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FREEMASONRY IN ALL ITS BRANCHES.

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Monthly Masonic Summary.

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WE have to report the successful result of our first great Charitable Anniversary for 1878, when Bro. James Terry announced that the stewards had returned £11,126. The Duke of Manchester ably presided over the gathering which was both numerous and enthusiastic. We congratulate Bro. Terry. We have little else to report, except the prosperous growth of English Freemasonry. On all sides we behold signs of a flourishing order and new Lodges.

Many Lodges are raising their fees of admission, and we think most advisedly. It is quite clear that the Lodges *qua* Lodges must do more for the Charities, and also make the privilege of entrance rather dearer than it now is. Quantity, not quality, seems to be the desideratum of some Lodges. But such a state of things is greatly to be deprecated, as it will act inevitably, sooner or later, most prejudicially on the Craft. Abroad, the "Insanis ira civium Latomicorum" continues, especially in France, though there are signs there that a large and intelligent minority are not prepared to be dragged through the dirt by an intolerant and illogical majority. Brother Hubert declines re-election to the Mastership of his Lodge, dissatisfied with past and present, and anxious for the future, and the movement seems spreading.

In the meantime, as if to mend matters, the G. Orient coolly proposes to grant Charters to French Lodges in all jurisdictions which are not in fraternal relationship with it. This is Masonic revolution as well as Masonic impertinence with a vengeance! But we are not the least surprised at it, as the open patronage of the "Philadelphes"—a political and spurious body in London—by the *Monde Maconnique*, is a discredit to French Masonic journalism and an insult to English Freemasonry.

AN HERMETIC WORK.

(Continued from page 391.)

CHAP. I.

A plain and full explanation of the aforesaid Epitaph, Scutcheons and Motto's of W. C. As well for the Philosopher's Stone as his own Tomb-stone.

THIS Epitaph is literally the work of Philosophers, and yet may revive the old useful Adigy and Motto upon this Authors Tomb-stone, to remember thy end. For as this flourishing  signifies this Author W. C. being a Mercurialist, tired of all worldly Inquina^{ts} ments. So it illustrates all the Planets and their Mercury, and the universal Spirit  and Mercury of the World, and the specificks of Nature; and no less, the true Mercury of Philosophers for this work: free from all filthy corruptions well fitted, and put naked without Garb, or any strange thing into its Glass, and private Philosophical Nest or Vessel, (as into a Grave and Coffin) with constant vapourous heat for Putrifaction, and its true preparation, rectification, and perfection, orderly through its progression of Colours, till it come to the true Sulphur of Philosophers, which in the interim, makes good that Philosophick saying,

Est iter ad Cœlum, sed me gravis impedit Aer,
Et me perfudit' qui me cito deserit humor.
Huic mihi sunt Lachrymæ, sed non est causa doloris, &c.

Englished thus,

It tends to Heaven, but the gross Air hinders,
And moisture false quickly turns to Cinders.
Hence comes these Tears, though there's no cause of grief,
For they but nourish, th' Earth gave them relief.
And though Worms feed upon my Carkass here,
My Soul's in Heaven with my Saviour Dear.

Thus it may appear double you see, or one in two, Male and Female, Superieur and inferieur, Gross and Subtil, Celestial and Terrestrial, Sulphur and Mercury, Water and Earth, Corruptible and Incorruptible, or Spiritual. And so the parts also are three, Body, Sol, and Spirit; Sal, Sulphur, and Mercury; ☉. ♃. & ♁. Calx, Ferment and Tincture; and the very Mercury may be termed threefold, preparing, prepared, and essential, and according to Ripley, and Raimund, calcining, reviving, and essential. So likewise it may be termed four; for the Water, and Earth which are two visible Elements, comprehend Fire and Air, which are the four Elements, which are turned inside outward, whereby they shew their effects and properties. Thus *Terra; Stat. unda Lavat, pyr Purgat, Spiritus intrat.* The Earth fastens, Moist washeth, Fire purgeth, and Spirit enters. In and for which, also there are four Fires used, Natural, against Nature, Innatural, and Elemental; all which, at the last will make a fifth Essence; and so by a perfect Ternary *Quadrante*, and Quintessential process, from one, two, three, four, and five. It returns again into one most perfect spiritual substance, and so is Reunited, and raised to a perfect Circular Centre, a fixt fusible and incorruptible Medicine, to make the true Elixir of Philosophers; opening and shutting at pleasure, giving the Keys of happiness to all that shall enjoy it, to enter to a Kingdom of Health, Wealth, and Honour, and shutting out all ignorant dark Bodies, and Spirits. Thus then at last this Medicine may obtain the name and number, intimated by W. C. which as it is this Authors name, who is but one in Person, and in Figures, twice five

hundred ; so is the Medicine but one in substance, and in virtue twice five hundred, or a thousand. For this cause the Jews thought Christ to be John Baptist, risen from the Dead, and therefore did such mighty works. And this we know (saith St. Paul) that such as he is, such like shall we be at the Resurrection, if we have his Spirit, and follow him in pious Obedience, Patience, and Humility. So that in this Epitaph, as well as by the said Scutcheons and Motto's, is plainly set forth the divine and natural Stone of the Wise-men, with their Sulphur and Mercury ; though to be understood with a grain of Salt ; and likewise the Moral, Natural, and mortal fate of Man. The whole Art therefore of this Philosophy, is to begin where Nature ends, and to take what you find most ready and perfect in Nature, and that which is nearest of kin ; and intirely separate the Heterogeneous gross parts, and congregate the Homogeneous, make them Essential, and separate the Elements, kill the Quick, and quicken the Dead, and Circulate, Fix and Ferment all to the highest degree of Exaltation, and Philosophical Sublimation and Perfection. As Ripley saith, Kill the Quick, and to the Dead give Life ; Make Trinity one without any Strife. Thus opening and shutting by Ixions Wheel, in heavenly mansion, both in a natural and artificial vessel, till it come to the greatest perfection and number, if not Infinite. And now note, though most Philosophers in their Writings have concealed their true privy Mercury, Fire-Vessel, Time and Bath. Yet here thou maist easily find all the Secret ; If God have ordained thee to be helpful towards the Redemption of his poor Creatures, groaning under their burdens of Oppressions and Mortality.

