounder quits the gun with a speed of about four hundred yards per second; now, if this velocity could be kept up, it would require no fewer than ten million years before the ball could reach Sirius! Again, take the swiftest form of velocity of which we have any knowledge, light, which travels at the rate of nearly two hundred thousand miles per second, or about twelve million miles a minute, yet the distance of Sirius is so vast that it takes nearly twenty years for its light to reach us; so that if Sirius was suddenly to become extinct, we should not be acquainted with the fact till twenty years hence.—*Chambers' Journal*.

## THE SUN-DANCE OF THE SIOUX.

Lieut. Schwatka contributes to, and Frederic Remington graphically illustrates in, the *March Century* a curious custom of the Sioux. From this article we quote the following: When all had assembled and the medicine-men had set the date for the beginning of the great dance dedicated to the sun, the "sun-pole" was selected. A handsome young pine or fir, forty or fifty feet high, with the straightest and most uniformly tapering trunk that could be found within a reasonable distance, was chosen. The selection is always made by some old woman, generally the oldest one in the camp, if there is any way of determining, who leads a number of maidens gaily dressed in the beautiful beaded buckskin gowns they wear on state occasions; the part of the maidens is to strip the tree of its limbs as high as possible without felling it. Woe to the girl who claims to be a maiden, and joins the procession the old squaw forms, against whose claims any reputable warrior or squaw may publicly proclaim. Her punishment is swift and sure, and her degradation more cruel than interesting.

The selection of the tree is the only special feature of the first day's celebration. After it has been stripped of its branches nearly to the top, the brushwood and trees for a considerable distance about it are removed, and it is left standing for the ceremony of the second day.

Long before sunrise the eager participants in the next great step were preparing themselves for the ordeal; and a quarter of an hour before the sun rose above the broken hills of white clay a long line of naked young warriors, in gorgeous war-paint and feathers, with rifles, bows and arrows, and war-lances in hand, faced the east and the sun-pole, which was from five to six hundred yards away. Ordinarily this group of warriors numbers from fifty to possibly two hundred men. An interpreter near me estimated the line I beheld as from a thousand to twelve hundred strong. Not far away, on a high hill overlooking the barbaric scene, was an old warrior, a medicine man of the tribe, I think, whose solemn duty it was to announce by a shout that could be heard by every one of the expectant throng the exact moment when the tip of the sun appeared above the eastern hills. Perfect quiet rested upon the line of young warriors and upon the great throng of savage spectators that blacked the green hills that overlooked the arena. Suddenly the old warrior, who had been kneeling on one knee, with his extended palm shading his scraggy eyebrows, arose to his full height, and in a slow, dignified manner waved his blanketed arm above his head. The few warriors who were still unmounted now jumped hurriedly upon their ponies; the broken wavering line rapidly took on a more regular appearance; and then the old man, who had gathered himself for the great effort, hurled forth a yell that could be heard to the uttermost limits of the great throng. The morning sun had sent its commands to its warriors on earth to charge.

The shout from the hill was re-echoed by the thousand men in the valley; it was caught up by the spectators on the hills as the long line of warriors hurled themselves forward towards the sun-pole, the objective point of every armed and naked savage in the yelling line. As they converged

towards it the slower ponies dropped out, and the weaker ones were crushed to the rear. Nearer and nearer they came, the long line becoming massed until it was but a surging crowd of plunging horses and yelling, gesticulating riders. When the leading warriors had reached a point within a hundred yards of the sun-pole, a sharp report of rifles sounded along the line, and a moment later the rushing mass was a sheet of flame, and the rattle of rifle shots was like the rapid beat of a drum resounding among the hills. Every shot, every arrow, and every lance was directed at the pole, and bark and chips were flying from its sides like shavings from the rotary bit of a planer. When every bullet had been discharged, and every arrow and lance had been hurled, the riders crowded around the pole and shouted as only excited savages can shout.

Had it fallen in this onslaught, another pole would have been chosen and another morning devoted to this performance. Though this seldom happens, it was thought that the numerous assailants of this pole might bring it to the ground. They did not, however, although it looked like a ragged scarecrow, with chips and bark hanging from its mutilated sides.

That such a vast, tumultuous throng could escape accident in all that wild charging, firing of shots, hurling of lances and arrows, and great excitement would be bordering on a miracle, and no miracle happened. One of the great warriors was trampled upon in the charge and died late that evening, and another Indian was shot. The bruises, sprains, and cuts that might have been spoken of in less affairs were here unnoticed, and nothing was heard of them.

## FITNESS IN MUSIC.

Certainly Lohengrin, Tannhauser and Parsifal are imbued with a strong religious sentiment, but that by no means proves that the music may be appropriately used in the services of the Church. As a rule all adaptations are bad. If the composition be worth anything, the music is indissolubly wedded to the idea expressed by the words, and to divorce them and wed it to words of different import is a wrong to the composer and a violation of a canon of correct musical taste. For two reasons operatic and secular airs are unfit for use in Church. First, the style is, as a rule, uneclesiastical. The Church has her school of music, and the harmony and counterpoint of good Church music differs essentially from that of ordinary secular music, as vividly as Byron's "Don Juan" differs from "Keble's Evening Hymn." You cannot make music sacred by tacking on sacred words.—*The Churchman*.

## NEW NOSES MADE TO ORDER.

A NOVELTY IN MODERN SURGERY. WHAT WILL COME NEXT?

Mrs. Mauger had suffered from nasal catarrh until the bones as well as the tissues of her nose were all gone. In this condition she applied to Dr. K. to see if he could build a nose for her.

The Doctor, by means of skilful surgical operations and the introduction of the breast-bone of a chicken (for the bridge of the nose) gave Mrs. Mauger an organ of smell that she is proud of.

The advance in modern surgery is really astonishing, nor is the progress of modern medicine a whit less wonderful. There was a time when a doctor had little hope of saving a patient who complained of restlessness, helplessness, feverish feelings, periodical headaches, dizziness, dimness of sight, ringing in the ears, difficulty in thinking and trouble in remembering the names of friends. There was not one chance in a hundred that this patient could be restored to permanent good health.

Now, however, a doctor, when his patient complains of these symptoms, recommends Paine's Celery Compound knowing full well that the use of this scientific discovery will strengthen the weakened nerves and build up the failing forces of the brain. It will give good digestion, sound sleep, and freedom from aches and pains. Soon the user will not only feel, but look like a new person. With the perfect health given by this invigorator come elastic step, a clear brain, bright eye, rosy cheeks and steady nerves.

This great discovery has done more to check the great evil of brain and nerve weakness than all other remedies known to the medical or scientific professions, and it is every day restoring men, women and children who were virtually dead to the world, to life and health.

## BURLINGTON ROUTE.

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THE PRESBYTERIAN YEAR BOOK, says the *Christian at Work*, is a very handsome appearing and beautifully printed volume. No Presbyterian who wishes to be intelligently advised as to the movements and work of his Church can afford to do without it.