

UNIVERSITY OF OTTAWA

REVIEW

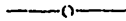


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THE VIRGIN OF THE VALLEY.



IN the valley of Ambato, in the distant Argentine,
The Choya Indians labor 'neath the cinnamon and vine,
Or kneel with child-like fervor at la Vergen del Valle's
shrine.

A *Virgo purissima*, divinely innocent,
Yet majestic of aspect, in each chiselled lineament;
Child-grace and love maternal in exquisite beauty blent.

Long ago, so run their legends, dim centuries ago,
Ere foot of missionary had crossed the Andes' snow,
Angels brought the Lady's image to its rock shrine in the glow
Of the spirit-haunted moonbeams. There in the morning light
Smiled she on her savage children from her niche's gentle height,
And they gazed in breathless wonder on the vision strange and
bright.

Soon they learned to offer homage to the Daughter of the Air:
To lay their simple joys and sorrows in her presence bare,
And bow in adoration to the Greater Spirit there.

At length, far over oceans, came a priest, a holy one,
Who told the wondering Indians of the Virgin and her Son,
And they led him to the wild where Mary's gracious image shone.
Still in her rock-throned majesty Ambato's Virgin stands;
But has been crowned with gems and gold by consecrated hands,
And before her pious pilgrims kneel from many distant lands.

E. C. M. T.

THE FORAY OF QUEEN MEAVE.

(IN TWO PARTS.)

PART II.



WHEN Aubrey de Vere set out to tell his story in verse, he had already to hand a tolerably strong and well-articulated skeleton of legendary lore to dress and adorn. On this point the author, speaking of his poem, assures us in the Preface :

“ It is founded, and in substance represents the far-famed *Tain bo Cuailgne*, a tale regarded by many Irish scholars as the great Irish epic of ancient times, by others as a part only of some larger epic of which numerous portions remain, but which unhappily found no Pisisstratus to combine them into a whole.”

Let us now rapidly glance along the outline of this famous ancient tale, as it appears in its modern form.

In the first book, the poet treats of “ The Cause of the Great War.” We are here told in glowing language how Meave, the Queen of Connaught, awakening one morning, fell to disputing with her husband, Ailill, “ trivial man and quaint, and early old,” as to their respective wealth and worth. In fact, they spoke as if wealth and worth meant the same thing. They wrangled about their personal wealth, just as Milton makes Adam and Eve bicker about their respective share of blame, and—whisper it lowly—as their sons and daughters, without the urging of the Puritan poet, have been quarrelling about respective wealth and worth, and almost every other question that permits of debate, ever since. Their lords—I mean the creatures of Meave and Ailill, of course—called upon to arbitrate “ ’twixt them found in value difference none,” and had they decided otherwise they would certainly have proved themselves extremely un tactful courtiers.

The description of the royal couple of Connaught, wherewith the poem opens, is vivid :

“ In Cruachan, old Comaecht’s palace pile,
Dwelt Meave the queen, haughtiest of woman-kind,
A warrioress untamed that made her will
The measure of the world. The all-conquering years
Conquered not her: the strength of endless prime
Lived in her royal tread and breast and eye.

A life immortal. Queenly was her brow ;
 Fulgent her eye ; her countenance beauteous, save
 When wrath o'erflamed her beauty. With her dwelt
 Ailill her husband, trivial man and quaint,
 And early old. He had not chosen her :
 She chose a consort who should rule her not,
 And tossed him to her throne. In youth her lover,
 Was Conchobar, great Uladh's king :
 She had not found him docile to her will
 And to her sire returned."

In the encounter with his Queen, Ailill, like the positive and selfish fellow he was, claimed a superiority, for the reason that he was the sole possessor of the far-famed white bull, Fionbannah ; and his spouse, not to be outdone, resolved to gain, by hook or crook, possession of an ox of greater parts. When the dispute was at its height, MacRoth, "old Connaught's herald," informed the Queen, that Cenor Conchobar, King of Uladh, or Ulster, "boasted a bull, lordlier than ours, a broader bulk, and black," adding that this bovine marvel was in the charge of Daré, and her majesty despatched MacRoth to supplicate for the purchase of the remarkable animal. Daré, with true Celtic gallantry, no sooner heard the plaint of the Queen's herald, than he consented to send to her the extraordinary beast, called Donn Coulgne ; because his "lovings shake Cualgne's shore," a by no means conclusive reason. But learning later on that MacRoth boasted he, Daré, had done so through dread, the order was rescinded, and MacRoth hooted from the gate of the Castle by the professional clown of the establishment. The herald made his way to Cruachan, the royal abode of Queen Meave, as best he could, and told his story—to suit himself we may be sure. Meave immediately summoned her great allies, "from East and West and South," harangued them, and declared war against Ulster. Soon after Faythleen, the Witch, met Queen Meave, and prophesied calamity, but promised that in aid of Meave, she (Faythleen) would breathe over the realm of Uladh, a spirit of imbecility.

" And on her son's
 Imbecile spirit, and a heartless mind
 And base soul-sickness."

The second book is entitled "The Deeds of Cuchullain." Unaided, Cuchullain affected the whole army of Meave, by very

many exploits of marvellous cunning and strength. Here is a specimen of the warfare and of the spirit of this book throughout :

“ Next morning Neara's sons outsped the rest
 Car-borne with brandished spears, and, ere the dew
 Was lifted, came to where Cuchullain sat
 Beneath an oak, sporting with blackbirds twain
 That followed him for aye. Toward the youths
 He waved his hand : ‘ Away, for ye are young !’
 In answer, forth they flung their spears : he caught them,
 And snapt them on his knee ; next, swift as fire,
 Sprang on the twain, and slew them with his sword,
 One blow.”

Ailill, who, like most timid beings, was possessed of much cunning, since cunning is the instrument of the weak, suggested that Fergus, a king exiled from Ulster who joined Queen Meave to be avenged on the perjured usurper of his throne, be commissioned to his countryman, Cuchullain, with gifts to wean him from his alliance, but Fergus had many misgivings knowing so well how greatly Cuchullain loved his country. Finally, at the request of the Confederate King, he undertook the important and difficult mission, and the Ulster hero and his wronged and exiled countryman and whilom king, met, talked for long of “ ancient days heaven-fair through mist of years,” but, when Fergus made his proposal, it was met by Cuchullain in the only way open to an honest man—by curt refusal. But in accordance with agreements quite frequent among Irish antagonists in ancient times, he consented to forbear Meave's host till she had reached the border of Uladh (Ulster), the Queen engaging, on her side, that the warfare should then be restricted to a combat between himself and a single champion sent against him day by day. Fergus proposed the arrangement to the Confederate Chiefs :

“ Twixt southern Erin and my Uladh's realm,
 Runs Neeth : across that river lies a ford ;
 Speak to Cuchullain : ‘ By that ford stand thou,
 Guarding thy land. Against thee, day by day,
 Be ours to send one champion—one alone—
 While lasts the strife forbear the host beside !’”

Thenceforth the mighty champion of Ulster continued his warfare, himself against a host, and during ninety days he

harrassed the forces of the Queen, and killed a large number of her best warriors.

The third book has for subject, "The Combat at the Ford," that is to say, the combat between Cuchullain, the champion of Ulster, defending the ford situated on the outskirts of Ulster, and the champions sent against him by the Queen and her confederates. This book is essentially a continuation of the preceding one, and Cuchullain is its hero throughout. It closes with a thrilling account of the terrible duel between Ferdia and his bosom friend Cuchullain, as a result of which fray, the former was slain and the latter grievously wounded, physically weakened, and made a victim in part to the evil enchantment that had worked so much calamity to the manhood of Ulster.

The fourth book describes the advance of Queen Meave on the fastnesses of Ulster, while the famous Red Branch Knights, the heroic militia of that province, were rendered imbecile by the spells breathed over them by Faythleen the Witch. At first Meave was successful everywhere, and the immortal Bull, "Cualgné's matchless Donn," was captured and despatched southward, only to fall a victim to a rivalry the description of which furnishes one of the finest episodes in the poem, and which I cannot refrain from quoting :

" Next day, ere dawn,
Southward she sent the Donn. Suspecting fraud,
He on his keepers turning siew a score,
Yet peaceful paced at last betwixt their ranks,
At each side fifty spears. Five days past by,
Forth rolled the roar of Ailill's bull, snow white,
Fionbannah. Bursting through his guard, the Donn
Rushed t'ward the sound. Upon the midway plain
The rivals met. All day that battle raged
While wood to wood, thunder on thunder hurled,
And all the bulls of Erin sent reply.
Shepherds, through wood-skirts peering, saw the end.
The Donn at sunset rushing t'ward the north.
And, heaped upon his back—their horns entwined—
Fionbannah dead ! all night the conqueror rushed
O'er hill and plain and prone morass. When dawn
Looked coldly forth through mist along the meads
Far off he kenned a rock ; that rock he deemed
A second Bull : collecting all his might
Thereon he hurled his giant bulk, and died."

Before Queen Meave had penetrated to the heart of the province of Ulster, the confederate kings' fell out among themselves—a peculiarity Irish leaders yet retain—and there burst forth a contention between them and the "Exile Band," the Ulidian followers of Fergus; but notwithstanding the dissensions, Queen Meave managed to make the circuit of Ulster, plundering as she went along, yet enacting nothing memorable, but on the contrary rather fore-enacting the events that hand down to posterity, just as effectively as if they had been heroic ones, the memory of the King of France who, with forty-thousand men, more or less, marched up a hill, and then—marched down again! She met with little opposition, for, owing to enchantment, the inhabitants of Ulster were as imbecile as if they were two modern Home Rule factions, slandering each other for mastery. The resistance offered by the fearless Ketherine in the very teeth of spells and enchantments, is magnificent:

"First of these
Was Ketherene. Hewing oaks on Ferad's crest
He marked her host, and rushed, a naked man
From waist to head, his axe within his hand,
In fury on it. Late that eve his kernes
Forth from the battle tore him bleeding fast
From fifty wounds."

When Queen Meave grew tired of wandering and plundering, she became despondent, and, heading for home, recrossed the Ulidian frontier.

The fifth and concluding book, called "Queen Meave's Retreat," tells how she, having reached the Plain of Uta, declared sacred by the Druids, wrongfully camped thereon, and proceeded to divide the spoil.

"From morn to eve
That spoil's partition lasted; first, huge herds:
Flocks snowy-white through water-weeds and grass
Followed, homd-driven. War-horses few were there
But many from the plough: with these in crowds
Poor hinds, and swine-herds, maidens skilled in works
That knew to spin the flax or mix the dye,
Or card the wool. Next followed wild-eyed boys
Round each to each. No tear they shed, but sowled
Defiance on their lords and sang fierce songs

Of Uladh and her vengeance. King and chief
Scanned each his prize with careless-seeming eye ;
Yet oft their followers strove, while onward paced
The royal arbiters with wands high held,
Ruling the wrangling crew."

Before the process was completed, King Conor of Ulster, was discovered advancing, whereat Ailill hastened to transfer the supreme command to Fergus. After a glorious battle Fergus struck the usurping but brave King Conor Conchobar to earth, thus avenging himself on his chief foe. The Ulidians returned to the attack, and just as the battle was again about being lost by them, Cuchullain awakes from a visioned sleep, he hastens to the aid of his countrymen in their dire distress, he leads a final onset for Ulster, and Queen Meave is driven in utter overthrow across the Shannon River.

Although the Achillean return of Cuchullain to the host of Ulster from the forest where he lay wounded and spellbound, and other peculiarities presently to be mentioned, lend the poem a pronounced epical tinge and inspire it with the spirit of patriotic action, out of which springs the epics and the drama, nevertheless it is scarcely a Classical Epic in the strict meaning of the words ; since it does not relate a story in which a whole nation feel profoundly interested ; nor does it find its inspiration in a crisis to which an entire people trace their freedom, or happiness, or greatness, unless, indeed, we are disposed to consider the ancient principality of Connaught a separate and distinct nation, though its monarchs, in common with the three remaining monarchs of the four provinces into which Erin was divided then as now, was always in theory and generally in reality subservient to the Chief King, or Ard Righ, at Tara, a separate nation : nor would such an arrangement seem outlandish to our modern mind which is accustomed to it in all its essentials by the relations subsisting between each of the "sovereign" States that compose the republic of the United States and the federal power at Washington. Furthermore, Meave and her allies, drawn as they were from all points except Ulster and even thence in small numbers under Fergus, fairly represented three-fourths of the fighting strength of Erin. But over against these weighty facts must be set the ancient

status of the legend out of which Aubrey de Vere drew his materials. Although it was the master-romance of its cycle, that is to say, of the second great cycle of Irish legendary history, the foray of Queen Meave in quest of the Bull of Louth, was a tale familiar in the Irish under the title of "The Cattle Spoiling of Colony," no more than that.

Although our poet has added to the original tale, and exemplified many portions he found lean enough, and there is certainly much in his treatment that left the materials he used more essentially epic than they were before he remodelled them, and most epics are founded on some merely local circumstance, I am, nevertheless more disposed to class the poem with Romantic Epics, like "Orlando Furioso," the "Divine Comedy," the "Færie Queen," the "Idylls of the King," than with Classical Epics, such as the "Iliad" and the "Odyssey," the "Æneid," the "Paradise Lost," the "Luciad" and "Jerusalem Delivered." Yet "The Foray of Queen Meave" has many qualities in common with grand epic, and numerous commendable qualities of its own—vivacity and directness, for instance—that some immortal epics lack, composed as they sometimes are of huge masses of words which are too ponderous for poetry and too respectable for absurdity. The essentials of an epic are unity and progression, and our poet's narrative is, indeed, perfectly straightforward; the action is single and entire, having, as Aristotle describes the requirements of this part of epic, a beginning, a middle, and an end; it deals almost exclusively with great actors, mythical and mythopoetic beings, and, within their limitations, portentuous events; it is characterized by perspicuity and facility of construction; it has proportion and sustained style, there are few poems so transparently clear; and, more than all, the incidents are brought out and their importance insisted upon in the canonical manner of Classical Epic, apropos of which the reader will recall that the actions of the "Iliad" and the "Æneid" were in themselves short and insignificant but are so beautifully extended and diversified by the invention of episodes, and the machinery of gods, and the other poetic devices, that they make up a lengthy story. Although the undertaking that forms the burden of the "Foray" can hardly be termed dignified, being, when deprived of its modern embellish-

ments, little more than a cattle-lifting raid, the antiquity of the tale gives it a certain elevation, and the poet has so transfused it by his genius that he leaves it a magnificent narrative poem that has such a strong infusion of the heroic in all its parts, stern consideration for strict technical rule alone should hinder it from being placed among the Great Epics. Waving all minor canonical differences, however, it is as near an approach to the Grand Epic as are "The Idylls of the King," or probably as can be made by a poet living in the matter-of-fact Victorian age, when the schoolmaster and the man of science have between them almost destroyed inspiring myth and tradition, and the critical spirit has scouted romance from history leaving to the poet the sorry resort of the exact selection, interpretation, and appreciation of historical incident and national legend.

The poet displays such evenness of merit in his work that it requires an effort to discover a marked superiority in any of the parts, yet the five books into which this poem of over three thousand lines is divided, are not, I venture to think, of anything like equal literary worth. Were they so they would be most remarkable in the annals of literature as they would be almost unique. Homer alone among great poets maintains his strain at a very high altitude for a long spell, a distinction easily explained if it be true that the "Iliad" was at first a series of lyrics. Milton compares with him unfavorably, as when the epic of the latter reaches a high point it visibly and continually declines. The six books of Spenser's "Faerie Queen" form a declining scale of merit. In Dante there are many sleepy pages. Virgil's "Æneid" is a poem which is now read by preference in parts; it is incomplete in many details, and in the latter books the petty battle-scenes grow wearisome. To adduce many other instances would not be a difficult task, but they would only serve to accentuate a truism. While the human mind is rightly compared by Ruskin to the vault of heaven, encompassing the earth, which lives and flourishes beneath it, human performance, even when it is guided by the best intellect, is faulty and imperfect. No matter how unexceptionable the feeling that eventuates in a form of action, the latter will have only comparatively little wherewith to prove its exalted origin. Shakespeare puts into the mouth of the Duke, in

"Measure for Measure" words that beautifully express the thought,

" No might nor greatness in mortality
Can censure scape."

There is, I think, a certain falling-off in the fourth and fifth Books, but this decline is more in incident than in treatment, as the two books contain a number of the highly wrought episodes where with de Vere's consummate art and opulent fancy have veiled the original bareness of his subject. If they can boast of no great range of imagination, these books can, I believe, be justly admired for their delicacy of expression. It is only by comparison with what has gone before from the same pen that they lose, but they are themselves richly jewelled, and moulded to shapes of pure classic beauty idealized by the bright sunlight of poetic fancy. In a word, they may be reckoned inferior in interest, if not in style, to their great predecessors, as the "Paradise Regained" must be reckoned inferior to the "Paradise Lost," although the authorship of so fine a lot of verses as is the "Paradise Regained" would make the fame of a meaner bard than Milton.

That the most bulky of modern Irish poets approaches to perfection so measurably, should be, I hold, with the conscientious literary workers among his countrymen, an unflinching cause for the liveliest gratitude. If our people would only lay better to heart the careful artistic habits of this poet his works would be a positive benefaction to his race. Irish poetic expression is all too frequently conceived in haste, spasmodic, disjointed, uneven and unpolished. Its prevailing form, or rather formlessness, bans it from the consideration of the educated. That is the rule, to which there are, fortunately, very many exceptions, made by sane literary workers who recognize that it is constructive ability in the best sense—that power of execution which creates, forms and constitutes—not the profoundness of single thoughts, not the richness of imagery, not the abundance of imagination—that raises the artist above the novice. Genius may, I venture to suppose, disregard existing literary laws if it perceives a higher object which may thus be attained. But the public has a right to question it rigorously as to whether it has any such result in view, and to refrain from challenging would be to set a premium upon eccen-

tricity, carelessness and disorder. One Walt Whitman in five hundred years is surely enough. Furthermore, the public shall demand that, in disobeying laws heretofore approved, genius shall embody and suggest deeper and better ones. Until genius can give an affirmative reply to such inquiries, innovation should be ruthlessly frowned down.