Now as this Epitaph doth thus set forth the true Elixir of Philosophers, and mans Mortality ; so likewise these Scutcheons or Hyeroglifical Figures you see do the same in the honourable Pedegree of the Philosophick true Medicine, or Golden-fleece, as well for the Life and Health of mans Body as Metalls, both in the Elements and Principles of the said Elixir, and in its Cœlestial and Terrestrial parts, proceeding from their *Sakine Chaos*, or first mercurial matter, and their glorified Sulphur to their Cœlestial Sphears of Multiplication, Fermentation, and Projection ; and so they and their Motto's agree sincerely, with all the Philosophick sayings and intentions ; namely thus, Some Philosophers would have it one thing, and affirm, that the Salt of Metals is the Philosophers Stone ; Others say, all's in Mercury that the Wise-men seek ; and again, others do teach, that the whole Art depends in and upon the true preparation of their Sulphur, as being the most perfect of the three principles, whose Orbs must be thrice turned about, as in my three Figures and Cœlestial Wheels : and some would have it one thing, comprising the nature of two, as a Hermophradite or Embrio ; moreover, some would have it absolutely two things, as Male and Female, Fire and Water, or Water and Earth, Sulphur and Mercury, or Heaven and Earth. Some likewise would have it consist of three, Salt Sulphur, and Mercury ☉. ♃. & ♄. Body, Soul, and Spirit ; Others would have it the four Elements, and say, the Conversion of them is the whole work. And some again would have it a fifth Essence and Quintessential Spiritual Body ; and say their Mastery and Mistery consists in these five numbers, 1, 2, 3, 4, & 5. as in my said Epitaph and Circular Scutcheons appear, thus comprehended, in and by the Chaos and Products.

The Chaos in th' Excentrick Centre still,
 Hath death's Heads Ternary, Crows or owly Bill,
 Whose square Face, under Times confused Glass,
 Of Fire and Water, six days Angles pass,
 Within the Spiny Bush, Expansion till,
 A Sabatean Rest makes all stand still.
 After each Colour Fram'd to th' owners praise,
 Then all things multiply to the end of days.
 The two in number, are but one in kind,
 And four in Nature, three in one do bind.
 And then the Quintessence wheels thrice in'ts Sphear,
 To conquer all the Mortals every where ;

Which Waters thus takes name from Icarus, the lofty Eagles Son, and Dedalus Philosophers true Sulphur and Mercury their unctuous Tincture; and their water Dry.

The Owl appears in darkness, Yellowish Red,
And white are seen upon the Gooses Head.
The Bird of Paradise, and Phoenix fly,
Which Starry brightness in th' Adeptists Skye;
Through Milkie Paths up to the Moon and Sun,
To multiply till the Adept have done.

Then each that's worthy, come and Feast you here,
With Apollo, Hermes, and Minervahs Chear:
For here is Nectar, and Ambrosia still,
Under these Hyeroglyphicks take your fill.

All which nevertheles, I acknowledge is really but one onely thing, or Essence in the Root, viz. the Philosophers γ , although out of two or three particulars, or more in kind; and one operation of several parts, as in my said Epitaph, and Circular Figures comprised: Nay indeed may be but one onely particular thing, and one continued simple and single operation, when duely prepared, and superfluities removed. But if one onely thing be taken, then it is divided into several parts; or if several things be taken, they are brought to one; and so may it be said of the Operation, which all being but one, the Philosophers nevertheless are pleased to distinguish it by its several Progressions, Colours, and Properties, intimated by, and within the said three figured Circles and their Titles; all agreeing with this old *Ænygma* of Vitriol, which being in many of the Metallick kind, is and hath but one thing or substance; and although but one, yet may be opened, divided, and have several parts; and being done, be brought to one again, in one single and simple operation of Nature; Thus,

V.	I.	T.	R.	I.
<i>Visitabis Interiora Terræ, Rectificando Invenies,</i>				
O.	L.	V.	M.	
<i>Occultum Lapidem, Veram Medicinam.</i>				

Visit the interiours of Earth, Rectifying,
And you shall find the hid Stone, and true Medicine.

And like it, agreeing with this work of Palyngenius, which hath two.

Hunc Juvinem Arcadium, Infidum nimumq; fugacem,
Prendite, & immersum stygiis occidite Lymphis;
Post Hiales Gremio impositum Deus excipiat, Quem
Lemnia Terra colit sublatumq; in Cruce figat.
Tunc sepelite utero in calido & dissolvite putrem,
Cujus stillantes Artus de corpore nostro
Spiritus egrediens penetrabit, & ordine miro,
Paulatim extinctum nigris revocabit ab umbris.
Aurata indutum Clamyden Argentotoq; nitentem,
Projicite hunc demum in prunas Renovabiter alter,
Ut Phoenix, & quæ tangit perfecta relinquit,
Corpora, Naturæ leges & fœdera vincens,
Mutabit species, paupertatenaq; fugabit.

Englished thus,

Take this Arcadian slippery Lad, who's apt to fly,
And in the Glittering Stygian Lake, drown'd let him dye;
When Hials juices in his breast, God saves him from loss,
Whom Lemnian Earth doth nourish, lift up fix t'a Cross,

Then in a warm Cave buried, dissolve what's Rotten,
 From whose Synews drops of this our Body's gotten.
 Spirits will Pierce, and orderly from shades bring out,
 This Offspring, clothed with Gold and Silver round about.
 At length project this on live Coals, and you'l soon see,
 Another (Phœnix like) thereby renew'd to be;
 Which with its onely touch, perfects all Bodies here,
 Past the strict bond, and laws of Nature's Sphear ;
 And will change the Species to a higher degree,
 Whereby all Grief may cease, and Poverty shall flee.