Now, I have long been of opinion that the want of technique from which Irish poetry so grievously suffers may be traced to one prolific source—want of patience in Irish poets. To save this modest dictum—the unassuming utterance of one who holds the whole lengthy line of Irish bards most dear—from being branded as dogmatic, and, if possible, rescue it from a seeming sterility of arrogance, and an deadness of contempt, out of which nothing can proceed, some explanation is necessary. Let me set out with the proviso that I am not alluding to the glorious band of Irish balladists. Ballads—not ballades, which bear to the former about the same relation subsisting between “Symthe” and “Smith” in the long and distinguished line of the Smiths—form a class apart. They are Democrats among poems. They fairly delight in the crudest aspects of human life and nature. Freedom is their dominant note. They prefer audacity of invention to logic and correctness. In them frequently proportion and harmony give place to direct force, if not incoherence. Every country owes much to its balladists, and Ireland is, I venture to think, among the countries that owe most. The Irish intellect is so endowed as to give the lyrical element a peculiar predominance, and Irish lyrists have been numerous. The Irish balladists are the lineal descendants of the patriotic Irish bards of by-gone days. Their work is great, but from the literary standpoint, it is imperfect. To be striking, vivid, passionate, is their main object. It is only just to measure them by the standard that is universally applied to such works as theirs, and under this treatment they show up well; nor should it be forgotten they never so much as affected the desires of the vanished and gilt-edged votaries of pseudo-classical insincerity and hollowness. They never bothered their heads about “decadence” and “art for art’s sake,” being more vitally interested, I have no doubt, in potatoes for potatoes’ sake. They have stimulated patriotism and braced the

nation with a sense of its own dignity ; they have promoted the pride of race and inspired the race with ardor ; they have taught the people to con the noble lessons of the past, and through their fiery and pathetic effusions the Irish people has, in no small degree, come to knowledge of itself and acquired solidity. Their work is great, I repeat, but they are neither pedants nor precisians, and their great performance is not literary but patriotic. That much made clear, I can return to my subject.

Poetic inspiration, or artistic inspiration, may be defined as a vehement love of beauty—the sexless, intellectual, æsthetic beauty of the Greek—which God, at rare intervals installs into the minds of a few ; the poets and artists of every land. It was this love that Louis Pasteur meant, when speaking of the ideal in terms not often used by men of science, he beautifully said : “ Happy is he who has a God in his heart, an ideal of beauty, to which obedience is rendered ; the ideal of art, the ideal of science, the ideal of country, the ideal of gospel virtues, these are living sources of great thoughts and great actions.” Again, when Cardinal Newman taught that, “ Poetry is the perception, and the poetic art is the expression of the beautiful ; for vice can be rendered attractive solely by enduing it with some of the attributes of beauty,” the great Englishman still further illustrates the notion of the great Frenchman. All that is strongest and truest in poetry is an inspiration ; that is, it holds within itself a thought or a teaching not consciously created, not even mastered, in its inception by the mind that brought it fourth, but susceptible of growth, and further illumination, even to the poet himself, who was the chosen instrument of his message. Thus all the true poets must have moments—brief spells—when they are also seers, as in the olden times they were denominated. Wherever any object takes such a hold of the mind, by which it seeks to prolong and repeat the emotion to bring all other objects into accord with it, and to give the same movement of harmony sustained or continuous, or gradually varied according to the occasion, to the sounds that express it—this is, if not poetry, poetic sentiment, or the raw stuff out of which poems are made. There is no truth cognizable by man which may not shape itself into poetry. Wherever the sensations, thoughts, feelings, of men can travel, there the poet may be at their side and

find materials for his faculties to work on; the one condition of his working being that the object pass out of the region of mere dry fact, or abstract notion, into the realm of the imagination. So, when I find poetry defined as "a fine art operating by means of thought and language," I am disposed to accept the definition, imperfect as it is, as the most satisfactory effort to define the term that has down till the present passed the lips of philosophy. "Not with so much labor is Ceres said to have sought Proserpine," says Milton, "as I am wont day and night to seek for the idea of the beautiful through all the forms and shapes of things, and to follow it leading me on with certain assured traces." While thus expressing himself, Milton, I believe, speaks for all his spiritual kind. The search after the ideal of beauty may be long and very weary, but the steadfast in faith weary not, though the road be long and the wayfaring greivous. In every department of art—sculpture, painting, poetry, music—in literature, philosophy, science, everywhere that genius finds room to assert itself—we meet with instances where the coarser wants of the body are forgotten, or subjugated, the love of life and the desire for its enjoyment, preservation and perpetuation are suppressed, and everything that belongs to the world, or that can be classed as practical, is sacrificed to the pursuit of the ideal—of abstract beauty, that is to say, proportion in form, color, sound, diction, thought or fact. Led on by the Spirit of Art, men have been known to give up all that the world holds dear, and those of us who appreciate the spiritual in man will gladly testify that theirs is indeed a noble sacrifice. If I were requested to state off-hand why those cloistered toilers allowed themselves to be chained in the Cell of Contemplation by the love of artistic study, I should reply in the line of Terence, quoted by Horace, in which the wiser slave tells his young master that *loving*, having in itself neither reason nor judgment, cannot be treated by guidance and argument.

A consideration of the foregoing helps to an understanding of the definition offered by high authority for that rare gift which God bestows once or twice in a century—mayhap not so frequently in this century—and which we call genius. Carlyle defines it, and exemplifies

his definition by his practice, as "the infinite art of taking pains." Michael Angelo, who was strong in many provinces, of art, calls it "eternal patience." Augustus Schlegel says that though it is "in a certain sense infallible, and has nothing to learn, still art is to be learned, and must be acquired by practice." Therefore, as the manipulative skill required to give an expression to an idea must be learned, genius is not indolence, nor a license to dispense with all labor. *De profundis*, indeed, must the poet come; "there must the deep rhythm of life have electrified his volatile essence to a living rhythmic joy"—in this single sense, and this only, the poet is born, not made. While the love for the beautiful is a gift from heaven, the method of expressing the beautiful does not necessarily accompany it, and must be acquired. If ever there was an inspired poet and genius that poet and genius was Robert Burns; yet this is what he said on the matter of inspiration: "Though the rough material of fine writing is undoubtedly the gift of genius, the workmanship is as certainly the united effort of labor, attention and pains." The only just and precise sense in which the word Poetry can be used is to signify the Art of Poetry as opposed to the other imitative arts of Painting, Sculpture, and Music. The painter must know how to use his brush, and with what colors to supply his palette; how to produce his distances, and how to outline his figures. The sculptor must learn the anatomic proportion of forms, and he must learn how to use his chisel so as to liberate the statue from the block, nay, he must learn the comparative suitability of the different marbles. We live in an age and country where the notion is all but universal that musicians are ready made, yet the careful student who studies his instrument and his master will, I venture to think, be in a position successfully to controvert any such claim. When musicians, painters, sculptors, architects, and all other exponents of the Fine Arts and the Arts in general, come forth fully equipped like Minerva from the head of Jove, I shall believe that the poet has no need of study, but until this miracle occurs, I prefer to hold fast by my present conviction that the poet must be acquainted with the mechanism of verse and the value of many forms, the meaning of the words composing his language and their uses; because correctness in metrical composition, as I understand the

term, implies obedience to the laws of imaginative thought, and, therefore, not only precision of poetical expression, but justice of poetical conception. True, genius is a gift from heaven, and like all heavenly gifts, generally placed in a frail vessel thrown among us at random; but invariably for a purpose and in obedience to a law. Genius is a sort of sixth sense combined with large and abiding common-sense. It is intensity of faculty; it is keenness of insight; it is extraordinary receptiveness: all that it is and much more. When a man displays genius, we are startled, then captivated. We are not much surprised at seeing a genius soar; we suspected he possessed pennions. But when mere cleverness essays the flying act, we laugh in derision. When a man becomes over-clever he approaches very near being a fool. The characteristics of genius have been defined by philosophers to be a power of simplifying, of taking that view of a subject in its rounded completeness that makes it more easily understood, of possessing one idea, in the light of which all others are resolvable. The power of analyzing the feelings of the mind, though distinct from the poetic talent, is obviously necessary to its exhibition; and the power of arranging, which is necessary for an extended poem, is a modification of the same talent, being to poetry what method is to language. In the interval while power is being brought to bear upon the material, the corporeal presence of the poet may experience very many changes and be handed over to the subjugation of a thousand moods.

One must see clearly what so many poetasters and their praisemongering friends seem never to suspect, that a great poet must know, first of all. He must be a full man, a finished scholar. Poetry is thought tinged with emotion. Poetry must idealize and raise to the realm of the imagination that which it presents, but what it presents must have its "root in truth"—to use the words of Leigh Hunt—"or never will it blossom into a beauty that touches the heart of man." The acquisition of knowledge, the concentration of intellectual power, the search after the truth of method, all these steps require time. Then, an artist must have conviction, as scepticism and half-heartedness are barren, and conviction is acquired by inquiry and comparison. The poet, however much he may seem neither to toil nor to spin, can use only

the materials which have been stored in his brain during years of thought, reading and observing. The most brilliant intellect cannot do without an accumulated fund of facts and ideas.

Every part of our physical organization has a definite amount of force to be used in sensation, and when, by prolonged exertion, this force is expended, pain takes the place of pleasure. What is true of our bodies is true analogically of our minds. Experience teaches that mental activities which give delight at the outset, produce pain when greatly prolonged. How great a prolongation may be pleasurable experience depends, of course, greatly on constitution and habit. Of one thing we may be certain; before the pen has had time to glean the teeming brain of the poet, his physical being will be subjected to as many weathers as the sower experiences between the planting of the seed and the garnering of the fully ripened grain. The inspiration, the heaven-born capacity to produce music out of words, is probably always present in a true poet, but in various degrees of strength, and the moods of overmastering passion may be unfrequent. It has often been remarked that he who is visited by a real inspiration generally depends on a mood rather than upon circumstances. It is quite natural to suppose there are times when the joy of creation ceases to thrill the poet, and his pen, unless it be wisely laid aside to await favorable opportunity, is given over to the production of more or less ineffectual and dormant passages. One can say in all seriousness that Pegasus, in common with other winged animals, has his moulting season, when he has not feathers to soar aloft in ether, but must remain a mere groundling, a perfect sparrow of discord and harshness. The trouble with the Irish literary workers is that the fiery, impatient Irish spirit abhors delay and vigil, and would have Pegasus soar, feathers or no feathers. It is often too impatient to explain itself justly; it is overpowered by a rush of emotions, which sometimes wants power, sometimes the indulgence of inward enjoyment prevents it from describing. It mistakes impulse for inspiration; it overlooks that important element of style, completeness in preparation; it edges away from revision; it gives itself over to complexity of spiritual forces in play together at one moment, but going in different directions--this it does, if not always at least often, and it does it all through want of patience.

In fact things have drifted so far astray that when an Irish author, especially if he be a poet, displays a carelessness, an inattention to appearance, all implying a want of concentrated attention to his action ; is he not accredited by our easy-going prevailing Irish criticism with the possession of a "racy Irish diction and system of thought"? The phrase may not always be in the same words, but the idea never changes. The Irish intellect—both imagination and reason—is subtle, rapid, versatile, graceful, while in both fancy and reason there is frequently a want of strength, boldness and comprehension. In much the same way, there is a tendency in the habits of the Irish memory that, while it shirks from the irksome task of yielding to the mind in slow succession the materials for abstraction, or for that laborious discernment of differences which is the province of the judgment, delights in supplying with incredible quickness images linked by some resemblance of almost impalpable subtlety, and the ideas of the Irish are apt to be indefinite, because liable to be mingled with another train of thought not connected with them. In other words, the fancy is abundant, while imagination and judgment appear much less. Hence, Irish artists and poets are prone to forget that the secret of artistic excellence is unceasing labor, and they produce before they have completely thought out their subject. But those faults are recognized by a steadily increasing body of educated Irish, and with the intelligent a fault known is a fault corrected. When Irish writers, as a class, grow more conscious of their aims and the requirements of their art, when they become more critical and comparative and patient, it is reasonable to suppose they will stand high in the estimation of an age which has few really strong prejudices, and which can boast of few great thinkers, statesmen or seers.

There is another source of weakness to Irish artistic development, and it lies much closer to the surface than the one just mentioned. The testimony which literary history has accumulated by the experience and erudition of time, greatly excuses the paucity and incoherence of Irish literary achievement. A period of moderately popular excitement is a period of bright, lively ideas that, by rendering general sluggishness impossible, and in the case of the Irish, animating the people with hope and expectation, most powerfully stimulate creative faculty. On the other hand, a

period of violent political eruption, produced by the clash of bitterly contending classes and sects, and sufficiently severe to rend society to its foundations, has ever been a period detrimental to the expansion of the blossoms of fancy, which delicate blooms require a tranquil if heated psychological atmosphere. No man can compose seated on the slope of a seething volcano. Turmoil and confusion are fatal to the production of permanent literature; and it is as notorious as deplorable that the society of Ireland has been shaken and shattered by a long succession of the most terrible eruptions.

But when all is said, the outlook is not without its ray of hope. Ideas have a life of their own; no generation can do more than surmise dimly, if at all, their future developments. What we Irish possess, we can count. The Irish possess and maintain the cardinal elements of national greatness—robust character, independent personality, expansive vigor, sincere religiousness, and if they are not yet politically they are socially and intellectually free. These things present, indeed, a tolerably firm and commodious foundation upon which to rest a fulcrum; but it must not be forgotten that every process of change in national habits or customs implies suppression, and blending, and compromise, and recombination—a mental chaos out of which it is extremely difficult to bring order within the limits of time. Furthermore, to make the Goth an artist is no easy task. The Irish are not Goths it is quite true, but they have long been in close contact with Goths, and for various causes growing out of their dark and lethal history and lying hitherto beyond their control and which have stultified the educational system of the country, they suffer from what may be called recrudescence in artistic taste, and the champion of scholarship and the quest for the ideal and the beautiful, who like a knight of old, sallies forth to break a lance with rooted and multitudinous error and ignorance in behalf of Irish art and literature, would need be superhuman, or if human, no less heroic than Theseus grappling the Minotaur in Cretan labyrinths.

As in the case of the proper arrangement of words in a sentence, and also in that of the right ordering of sentences in a well-compiled paragraph, the economy of the recipient's mental energy is of first consequence, since upon it depends the force of the lan-

guage ; so, in the case of the correct choice and use of figures of speech, the same requirement of economy of the mental energies, the saving of the reader's attention, the sparing of the mental sensibilities, is fundamental and paramount. The chief manner in which this end is achieved in poetry will, I venture to hope, justify a few words of comment.

Metaphors, similes, and tropes are, as every student of fanciful literature knows, the life and soul of poetry. Figure is its necessary means of communication with the man ; for in the feebleness or ordinary words to express its ideas, and in the absence of terms of abstract perfection, the adoption of metaphorical language is the only poor means allowed poetry for imparting to others its own intense feelings. Figures in poetry not only serve their main purpose of economizing interpreting powers, but distinguish the glowing effusion of real inspiration from the cold efforts of mere science. A figure of speech is, as all my readers know, an impression in which one thing is said in the form of another related to it. Figures vivify style because in all minds, acts and relations are associated by resemblance, contiguity, and contrast ; that is to say, objects which resemble each other, or are contracted with each other, mutually suggest each other. But some names are more specific and concrete than others associated with them. Hence, interpreting power may sometimes be economized by selecting from associated objects, acts, and relations, the most specific and concrete. This is done by figures, in which the general and the abstract are expressed in the form of the specific and concrete.

Oliver Goldsmith somewhere calls the metaphor " the Muse's caducens by the power of which she enchants all nature ", and the title is well deserved. In the metaphor the resemblance is not expressed as in the similitude, but it is most implicitly implied. The allowed superiority of the metaphor to similitude is ascribed by the famous Doctor Whately to the fact that all men are more gratified at catching the resemblance for themselves than in having it pointed out to them, but Herbert Spencer, with what seems to me the better reason, thinks that the greater economy of the reader's attention it achieves is the more probable cause. The metaphor is a contracted similitude : the similitude an expanded metaphor. Both figures are governed by the great law of thought which Aristotle

called resemblance, a quality which is, as I have already remarked stated in the simile and implied in the metaphor, and in the metaphor the implied resemblance is so vividly conceived as to be taken for identity.

In "The Foray of Queen Meave" there is no excess of figures; in fact, they are everywhere within the limits of the poem subjected to a severe classical restraint, but what there are of them flow naturally from the subject. The poet takes all his materials for this part of his work from the hidden quarries of nature and spreads them before us in their beauty and freshness. It is very long since I learned from "Rasselas" while yet a school-boy that, "example is more efficacious than precept." The following examples will, I think, illustrate the salient points of the foregoing remarks:

"That hurricane of wheels."

"The courser baffled clothed his strength with speed."

"That mountained strength triumphant."

"Fencing my people from an alien foe."

"The setting sun levelled through holly brakes
Unnumbered dagger-points of jewelled light
And 'neath the oak-stem burned a golden spot."

" Finobar !

She whose bright face hath frosted with death's white
Full four score faces of war-breathing men.

"Each battle was a game, a jest, a sport
Till stood, self-doomed, Ferdia by the Ford--
Hugh lion of the forestry of war;
Fair, central pillar of the House of Fame.

"Then forth she loosed the sheets and spread the sails
And bounded on the waves of proud discourse
Recounting all her triumphs."

Who but a great poet could produce the least of such touches as they?

As our poet's metaphors are subject to classical restraint, so also are his similes. The classic use of simile may be instanced by Milton's description of Satan's shield. The comparison of the shield to the moon is borrowed from the similar comparison of Achilles in the Iliad, but Milton makes Homer's figure lawfully his own by appropriately embellishing it. Homer merely says that

the huge and massy shield emitted a lustre like that of the moon in heaven. Milton, in the words of Dr. Garnett heightens the resemblance by giving the shield shape, calls in the telescope to endow it with what would seem preternatural dimensions to the naked eye, and enlarges even these by the suggestion of more than the telescope can disclose :

“ He scarce had ceased, when the superior fiend
Was moving toward the shore ; his ponderous shield,
Ethereal temper, massy, large, and round,
Behind him cast ; the broad circumference
Hung on his shoulders like the moon, whose orb
Through optic glass the Tuscan artist views
At evening from the top of Fesolè
Or in Valdarno, to desery new lands,
Rivers, or mountains, in her spotty globe.”

In the “ Foray of Queen Meave ” many good examples of this striking figure may be found. The distant approach of Cuchullain is thus described :

“ Through the high-roofed woods
They saw him distant like a falling star
Kindling the air with speed.”

Cuchullain has a vision of a pure and princely shape :

“ Lithe his form
In youthful prime : chain armour round him clung
Bright as if woven of diamonds. Glad his eye ;
Dulcet his voice as strain from Elfin glen
Far heard o'er waters.”

The mutual watching of Cuchullain and Ferdia while engaged in their awful duel, gives rise to this :

“ Keen-eyed as ocean-bird
That, high in sunshine poised, glimpses his prey
Beneath the wave, and downward swooping slays him,
Each watched the other's movements.”

Here is another comparison with things of the sea :

“ Silence they kept,
Long silence. Then far off, as though from depths
By thought untraversable of cloudless skies,
Such sound was heard as reaches ships at sea
When, launched on airy voyage though still remote,
Nation of ocean-crossing birds begins
To obscure the serene heaven.”

I could easily cull many more examples but these will, I think, suffice for purposes of illustration.

It is almost unnecessary to state that the figure we call Personification, consists in attributing personality, or some of the attributes of personality, to an inanimate object, because of a fanciful resemblance to a living being. The philosophy of the figure is, however, most interesting, as it leads us far into the mysteries of mythology, and even supplies a key to the formation of myth. Man in his undeveloped and uncivilized state is governed, like the lower animals, wholly by his instincts and passions. On emerging from barbarism he forms governments and worships, and, as a consequence, is held back from the unbridled sway of his impulses and passions by fear of the law and God. He next reaches what may be called the poetic stage of development. Thenceforward nature becomes more than the mere minister to his physical necessities, she begins to strike the mind with wonder and admiration. The sense of natural beauty once awakened, the tide of æsthetic culture sets in ; religion passes from mere fetichism into the worship of nature ; poetry makes its appearance, and, in the fulness of time, as intellect gains step by step on the imagination, and man, in place of admiring the world desires to comprehend it, Philosophy is ushered into being. During the poetic stage of the development of man he touches abstractions with the Promethean fire, and into the nostrils of inanimate things breathes the life ; since for his poetic eye everything lives, and the assembly of his creation peoples Olympus with gods. The Greek religion, for example, was one of beautiful personation ; the powers of the universe were deified under concrete forms of human personality. The mystery of the woods and wilds was Pan. Nereids swam up from the azure deeps to glide across the surface of calm ocean. The Sun was a god who drove his steeds across the sky ; the Moon, a maiden who bent down at night to kiss her sweetheart in the solitude of Latmos. So, too, with the Roman imitation of the Greek mythology ; but my learned and most suggestive friend, Lampière, must furnish examples out of his classical dictionary, as I have no space for them here. All through the ages the poets have been partial to the figure by which we attribute life, sex, and action to inanimate beings, and our poet uses it with

effect. The following personification of early morning is in the best manner of the author of "The Fairie Queen":

" Morn the while
Was dawning, though she raised not glowing cheek
Nor ardent eyes, with silver waed not gold
Striking the unkindling portals of the East."

The following is essentially in the same spirit:

" The vernal day
Panted with summer ardours, while aloft
Noon-tide, a fire-tressed Fury, waved her torch
Kindling the lit grove and its youngling green
From the azure-blazing zenith."

This description of the disagreement of the Irish Chiefs draws its strength from personification:

" Old friendships died ;
And from the dust of ages injuries old
Leaped up like warriors armed."

Unlike the majority of reflective poets, Aubrey de Vere never permits landscape to distract the attention in his figure pieces, but with masterly art introduces sufficient to relieve and give effect to his dramatic purpose. With me this using of landscape for background is a positive merit; but I must not blink the fact that the poet has been found fault with by the critics for his scantiness of landscape. Even if this be a grave defect in a poet, certain it is our author conceals it from almost every reader who is not a professional critic, a sort of literary Pinkerton, with art which was doubtless guided by the æsthetic sensibilities that have so long rendered it well nigh impossible for the poet to compose anything trite or inartistic. That he could "write landscapes" when he chose, is, I hold, proved by passages from this poem and from other poems, and above all from his magnificent "Autumnal Ode." Even when he incidentally gives his readers a glimpse at landscape it proves to be what Lamartine emphatically declares to be Nature itself—the sublimity of music and poetry.

..... " great plains
Shine in the rising and the setting sun,
Gold-green, with all their flag-flowers, meres, and streams.

" Cuchullain reached a lawn : a tall autumn grass
Whitened within it ; but the beech trees round
Were russet brown, the thorn brakes berry-flushed.

" On that airy height
A wan lake glittered, whitening in the blast ;
Pale planes were round it."

I doubt if our author has deeply studied the mazes of feminine psychology, nor should such perplexing diversions be expected from one who is a bachelor of a certain age. Be this as it may, I do not fancy the women of this poem. It is sad to be compelled to state that Queen Meave is not loveable. She is an emotional woman, and her emotion, being perverted, assumes the essentially masculine forms of turbulency and aggressiveness ; and she is at all times deficient in delicacy of heart ; in refinement of instinct, impulse, and habit. Just as Fergus is a type of the manhood of Ireland, Meave is an anti-type of the womanhood of Ireland. She is of the amazonian type, and resembles Queen Elizabeth in many of the worst ways of the English monarch. Like the worthy daughter of King Henry, she has an expeditious way of disposing of discarded lovers ; but, it must be set down to her credit, she does not slaughter them outright, she only deserts them. Our modern Divorce Court would have served Meave's purposes to perfection, but the Irish Pagans knew nothing of such institutions. Like Queen Elizabeth, also, she has a talent for affairs, and more like her than all she was inordinately vain and dispicably unscrupulous. The parallel might be pushed very much farther, but to do so properly would call for a separate article. Were she living in the gathering twilight of the nineteenth century, she would, I have no doubt, be found with the other short-haired women and long-haired men, going up and down the country shrieking for Woman's Rights and all manner of utterly impossible social reforms, and leaving poor hen-pecked Ailill at home, to rock the royal children and attend to the royal cuisine.

Her consort, Ailill, was by no means the happiest of men. The poet tells the whole story in a few words, that tend to prove the strongest expression is generally the briefest and barest :

" She chose a consort who should rule her not,
And tossed him to her throne."

That the ill-mated couple should quarrel was inevitable. Ailill is much too familiar a type to require much elucidation.

The Princess Finobar recalls Tennyson's "Vivien." Finobar is light, sensual, and heartless, as the light and sensual are foredoomed to be. Better and purer than Vivien she is nevertheless an adept in the selfsame arts. Vivien was given over to poisoned whispering, that left not "Lancelot brave, nor Galahad clean." Finobar was not a habitual slanderer, her great fault was the playing fast and loose with affections that should have been sacred. She does not stand at the lowest point that womanhood can reach although she approaches that bad preëminence. It is pleasant to note her treacherous wooing was not always successful and that it produced a terrible retribution. Poetic justice was meted out to her and she reaped what she sowed. Death of a broken heart is surely the proper fate of the Princess Finobar and her sort.

Of the minor personages in de Vere's fine drama, I have allowed myself little room to speak. It seems as if the spell of Faythleen the Witch has been breathed over Ireland and her leaders all too frequently even in our own days. The Mor Reega, the Irish war-goddess, or Minerva, is made to play a short but potent role, resembling that of Fame in the *Æneid*. It may not be out of place to note that, even to the present hour, the name of Mor Reega furnishes the Irish peasantry with a favorite imprecation, and in their dialect to "see morega" is to meet with misfortune and suffering. Saltain and Dectara are notable creations, but, I venture to think, the poet should have pictured the parents of the hero a trifle more dignified. It should not be forgotten, though, that Cuchullain underwent a complete magical change of nature as well as of name after he left the parental roof, and that he was thereby as far removed from his parents in his nature as if their blood did not course in his veins. Briarind is an Irish Thersites—not he of Homer who was merely a deformed Grecian Jester, but he of Shakespeare's "Trollus and Cressida", whom Coleridge termed, the Caliban of demagogic life.

"Briarind had tongue so sharp, where'er he moved
A guard was round him ranged lest spleen of his
Should set the monarchs ravening each on each."

There are Briarinds in Ireland to-day, and instead of being guarded like foul-mouthed scolds in the days of old, they are actually sent to Parliament. It would be easy for me to fill many pages with brief notes on the numerous minor characters.

The stage that the poet uses is a broad one and it is crowded with characters. But it is not necessary to notice them all, one by one. In fact, to consider the characters employed in "The Foray of Queen Meave", whether great or petty, is to make a very insufficient survey of the subject. The interaction of character on character, and the general conduct and progress of the narrative, might be profitably treated in a volume triple the thickness of this entire publication. As I have previously stated I am strongly averse to that study of literature which consists in reading about books rather than in reading the books themselves. To the poem itself I would therefore direct him whose attention I may be so fortunate as to have awakened, believing as I certainly do, that the morality of poetry goes deeper than prosy writers suppose and the graceful sentences, and the manly sentiments, so frequently to be met with in this poem are among the most valuable and improving forms of reading.

One of the chief charms of de Vere's work is that it shows so many indications that the author is strict with himself. His poetry speaks in clear, if not loud, tones to the people. It is a poetry which shall make us more in love with the Land of our Forefathers by converting its noble scenery into images of lofty thought, and, as in the poem under discussion, by giving vitality anew to personages of Irish legend, or in others of his efforts to the personages of Irish history. The characters in "The Foray of Queen Meave," personify much that is great in the legendary lore of ancient Ireland. There is Cuchullain, for instance, so called from *cu*, a hound, or watch-dog, and *Ullan*, the ancient name of Ulster, because he is described as the *watch-dog* of his native province. He is immeasurably the greatest of all Ireland's legendary warriors. The poet describes this demi-god indirectly and by means of insinuation, but some idea of his qualities may be gathered from the mouth of one who hated him, on account of his virtues, Paythleen the Witch:

“One man alone I see,
One man, yet mightier than a realm in arms !
That Watch Hoend watching still by Uladh's gate
Is mightier thrice than Uladh : on his brow
Spring-tide sits throned : yet ruin loads his hand.”

There is inherent in such a theme a potential nobleness waiting to be evoked. Cuchullain is, indeed, a noble figure, that would do credit to the annals of any country, being as gentle as he is powerful, and as just as he is fearless. The determination and grim animalism of an Ajax are found in him, but coupled with an intellectuality and a wisdom that rises into the spiritual contemplation of a Prospero. He has been called the Achilles of Early Erin; yet as Aubrey de Vere himself points out, with the swiftness, the fierce impulse, and indomitable might that belonged to the Greek, he blends in perfect harmony qualities that remind us more of Hector. Like him he fights inspired chiefly by patriotic zeal; like him, too, he is generous, modest and forbearing to the weak. The only enemy to whom he is really implacable is he who has wronged his country; he loaths such as sell their birthright like Esau; such as sell their Master like Judas; such as lie and dissemble like Ananias and Sapphira, his wife. Age and women are sacred in his eyes, and his relations towards both his parents, fiercely as the latter are at variance with each other, are wonderfully tender and dutiful. Bayard Taylor was entirely right when he expressed in charming verse the equally charming thought that the bravest are the tenderest and the most loving are also the most fearless. Cuchullain is an Irish “Sir Galahad,” with a soul as white as Heaven, and in whom the moral and spiritual elements so predominate that his patriotic fervor is intense, and his aspiration after truth, justice and goodness most ardent.

The friendship that subsisted between Cuchullain and Ferdia resembles that of Achilles for Patroclus, but it is tenderer; it is akin to that of Mercutis and Horatio, but it is deeper, more serious, more permanent. Friendship is the highest form of human love, and is, therefore, only possible in its manifestations amongst the highest of the human race—“to men and angels only given.” The poet fulfills the canon which decrees that the hero shall not always be faultless, but always shall be noble. The souls of

Cuchullain and Ferdia must have been very nearly equal in their appreciation of moral standards, since it is upon such equality the pure sympathy underlying true friendship mainly depends. When a passion of this sort is destroyed it is like tearing the heart apart by fractions of inches. Cuchullain, we may be sure, would rather have died than have lifted an angry hand against Ferdia. Yet, he was called upon by Duty, "stern daughter of the voice of God," to slay his friend; surely the most horrible ordeal to which human feeling can be submitted by cruel fate.

Fergus, or to give him his full title, Fergus MacRoy, is a true prince and a true warrior. He is fearless, magnanimous, truthful, just; his lightness of heart is constant and contagious, in which respect he is a type of his race. He seems to be one of those unfortunates whom the gods envy and thwart; though valiant and generous he risks his life in a cause which he knows must be ultimately unprofitable, if not evil. Is not this typical of Ireland? He has seen somewhat of the sunny side of life and has experienced frequent moods of disillusion. Like Ulysses, he is a much experienced man of the world, and he sees through the illusions of the world. He has been wronged by the world, but he takes his injuries firmly like a man of action and experience, and sets about subduing his base antagonists like a second Alcibiades and unlike Timon of Athens, the antithesis of Alcibiades and his sort. He has met with great vicissitudes, he has been wronged grievously, he has suffered bitterly; yet he never parts with what Goldsmith called the Irish nack of looking at the bright side of things. He is brave, but as cautious as he is brave: as true as steel, and as firm as the rock-ribbed mountain. His desire for power is not overweening; he voluntarily resigned his throne; but, in the hour of danger, timidity and incapacity flee to him for protection as the sheep seek the shepherd, because they find in him a born leader of men. He rose superior to most of his allies, and while they fought for spoil his aim was to be avenged of him who usurped his throne.

I have before my mind the memory of his poetic works in general when I venture to affirm of de Vere that his constitutional earnestness and gravity, though intense, spared him a moment's leisure here and there for refined and quiet humor, but an indul-

gence to any marked extent in a work of the nature of "The Foray of Queen Meave," would, however, I opine, be contrary to his aesthetic canons. His brief essays in facetiousness, so far as the present poem is considered, may appropriately be called, the smile in literature. Yet, the quaint turns admirably their purpose, suggesting, as they never fail to do, concealed depths of kindly humanity in their author. This description of Saltain :

....." like a Poplar, vocal was the man
Not less than visible."

This declaration of an amouner :

" The gods have made my house a house of fame ;
The craftsmen grin and grudge because I prosper ;
The forest bandits hunger for my goods.
Yea, and would eat mine anvil if they might."

Cuchullain drives his spear in the ground and the protruding handle shakes when

" Loud Cuchullain laughed,
And cried, It quivers like the tail of swine
Gladdened by acorn feast."

Thus the humor, charming in itself, is seldom more than a gleam, but it is so cunningly used to relieve intellectual tension, that it produces a really marvellous feeling of sufficiency in the reader. But in the character of Fergus, the great exiled king, the author makes humor play something approaching to prominent part. The generally admired sword episode will illustrate this. When Fergus interviewed Cuchullain with the intention of weaning the latter from his allegiance, the hero fell into a familiar conversation, which turned on Ailill, of whom Fergus told this anecdote :

" One night
I sped to Meave's pavilion swift of foot ;
War-tidings wait not, Ailill from afar
Furtively followed, stung by jealous spleen.
The queen had passed into the inner tent ;
I sought here there. In the outer Ailill marked
My sword, that morning thither sent, a loan,
For Meave had vowed to outbrave its hilt with gems
Blazoning her zone. His wrath was changed to joy !
He snatched it up ; he cried, "Hail, forfeit mine !
Hail eric just !" and laughed his childish laugh.

Since then he neither frowns on me nor smiles :
 He will not let me rule his foolish kings ;
 Yet, deeming still my sword a charm 'gainst fate,
 Wears it. An another one I keep for him :
 One day 'twill raise a laugh !

That was precisely what he made it do, although it was some time subsequently during the supreme crisis when Ailill resigned the command of "his foolish kings" to the more competent Fergus :

"Ailill to Fergus turned
 And spake : 'Be thou henceforth our Battle-King :'
 Thus spake he ; then releasing from his belt
 The sword usurped of Fergus, added thus :
 'Receive once more thy sword ! in mirth erewhile
 I made it mine : the virtue in that blade,
 Hath kept me till this hour', Fergus replied :
 'I take my own : but one month past, this sword
 Had cut the cancer forth from Uladh's breast,
 And made thy throne a praise on earth for aye !
 I take my own, on thee a sword bestowing
 That best becomes thee. Waiting long this hour
 For thee I kept it.' Proudly Ailill clasped
 Its glittering hilt : Fergus drew back the sheath ;
 And lo, a wooden sword, for babes a toy !
 The concourse laughed ; the loudest Meave : though wroth
 Ailill a little whiffling laugh essayed,
 With sidelong face."