And yet understand me rightly concerning the said work, and matter of Philosophers ; that Gold for certain is the principle of Gold-making powder, (be it in what subject or appearance it will) even as Fire is the principle of Firing : For nothing can give what it hath not. *In Auro, semina sunt Auri.* As Augurellus and others testifie. In Gold, is the seed of Gold. And even the same may be said of Lune, when 'tis a Masculine. And their Mercury is the ground of both, and contains all three ; and is the Earth, in which it is sown, and from whence it takes its original, and is of their own Nature. But this must be living Gold or Silver, and not the common Gold or Silver, which are Dead ; or the common fowl Quick silver. And indeed these are more universal, cheap, common, and easie to be had, then most men, even some Philosophers do think : which caused Ingenious, and Learned Taulodanus to write against the Subject of that worthy old Philosopher Bracescus, though both true Philosophers, and their severall Subjects true ; and this made Claveus in his *Chrysopeia*, and *Argyropeia* to doubt of some of Lullie's processes ; For these Principles are to be found in one subject, and in divers having a Golden Nature, as Dunstan, Arnold, Guido, Ripley, Raimund, Glauber, and others do testifie ; and more ways are to the Wood then one : For out of every or any particular Metallick or Mineral Species, may by due Philosophick preparation, be extracted the subject for the Philosophers Stone ; and every Chymical work called particular may by purification, good preparation & fusible fixation, volatisation, and exaltation, be made a universal work for Multiplication : Nay out of every Element, and Principle of and in Nature ; and almost every abject thing whatsoever, may be extracted a Sulphurous, Sol, Lune, or Mercury, enlivened for the Philosophers work. And St. Devogius affirms, that the said first matter of Philosophers, is easier to be touched with the hand, then discerned or found by subtilty of Wit, or Sophistick imaginations, and faith, he told it & the Process literally to some, who nevertheless had not confidence therein, for the meanness of the same, and therefore left it without trial. And certainly the Antecedent and Primordial *Ens Auri*, is in every Element and Principle ; the which are never so simple, but out of each the other may be extracted ; and we may observe a kind of demonstration hereof by our Mother Earth, who brings forth all things : For take any good and fit Earth, extract all the Stones, Roots, Salt peter, and whatsoever else is included, and being then left open to the Air for some time in a convenient place, it will not onely of its self be impregnated again with new salt Peter, Vegetables, Stones, Mettals and Minerals, but also with Animals, and those very Stones, &c. shall hold a Sulphurous Gold and Mercury, fit for a Philosopher to work upon, and to make a fit Medicine for any of the three Kingdoms of Nature, and this being after specified with a fit Metallick, shall perfect the impure Mettals, to Sol, and Lune ; and 'tis strange that salt Peter, a Mineral in the Earth, should have its root and Quarry in the Air. And verily every thing brought to such likeness in perfection of Elements, and the three Principles, as to be Quintessential and fixt, are in community of substance with the principles of Mettals, and are in a manner universal, and may help to make the Stone for Transmutation of Mettals, as well as for the health of Men, &c. For the community of matter of all things, as in Sal, Sulphur, and Mercury, and the purity of the four Elements is in pure Water, and pure Earth, brought to a Quintessential essence, and so are in community of substance with Mettals, and will be of equal nature with their principles, namely, in Sal, Sulphur, and Mercury ; For

the matters and principles of Generation, are in Sal, Sulphur, and Mercury, and these may as well be had by Art, above the Earth, as by Nature in the Mines, and so may be brought to a fixt Sulphur of Nature, which is as good an Earth for the work as may be; for Guido saith of the Earth, it is no matter so it be fixed, and Raimund saith, nought is required in this Art for transmutation, but pure Earth, and pure Water; and Ripley saith, Hair and Blood cannot be the Stone for transmutation, but Elements separated from them may; and of ☿ separated from them, is little good, but if brought to Sulphur of Nature, it is as good Earth for it as may be; yet still mark, that it be brought to a community of Nature, and must be fermented with pure real Gold: yet you are not tied to go to so great a distance; for things neerer of kin are easier transmuted, and the nearest the best. Wherefore the Artists may begin where Nature left off in her simple and single operation. And (like a good Husband-man with Corn) Sow the pure grain of Gold (not common Gold) in its pure Mercurial virgin Mother Earth (not common Earth) but a white Crude, Golden Water or Essence, brought to them by the help of Eagles, or else by the mediation of the Doves; and the man in his glittering golden Robes, may drink of his Nectar in a pure silver Cup, three to the Graces, or nine to the Muses (as Ripley intimates) and according to the old Mystical Law. *Ter bibe aut toties ternos sic mystica Lex est.* Drink Three, or thrice Three, which is a Mystery; and so the Masculine and Feminine, or ☉. ♀. & ☿. being in perfect health, and in their prime and Sperme, as one thing, willingly embrace, and joyntly spiritualize themselves into a Sprout, or living Seed, to grow up to the highest degree of the power, energy, and virtue of ♀. and Gold, and of the spiritual Stone of Philosophers, and to do whatsoever else the Philosophers have need of. *Nam Lapis Philosophorum nihil aliud est quam Aurum in gradibus suis multiplicatum stante proportione quæ fuit in Auro primo.* For the Philosophers Stone is no other thing, then Gold multiplied in its degrees, standing in the same Temperature or Proportion in which it was at the first: which must be nourisht with the Mothers pure Milk, till it can feed upon stronger Meats, and so gets vigour to Multiply. And then the Glorified King (Triply Crown'd) shall vanquish his Enemies, and redeem his Brethren and Kindred, in all or any Nations from their vile Corruptions: If they can but touch the hem of his Garment; or entertain him at his approach, as they ought; for 'tis alike to him, to raise their Essences, as to separate their Maladies. Yet you must,

First, Learn the Eagles that foster up the Doves,
 And makes Diano taste of Venus's Loves,
 Where Cupid conquers Mars his furious Ire,
 And makes the Magnet draw the Calib's Fire;
 Which seems a Riddle, and's the Gordian Knot,
 And Herculean, labour for the Artists Lot.

Without the perfect knowledge of which, thou canst never attain thy end.

(To be Continued.)

PAPERS ON THE GREAT PYRAMID.

BY BRO. WM. ROWBOTTOM.

I.—THE BUILDING.

IN writing these short papers for the MASONIC MAGAZINE I shall endeavour to bring before its readers, in as brief and interesting a manner as my short acquaintance with letters and Masonry will permit, the results of those recent inquiries into Great Pyramid teaching which have excited considerable attention, not unmingled, it is true, with some ridicule.

In order to render each paper as complete as possible in itself, we will divide the subject under five heads, and, discussing first the building itself, will proceed to consider the times in which it was built; who the builders were; why they built it; and what it teaches.