An epigrammatical writer is usually, though not necessarily, a thinker of concentrated thought, but an author may be both wise and pointed without being prevaillingly epigrammatical in expression. I venture to suspect that the current criticism too frequently places an extravagant value upon sententious sayings, and in more than one instance it has proceeded to the extreme of regarding the production of epigrams as the note of excellence in a poet. According to this standard Pope would be almost as great a poet as Shakespeare and Martin Farguhar Tupper greater than Pope and Shakespeare taken together—a rather unsatisfactory arrangement. It may be useful to bear in mind that there is sententiousness too profound and diffuse to admit of being confined in the mold of the epigram. The poems of Aubrey de Vere contain quite enough of epigrams, made up of choice ideas instead

polished common place, to suggest great concentration in his thoughts, and in the work before us there are more than one epigram worthy of notice, as the following selection will, I think, serve to demonstrate :

Sadness is celibate and eremite.
 Of treasons worse is none
 Than sorrow when they country's foe is dead.
 tortuous mind made tortuous course.
 The Gael is restless ; lives on chance and change.
 Self-love, sole regent of the unloving heart.
 Not man is he, the man who dies of grief.
 Of
 A face, still fair, in auguiste ante dates
 Its future.
 For oft from out the present shines a past
 Long dead.
 A man's truth predestined ; from his birth
 By courage sealed to Truth.
 Equal in craft of war. The kinglier soul
 Conferred alone the victory.

All artists have been imitative not only of nature, but of each other, ever since the first artist "created." If the history of literature teaches one fact it surely is that no human being was ever independent in the sense of imitating nobody either consciously or unconsciously. The polished stones and shining jewels of the superb mosaic the poet puts together are often borrowed, though his plan and pattern may be his own. The man who produces literature without models will have few readers. Modern nations are "the complete outcome of a tenfold mingled ancestry," and no individual man can be wholly original either in his thoughts or acts, in the sense of being independent of his progenitors and predecessors. The word originality is frequently misunderstood and rarely used with a precise meaning. If by originality we mean an absolute imitation of what is essentially new in literature it is pretty certain there has been nothing of the kind for very many centuries. Therefore, while Aubrey de Vere is quite as original as any of his literary contemporaries—indeed, more so than many of them—he everywhere displays the results of a beneficial study not only of the ancient poets of Greece and Rome but of modern poets as well. It is safe to affirm—a glance at his work reveals the

fact—that Milton has had quite as much to do with nourishing his soul as Virgil, although the traces of the latter are numerous ; and that his friends Wovesworth strengthened his spirit as much as Homer, from whom, nevertheless, he seems to have acquired a peculiar force and nobleness, and that he owes much more to his friend, Tennyson, than to his great co-religionist, Dante, is equally certain. On the whole, Milton and Tennyson are the two spirits with whom Aubrey de Vere seems to have taken the most pleasure in communing, as they are the twain whose influence is most discernable in all the chief works of the latter half of his life.

Every literary success is dearly purchased, and the price is unsparing labor. Notwithstanding all that has been written and said in favor of genius and spontaneous expression, I prefer tenaciously to hold to my own long entertained, belief that painful apprenticeship to the Muses is necessary to the greatest genius as well as the mere rhymer. I never could see how exquisite finish implies lack of power any more than I could believe the superior edge and polish of a fine Damascus blade detracted from the worth of the weapon, nor can I convince myself that strength discloses grace, which would be tantamount to holding that the giant Gargantua in his cradle was more seemly than a common sized infant would be. The brilliant career of De Vere's life-long friend Tennyson disposes of the "spontaneous afflatus" theory. Through ten years of daily practice and preparation, he disapproved of the "genius superstition"—its fruits of sudden inspiration, its chance visitations of a fortunate moment, its flashings of intuition, and all the rest. So, in the words of one of his finest commentators, the mellifluous voice of his earlier ballads and lyrics which possess more sound than sense, struck a deeper note in "In Memoriam," burst forth into a fresh melody in "Maud"; but it was only in the "Idylls of the King" its true harmony was fully developed. The annals of literature by an endless repetition of instances teach that no poem has lived in the popular mind without refined language and grace of form. In the vital matters of patient preparation and careful workmanship, of slow acquisition of knowledge, careful composition, tireless sifting and finishing, Aubrey de Vere has set an invaluable example to his countrymen, who stand greatly in need of it, an example which will, I sincerely hope, be produc

tive of rich and abundant fruits. Even critics cannot appreciate what they cannot understand. The charming finesse and technical perfection displayed in every part of this fine verbal web of many colored woof—like like “woven sounds of streams and breeze,” to borrow a comparison from Alastor—indisputably indicates its artificer a workman completely drilled by what prattlers about “genius” and “inspiration” would call mechanical practice in all that is technical; but all that is technical means all that has at its immediate command, like so many slaves the faculties called into play to produce the rhythm, the harmony of words, the richness of the poetic dialect, the choice of keys and of cadences, and the other endless details a perfect knowledge of which is absolutely essential to him who would produce fine poetry. Too many of the Irish poets have believed in the “spontaneous theory”, yet no other Irish poet has so successfully executed so many important enterprises and manufactured blank verse—the reed-organ of the English tongue—so equally on a high level of excellence as the venerable author of “The Foray of Queen Meave.” In this poem we are listening to a poet full of vivid force and fulness of expression. His sincerity, gravity, massiveness, and strength, are set forth with the aid of patient but hidden art.

Every day brings the Irish at home into more intimate union with the English nation, and subjects them more to English influence, and every day removes the Irish abroad from their racial ideas and ideals, and exposes them more and more to the corroding influences of foreign literature and foreign thought. Consequently, we Irish need to have the independence of our thought maintained by a countervailing Irish influence, made up by the spread of intellectual culture throughout the entire scattered and “sea-divided” race, which shall qualify its members to appreciate and honor Irish genius. The task before the Irish writer who aspires to produce something lasting, if not final, in the way of revivying what is best in the half-forgotten literature of ancient Ireland, is to synthetize our rich historical and legendary inheritance in the light of sound criticism, and make his diction harmonize with the requirements of the language he uses. Aubrey de Vere has, I believe, done much for the

nascent literature of modern Ireland. His self-containment and balance fit him for his work. He is one who is religious without being narrow; philosophic without being a partisan, and loving without being weak. Our author exercised the greatest severity towards his own work, and the high finish he exacted in it are all but unique in the history of Irish literature. That the near future will witness a vast improvement in the conditions under which Irish literature is produced is devoutly to be hoped. We are tired of crudeness; we are sick of shoddy. If to the present generation of our Irish race an inadequate sense for the perfection of intellectual work is a real danger, if the discipline of respect for a high and flawless poetic excellence is peculiarly needed by us Irish, the poet of "The Foray of Queen Meave" is, of all our gifted writers and poets in the English language, the best lesson, the most salutary influence.

MAURICE W. CASEY.



AN APPEAL.




LEAD for me, Mother, stationed near the throne
Filled by the majesty of Him whose years
Were spent with thee while here ; small were my fears
Would'st thou breathe one sweet interceding tone.
The infant Jesus smiled on thee alone,
He made his youth thy sunshine ; when lewd jeers
His dying hailed, the shock was thine, thy tears
Blent with His blood, which from the cross had flown.

The hope, the joy, the care, the agony
Shared with thy Child, thy stainless life and birth
Have crowned thee Queen of Heaven; henceforth for me
The power thy love and woe beget assert ;
Flower of our race! my trust is set on thee,
I shall thy suffrage crave whilst I tread earth.

W.

Ottawa, May 25th, 1899.

LEO XIII. AND EDUCATION.


 E are the light of the world," said the Divine Master to His chosen followers one day as He sat with them on a mountain side in far Judæa. And then, as if in explanation and confirmation of the heavenly mission thus confided to them, He added the following sacred injunction: "Let your light so shine before men that they may see your good works, and glorify your Father who is in heaven." Ever since that memorable occasion, in obedience to those commanding words of the Saviour, there has shone over the temporary habitations of men a brilliancy before unknown. From that mountain in the land long ago promised to Abraham and his seed, from that mountain upon whose quiet slant the Sun of Justice reflected to His dearest followers a doctrine strangely at variance with the proud conceit of an effeminate world, there radiated a supernatural splendor that, penetrating the night of ages, has sought out and illumined the hidden corners whereby error previously lurked in undisturbed security. Rude, untutored men—simple fishermen from the Sea of Galilee—came down from that mount evolving before their mental vision quite a new aspect of human life. Some time afterwards these same unlettered sons of toil, enlightened and purified by the Pentecostal fire and fortified by the vivifying Spirit from on high, went forth out of the Deicide City of David to illumine with heavenly radiance nations that until then knew no beauty save the garish glore of the circus or of the arena.

The little band that gathered at our Saviour's feet on the mount, and listened wonderingly to His words of wisdom were not, however, the only ones to whom were spoken the divinely conceived eulogium, "Ye are the light of the world." The same apostolic characteristic has come down to our own days as a treasured inheritance through the long line of their successors during eighteen hundred years. Well has its responsibility been understood and weighed, well have its obligations been fulfilled by the blessed hierarchy of God's Church. Never once during the steady march of ages have the members of that hierarchy, taken as a body, even momentarily forgotten that they must shine before men as guides, not only in the way of virtue, but also in the walks

of both divine and human science. The Master's sacred injunction. "Go ye therefore and teach all nations," has never been lost sight of in that army of the cross. By the attraction of example, which is the greatest teacher, and by the sweet unction of their words they have successfully striven, both in season and out of season, for the world's enlightenment. Trials and disappointments, the opposition of hostile governments, the malice of contradicting sectaries, have never been able to trammel their efforts or to cloud their cheerfulness. Spanning with pilot eye the miserable present with its ever varying scenes, they scan with constant vision the mysterious region of unchangeableness where neither earthly joys nor earthly sorrows will ever find an entrance. Their eyes of faith have, in matters where eternity is at stake, practically nullified their corporal senses. In every man, in every boy, in every child they chance to meet, they see but an immortal soul,—God's lovely image,—an immortal soul that may be saved or lost, and a body intended by its Creator to shine one day with the brilliancy of a thousand stars in the glory of God's presence.

All the apostles and disciples of Christ were thus designated as lights of the world. How much more eminently however must that characteristic have manifested itself in their Prince, from whom the infallible Church was to expect unerring guidance. If the entire college of apostles was commanded to teach both by word and by example, how much more forcibly must that sublime precept have fallen upon the ears of Peter? If in all successors of the apostles there is required a preeminence of learning and sanctity, as well as a zeal-begotten prodigality in the world-wide diffusion of their knowledge and of their virtues, how much greater is the degree of those qualities that is looked for in the great prince occupying St. Peter's chair! What a sublime office is his! How sacred! How terrible! "Thou art Peter and upon this rock I will build my Church, and the gates of hell shall not prevail against it. And I will give to thee the keys of the kingdom of heaven. And whatsoever thou shalt bind upon earth, it shall be bound also in heaven and whatsoever thou shalt loose upon earth shall be loosed also in heaven." Were it not an article of faith that the spirit of truth is ever present with Christ's vicar to assist him in the hour of need, who amongst the sons of men

would presume to receive upon his shoulders so far-reaching a responsibility? Yes, it must needs be a brilliant light, a penetrating light, that shines from the throne of the fisherman.

As we have just stated, the successors of all the apostles have ever stood forth before the admiring eyes of appreciative generations, preeminent for both their learning and their sanctity. Moreover they have always been distinguished for their zeal in the widespread diffusion of these intellectual and moral treasures. With still greater authority, with still greater pride, and with still greater thankfulness do we make the same statement regarding the successors of St. Peter, the Roman Pontiffs. Under their prudent and unbloody sway the fiercest barbarians of the north were led to the ways of virtue. Under their fostering care literature, as well as the arts and sciences, flourished when the whole worldly-minded world lay buried in the dark night of ignorance. Yes, under all circumstances the Roman Pontiffs have always been promoters of learning and social virtue. They have ever been lights, after the dearest desire of Him who said, "Ye are the light of the world." In accordance with their divine mission they have on all occasions been opposed to those who would alienate science from the Lord of science, but never have they objected to honest research when carried on with the true spirit of Christianity.

The light that has emanated from the papal throne during nearly nineteen centuries is therefore wonderful in its brilliancy as well as in its continuity. During the past twenty-one years, however, this light has acquired a splendor that certainly must attract our especial attention, that must merit our careful consideration, and that must call forth our warmest admiration. How could things be otherwise since he who now occupies the fisherman's throne is universally hailed as "*Lumen in Cœlo*"? Yes, Leo XIII is indeed a light—a light in the heavens—a penetrating light that forces its way through the chaotic turmoil of a busy world and far into the future of the human race. The grand old man of the Vatican is indeed the "first intelligence" of our times. His plan of action is by no means behind the age in which he lives. Not only is he in touch with nineteenth century progress but he even sees with keenest forecast what will be the necessities of coming generations. He knows with unwavering prescience what mea-

asures must now be put in operation that the future existence and prosperity of individuals and of nations may be made secure. In this respect he may, without the least exaggeration, be called the greatest statesman the world has ever witnessed. Future generations will fully recognize the abilities of this man whom the present age is hardly capable of appreciating. Truer words could not be spoken than those that say, "Leo XIII bears upon himself the weight of the universe not lightly but intelligently."

In an article from the skilled pen of the Rev. Mortimer E. Twomey, in *Dohahoe's Magazine* for March, a passing reference was made to what is termed Leo's great life-plan of action. This view of the Holy Father's long and useful career was suggested by His Eminence Cardinal Satolli, than whom there is no one better capable of judging the present pontificate. Leo's triple life-plan is given as follows in the learned article referred to:—

1. Ardent zeal to develop studies.
2. Continued interest in social sciences.
3. Zeal for peace in Christian countries by the spread of civilization, by the teaching of religion, and by concord between Church and State.

Such was the threefold end to the attainment of which Joachim Pecci long before his elevation to his present sublime dignity directed every act of his promising career. Is that end not a noble one? Is that plan not the idea of a man such as the world needs in its administrative halls? Is that structure he proposed erecting not both spacious and comprehensive? Let it be the object of our essay to briefly consider the first item in this mighty life work. Let us see how Joachim Pecci has followed out what we believe the dearest, the most cherished part of his life-plan--the work of Christian education.

Education has been very aptly described as the "mightiest means ever devised for the moral elevation or the utter destruction of the human race." It is a grand work, it is a glorious enterprise. It is a work that will endure when time itself has come to naught. It is an enterprise that if properly attended to will be a source of mutual and eternal pleasure for both teacher and pupil when they meet in realms of unending happiness beyond the tomb.

Let the young be properly educated and earth, for them at least, will lose half its character as a place of misery. Living in the present, their hopes, their joys, their expectations will be centered in that future to which the finger of faith supported by science is ever pointed. Let young men acquire that noble development of soul and body which we call education and then their happiness, eternal as well as temporal, is perfectly secure. But in thus eulogizing a matter that in reality needs no praise we have carefully before our mind's eye an important distinction made by Leo XIII, and so we reject that spurious article which under the name of education some modern enthusiasts are continually striving to palm off upon unenlightened or unwary souls.

Holy Scripture amply proves the love that God has for the young, for those tender souls that may be called the latest effort of His omnipotence. No work is dearer to his heart than is the proper bringing up of His little ones. Can we for a moment wonder then why Christ's earthly representative has given the especial care of studies so prominent a place amongst the multitudinous and pressing duties of his illustrious pontificate? As shepherd of a world-wide flock well does he realize that "the struggle in which the irreligious and anti-Christian tendency of the age is engaged against the Church is narrowed down to a combat against the schools." Consequently, in accordance with the dearest wish of Leo's heart "all the appliances of modern progress should be used to make Christian truth and Christian morality lovely to the young."

It must needs be that he who would devote the noblest exertions of his life to the diffusion of Christian knowledge, demonstrates in himself a shining example of that perfection for the spreading of which he labors. Long ago, in the renowned Jesuit school at Viterbo, later on at the Roman College, and finally in the world-famed halls of the Gregorian University, Joachim Pecci proved unmistakably to his admiring professors and discomfited class-mates what a power of intellect was hidden behind his spacious brow. At the age of twelve we find him composing elegant Latin verses for the programme of a college festival. Then again, as he advances in his studies, he excels his class-mates in many another difficult branch. On the records of the Roman

College for 1828, Joachim Pecci's name appears attached to a first prize in Physics and Chemistry. The next year makes him leader in the difficult paths in Philosophy. But it is especially in the Gregorian University that Joachim Pecci's triumph is complete. In those famous halls where congregate the keenest intellects of the clerical world, he was greatest among the great. In reward for his evident proficiency in every branch of sacred knowledge, there was conferred upon him, in the year 1832, the degree of Doctor of Theology. His preeminence in other matters was, moreover, well in touch with his excellence in the most sacred of sciences, so that when, in 1838, the young Levite was promoted to the sublimest earthly dignity—the holy priesthood—he was easily capable of throwing a brilliant light upon questions the most complicated in the spiritual and temporal guidance of men.

Joachim Pecci's studies, however, did not end when he mounted for the first time God's holy altar. Brilliant though his learning was, still he did not hold himself dispensed from those further researches after knowledge that, in ordinary priests, are essential to the every day functions of the sacred ministry. On the contrary his whole life, as simple priest, as bishop, as cardinal, and most of all, as Sovereign Pontiff, has been one continued effort after a more profound acquaintance with men and things. The grand old man of ninety has not relaxed a whit of his former mental discipline. Long hours daily are devoted by him to study that he may the better lead his great and varied flock in the ways of God. Although pre-eminent in sacred science, he is by no means behind the times in other branches. As has been said above, all the inventions and discoveries of our progressive age can never get ahead of his mighty intellect. In the field of literature, both ancient and modern, his superiority is proverbial. One need only read encyclicals such as his eulogy of the Immaculate Conception, to become convinced that the age of Cicero has not ultimately passed away as long as Leo lives. An especial admirer of Dante, the Holy Father knows the whole Divine Comedy by heart. Judging from these facts it is not without reason that the past twenty years of the Papacy has been called "The Pontificate of the Scholar."

In studying Leo XIII from an educational standpoint, we shall group our reflections under three headings. In the first place, let us examine what the grand old man of the Vatican has done for primary education; secondly, let us see what have been his efforts in behalf of a higher education of the laity; and, thirdly, let us admire how zealously he has exerted himself for a superior educational standpoint amongst the clergy. Moreover, since Joachim Pecci's zeal for studies is a fundamental part of his life-plan, we shall not confine ourselves to the comparatively short period of his pontificate, but shall follow him step by step from that day when he first entered upon his sacred duties as a priest of God.

Almost immediately after his ordination, Father Pecci, as Pontifical Delegate to Umbria, is found devoting himself unsparingly to the sacred cause of primary education. In that capacity he used "all his authority and influence," says the Rev. Bernard O'Reilly, "to open schools wherever there was none, and to encourage and improve them wherever they existed." The young priest's energy, his foresight, his learning and his prudence, soon drew upon him a favorable recognition from the Holy See. Only a short time elapses before we meet him in a new and more distinguished sphere of action. He is only thirty-three years of age, yet he is filling with honor the then difficult position of apostolic nuncio to the Court of Brussels. In the fair land of Belgium one of his heaviest cares, we notice, was the proper training of the young. King Leopold had just declared war against denominational schools, but the able nuncio, seeing well the danger to the dearest interests of Belgium that must follow from such a step, protested vigorously against so flagrant an usurpation of a sacred right. He moreover used every means to provide a remedy. "During his stay in that country," says the Rev. Bernard O'Reilly, "Monsignor Pecci seized upon every opportunity to encourage the prelates of Belgium in their constitutional efforts to obtain from the state a due recognition and support for denominational education." He visited the great Catholic schools and showed, in every way, his profound interest in their noble work.

The learned and diplomatic young nuncio was, however, soon called to another and no less responsible post. The vacant See of Perugia needed a steady hand, a keen intelligence and a firm will

in its administration. The day when its mitre was placed upon the brow of Joachim Pecci opened a new era in its history. The Piedmontial occupation of Umbria, which resulted in the dispersion of the religious orders, had proved a fatal blow to the dearest interests of education in that part of Italy. In a manner well in keeping with his faith-fired and energetic character, the new bishop took up and championed the cause of proper moral and intellectual culture. In struggling manfully against the growing infidelity of the times, he was often obliged to draw upon his private funds for the support of poor schools and poorer scholars. When the government issued its programme of godless studies, cloaked under the pretext of modern progress and greater liberty, Monsignor Pecci was not slow in applying an antidote. "He drew up a similar plan, embracing all new subject-matters to be taught and the discipline enjoined, in such a manner, however, as not to imperil the solidity and seriousness of the old curriculum." In his Lenten pastoral for 1864, referring to the matter of education, Joachim (then Cardinal) Pecci very carefully draws the line between parental and state authority in the training of youth. He points out in convincing words that the state must neither usurp nor encroach upon the family right in a matter so important, aye, so sacred. Its sole business is to help the natural educators in their work. "Man's first duties," says he, "are subjection and service to God, and dependence on his parents." And again: "The relations and duties which obtain between parents and children are anterior and superior to all human aggregations."

The pastoral then goes on to draw the lines between complete education and what is only a secondary part of its make up. "You must distinguish, says the Cardinal, between education and instruction, between the moral training and the moulding of the heart, and the simple cultivating of the intellect." Instruction, as such, ordinarily consists in filling the minds of the young with a furniture of knowledge, that can help them, according to their years, to turn to a useful account their intellectual and bodily powers.

The moral training, on the contrary, should be a foundation for the development and the application of the great principles of

morality and religion, as bearing on men's conduct within the family and in the social sphere.

Scientific instruction will give you learned and clever young men and women ; religious education, on the contrary, will give you honest and virtuous citizens. Instruction, separated from education, properly so-called, serves rather to fill young hearts with vanity than to discipline them aright. It is quite otherwise with right education ; such a training under the guidance of religion, which is the regulator of the heart of man and the inspirer of pure and generous affections, knows how to implant and to cultivate virtue in the most illiterate souls, without the aid of much scientific polishing or instruction."

Having thus clearly stated the general principles upon which must be based a Christian education, the Cardinal, in the next place, makes an appeal to the parents that they may the more carefully watch over the moral and intellectual development of their little ones. He points out that not only should they watch over the subject-matters constituting their children's daily study, but that they should likewise have an eye to the manner in which these lessons are taught. Above all things, parents must be careful lest the proper cultivation of their children's supernatural life be neglected.

The Cardinal then becomes eloquent in condemnation of that system of training youth, popularly known as *education void of prejudice*. He describes it as "an education devoid of all the external practices and duties of the Christian faith, and calculated to familiarize young people with 'freedom of conscience' and indifferentism." He can hardly find words strong enough to adequately express his sweeping detestation of such a guilty compromise. According to his idea, the zealous care Catholics should take in the education of their children is by no means prejudice but a most laudable devotedness to all that is best and noblest in humanity. "No," says the Cardinal, "it is not prejudice but an undeniable truth continually demonstrated by the experience of every day, that the school of example has more power to form the minds of the young than has pure oral teaching. It is no prejudice but a pressing duty, and an earnest of true fatherly love which guards the young against the dangers and snares with which

the road of worldlings is sown—against licentious conversation, pestilential books, obscene spectacles, evil companions, perfidious friendships and dark associations.”

In 1877, when the government enacted the law of obligatory education, Cardinal Pecci addressed his clergy in words of fiery zeal, pointing out to them that, since the Catechism had been spurned from the schools, they must, in other ways, supply the lack of proper religious training. In teaching and training the young, says he, “the solicitude of the priests should be industrious and indefatigable.”

Just about a year before his elevation to the Sovereign Pontificate, Cardinal Pecci issued to the clergy and faithful of Perugia, another remarkable pastoral. It treats in a masterly manner the question: “Is the Catholic Church hostile to the progress of industry, art and science? Is there, as her adversaries declare, a natural and irremediable incompatibility between the Church and civilization?” Refuting as it does the stupid calumny that the Church of Rome is opposed to science, this document merits our careful study. Here is a brief extract, which gives us an idea of the Cardinal's interest in the advantages of modern discovery. “The pretended enmity between the Church and science is not only absurd but impious, for it involves the supposition that the Church fears lest science may succeed in dethroning God. So far from dethroning Him, science can only make manifest His power and redouble the love He inspires by the full harmony and magnitude of His works.”

The pastoral makes manifest that a greater knowledge of science only leads to a more disinterested love for the Lord of science. It argues that the church has no reason for hostility to a profound and serious study of nature since at the bottom of all researches scientists must discover God. In recognition of the benefits derived from modern discovery and invention the Cardinal then verges into the following glowing words:

“How splendid and majestic does man seem when he reaches after the thunderbolt and lets it fall harmlessly at his feet; when he summons the electric spark and sends it, the messenger of his will, through the abysses of the ocean, over the precipitous mountains, across the interminable plains! How glorious, when he bids

steam fasten pinions to his shoulders and bear him with the rapidity of lightning over land and sea! How powerful, when by his ingenuity he seizes upon this force, imprisons it and conveys it by ways marvellously combined and adapted to give motion—we might almost say intelligence—to brute matter, which thus takes the place of man and spares him his most exhausting toil! Tell me if there is not in man the semblance of a spark of the Creator, when he invokes light and bids it scatter the shades of darkness!"

The work of Archbishop Pecci in behalf of education was not, however, confined to mere displays of rhetoric. At great personal sacrifice he improved the existing primary schools of his diocese, and inspired them with fresh impulse and new life. He, moreover, founded many additional institutions having primary education as their object. Amongst these was a night school for such persons as necessity compelled to work during the day. In a word, Archbishop Pecci left nothing undone that might contribute even remotely to the moral and intellectual advancement of his people. We will next consider what special efforts he devoted to the more advanced education of the laity and of the clergy.

B. J. MCKENNA, O. M. I., '96.

(To be Continued.)



GOLDWIN SMITH ON OUR POETRY.

WHEN Prof. Goldwin Smith outspeaks on politics or international affairs, I am in the habit of stopping both ears with my fingers. I do not consider his message of more utility than a disquisition on bicycle gearing by the ghost of my great grandmother would be. The world has got ahead of the old lady, and that is what has happened to the ex-Oxford professor also. But I confine my prejudice strictly to politics. When the Professor delivers himself on literary affairs I listen with attention and respect. While Goldwin Smith is not even as reliable a literary critic as Lord Macaulay was, his opinion of literature, guided as it is by the finest culture of the two continents, is, I believe, of special value.

In an essay read before the students of Cornell University last week, Prof. Goldwin Smith discussed the future of poetry. In it he bewailed the break that has occurred in the line of great poets throughout the world, and asked the question whether the kingdom of the imagination is passed away. He confessed that in looking over the names of living poets he could not find one of the first-class. "Perhaps ardent admiration," he said, "would put in a word for Kipling as one who has shown the power, but Kipling's serious poems, as yet, are few and on a smaller scale." As an evidence of the poverty of the muse in England he points out that when it became necessary to choose the successor of Tennyson there was embarrassment, but it was not the embarrassment of riches.

Some idols that loom large enough in the sight of many, the professor would whittle down to much smaller dimensions. This is what he said of Robert Browning:

"I have always failed to see a poet in Browning, except when, as in the dramatic lyrics and other pieces, he is level with the common intelligence. In these I pay hearty homage to his poetic power, and only wish that he had given us more of them. In the pieces which are the special study of the Browning clubs I am unable to recognize either the poetic beauty of the language or the melody of the verse, while the philosophic meaning, I can well understand, needs Browning clubs, and very powerful Browning clubs, to extract it."

On the other hand, Augustine Birrell tells us, in a famous essay, that almost everyone can understand Browning, provided they give his verse their attention, and that if they do so their trouble will be repaid a hundred-fold. As between the two critics, I, who am not a critic, nor even the son of a critic, beg leave to vote with the Professor. I venture to think that the overwhelming majority of Browning readers will hold that one of their poet's lyrics is worth a dozen of his lengthy poems, and that his powers are best displayed and more generally obvious in his lyrics.

Goldwin Smith is a pessimist among pessimists. Withal he looks toward the future of our poetry with some hope. Poets and artists seem to come in groups, and this seems to be a barren era, and, curiously enough this philosopher who, as the editor of the *Citizen*, to whose synopsis I am under obligation, remarks, never tires of inveighing against war in and out of season, sees in it the stimulus of the heroic spirit of nations of which is born the chief inspiration of the muse. Critical epochs of national life produce poets, and these epochs are usually marked by wars, though sometimes by the throes of religious excitement incident to periods of change.

In Hellas the Persian wars were followed by the Attic drama and the art of Phidias. Amid the civil wars of Rome comes Lucretius, offering a haven of peace from their distractions as well as freedom from the terrors of superstition. When the wars are over and the Augustan age brings peace with grandeur, the poets Virgil, Horace, Ovid, float like halcyons on the calm and sunlit waters. Then there is a decline, until at last Claudian is born out of due time. Dante manifestly springs from the turbulent, factious, yet intense, serious and religious life, of the Italian republics. The golden age of French and Spanish poetry, mainly dramatic, corresponds with that of French and Spanish greatness. Chaucer comes with an age of galvanized chivalry and at the same time of the religious reform which inspires his picture of a good parish priest in contrast to the general laxity of the clergy, and shows him to be a contemporary of Piers Ploughman. It is needless to say how the Elizabethan literature is linked with the Elizabethan era, with the renewal of national life, the reformation, the struggle against the Catholic powers. The Puritan revolution has its poet in Milton and, by reaction, in Dryden. The reign of Anne is not illnamed Augustan, as it was, like that of Augustus, a season of political calm, feelingly sweet after the storms, and gave birth to a jubilant poetry, hooped and peri-

wigged, yet brilliant in its way. With the European revolution at the end of the century comes a galaxy of poets. On the side of the revolution there are Byron and Shelley, and I suppose we may say Burns and Keats, though Keats is socially almost colorless; on the other side are Coleridge, Wordsworth and Southey, when they had got over their youthful illusions, and Walter Scott. American poetry seems to be little connected with natural history. It probably felt the influence of the parent tree more than that of the offset. The war of secession produced nothing that could be called poetry unless it was John Brown and My Maryland."

That public excitement is conducive to the production of soul-stirring poetry, the history of literature teaches. But the excitement must not be too intense, and it must not be universal, only general. Too much turmoil stifles the voice of poetry and deprives the poet of his necessary contemplation, which is the daughter of tranquility.

The American war of secession produced more poetry than the two lyrics mentioned by Goldwin Smith. We who have read the lyrics of the Rev. Abram Ryan—than whom no finer poet within his limitations was ever born—can affirm that much. I doubt if the Professor ever read a line of Father Ryan. The poet's Irish name would, I venture to think, be quite enough to scare the Professor away.

Goldwin Smith's conclusions are noteworthy:

"My conclusion is, then, that of those who are now listening to me many may look forward to seeing the line of great poets renewed, perhaps to seeing such another group as adorned the early part of the century, with the richness of their poetry enhanced by the progress of thought, the increase of sensibility and the deepening interest of life. In the meantime we have the heritage of the poet past from Homer to Tennyson—enough to keep alive the taste for poetry and to inspire new poets. The poems of Homer did belong to the youth of the race and to a phase of humanity far different from that in which we live. Nevertheless, they are still ours."

In one of Dr. Holmes' poems, he humorously describes Science as elbowing Poetry out of the world. Between Science and Poetry there is no inherent antagonism. But as Stedman points out, there is a temporary struggle between Science and Poetry under way, and has seriously embarrassed the poets of the era. But so long as spring returns to a single human heart poetry will not desert this world of ours. While men have strong convictions poetry will not be without a motive; the great trouble in our days is that the convictions which are true and deep are not many.

THE PROMISE OF THE MORNING.



HIS book of poems was written by Mr. Henry Coyle, a young man whose name is well and favorably known to the readers of all the leading secular and religious publications of New England, and published by the Angel Guardian Press, of Roxborough, Massachusetts. The binding and typography of the volume are exceedingly fine and suitable.

Human intellects, like cabbages or cucumbers, require periods greatly differing in length for their proper development. To use the remark of a cynical Professor of English, under whose prevailing frown I once trembled: "Some persons are tolerably thoughtful at five years of age, while others are fools at fifty, and during the intervening time." The first-fruits of the intellect, like those of the vegetable garden, are very apt to be a trifle flabby. The majority of young bards cannot avoid the mistake of over-confidence, since, in the words of Pope :

" Fired, at first sight, with what the Muse imparts,
In fearless youth we tempt the height of arts."

The duty of the critic towards first volumes of verse is to extend to them all the politeness he can command. Politeness is charity. In dealing with ninety-nine out of every hundred of poetic first volumes, produced by inexperienced young people who think poetry to be the mere melody—wheeled fairy car, in which lovely thoughts, and rich imagery, are carried pleasurably into the mind, when it really is the fiery-winged chariot, with thunderous wheels, rearing up the fallow mental fields through which it clears and strewing the golden grain of truth into the deeply delved furrows, so that the once barren soil should wave richly with the ripened ears of noble actions, the critic must of necessity greatly patronize. But there is the remaining volume, the grain of wheat in the load of chaff, that forms the exceptions, in dealing with which the critic can act according to the stern canons of the profession and meet out cold justice with a good conscience.

If my judgment counts for anything, "The Promise of the Morning" presents the self-sustaining and worthy rare exception among recent first-books of verse. The "Rosy-fingered moon"

of Mr. Coyle's poems, is exceedingly bright and offers promise of a beautiful and health-giving afterglow, affording us exquisite glimpses "of mountains where immortal morn prevails." Unlike the usual run of poetic firstlings, few of which possess the negative merit of freedom from haste or extravagance, and still fewer, the positive qualities of smoothness, accuracy, and good sense, this book of Mr. Coyle's is full of signs and tokens which proclaim beyond cavil that it comes from the brain of a strong man, in full possession of his powers. The years of the authors are not very many, yet his thoughts are deep, manly and true. The poems are the product of a thinker and of an artist; they represent both imagination and art; and their themes are taken from nature, the soul, and strong wholesome faith,—the triune sources of all really heart-lifting poetry.

No verse produced anywhere in America in our time shows that rare genius which would be worth a descent from Olympus to meet. To say that Mr. Coyle's verse is of the first-class would be to wrong him by flattery, yet, quite unlike the class to which it belongs, it has no wretched rhymes, no lines defying scansion, and the spirit is optimistic. Metrical correctness and optimism are no slight things in those days. Witness the hopeless, soulless thought that underlies by far the greater portion of the verse foisted upon us by our own Canadian poets. When wandering through their carefully chosen collections of artfully sequenced words and sentences, for the most part as devoid of useful ideas as a frog is of feathers, the reader is constrained to exclaim with Southey, "My days among the dead are passed." The mass of poetry produced in the United States is, if anything, worse than the Canadian article. It is colorless, heartless, pointless, flat and stale. How much of the magazine poetry will live? Only yesterday, Mr. W. D. Howells gave it out that interest in poetry was on the decline. The stuff Mr. W. D. Howells calls poetry, and which he has been puffing on behalf of his friends in and out of season, does not deserve to live. It was predestined to hasty and unhonored death at its very incubation, and nothing in its life becomes it half so well as the leaving of it. To turn from what has been passed on the reading public as true poetry, and frequently praised by Mr. Howells and his circle as the

very quintessence of verse, to the lines of Mr. Coyle is very like walking from a barren sand-dune into a blooming garden replete with nature, grace and loveliness.