Since one of the chief points which I wish Masonic readers to impartially consider is the origin of the Craft at the building of the Great Pyramid, I may as well state here that wherever any matter concerning the Pyramid itself appears to me to bear upon Masonic tradition, I shall endeavour to support it by such authorities as are free from any suspicion of having their views influenced by Masonic teaching. Thus, should any Mason note anything in the theories of Professor Piazzi Smyth which may tend to explain certain difficult points in the ritual of the Craft, he may safely conclude that the connection is quite unintentional on his part, for that gentleman is, as yet, far from being prepossessed in favour of the Order. Where, too, we find Prof. Smyth's theories viewed from a Masonic standpoint, corroborated by so competent an authority as Mr. Richard A. Proctor, we shall, I assume, be proceeding by steps sufficiently sure, if we walk at the same time by the light of that Sacred Volume which should ever be as a lamp to guide our feet.

That the building itself is worthy the attention of every true Mason will appear when we consider that of all the stately buildings which the hand of Man, instructed and aided by Science, has reared upon the face of the earth, there is, and has been, none which could equal, much less excel, that stupendous monument of Masonry, which, after the lapse of more than four thousand years, still speaks to men of the mighty dead who have gone before, and extorts a wondering admiration of their labours.

But there is in the building something more than at first meets the eye; something which tells of a purpose and design in its construction which stamps it with a character purely its own.

Mr. James Bonwick, in his recently published *Pyramid Facts and Fancies*, a book from which I shall frequently have occasion to quote, after impartially giving a general review of Pyramid theories, ancient and modern, thus decides:—"There is something in the pyramid; and men who see what others cannot, would not see if deided for their second sight, may yet be proved to have a vision true and clear."

Situated on the 30th degree of latitude north, and about 31° longitude east of Greenwich,* the Great Pyramid stands, not only centrally with regard to the countries composing what is popularly termed the Old World, but also on the geographical centre of the land surface of the whole world.

Standing, then, in this unique position, upon a four-square base whose sides are perfectly oriented—that is, correspond exactly with the cardinal directions—it rises to a point at that peculiar angle which gives as its result that the height is the radius of a circle whose circumference is equal to that of the base. It thus presents, or rather, did present—though throughout these papers we shall consider the work in its perfect state, as when the builders completed their labours—a perfect specimen of that peculiar style of architecture which has always been regarded as emblematic of stability, and this may be the import of its name in the Arabic tongue, *Harām*, which is variously translated to signify an old structure, or a holy place. But this meaning is doubtful, as it is considered "very possible that the Egyptians might have written 'HRAM, without any vowel, after the aspirated consonant."† To the figure of a pyramid as the type of strength for endurance, or stability, the British Constitution is happily compared; nor indeed is there any other style of monument which could contest its claims in this respect.

Into its external structure two classes of limestone entered. For the squared but unfinished structural masonry, the nummulitic limestone of the levelled rock upon which it is built was used; but for the finished casing stones a more compact white limestone from the eastern side of the Nile was obtained. Into the levelled rock were

* Or from the Great Druidical Astronomical Temple of Stonehenge, 33° east.

† Pyramid Facts and Fancies, p. 21.

sunk, at each corner, sockets (to receive the corner stones), of which that at the north-east is remarkable for its greater size, and for its being the first discovered by the French *savants* in 1797. It is an irregular square, 137·8-in. by 118-in., and cut 7·9-in. deep in the rock. Some amongst those French Academicians had most probably been correctly instructed, for they prosecuted their search first where it was most likely to be rewarded. The account of their discovery, as recounted in "Antiquités, Description," vol. ii., p. 63, is translated by Prof. Smyth, as follows:—"They recognised perfectly the esplanade upon which the Great Pyramid had been established, and discovered happily, at the north-east angle, a large hollow socket worked in the rock, cut rectangularly and uninjured, where the corner-stone had been placed." They shortly afterwards discovered a corresponding socket at the north-west angle. By this important discovery the original base line was determined; and when, in 1837, Col. Howard Vyse so happily exposed to the light two of the original casing-stones *in situ*, the height of the building in its perfect state was recovered.

Concerning these casing-stones, Prof. Smyth says:—"The extreme value residing in these angular relics was not only because they were of the number of the original casing-stones, and actually *in situ* and undisturbed, and therefore showing what was once the veritable outside of the Great Pyramid, viz., smooth, polished, dense, white lime-stone, almost like marble, in a sloping plane; but because they exhibited such matchless workmanship: as correct and true almost as modern work by optical instrument makers, but performed in this instance on blocks of a height of nearly 5 feet, a breadth of 8 feet, and a length, perhaps, of 12 feet, with the finest of joints, said to be no thicker, even including a film of white cement, than 'silver paper.'"^{*}

Concerning the exquisite workmanship of the early masons there is something more to be said, when the internal construction of the Pyramid comes under notice. From the esplanade, which appears to have encircled the building, ran E.N.E. "the causeway, or raised road, by which stones, ready prepared, as in the case of the Jerusalem Temple, could be brought from the river to the site."[†]

But if the dimensions of the exterior have exercised the abilities of engineers not a little to determine, the construction of the interior has given scope to endless speculations and theories wide as the poles asunder.

What is there, then, to be seen? Very little indeed, it would appear, on a mere cursory observation. A long, slant tunnel of narrow dimensions—about 4-ft. high by 3-ft. 6-in. wide—descending from the entrance, 49 feet above the ground, and near the centre of the northern face, leads into a chamber hewn in the solid rock (100 feet below its surface), with a finished ceiling, but a rough and exceedingly uneven floor. "This subterranean chamber had been *begun* to be carved out, deep in the heart of the rock, with admirable skill. For the workmen, having cut their way down to the necessary depth by the passage, commenced with the chamber's ceiling, making it exquisitely smooth, though 46 feet long by 28 broad; then, sinking down the walls therefrom in vertical planes, there was every promise of their having presently, at that notable 100-foot depth inside the otherwise solid limestone mountain, a rectangular hollow, or chamber, whose walls, ceiling, and floor should all be perfect, pattern planes. But when they had cut downwards from the ceiling to a depth of about 4 feet at the west end, and 13 feet at the east end, they stopped in the very midst of their work. A small, very small, bored passage was pushed on into the rock merely a few feet further towards the south, and then that was also left unfinished; a similar abortive attempt was likewise made downwards, though with still less result; and the whole floor, from one end of the chamber to the other, was left thus a lamentable scene of up-and-down and fragmentary confusion. Verily (seeing that the whole light of day was reduced down there to a mere star-like point at the end of the long entrance-passage), verily, it was the true locality of 'the stones of darkness and the shadow of death.'[‡]

^{*} Our Inheritance in the Great Pyramid, p. 22—23.