Henry Coyle is the editor of *The Weekly Bouquet*, that most ably compiled and entertaining of Catholic juvenile publications. In his editorial capacity he takes a tireless pleasure in being kind. He never fails to extend sympathy and useful aid to deserving young writers.



“When the column of light on the waters is glassed,
As blent in one glow seem the shine and the stream ;
But wave after wave through the glory has passed,
Just catches, and flies as it catches, the beam :
So honors but mirror on mortals their light ;
Not the Man, but the Place that he passes, is bright.”

—Schiller

SAM WELLER.



Of all the creations of Dickens' exuberant fancy, Sam Weller is perhaps the most original and the most interesting. He possesses many beautiful traits of character, of which the most salient are his love for his master, his tather and his wife, his humor and his shrewdness.

Without doubt Mr. Weller's most striking characteristic is his loyal attachment to his master, Mr. Pickwick. It is true Mr. Pickwick deserves the esteem and affection of a man-servant towards whom he always acts as a father, but Sam seems to love him from a preternatural point of view. He considers his employer as superior to all other men, as a meteor whose fiery path we watch with amazement and respect, as an angel of the happy regions above, who had descended to the state of man for the sole purpose of doing good. "I never heard, mind you," says Sam to Job Trotter, "nor read of in story books, nor seed in picters, any angel in tights and gaiters, not even in spectacles, as I remember, though they may have been for anything I know to the contrary, but mark my words, Job Trotter, he's a reg'lar thoroughbred angel for all o' that, and let me see the man as wenturs to tell une he knows a better vun." This devotion was so deep-rooted in Sam's heart that he willingly deprived himself of the light of the exterior world that he might serve his master in a debtor's gaol. The means by which he effected his entrance to Fleet Prison were simple but surprising. He made an agreement with his father that the latter should hand him over twenty-five pounds and then, as if Sam had refused to pay them back, should take his case before a lawyer and have his son imprisoned. This little strategy succeeded very well, and a short while afterwards Mr. Samuel Weller had a "chummage" in the Fleet as a debtor. Mr. Pickwick, not knowing who was his servant's creditor, tried to force Sam to accept from him his own purse the sum due, but Sam constantly refused on the plea that, although it would be granting a favor to himself, it would be granting a still greater one to that "hard-hearted old wretch," his creditor. Another thing that attests the depth of Sam's affection, was his readiness to abandon all the bright prospects of a happy future for the sake of continuing his services to

wards his fatherly master. He conceded to retire only after ample assurance that he would no longer be needed. What a beautiful example of true love and heartfelt gratitude! What a striking picture of the effects of kindness towards an inferior! As for Sam's love for his father, this quality seems very natural indeed, but it nevertheless raises him very much in our estimation. This characteristic is chiefly displayed when Sam uses all his sympathising powers to compensate for the cruel afflictions his "very respectful progenitor" had to suffer at the hands of a henpecking wife and of a sneaking old minister, Mr. Stiggins by name, but better known under the pseudonyms of the "shepherd" or "the red-nosed chap." This state of affairs engendered in Sam's breast strong feelings of disgust in regard to these two worthies. Although Sam had not the opportunities of his father to display efficiently his hatred, yet on one occasion he calmly remarked that if he were in his father's place "he'd a poison that ere red-nosed chap," an expression not altogether savoring of good feeling and kind intentions. But a short time before Mrs. Weller relinquished her hold on worldly affairs, her conversion (according to Sam's expression) to the cause of her persecuted husband, softened the younger Weller's wrathful sentiments. As for that disseminator of discord, the petulant old "shepherd," when the elder Mr. Weller, vulgarly speaking, nearly kicked him into eternity, and afterwards half-drowned him in the horse-trough, Sam expressed his excessive delight by laughing till the tears rolled down his cheeks and he himself rolled off his chair. When his father was all but brought to the ground by the load of accusations heaped upon him by the voluble widow he had married and by the notorious Stiggins, Sam would chime in with a "you're a vessel of wrath," or "you're a reprobate," thus making his father chuckle till his trembling flesh gave Sam serious apprehensions that he might die of "appleplexy."

One fateful day Sam succumbed to the charms of Mary the housemaid at Ipswich hotel. With her he soon felt himself established on a solid footing and formed bright prospects of a happy future, as she was not a widow and had no connection with a "shepherd" of any description, red-nosed or otherwise. Having obtained the consent of his kind old master, Mr. Pickwick,

Sam succeeded in winning that of the fair housemaid. After a solemn marriage the happy couple took possession of a country residence which Mr. Pickwick had built for his own accomodation. Thus we see that our hero was not altogether devoid of that one remarkable passion of "perverse human critters."

What should be considered as next in importance to this remarkable generosity of heart is our friend's humor. Sam always gives vent to his feelings in a most comical way. He has a habit of substituting W's for V's and *vice versa*, and of getting entangled in words that is peculiarly ludicrous.

"'I'm afraid mum' said Sam, on one occasion to Mrs. Weller 'that this here gentlem'n with the twist in his countenance (Mr. Stiggins) feels rayther thirsty with the melancholy spectacle afore him. Is it the case mum?'"— The worthy lady looked at Mr. Stiggins for a reply; that gentleman, with many rollings of the eye, clenched his throat with his right hand and mimicked the act of swallowing, to intimate that he was athirst — "I am afraid Samuel that his feelings have made him so, indeed," said Mrs. Weller mournfully.

"'Wot's your usual tap sir?' replied Sam.

"'Oh my dear young friend,'" replied Mr. Stiggins, "all taps is vanities."

"'Well,'" said Sam, "I dessay they may be, sir, but vich is your particler wanity, vich wanity do you like the flavor on best sir?"

"'Oh my dear young friend,'" replied Mr. Stiggins "I despise them all. If, said Mr. Stiggins, if there is any of them less odious than the rest, it is the liquor called rum. Warm, my dear young friend, with three lumps of sugar to the tumbler."

"'Very sorry to say, sir,'" said Sam, "that they don't allow that partickler wanity to be sold in this here 'stablishment."

"'Oh the hardness of heart of these inveterate men ejaculated Mr. Stiggins. Oh the accursed cruelty of these inhuman persecutors!"

"'With these words, Mr. Stiggins again cast up his eyes and rapped his breast with his umbrella and it was but justice to the reverend gentleman to say that his indignation appeared very real and unfeigned indeed. Hereupon Mrs. Weller had the com-

placency to remark that the "Shepherd" was a persecuted saint while Mr. Weller departed to procure the "partikler wanity" of port wine with sugar and spice for the company."

Another feature of Sam's humor is his original comparisons. "What do you think of your father? Sam," inquired Mr. Pickwick, with a smile. "Think, sir! replied Mr. Weller, why I think he is the wictim of connubiality, as Bluebeard's domestic chaplain said, with a tear of pity, ven he buried him." On another occasion Sam, having soliloquized on a lunch prepared for a hunting party, finished up by saying: "Now, gen'lem'n, fall on, as the English said to the French when they fixed bagginets." Rather comical, too, are the titles Sam bestows upon his worthy father: "Old Nobbs," "My Prooshan Blue," "My wery respectful progenitor," "The Governor," the Hemperer," "the old'un," etc., all of which are sufficiently smile-generating in themselves, but are rendered still more so in the mouth of such a worthy as Mr. Samuel Weller. These may be considered by some as betraying, a lack of the respect due to the author of his days, but no, he utters them only through familiarity and affection.

We have now come to the last but by no means the least important of the qualities of our amusing friend. This, his shrewdness, is apparent in all his words and acts. Sam was certainly remarkably clever and no one, with perhaps the exception of Mr. Job Trotter, ever succeeded in getting the best of him. When in a desperate case he would manage to wriggle out dexterously, baffling all attempts to impose upon him. For instance, when Mr. Perker tried to take roundabout ways to extract certain information from our worthy, then engaged as "Boots" at the White Hart, Sam always managed to meet him half way thus repulsing all his attempts.

"Pretty busy, eh?" said Mr. Parker. "Oh, wery vell sir," replied Sam, "we shan't be bankrupts, and we shan't make our fort'ns. We eats our hiled mutton without capers and don't care for horse-raddish, ven ve can get beef."

"Oh," said Parker, "you're a wag, aren't you?"

"My elder brother was troubled with that complaint," said Sam; "it may be catchin'—I used to sleep with him."

"This is a curious old house of yours," said Parker, looking around him.

"If you'd sent word you was a coming, we'd 'ave 'ad it repaired," replied the imperturbable Sam.

Again when the "shepherd," having with great condescension visited Sam in his gaol, had uttered certain disrespectful accusations against the elder Mr. Weller, and afterwards closed his eyes as if in anguish, the said Mr. Weller forthwith proceeded to describe imaginary fireworks with his fists in close proximity to the head of the reverend gentleman, so that Mr. Stiggins having jerked his head forward it came in contact with one of the old stage-driver's ten pounders, Sam's ready wit soon inspired him with means to extricate his father from this plight:

"Wot are you a-reachin' out your hand for the tumbler in that 'ere savage way for?" said Sam, with great promptitude. "Don't you see you've hit the gen'l'm'n."

Other instances by the score could here be quoted, but enough has been said to delineate this feature of our hero's character.

Sam, being in himself such a peculiar genius necessarily fills an important place in the novel entitled "Pickwick Papers." In fact we learn from the history of the story that its successive instalments met with no wonderful success before Sam's providential appearance on the scene. Sam soon became exceedingly popular, so much so that Dickens himself considered him as the most successful impersonation of all his writings. This popularity was so great that several very happy attempts were made to dramatize his sayings and doings. And so, if "the success of Pickwick Papers was unexampled in English literature," if they were soon to be found "in the hands of everybody in London from the peer to the cabman," if "*Weller* corduroys were displayed in linen drapers' windows," and *Weller* articles of apparel in general were the fashion of the day, it was all undoubtedly due to the popularity of that shrewd but faithful, loving and humorous personage, Samuel Weller.

WILLIAM, (Age, 15.)

Third Form.

THE SUN.

(LECTURE DELIVERED BEFORE STUDENTS' SCIENTIFIC SOCIETY BY MR. J. E. DOYLE, '99.)



It probably would have been in order at the commencement of this paper, to describe the sun as viewed by the ancients, but so much has to be said about it from the point of view of modern science that time will not permit me to do so. Let it suffice to say, that even among the tribes which were most remote from civilization, there seems to have existed the knowledge that it was the prime promoter of life and accordingly they worshipped it as the great God of Nature.

In order to clearly understand what follows it is first necessary for us to get a general idea of what the sun is. We are inclined to think that it is the largest and most luminous body in the universe; but astronomers say differently. This immense source of heat and light so many thousand times larger than the earth or moon, is simply one of the myriad stars which we see in the heavens and probably is much smaller than many of them, appearing so large because of its comparative nearness to us. But its importance to our Earth and the other planets which circle around it cannot be overestimated. It keeps them in their relative positions, is the prime cause of their movements, and by means of the light and heat which it transmits preserves every form of activity upon the surface of the terrestrial globe.

To measure the distance of the Sun from our planet was for a long time beyond the power of astronomers. The ancients made a guess at it, supposing it to be in the neighborhood 5 million miles, which is about 90 million miles astray. It was not until the last century that Halley solved the problem by means of the transits of Venus. This planet is closer to the Earth than is the Sun, and its orbit is within our orbit. There will then be a time in the revolution of both when Venus is exactly between the Earth and the Sun. Now suppose there are two observers one at each end of a diameter of the earth, when Venus is passing over the solar disk it will appear to each of them to be projected on different parts.

This apparent difference in position enables us to form two triangles each having as its apex Venus and one having its base the diameter of the earth, the other the line joining the apparent positions of Venus on the Sun. Then by geometry we may find the distance from Venus to the Sun and adding this to the known distance between Venus and the Earth, we have the whole distance from the Earth to the Sun.

There are five other methods of computing this distance, to which, however, not so much importance is attached. Nevertheless it might be well to explain one other—that which depends on aberration. Aberration is defined by Young, as the apparent displacement of a star due to the combination of the motion of light with the motion of the observer. Flammarion illustrates this by a familiar example. Suppose a person standing out in a rain which is falling vertically. If he be standing still, he will hold his umbrella straight over him; but if he move, in order to be protected from the rain he will have to incline his umbrella forward, and the faster he walks the more he will incline it. The extent of its inclination will therefore depend upon his own speed and the velocity at which the rain is falling. This same effect is produced by light. On account of the enormous velocity of the earth through space an observer looking at a star will be obliged to turn his telescope in the direction the earth is going. Then knowing already the velocity of light, which is 186,000 miles per second, by a simple formula the velocity of the Earth in space may be found—19 miles per second. Then taking the length of a year as $365\frac{1}{4}$ days he may deduce the circumference of the orbit. Half the diameter of the orbit will be the distance of the sun.

This distance is so great that we can form an idea of it only through comparison. A cannon-ball possessing a uniform velocity of 1,700 feet per second would take almost 10 years to travel it. A railways train going a thousand miles a day would traverse it in $254\frac{1}{3}$ years, and the report of an explosion on the Earth, supposing sound to travel with a velocity of 1,100 feet a second, would be heard on the Sun 14 years afterwards.

Now knowing the distance of the Sun from the Earth it is comparatively easy to find its diameter and consequently its area and volume. In angular measurement the apparent diameter of

the Earth seen from the Sun is $17''.32$, that of the Sun viewed from the Earth 32.04 . Therefore dividing one by the other we find that the Sun's apparent diameter is about 108 times the Earth's. But we know the real diameter of the Earth to be in round numbers 8,000 miles. The Sun's real diameter is then $8,000 \times 108$, that is 864,000 miles. Its surface is about 12,000 times and its volume 1,300,000 times that of the Earth. The strongest imagination could hardly form a correct idea of this immense difference. If the Earth were placed in the centre of the Sun, supposing the latter to be a hollow sphere, its outer rim would be 433,000 miles from us, and the Moon revolving round the Earth, about 239,000 miles from it, would still be about the same distance from the Sun's rim. Jupiter is 1,390 times larger than the Earth, and Uranus, Neptune and Saturn are also much greater in volume, yet all these added together would form a mass 600 times smaller than the Sun. A man who could travel round the earth in 73 days would take 7,930 days or 22 years to go round the Sun.

To the uninitiated it might seem ridiculous to speak about weighing the solar mass, yet, strange as it may seem its weight has actually been determined in the following manner. What we mean by weight is simply the pull exerted on a body by the centre of attraction. Now there is a law determined by astronomers which says that the square of the time of revolution of a planet varies as the cube of its distance from the Sun; the farther, therefore that a planet is from the sun the slower is its motion around that body. For example, a moon placed twice as far away from us as our present one would revolve 28 times more slowly, and a body at the same distance from us as is the sun would revolve, following the law, 7,532 times slower than the moon, that is in 566 years. And since we know that the sun has force enough to cause the earth to revolve around it in only one year, we might conclude that the attractive force of the sun is just 566 times that of the earth. But the weight does not vary only according to the time of revolution, but according to the square of the time. Then the Sun is not 566 times, but 566^2 or about 320,000 times heavier than the earth. Flammarion has calculated that the weight of our globe is 5,875 sextillion kilogrammes, a kilogramme being a little over two pounds; the weight of the sun, therefore, in round num-

bers is almost two nonillions of pounds, or nearly two octillion tons.

Let us now examine the bright outer surface of the sun, or, as it is more scientifically called—the photosphere. Any knowledge that has been gained on this subject, or any theories put forth are of comparatively recent date. Galileo, although not the inventor of the telescope, was the first to construct one powerful enough to be useful in astronomical observations. The ancients could ascertain nothing concerning the true nature of the Sun. True it is, that at a very early date, several black spots were distinguished when it was near the horizon, simply by looking through burnt glass; but they were taken for passing planets, or for phenomena whose cause they could not conjecture. Even the renowned Kepler himself mistook one of these spots for the passage of Mercury. The popular idea regarding the Sun at the time was that it was pure fire. In fact this doctrine was taught and a denial of it would almost have been an act of heresy.

Although to the naked eye the surface of the sun may appear regular, yet the invention of powerful telescopes has proven this to be false. It is extremely rugged and irregular. Seen through the telescope it appears to be covered with small granules, mostly oval in form, the very fine lines which join them forming a network. Father Secchi, the eminent Italian astronomer, attempted a drawing of this. He says:—"It is difficult to find any familiar object which resembles this structure; we obtain a kind of analogy when we look through the telescope at a drop of thickened milk, the globules of which have lost the regularity of their form." Nasmyth, another astronomer of the present day, expounded what is called the willow-leaf structure of the solar surface. According to his theory enormous bodies, shaped like the leaves of the willow, are spread over the whole disk of the sun, except where the spots lie. They are all of one size, but lie over one another in every direction, and were supposed to be the immediate sources of the solar light and heat. Although Nasmyth's theory has since been disproved, yet it rested on solid facts and to him we owe the discovery of the irregular leaf-like form, upon which nearly all astronomers agree, and thus we have what are called sun spots.

Probably the most important thing to be studied about the Sun is the nature of these spots. Father Sheiner a Jesuit priest of Ingolstadt, was the first to call the attention of the world to them. We can hardly judge of the stir this created in the scientific world at the time. "The glorious orb of day had always been regarded and honored as the purest symbol of celestial incorruptibility and the learned men of the period would never have dared admit the existence of these spots. It would have been almost treason and dogma itself would seem to be compromised." It seemed like heresy to affirm that His heretofore Immaculate Majesty was after all not free from stain.

Early astronomers believed sun spots to be entirely separated from and elevated considerably above the surface and to revolve about the Sun. But this opinion is untenable, because they are alternately visible and invisible for the same length of time. As a general rule they make their appearance on the East side of the Sun, and moving toward the West disappear in about 14 days. Spots nearly always pass over the Sun's disk but once. They seem to break up before that part of the Sun's surface which was visible to us becomes invisible again. Very often, however, the same spot appears a second time and some times, although very rarely the same one has been seen three or four times. They are not to be found thrown at haphazard on the Sun, but are most numerous in the immediate neighborhood of the equator and very few appear in latitudes above 35° or 40° . Father Shenier tells us that they all appear to be in a zone between the tenth and thirtieth degrees of latitude.

Sun spots are made up of two parts—1st a dark circular part called the umbra and around this a lighter part called the penumbra, which is a kind of fringe composed of filaments directed radially. A spots whose umbra forms its centre is the most usual. It is called a normal spot. But in many cases the umbra is out of the centre and has its penumbra only on one side, the filaments not pointing toward the centre but curved in all directions. The number of sun spots varies very much from time to time. In 1871 there were so many of them that astronomers were enabled to determine the zone in which they habitually appeared, while in 1879 very few were seen. The same might be said about their

duration. Some last but few days, while others again last for months.

Sun spots, as I have mentioned before, are not stationary. It has been found that they return to the place whence they started in about $27\frac{1}{3}$ days. We might be apt to conclude therefore that the Sun rotates in this time. But this is not true for we have failed to take into account the fact that the Earth also moves. During these $27\frac{1}{3}$ days, she will have passed over about 25° of her orbit. Therefore when the spot has apparently completed a revolution, it has really revolved once and gone over two days of the next revolution. Allowing for this it has been found that the true time of the Sun's rotation is about $25\frac{1}{2}$ days. However, we have here to notice an extraordinary fact. The Sun's rotation differs widely from that of the Earth. Since the latter is a solid body, it necessarily rotates as a whole, every point on its surface taking the same time to make a revolution. The former on the contrary is not solid. The velocity of its rotation increases from the equator to the poles. Those who have made a close study of the movements of spots have found that they vary in their periods of revolution, according to their position on the sun. Spots on either side of the equator move faster than those on the equator; which fact demonstrates the Sun's peculiar mode of rotation.

Now, having a general idea of what sun spots are we must inquire more deeply into their nature. As I mentioned before, Sheiner imagined that they were satellites. Galileo, from the observations he made, concluded that they partook of the nature of clouds floating in the solar atmosphere. This explanation was admitted for a long time and is even held by some of our present day astronomers. Others again have asserted that they are steep mountains, and many learned men who regard the sun as a liquid mass have affirmed that they are scoria floating on an ocean of fire. But such strong objections have been brought against all these theories that they are hardly tenable at the present day. It is to Wilson, an astronomer of Glasgow, that we are indebted for the true explanation. The sun spots are undoubtedly cavities in the photosphere. They are filled with gases and vapors which are cooler than the surrounding portions and which therefore absorb a considerable quantity of light. This accounts for the dark

color of the umbra. The appearance of the spots as they disappear around the edge of the sun proves beyond a doubt that they are depressions in its surface. Looking at a normal spot when it is near the centre the umbra is nearly in the middle; but as it moves nearer the edge the side of the penumbra nearest us becomes narrower while that farthest from us grows wider; and just as it goes out of sight the penumbra on the inner edge disappears altogether,—"the appearance," says Young, "being precisely such as would be shown by a saucer shaped cavity in the surface of a globe, the bottom of the saucer being painted black to represent the umbra, and the sloping sides gray to represent the penumbra."

Sun spots are far from being all of the same size. The umbra of the smallest would have a diameter of about 500 miles, while the diameter of the largest would be about 60,000. The penumbra of the largest spot would have a diameter of about 150,000 miles. The extent of the depression of the umbra below the surface has been very hard to determine, but according to Fay, Carrington and other astronomers of note it varies from 500 to 2,800 miles.

The process by which these spots are supposed to be formed is very interesting. There is no law governing the time necessary for their formation. In some cases the pores on the surface appear to open and a spot is gradually evolved. At other times again they appear almost in an instant; but if the observer has watched the sun closely for several days ahead he will have seen that there has been great agitation going on. Luminous bubbles have been appearing and disappearing very rapidly and at short intervals, when suddenly there is a kind of explosion and a large opening is made. At first there is no penumbra, but it is gradually evolved and assumes a regular form, according as the spot itself takes its determined shape. When there are several spots close together it often happens that the luminous matter separating them is dissolved and they unite into one. The contrary has also been observed to take place. A single spot has been known to divide, the part broken away, however, disappearing shortly afterwards. The penumbra of a sun spot is far from being regular in its structure. Its size depends upon the size of the spot and the filaments which compose it have no fixed direction.

"Some," says Flammarion, "resemble sinuous currents which straighten out as they become more distant from the umbra ; and many appear as if formed of oval shaped masses like knots stretched out and placed end to end."

From the fact that the number of sun spots varies from time to time the question arose among astronomers as to whether or not they had fixed periods. Schwabe, a German, made an extensive series of observations running over nearly thirty years and he came to the conclusion that they attain a maximum every ten or twelve years, a conclusion which has been confirmed by recent study. As yet no satisfactory explanation of this periodicity has been advanced. The celebrated English astronomer, Sir John Herschell, attempted to explain it by meteors which he supposed to move in orbits, revolving once round the Sun every 10 or 11 years and coming so near it at perihelion that its attractive force caused many of them to actually fall into it. The distribution of the spots on the surface of the Sun, however, does not permit of this explanation. Others, from the fact that the spots are most numerous when Venus, Mercury and the Earth are nearest the Sun suggested these planets as the cause. And others again held that they were caused by Jupiter whose period is just about the same as the sun-spot period. But this theory must also be rejected for often a maximum of spots occurs when he is in aphelion—that is on a point on his orbit farthest away from the Sun. We have yet to await a perfectly satisfactory explanation of this periodicity.

The influence of sun spots on our Earth has been a problem which, for a few years back, has claimed much attention. The great point now is to find a means of predicting the weather for some time ahead, and the man who will succeed in this, if success is at all possible, will deserve the gratitude of the world. "The exclusive possession of such a knowledge," says Langley, "would bring wealth beyond the dreams of avarice to the user ; or to ascend from the lower ground of personal interest to the higher aims of philanthropy and science, could we predict the harvests we should be armed with a knowledge that might provide against coming years of famine, and make life distinctly happier and easier to hundreds of millions of toilers on the Earth's surface." But as

yet we have no certain knowledge of the relation of sun-spots and the weather, in fact it is scarcely possible that they exert any influence in that direction. We know, however, that the spots are cooler than the Sun itself and we might think that, on this account it would give off less heat. But this idea is incorrect except in as far as the spots themselves are concerned. It has been ascertained that the deprivation of heat due to them would amount to only $\frac{2}{3}^{\circ}$ Fahrenheit every period. But this says Langley, "is the direct effect of the spots considered merely as cool patches on the surface, and it does not imply that when there are most spots the Sun will necessary give less heat. In fact there may be a compensating action accompanying them which makes its radiation greater than when they are absent." We are positively certain, however, that sun-spots exert at least one influence on the Earth, —they are the cause of those electric phenomena called magnetic storms which are known to be raging when the compass needle is very unsteady and telegraph and telephone lines rendered almost useless. When these storms are frequent and very violent there are always a great many spots on the Sun. We are yet ignorant of the nature of the connection, but that there is a connection is established beyond all doubt. In November 1882, there was a magnetic storm so violent that it almost completely stopped electric communication between places in America. It took hours to send telegraphic despatches and the switch-boards in many telephone stations were burned away. At this very time a large Sun spot was discovered.

Next in order is the solar atmosphere. This surrounds the photosphere and may almost be said to be a part of it. This stratum, although of comparatively small thickness, is the densest and hottest part and has been found to contain vapors of many of the elements to be found on the earth. Above this again is the chromosphere, a very important portion of the sun, about which a great deal has been learned. This region is like the others made up of a number of gases of which hydrogen forms by far the greatest part, and which seem never to condense into clouds of solid or liquid particles. It is visible only during a total eclipse of the sun, when it appears to be of a bright red color, whence the name—chromosphere. When seen (at the time of an eclipse) it has very

much the appearance of an immense sheet of red fire, only the flames are composed of upright filaments, although in reality there can be no combustion since the temperature is too high to admit of it. Rising hundreds of thousands of miles above the chromosphere are the beautiful prominences or protuberances, to the study of which so much attention has been given by modern astronomers. At a total eclipse, when as everybody knows, the moon is between the earth and the sun, the ring of the chromosphere becomes visible and with it these prominences which seem to throw themselves in every direction around the moon, very much resembling immense tongues of pink fire. The attention of astronomers was first drawn to them during the eclipse of July 1842, although they were really discovered centuries before; the discoverers, however, thought them to be merely optical illusions. Since the year 1842, everyone interested set to work to ascertain their nature. At first it was not known whether they were attached to the sun or to the moon; but photographs taken during the eclipse of 1860, proved that they really belonged to the Sun, for from these it was seen that the moon moved over them.

The first theory put forth as to the nature of the prominences was that they were mountains, but some of them were observed to be so much inclined that being such it would be impossible for them to keep their balance. During the eclipse of 1851, which was total in Sweden, Mr. Airy the then director of the Greenwich Observatory, made several valuable observations which have thrown much light on the subject. He proved-- (1) that the prominences were not mountains but gaseous masses, very much resembling clouds in appearance; (2) that the variety of forms which a single one was supposed to assume, might be real variations, but also it might be that the drawings heretofore completed were incorrect; (3) that those on the side of the sun which the moon was leaving grew larger, while those grew smaller that were situated on the side which the moon was approaching, whence he rightly concluded that they were attached to the sun and not to the moon; (4) on account of the short time during which observations can be made (because of the rapid motion of the moon over the Sun's disk), all observers have not seen the same number of prominences, nor have they placed them on the same part of the

surface. The number of prominences during the eclipse was so great that it was impossible to count them. The sun was wholly surrounded by jets of flame, reaching to a great height. The next occasion which presented itself to the study of these phenomena was in August 1868. Shortly before this new discoveries had been made along the line of spectrum analysis and it was proposed to utilize them in solving the problems yet remaining.

It might be well here for me to give a short explanation of this all important process. No doubt everyone here has noticed that on looking through a glass prism, objects on the other side appear to be beautifully tinted, but it is very doubtful if many have taken the trouble to ascertain the cause of this phenomenon. It is this—the white light falling from the Sun as it traverses the prism is divided into its component parts, or speaking more scientifically is dispersed. If the image of the ray is received on a screen placed in a dark room it is found to be a bright band composed of seven colors, viz.: violet, indigo, blue, green, yellow, orange and red. This is what is termed the solar spectrum. Now it is very important to note that the colors of this spectrum are not continuous. In 1802 Wollaston and after him Fraunhofer, a famous German optician, observed that a great number of fine dark lines crossed them at very unequal intervals. In experiments made with artificial lights and with some of the stars these dark lines changed their positions and were more or less numerous. The spectrum of an electric light contains very bright lines. In flames in which certain chemical substances are vaporized very brilliant lines which differ for different substances are observed instead of dark ones. It is to the presence of these lines that the spectra owe their usefulness. Experiments made by Bunsen and Kirchoff proved that the same substance when volatilized always produces lines which have the same color and occupy the same positions, and also that a metal always showed its presence no matter how small a quantity of it existed in the substance. Hence we have spectrum analysis, a sure method of ascertaining the composition of a body by means of its light.

For the study of the different spectra, Kirchoff and Bunsen invented the spectroscope. The essential part of this instrument is a prism by means of which the light is dispersed. The ray is ad-

mitted to this prism through a narrow slit in the end of a tube containing an achromatic lens. This tube is called the collimator. The spectrum is looked at through a small telescope called the view telescope. On nearly all the modern instruments is found another still smaller tube which by means of a micrometer screw attached to it calculates the difference between the lines. When spectra are to be compared a second small prism is fixed to the slit in the collimator.

Now in regard to solar prominences, spectrum analysis has enabled astronomers to settle two very important questions; (1) are the prominences composed of solid matter, or are they gaseous? (2) what substances enter into their composition? From the eclipse of August 1868, very much was learned. An enormous prominence almost ten times as large as the earth was seen, and by attaching a spectroscope to the telescope a spectrum formed of a number of white rays was obtained. The first question was therefore solved—the prominences were really gaseous in composition. But the more difficult of the two was yet to be answered. If they were gaseous what might be the nature of the gases which enter into their composition. In order to determine this it was necessary to know the color and position of the lines in the spectra of the different gases and metals and compare them with the spectra of the prominences. This was done by Janssen, who made the very important discovery that they were visible even when there was no eclipse, and that hydrogen was their fundamental and principal constituent.

He swept his telescope to which was attached a spectroscope, over the edge of the sun and when he came to a prominence turned the collimator of the latter instrument upon it. Observing the spectrum formed he found that the hydrogen lines in it varied in length, which fact enabled him to determine the form of the prominences and hence the form of the chromosphere. At the present time in all the principal observatories of the world, the prominences are viewed each day and several important phenomena attending them have been observed. Sometimes there is almost perfect rest, then violent eruptions take place and immense flames thousands of miles in height are ejected. Flammarion describes these very beautifully. He says: "They sometimes assume mag-

nificent forms, more beautiful than any artificial fireworks our imaginations can picture; the branches falling in the form of parabolas more or less inclined present a very artistic spectacle. Some jets resemble the spreading tops of beautiful palm trees. More often the trunk, very lively and very brilliantly illuminated, at a certain height appears to divide into branches. Again the summit is carried by the wind toward the jet, and then turned in a contrary direction. These forms are always filamentary at the base and terminate in thread-like flames. Their light is so bright that that they shine through thin clouds even when the chromosphere has disappeared and these show besides hydrogen, the presence of several other substances. They seldom last more than an hour and are more often seen for only a few minutes."

The substances that compose the prominences are incandescent gases uplifted by some force whose origin is not known. The fact that they appear not to be thrown out in a straight line, but spirally, (the axis sometimes being vertical and sometimes horizontal) seems to indicate that they result from an interior eruptive force combined with that exerted by violent solar tempests. After they have reached a great height they seem to strike a resisting medium which is supposed to be solar atmosphere, and losing their filamentary form they become clouds which soon fade away and disappear altogether.

We have now reached the corona, the outermost portion of the sun. This phenomenon, which is about twice as bright as the full-moon, can be seen with the naked eye during a total eclipse, from which ancient astronomers concluded that there could be no total eclipse since the moon did not cover the whole surface of the sun. Scientists generally divide the corona into three parts, although these merge into one another so gradually that it is impossible to tell where one begins and the other ends. The first part is in immediate contact with the photosphere and by reason of its bright green color contrasts very beautifully with the brilliant scarlat of that portion. It is so brilliant as sometimes to cause doubt as to the precise moment of the totality of an eclipse. Its width in angular measurement is between fifteen and twenty seconds. The next part from which the prominences arise is also very brilliant and has a breadth of about five minutes. The third

part is the corona proper. Its circumference is far from being regular. It seems to be composed of streaks and filaments which generally radiate outward from the Sun, although too, often curved and twisted in every direction. These filaments are found to be longest in the sun-spot zone, that is about 35° on each side of the solar equator, but they also appear at the poles.

The Sun is undoubtedly the prime cause of the corona, but its appearance may be much changed by the Moon and by the fact that we look at it through our atmosphere. We have no certainty as to its nature and extent. If our instruments and our eye sight were more powerful much more might be seen. It cannot be, as was once supposed, a solar atmosphere, at least if it is an atmosphere it cannot resemble that of the Earth, because, as Young says "no gaseous envelope in any way analogous to the earth's atmosphere could exist there under the solar conditions of pressure and temperature." The corona is most probably meteoric matter ejected from the nucleus of the Sun and so rare that comets have passed directly through it without being in the least disturbed in their courses.

Thus far I have said nothing about the central part or nucleus of the Sun and it must be confessed that up to the present astronomers have obtained very little positive knowledge concerning it. They are certain of two things only—that it has a very high temperature and very low density. Many suppose that it is gaseous matter, but from what is known of the behaviour of gases, they must admit that this gaseous matter is in a far different state from gases prepared by chemical means. The condensation which must certainly result from the enormous force of solar gravity and the intense heat of the nucleus should certainly tend to increase its density and give it a consistency somewhat like tar or pitch. This has caused many to hold to the theory that the central mass is in the liquid state.

The Sun is the world's great source of light and heat. Scientists have calculated that its light is equal in quantity to that of 1,575 billions of billion candles. It is 190,000 times as bright as a single candle and 150 times as bright as limelight, which when placed between the eye and the Sun, is as a dark spot on its disk. But it must not be supposed that the whole surface of

the Sun is of equal brightness. If we take a screen and throw upon it an image of the Sun of at least 1 foot in diameter, we will find that the light at the edge is very much weaker than that at the middle, being only about $\frac{1}{3}$ as strong. There is also a marked difference in color. At the limb the blue and violet rays lose much more of their brightness than do the yellow and red, and the light from that portion is brownish red as compared with that from the centre. This phenomenon can be accounted for in no other way than by supposing that the lower portion of the surrounding atmosphere absorbs many of the rays, thus preventing them from reaching the earth in all their intensity.