[†] Pyramid Facts and Fancies, p. 7—8.

[‡] Our Inheritance in the Great Pyramid, p. 86.

This descending passage and subterranean chamber appear to have been all that was known to the Ancients. Not only was the entrance itself said to be kept secret, but the ascending passages were sealed with immense blocks of stone prepared and placed in the building during its construction, and then, when all was completed, slid down to the position they were intended to fill, the noble dimensions of the Grand Gallery, according to M. Maillet, affording plenty of storage room for prepared stones sufficient to block up more passages than have hitherto been discovered.* Hermetically sealed at its junction with the descending passage by the great portcullis block, said to have weighed from 50 to 70 tons, the ascending passage remained undiscovered until about the year 820 A.D., when, according to Arab tradition, the Caliph Al Mamoun directed a forced entrance to be made into the Pyramid. In his day no signs of the outer entrance was visible, and he had only tradition to guide him to select the centre of the northern face for his search. Commencing some twenty feet above the base the forced entrance struck the descending passage near the point at which the ascending passage began, the workmen having been guided thither just at the time when they were becoming rebellious at the apparent fruitlessness of their task by the fall of a heavy stone.

"In the fall of that particular stone," says Professor Smyth, "there almost seems to have been an accident that was more than an accident. Energetically, however, they instantly pushed on in the direction of the strange noise, hammers, and fire, and vinegar being employed again and again, until breaking through a wall surface, they burst into the hollow way, 'exceeding dark, dreadful to look at, and difficult to pass,' they said at first, where the sound had occurred. It was the same hollow way, or, properly, the Pyramid's inclined and descending entrance-passage, where the Romans of old, and if they, also Greeks, Persians, and Egyptians, must have passed up and down in their occasional visits to the subterranean chamber and its unfinished, unquarried-out floor. Tame and simple used that entrance passage to appear to those ancients who entered in the right way, and, as the builders intended, from above; but now it not only stood before another race, and another religion, but with something that the others never saw, viz., its chief leading secret, for the first time since the foundation of the building, nakedly exposed. A large angular-fitting stone, that had made for ages with its lower flat side a smooth and polished portion of the ceiling of the inclined and narrow entrance-passage, quite undistinguishable from any other part of the whole of its line, had now dropped on to the floor before their eyes, and revealed that there was just behind it, or at, and in that point of the ceiling which it had covered, the end of another passage clearly ascending therefrom, and towards the south, out of this descending one.

"But that ascending passage itself was still closed by an adamantine portcullis, or rather stopper, formed by a series of huge granite plugs of square wedge-like shape dropped or slid down, and then jammed in immovably, from above. To break them in pieces within the confined entrance-passage space, and pull out the fragments there, was entirely out of the question; so the grim crew of Saracen Mussulmans broke away sideways, or round about to the west, through the smaller, ordinary masonry, and so up again (by a huge chasm still to be seen, and indeed, still used by all would-be entrants into the further interior), to the newly-discovered ascending passage, at a point past the terrific hardness of its lower granite obstruction. They did up there, or at an elevation above, and a position beyond the portcullis, find the passage way still blocked, but the filling material at that part was only limestone; so, making themselves a very great hole in the masonry alongside, they there wielded their tools with energy on the long, fair blocks which presented themselves to their view. But as fast as they broke up and pulled out the pieces of one of the blocks in this strange ascending passage, other blocks above it, also of a bore just to fill its full dimensions, slid down from above, and still what should be the passage for human locomotion was solid stone filling. No help, however, for the workmen. The Commander of the Faithful is present, and insists

* *Pyramid Facts and Fancies*, p. 53—61.

that, whatever the number of stone plugs still to come down from the mysterious reservoir, his men shall hammer and hammer them, one after the other, and bit by bit, to little pieces, at the only opening where they can get at them, until they do at last come to the end of it all. So the people tire, but the work goes on; and at last, yes! at last! the ascending passage beginning just above the granite portcullis, and leading thence upward and to the south, is announced to be free from obstruction and ready for essay. Then, by Allah, they shouted; the treasures of the Great Pyramid, sealed up from the fabulous times of the mighty Ibn Salhouk, and undeseccrated, as it was long supposed, by mortal eye during all the intervening thousands of years, lay full in their grasp before them."

But this strange building has no secret treasure to reward the untiring energy of the Saracens. The way is clear, and for "no less than 110 feet" they pursue their upward way, through "a passage of royally polished* white limestone, but only 47 inches in height, and 41 in breadth," and come to a point where another low passage runs horizontally to the centre of the pile, and leading to the "Queen's Chamber." This room is but about 19 by 17 feet, with a pitched ceiling, formed of sloping stones meeting in the centre. All accounts of this room state it being in a very rough condition, and with an unfinished flooring. It was empty, and the only remarkable feature was a niche in the east wall, about 5 feet wide at the bottom, and by 4 narrowings brought to about 2 feet at the top. But in 1872, Mr. Wayman Dixon discovered two channels, apparently like the air channels of the King's Chamber, shortly to be noticed, on the north and south walls, only that these had never been used as such, having not been perforated through the wall of the chamber, but only to the distance of 5 inches from the face of the stone.

Originally, the horizontal passage to the "Queen's Chamber" had been sealed in like manner to the first, so that on emerging from the narrow ascending passage the noble proportions of the "Grand Gallery" were revealed, with an unbroken floor line continued, and rising at the same angle as that just quitted. Immediately on the right, however, is what is called the "Well's Mouth," but which is really the entrance to a narrow and exceedingly rugged shaft or "man-hole" communicating with the descending passage 24 feet from its termination in the subterranean chamber. Count Caviglia explored it in 1817. Entering at the bottom, from which he had cleared away the rubbish, he groped his way up the some 200 feet of its length, and finding on his way a grotto in the natural rock, near its surface. By this way the workmen who accomplished the sealing of the ascending passages, are supposed to have quitted them, and regained the entrance from the descending passage, which was then secured.