The problem of finding the exact amount of heat sent out from the Sun is one which is not very readily understood. By the amount of heat received by the Earth from the Sun, we mean the number of heat units received in a unit of time by a square unit of surface, when the Sun is in the zenith. The unit of heat is called the calorie. It is the quantity required to raise the temperature of one kilogramme of water one degree centigrade. The first thing to be done is to find how much heat falls on a small known surface. We take a saucer-shaped vessel which contains about 100 cubic centimetres of water. Into this is dipped a thermometer which registers the temperature. The apparatus is arranged so that the water will not run out and is exposed to the perpendicular rays of the Sun. Now disregarding the heat absorbed by the atmosphere and that radiated to the vessel, it is observed that the 100 centimetres of water receive from the Sun each minute about 25 calories, that is 1 kilogramme of water would be raised 25° centigrade or 25 kilogrammes would be raised 1°. This quantity—25 calories for 100 centimetres per minute—is what is known as the solar constant. Therefore if 100 centimetres receive 25 calories of heat in one minute, finding the cross-section of the Earth exposed to the sun's rays in centimetres, we may ascertain the number of calories it receives. The sun's heat falling on the earth during a single minute is sufficient to boil 37,000,000,000 tons of water, or it would melt in one year a layer of ice over the whole surface of the globe 160 feet thick. But we receive only a very small portion of the sun's heat. It is thrown in all directions and could warm 2,200,000,000 worlds like our own

“Let us suppose,” says Langley, “that we could sweep up from the earth all the ice and snow on its surface, and gathering in the accumulations which are on its Arctic and Antarctic poles, commence building with it a tower greater than that of Babel, fifteen miles in diameter and so high as to exhaust our store. Imagine that it could be preserved untouched by the sun’s rays while we built on with the accumulations of successive winters, until it reached out 240,000 miles into space and formed an ice-bridge to the moon, and that there we concentrated on it the sun’s whole radiation, neither more nor less than that which goes on every minute. In one second the whole would be gone, melted, boiled and dissipated in vapor.”

Now the question is, if there be such a great heat, how is it maintained? A fire presupposes fuel, but it would be absurd to compare the heat of the Sun with any we have on earth. No quantity of fuel could supply what the sun would need for a single second’s burning. It is thought that in Pennsylvania there is enough coal to supply the whole country at its present rate of consumption for over 1,000 years. Yet this would burn in the sun for about $\frac{1}{10000}$ th of a second. If the whole body of the Sun were coal it would certainly have been consumed in much less time than man has been on the earth, and we know from the history of the last 2,000 years that there has been very little if any diminution in the amount of heat that the earth receives. Therefore that the Sun is a burning body which is gradually consuming itself cannot reasonably be held.

One of the most plausible theories regarding the constancy of the Sun’s heat, endeavors to explain it by the fall of meteors or aerolites upon its surface. The Sun is the centre of gravitation of millions of bodies. Beside the planets which have fixed orbits, there exist a multitude of comets, comparatively small in size, that describe much more elongated orbits, and are thus rendered liable to considerable resistance. For example, Encke’s comet approaches visibly to the Sun as the length of its period diminishes. From this cause its motion is accelerated and some day, no doubt, after describing a spiral course round the Sun will fall into it. Then again there is an almost infinite number of meteors. They very seldom have elliptical orbits but describe parabolic curves,

which seems to show that they are approaching the region of the sun for the first time. These meteors very often collide and the result is that thousands of them fall upon the Sun's surface. But they need not necessarily burn when they touch the Sun. The enormous rate of speed at which they are going would produce on collision a quantity of heat over 9,000 times that produced by an equal mass of coal. Here then, is a means of causing heat which would be sufficient to restore all that lost by radiation. There are, however, several objections to this theory which make it rather untenable. The one generally held by astronomers of the present day is what is known as Helmholtz's theory of solar contraction. He explains the constancy of the Sun's heat by the transformation of the force of gravity into heat. This explanation presupposes the nebular theory of LaPlace. The different parts of the created nebula, formed at first nothing but a chaotic mass, subject only to the force of gravity. This force being at work the molecules of the nebula tend to go toward the centre and they precipitate themselves upon one another. This precipitation, coupled with the fact that there must be condensation and therefore a slow contraction in bulk, produces heat. Helmholtz has calculated that a diminution of 1-1000 of the Sun's diameter would supply heat enough to take the place of that lost by the radiation of 21,000 years.

So we need not fear that the Sun's heat and light will fail us, at least not for many centuries to come ; although there is an ultimate limit beyond which contraction is impossible. It is almost certain that at the present rate of diminution the Sun's heat cannot last any longer than a million years. If the cooling and extinction of the Sun is to be the end of the world, it is yet a long distance away.

There yet remains a very interesting question which is every day becoming more important—the Sun's industrial relations to man. Man who once adored mighty Sol as his god, in some future time not far distant may yet make him the slave of his will. When all the forests are cut and burned away, when the earth will refuse to supply him with coal, he will be obliged to look about for another source of power and will turn towards the Sun. The orb of day is the great source of mechanical energy. The coal

that drives the steam engine and the water that turns the wheel, are simply stored up sun-power. But there is an immense amount of solar energy wasted. If we are to believe scientists we must admit, that, from every square yard of the earth's surface, supposing the Sun's rays to fall perpendicularly and unaffected by the atmosphere, there could be derived more than one horsepower. All the steam engines in the world could be set going together by the noon-day heat which falls on such a small area as that occupied by the City of London or Manhattan Island. No wonder, then, that many inventors have turned their attention to this as a source of power which, though so far it has cost more than it is worth, is yet capable of great results.

At the great Paris Exposition there was exhibited an extraordinary machine, which looked very much like a large inverted umbrella, pointed toward the Sun. This was a sun machine invented by a Mr. Mouchot. It consisted of an immense parabolic reflector which concentrated all the rays to a steam-boiler fixed to the centre. This steam generated by the Sun drove a steam engine, which in turn was employed to work a printing press. There is in New York also a solar engine invented by Ericsson, which may be run on an economical scale and is capable of being used with advantage to pump water into desert regions. Who knows, but that at some future day when the great empire of England is no more and when America has fallen into decay, the vast Sahara now barren and desolate under intense solar heat, may for this very reason become the seat of a "mightier empire than has been." He who will find a means of utilizing the great amount of solar energy now going to waste will certainly cause a greater Revolution than the world has yet witnessed.

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Vol. I.

MAY, 1899.

No. 9

Gladly do we proffer our sincerest congratulations to Rev. Father McKenna on his recent elevation to the sublime dignity of the eternal priesthood. It is for us a joy and a pleasure beyond expression to act as the mouth-piece of the whole student-body in echoing the enthusiastic felicitations offered to him by his pupils. We seize this opportunity as a most fitting one to assure Rev. Father McKenna that his worth is appreciated by us. We know indeed and feel all that he has been to us—a friend in need to some of us, a consoler in sorrow, a counsellor in doubt and trial, an indefatigable professor, an unwearied tutor, a generous contributor to our University magazine despite his multifarious and pressing duties. Everywhere has his influence been felt and always for good. May God reward him a thousand-fold for the past—and for the future may God speed him on the bright, glorious way of sacerdotal and religious perfection.

CHINA AGAIN.

China has again attracted our attention during the month through Russia's demand for railroad concessions. Since our comment in the May REVIEW on Chinese affairs, in which we touched on the relations between Great Britain and Russia respecting the ultimate partition of the Flowery Kingdom, a very important agreement has been arrived at by the two countries. Their differences until recently were most serious. England, however, sought quietly to maintain her position by keeping pace with the encroachments of her rival, and to limit, whenever possible, the territory which Russia was seeking, by having other countries assert an "influence" over it. With this object in view, the British endeavored to have the German government claim a wider dominion in the Hoang-Ho district, one of the richest sections of China on account of its excellent river accommodations. But the Germans were timid and refused to act on England's suggestion. John Bull for a time was baffled. He well understood Russia to be firmly grounded in the North, with no contiguous claimant in the South, except Germany. And since the latter had refused his overtures, he saw no way open to him of getting the better of his rival through opposition. Then Britain's own peculiar diplomacy came to the front and prepared to convert the enemy into a friend. An agreement was negotiated and after due consideration accepted. This practically insures each country against interference from the other in whatever demands either may make on the Chinese government regarding its particular "sphere of influence." The importance of the agreement is already shown in the changed conditions under its operation. Russia having nearly completed her trans-Siberian railway, is anxious to extend the work and make the terminus at Port Arthur. This necessitates traversing Manchuria. But the fact that Manchuria is a part of China is not to be accounted an obstacle, and accordingly Russia has requested the Peking government for permission to build a railroad through the territory. The request has been made apparently with the fullest confidence, and England is not making any objection to it. The latter country has not yet asked for anything to equal Russia's latest grab, but it may be expected to come

forward in due time and claim its share of the spoils. The agreement is also important in so far as it will likely delay the partition of China by offsetting a clash between the two strongest aggressors.

NEGROES IN THE SOUTH.

Canadian newspaper readers who, besides searching for current history, endeavor to view events of the day from a sociological stand-point, are often perplexed by the relations existing between the negroes and the white population in the Southern States. Scarcely a week passes without a report of the lynching of a negro in some part of the country. But sometimes lynching is evidently thought too mild a punishment for the criminal colored man, and, as was the case recently in Georgia, he is burned at the stake. This horrible punishment finds its parallel only in the outrages of the primitive savages of the continent. At every lynching the North raises a voice of protest, but the South hears it calmly and just as quietly ignores it. The Southerners say they know the negro better than anybody else, and that they know how to punish him for his crimes. Thus lynchings go on, and the justice-loving sense of the country is periodically shocked. However it is not only in criminal matters that the South shows its abhorrence of the colored man. The dislike is showing itself in civil affairs, and the negro is being disfranchised and subjugated by legislation. Although the Confederate rebellion resulted in the emancipation of the negro, and placed him on the same level before the law as his former owner, nevertheless the Southerner does not acknowledge the negro as his equal. It is precisely this idea that is at the bottom of all the antagonism between the races. Equals are entitled to equal rights, but inferiors are not entitled to equal rights. Acting on this principle several states have enacted measures abridging the negro's right of suffrage, and others are preparing to follow the example. The following item which has been going the rounds of the newspapers during the month will explain the manner of procedure:

"The House of Representatives of Alabama is now considering two important amendments to the Constitu-

tion, both in the interests of the white citizen. One bill seeks to require that all voters must be able to read understandingly any part of the Constitution of the State, but provides that this provision shall not extend to any citizen whose antecedents prior to 1861 enjoyed the privilege of suffrage. This provision is intended to preserve to the ignorant white voter his right to participate in elections. The other bill seeks to apply the school revenues derived from taxes on property belonging to white men to the education of the white children. As it is, the school funds are contributed equally without regard to race, although the whites pay practically all of the taxes. The indications appear to be that both of these bills will pass."

It is not easy at present, however, to understand how such legislation can be enacted in view of the fifteenth amendment to the Constitution of the Union, which was adopted by a majority of the States, after the Civil War, declaring that "The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any state on account of race, color or previous condition of servitude." The Alabama law would seem to be in direct opposition to this provision, but, apparently, the National Constitution is being overlooked. North Carolina and Louisiana have nearly similar laws in operation now, and other southern states are endeavoring to restrict the negro's privileges.



Among the Magazines.

BY MICHAEL E. CONWAY.

The magazines for May contain many readable articles. Every reader of the May number of the *Catholic World* must have appreciated Miss Guiney's instructive paper on Aubrey Beardsley, the distinguished young artist whose premature death on March 16th, 1898, cast a gloom over art-circles in England. His name will live with those of Keats and the marvellous Chatterton as a youth of rare genius who had achieved world wide fame in the realms of art. The fiction of the issue is particularly good. A pretty dia-

lect story entitled "Ancient and Honorable," and "Zack's Interests or a tale of Western Life," are the best contributions to this department.

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Every number of the *Ave Maria* during the month of May has been one of particular merit. Especial mention must be made of the opening article in the issue of May 6th, which treats of the origin of the May devotions. With zealous care the writer has traced the spread of this devotion from the time of the Blessed Henry Suso in the fourteenth century, who always refrained from touching the flowers during the month of April, in order that he might offer them to the Blessed Virgin on the first of May. He then sketches other May-day religious customs in Paris and Cologne until the year 1822 when Pope Pius VII blessed the devotion and enriched it with many indulgences. An excellent chapter of the serial, "Weighed in the Balance," appears in this issue. This is a story of great merit and its presentation in some more enduring form in the near future, will be gladly welcomed by numerous readers.

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Readers of *Donahoe's Magazine* will undoubtedly be delighted with the contents of the May number. "The President and His Adviser," "Decoration Day," "Reminiscences of the Civil War," are articles of particular interest to the residents of the United States, but a perusal of them will amply repay readers in general. "The Unbeliever," a story by Catharine Tynan Hinkson, is interesting and from the conclusion appears to have been founded on fact. "Two Sorts of Consolation," is commonplace and does not at all improve the fiction of this issue. One of the best features of the number is the poem, "When the West Wind Blows" by Rev. James B. Dollard, which adds much to the long list of the productions of this brilliant Canadian writer. "Money, Prices and Wages in the Middle Ages," throws considerable light on these much misunderstood topics. "Rachel," a story by John A. Schetty, holds the interest throughout and is well worth reading.

The June number of the *Messenger of the Sacred Heart* abounds in interesting matter and admirable illustrations. It will be remarked that the re-opening of the Borgian Halls in the Vatican in 1897 was a marked event of that year and of especial interest to the students and lovers of the fine arts, on account of the numerous art treasures contained within these apartments. An extended description of these treasures occupies the opening pages of this issue. The writer is evidently able to appreciate the beauties of these triumphs of art, and shows that religion and art are inseparably connected. He quotes the words of the Holy Father addressed to the Sacred College of Cardinals: "Art and Christianity are joined by indissoluble bonds, because art finds in our faith fresh inspiration, and in the Church and the Popes generous protectors. Foolish, therefore, is the claim put forward by the liberals that genius and immutability in dogma are in ill accord. The Vatican alone is enough to show the marvellous union between true beauty and true religion."



Of Local Interest.

By W. P. EGLESON.

On Wednesday the 17th inst., the Scientific Society took its first annual trip. As early as 4.30 a. m. could be seen the form of Rev. Father Lajeunesse, O. M. I., the indefatigable director of the Society, arousing the slumbering members from their beds. At five o'clock all preparations for the excursion were completed and two bus-loads of happy students started for Blackburn's mica mine. The day was an ideal one and the drive was greatly enjoyed by all. The party reached its destination at noon, and received a cordial reception from Mr. Stewart, the courteous manager of the mine, who invited the students to make themselves at home. After a hearty dinner a visit was made to the open mine, and a descent was made in the main shaft, 268 feet deep. The descent was made in the bucket, but during the ascent an accident happened to the machinery and many of the students were obliged to climb the ladders. At 5 o'clock p. m. a start was made for home. After a

pleasant six hours' drive the tired but happy company found itself back at the University. Our thanks are due to Mr. Stewart, the manager of the mine, and also to Mr. Gratton, the genial foreman, for the kindness and courtesy shown us during our visit.

It will now be in order to congratulate Rev. Father Lajeunesse, the director of the Society, and the energetic committee who had charge of the affairs of the society during the past season. If the success already achieved may be taken as an augury for the future we feel secure in saying that the Scientific Society has a brilliant record in store for it. The lectures delivered at the regular weekly meetings have been a credit to the society, and the enthusiasm of the members in their work speaks eloquently indeed.



ORDINATIONS.

At the Trinity Ordinations, Saturday, May 27, His Grace Archbishop Duhamel ordained the following students of Ottawa University Theological Seminary :

Priests—Rev. Albert Gagnon, Ottawa ; Rev. John Brownrigg, Alfred, Ont. ; Rev. Bernard McKenna, O. M. I., Ottawa ; Rev. Arnaud Baron, O. M. I., France ; Rev. Patrick Flynn, O. M. I., Lowell, Mass. ; Rev. Aloysius Lebert, O. M. I., Bavaria.

Deacons—Rev. Brother Roy, O. M. I., Lowell, Mass. ; Rev. J. B. Horeau, O. M. I., France ; Rev. Patrick O'Neil, O. M. I., ; Rev. Odilo Allard, O. M. I.

Sub-Deacons—James Fallon, O. M. I., Kingston ; Arthur Barette, Ottawa ; Albert Rousseau, St. Boniface ; Antonio Barette, Ottawa ; Ernest Lacombe, O. M. I., Ottawa.

Minors—Messrs. G. Prudhomme, Cantley ; George Fitzgerald, Ottawa ; John B. Bazinet, Prescott ; Joseph Desjardins, Ottawa ; Omer Lavergne, Ottawa ; Malcolm McKinnon, British Columbia ; Ambrose Madden, O. M. I., Ottawa ; Stephen Blanchin, O. M. I. ; Omer Robillard, O. M. I. ; Julius Priour, O. M. I., Ottawa ; Aquilla Gratton, O. M. I., Montreal ; Charles Soubry, O. M. I., France ; Eugene McCuade, O. M. I. Boston ; T. Blanchard, O. M. I., Montreal.

Tonsure—Messrs. Harken, of Vankleek Hill ; Chatelin, of Thurso ; Ethier, of Prescott ; Pare, of Prescott.

Rev. Hilaire Chartrand, of the Seminary, will be ordained to the priesthood at Hartwell, P. Q. on June 11th.

Priorum Temporum Flores.

M. A. FOLEY.

Letters from Rome have brought the welcome news that, on Holy Saturday, Rev. W. O'Boyle, '96, was raised to the sublime dignity of the priesthood. Congratulations, Father O'Boyle, and *God speed.*

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Mr. Patrick Lawn, ex-'99, writes to renew his subscription to the REVIEW and to convey to "ye Editors" a few words of compliment and encouragement. Thanks, old friend, thanks.

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Thomas O'Hagan, LL. D., '82, the well-known Canadian writer, has just returned from a tour through the Western and Southern States. During the three months of his absence he delivered about seventy lectures. In Texas he met several of the Oblate Fathers—Rev. Fathers Smith and Parisot among others. He is at present publishing two new works—a volume of poems, "Songs of the Settlement," and a critical work "English Epochal Poets." Dr. O'Hagan's past brilliant success in the literary field affords a guarantee that his prospective publications will meet with a hearty reception from the reading public.