The "Grand Gallery" is seven times the height of the one from which it opens. Very peculiar in its construction, the width on the floor being only 3 feet, increasing to 6 feet above the "ramps" which run along each side, and again narrowing by 7 overhanging lappings to rather more than 3 feet at the ceiling. For 150 feet the floor of the Grand Gallery continues its ascent at a regular angle, then rising 3 feet by a step, 5 feet horizontally brings the visitor to a low doorway, followed immediately by a hanging portcullis, called the Granite Leaf, on which is the "boss." He is then in the Antechamber, and another low narrow doorway, or short passage—for it is some six or seven feet through, and is constructed of "awful blocks of frowning red granite, both on either side and above and below"—brings him to the Grand Chamber. And what is there to see? We will take up the Professor's description of the Saracens' entrance:—

"And what find they there, those maddened Muslim in Caliph Al Mamoun's train? A right noble apartment, now called the King's Chamber, roughly 34 feet long, 17 broad, and 19 high, of polished red granite throughout, both walls, floor, and ceiling; in blocks squared and true, and put together with such exquisite skill that no autocrat emperor of modern times could desire anything more solidly noble and refined.

"Ay, ay, no doubt a well-built room, and a handsome one too; but what does it contain? Where is the treasure? The treasure! yes, indeed, where are the promised

* Mr. Cockburn Muir objects strongly to the term "polished"; the stones not being polished, but only very finely worked.

silver and gold, the jewels and the arms? The plundering fanatics look wildly around them, but can see nothing, not a single *dirhem* anywhere. They trim their torches, and carry them again and again to every part of that red-walled, flinty hall, but without any better success. Nought but pure, polished red granite, in mighty slabs, looks calmly upon them from every side. The room is clean—garnished too, as it were; and, according to the ideas of its founders, complete and perfectly ready for its visitors, so long expected, and not arrived yet; for the gross minds who occupy it now find it all barren, and declare that there is nothing whatever there, in the whole extent of the apartment, from one end to the other, nothing except *an empty stone chest without a lid.*"

But this room has some wonderful secrets to reveal, according to those who have sought the riches of wisdom in the way they are to be found, and therefore it is deserving of a little more notice than the treasure-seekers gave it. Sandys (1610) wrote of it, saying: "A goodly chamber, twenty foote wide, and forty in length; the rooffe of a maruelous height, and the stones so great, that eight floores it, eight rooffes it, eight flagee the ends, and sixteene the sides, all of well-wrought Theban marble."* A very taking description, though scarcely accurate. Unable to easily discern the joints of the masonry, Sandys appears to have given his imagination free play. Smyth, in his plate of this chamber, shows 9 stones in the roof, and 100 in the 4 sides, in 5 courses of masonry, of which the top course contained 7 stones only. Greaves, the Oxford Professor of Astronomy (1638) made 6 courses, but Smyth worked longer and under better conditions. In other respects, the old Professor's remarks and measures have proved very accurate; much more than those of many of his successors, who appear to have roughly guessed their measures, with a result sufficiently bewildering if all writers were to be received as of equal authority. Greaves had been greatly struck with the workmanship of the Grand Gallery, which was "not inferiour," says he, "either in respect to the curiosity of Art, or richness of materials, to the most sumptuous and magnificent buildings;" and when he comes to the King's Chamber, he describes it as follows:—"This rich and spacious chamber, in which Art may seem to have contended with Nature, the curious work being not inferior to the rich materials, stands, as it were, in the heart and centre of the Pyramid, equi-distant from all the sides, and almost in the midst between the basis and the top. The floor, the sides, the roof of it, are all made of vast but exquisite tables of Theban marble."†

Nor are modern engineers less sparing in their admiration of the work of those early masons who reared the apparently simple yet strangely complex pile. According to Sir John Hawkshaw the three greater pyramids mark the summit of perfection in the art of building attained in Egypt. Had he limited his remarks to the Great Pyramid, he might have said that it was the most perfect monument of all masonic skill that the world has ever seen.

Professor Owen‡ is not less enthusiastic in his admiration; he says: "The arts of quarrying and of masonry, manifested by the marvellous bulk of granite blocks, the perfection of their shaping, and the fineness of their polished surfaces, were as advanced in Egypt at the date of the pyramids as at any subsequent period, or as they are now practised with the aid of gunpowder and of steam machinery in the granite quarries and works at Aberdeen." And again he says: "This material (granite) enters into the internal architecture of the Great Pyramid. Emerging from the Entry gallery into the Grand Passage, walled and roofed by mighty masses of polished granite, called the 'King's Chamber,' conducting to the mortuary chapel, contiguous to the chamber of the royal Sarcophagus,§ the unexpected dimensions of the 'Granite Chamber' impressed me with a resemblance to the side aisle of a cathedral. The whole of the known in-

* Pyramid Facts and Fancies, p. 37.

† Ibid.

‡ Leisure Hour, 1876, p. 325.

§ Besides adopting the exploded idea that the "coffer" is a sarcophagus, Professor Owen seems to apply the name of "The King's Chamber" to the Grand Gallery, which is not warranted by other writers.

terior structures of Cheop's Pyramid—the central tomb, the roof of which is relieved by a series of discharging arches,* from the enormous superincumbent mass towering to the pyramid's apex; the ventilating shafts, extending at the best angle for their purpose to open upon the sides of the pyramid; the precisely-estimated slope of both upward and downward passages, in reference to the enormous blocks of granite to be moved along them, hardly, if at all, inferior to the monolithic Sarcophagus itself,—all these impressed my architectural and engineering fellow-travellers with the conviction that a mind of high order in their sciences had planned and presided over the construction of the pyramid."

Of course, no one in the least acquainted with even the architectural features of the Great Pyramid, could doubt for one moment that the master mind who directed the work, had previously conceived and completed the plans of its structure before the masons began their work. Nay, we are able to go further than that. In the "Chambers of Construction" over the King's Chamber, (five in number), there still exist—or did in 1837, when Col. Howard Vyse published the results of his explorations—the quarry marks on the unfinished faces of the huge blocks.† These prove that the stones came ready prepared and numbered from the quarries of Syene, 700 miles up the Nile. The consecutive order of the numbers was apparent, and the stones were further marked for north, south, &c.

Trusting that I have shown sufficient reasons for claiming attention on the part of all Masons to the investigations now being made in what may be termed Great Pyramid Science, I shall now close this Paper with a few particulars as to dimensions, &c., which will be found useful in subsequent papers. Hitherto, I have used rough dimensions only, as being less likely to "bore" readers, but the exact quantities will be required, and given in this form they will be more easy for reference than if scattered through the text. I have already stated how the discovery of the corner sockets and the casing-stones led to the recovery of the external dimensions within very narrow limits, and I may now add, in explanation of the nicety of the measures given below, that they are the result of careful mathematical calculations, aided by the fact that the internal measures, which are easily made, have a peculiar proportion to the external, as will shortly appear. The dimensions are given in terms of Pyramid inches, the Pyramid inch being the one-thousandth part greater than a British inch, (which is the *unit* of our system), and is derived from the "boss" on the "granite leaf" of the Ante-Chamber, the face of which is 5 such inches:—

EXTERIOR, WHEN PERFECT.

	Pyr. inches.
Vertical height above pavement	5,813·01
Inclined height at centre of sides	7,391·55
" " corners	8,687·87
Base side, as determined by sockets	9,131·05
Diagonal of base ditto ditto	12,913·26
Sum of the two diagonals (nearly)	25,827
*Angle of the sides by the casing-stones	51° 51' 14·3"
Angle at the corners	41° 59' 18·7"
Area of base = 13·340 Pyr. acres, of which 1 equal 0·9992 British acre.	

PASSAGES—FLOOR LENGTH.

Grand Gallery	1881·4
First ascending passage, if reckoned on a floor line produced downwards to floor of entrance-passage	1542
Entrance passage, from commencement to such point of intersection by floor line of first ascending passage	986
Or, computed whole length of entrance-passage, to termination in subterranean chamber... ..	4446

* Referred to later on as "Chambers of Construction."

† It is among these marks that Egyptologists identify the Cartouche of Cheops, Xufu, or Suphis, after whom the Great Pyramid is often designated.

QUEEN'S CHAMBER.						
Length	...	...	...	...	...	226.5
Breadth	..	...	...	...	...	206
Displacement of Niche from centre of East Wall...					...	25
ANTE-CHAMBER.						
Length (of granite floor 103.033, and of limestone 13.23)	...				...	116.26
Breadth (east to west)		...	...	...	...	65.2
Height	...	...	...	...	...	149.4
KING'S CHAMBER.						
Length (east to west)	...	...	...	...	...	412.132
Breadth	...	...	...	...	...	206.066
Height (floor to ceiling)	...	...	...	...	...	230.389
Diagonal of end	...	...	...	...	...	309.1
" side	...	...	...	...	...	472.2
" floor	...	...	...	...	...	460.8
Solid or cubic Diagonal	...	...	...	...	...	515.164
COFFER.						
External length	...	...	...	...	...	89.62
Inside	"	...	...	...	...	77.85
External breadth	...	...	...	...	...	38.61
Inside	"	...	...	...	...	26.70
External height	...	...	...	...	...	41.13
Inside depth	...	...	...	...	...	34.31
						Pyr. cubic inches
Measured capacity volume exterior	...	...	...	...	...	142,316.
" " interior	...	...	...	...	...	71,317.
" cubical contents of sides	...	...	...	...	...	47,508.
" " bottom	...	...	...	...	...	23,758.
Assumed original cubic contents of Coffin, ascertained by comparison of measures and above capacities	...	...	...	...	...	71,250.

* * * The above measures are all taken from the 3rd Edition of "Our Inheritance in the Great Pyramid," by Prof. Piazzi Smyth, F.R.S.E., F.R.A.S., Astronomer-Royal for Scotland.

WHAT MATTER ?

FAST falls the snow, O, lady mine !
 Sprinkling the lawn with crystals fine ;
 But, by the gods, we won't repine,
 While we're together.
 We'll chat and rhyme, and kiss and dine,
 Defying weather.

So stir the fire and pour the wine,
 And let those sea-green eyes divine
 Pour their love madness into mine.
 I don't care whether
 'Tis snow or sun, or rain or shine,
 If we're together.

 THE ADVENTURES OF DON PASQUALE.

 BY THE AUTHOR OF THE "OLD, OLD STORY."

CHAPTER IX.

 "And from new and strange heart griefs
 May my Talisman thee defend."

PUSCHKIN.

EVERY now and then there comes to us in life what the French term so well a "changement des décorations," which alters for the time being the onward current of our feelings, our plans, our words, our ways. For we are all, after all, ever creatures more or less of circumstance here, and are acted upon by a thousand influences, which sometimes affect us grotesquely, and move us deeply. Indeed our whole present and future are coloured by what is seemingly only a "hazard" of existence, one of those startling and even commonplace events which confronts us often at every step we take, and seems to give a new impulse, an altered direction to our wayward wills and our wandering feet.

It is strange and touching often in later years to recall the past which has faded, and old friends who have been forgotten amidst the vortex of business, pleasure, prosperity, social comfort. It is remarkable to note how little causes have led to great results for us; how much has turned out differently from what we once hoped and dreamt, and how very wonderful, above all, have been both the contradictions and the conceits of life for us all, for you and me, kind reader, alike.

Yes, so it is, and to the reverent mind it is a glad realization, that after all is said and done, and amid the noise of contentious philosophies, and earthly logomachies, "whatever is, is best," and a wiser and Diviner Providence has indeed all the while been shaping our purposes and directing our steps. But I must not become too serious, and will therefore proceed with my story.

While all at Rome were basking in the sunshine of contented hopes and glowing illusions, (happy moments for mortals,) a new arrival managed to throw a good deal of doubt, confusion, and even fear, into that joyous little circle.

Baron Puchner-Priessler, a very old friend, and admirer too, of Madame Allegri, appeared at her hospitable mansion, and recalled old days and reclaimed ancient friendship. He had buried his wife not so long ago, but, like some widowers I have met with in life, bore his great loss with calm resignation. Ill-natured people, and a lot of ill-natured people do live in this wicked world of ours, liked to declare that he looked much more cheerful since he had again reverted to a bachelor existence. I for one do not believe them. It is just possible that the defunct baroness had been in the habit of talking a little too much, laying down the law too severely to please her husband and his friends; but then as she had brought him a large lump of the yellow metal, she had a right to expect "privileges" of some kind. And if she did speak too often and too much, she had been a very good wife to her liege lord, and we will therefore credit him with sincere regrets for the partner of his bosom, and the faithful companion of long years of domestic comfort and happiness.

We all remember that inimitable touch in a modern novel, where Bishop Prowdie opens the letter-bag, alike with episcopal dignity and a sigh of relief, as he realizes the fact that Mrs. Prowdie is no more there to open it before him! And it is just possible that that excellent man the Baron Puchner-Priessler did not weep, but rather gently and serenely smiled, when in his grand château he was aware that his good but imperious Chatelaine was no more "to the fore" to interfere with his arrangements or to dominate his friends.

Being still in the prime of life, well preserved and well dressed, he bethought himself of his old friend Mdme. Allegri, and took it into his head that a visit to the "Morgen-land" would set him up, and do him a great deal of good in the loneliness which seemed to press upon him, as he roamed through long galleries and looked into chilly rooms. Even a wife's voice, though you may hear it too often, at such moments goes for something.

But his descent upon Rome did not please every one, the more so as it was quite clear that he was still as ever a fervent admirer of Mdme. Allegri. He was rich, educated, and personable, and was looking out for a pleasant companion, whom, as a Puchner-Priessler, he might present comfortably to some very difficult Puchner-Priesslers, male and female, without fear and without hesitation.

Poor Mdme. Allegri was rather, as we should say, "in a fix." He had come a little too late; he ought to have appeared on the scene sooner; for the amiable woman, though she might not have objected to the castle and family mansion and broad acres of Puchner-Priessler, had they only been opportune, or as the Irishman said, "just in sayson," had gone so far with our old friend Don Balthazar, (a by no means despicable parti himself,) that she did not know, as Paesiello a little cynically said, "which way to turn herself," and so, clever woman as she was, she sought to temporize!

She would not, not she, refuse to see her ancient friend the Baron, nor would she decline the attentions of her newer admirer.

And, therefore, for some time everyone had "hardish lines" of it in Rome, and this unhappy "crise" and this false position affected the happiness and even the tempers of all. And then, as if to prove that misfortunes never come single, an energetic Englishman of the name of Compton happened to meet Anna at an artistic gallery, and straightway fancying himself violently in love with the fair enchantress, bored everyone with the sublimity and intensity, the pathos and the bathos of his "grande passion." As he became a great friend of Paesiello's later, and will appear again, I will only now remark that he was rich and good-looking, and educated and pleasant, a bit of a philosopher, and no end of a swell.

Thus our readers will note at once that the situation is a little clouded over, and if they are very sentimental will be hoping to hear of broken hearts and blighted beings. I fear that I have nothing of the sort to tell them. We live in a very prosaic age indeed, when love and matrimony are very matter-of-fact things. There is very little sentiment afloat just now in society, and broken hearts are out of fashion, like some articles of feminine attire which I for one used to admire in days of old!

Young men propose to young ladies because it suits them to do so; and young ladies refuse some young men, and take up with other young men, because it suits them to do so! I wish it were otherwise. I should feel much more composed, I admit, if our "golden youth" would be a little less confiding as to what they do do, and as to what they don't do; if they would not show too often how little interest or heart they have in anything; how, in fact, life is to them a sort of brilliant masquerade, and their motto is, all through it—

"Take each fair mask for what it seems to be,
But look not thou beneath it."

I am always, therefore, now quite easy in my mind when I hear that Miss So-and-So has rejected Mr. So-and-So, as I know if we could find the hero he would be smoking a cigarette, reading a French novel, and sipping B. and S., or Phiz, Curaçoa, or Absinthe! Broken-hearted? Not in the least!

I am not going, then, to indulge in any high-flown sentimentality in these veritable pages. As Clothilde says in the "Cheven Blanc," "seulement je constate." I state the fact, and leave its explanation and its consequences to others.

Paesiello, who was very observant, noted down the incidents of the little by-play of those whom he liked to call in his diary "human Fantoccini," and as he had taken a huge fancy for Compton, he was much amused at the bold Briton's palpable attentions to the always sunny Anna. Bechner, who was very much in love with Anna as we

know, was, as I before pointed out, both a "militaire" and a "philosophe," (as some soldiers are,) and though he perceived the danger he was in, yet he bore it all very cheerfully, with little of outward feeling. And to say the truth it was not very easy to quarrel with Compton; he had youth and good looks, too, on his side, and Anna was not at all insensible, (as why should she be?) to the attentions of so agreeable and desirable a companion. But we must leave them for a short time in this little amusing embroglio.

(To be Continued.)

EXTRACTS FROM THE MINUTE BOOKS OF THE CARMARTHEN LODGE.

BY BRO. J. MARSDEN, B.D.P.M. OF ST. PETER'S, 476, CARMARTHEN.

ON the first page there is a prayer, of which the following is the concluding portion:—
"O God, give us Wisdom to contrive in all our doings, Strength to support in all difficulties, and Beauty to adorn these heavenly mansions, where Thy honour dwells; and grant, O Lord, that we may agree together in Brotherly Love and Charity one toward another, and in all our dealings with the world do justice to all men, love Mercy, and walk humbly with Thee, our God, and at last may an Abundant Entrance be administered unto us, into Thy Kingdom, O Great Jehovah. Now to the King Eternal, Immortal, Invisible, the only Wise God, be power and glory, for ever and ever. Amen."

Then follows in order the following important document, which I give *verbatim et liberatim*:

"By Virtue of a power granted me from the Grand Master of Free and Accepted Masons of Great Britain as Provincial Grand Master of South Wales, I do by these presents Ordain, constitute, and appoint a Lodge to be Erected and held at the dwelling house of Daniel James, in the County Borough of Carmarthen, and do hereby depute and delegate Lazarus Thomas, John Evans, and Daniel James, Master Masons, to see that all things herein are done decently and in order, as becometh the Rules of this most Antient Society. Given under my hand and Seal, this 19th day of October, 1753.

"EDWARD MANSELL,
Grand Master."

The Lodge was in existence in 1734, as Pine's engraved list of that date proves. Weighing that fact together with the contents of the foregoing entries, it appears probable the Carmarthen Lodge had for many years worked without a regular Charter, and as a time immemorial Lodge.

"24th October, 1753.

"By the authority aforesaid I do hereby appoint Bro. Lazarus Thomas to be my Senior Warden, and to act as Master in my absence, and Bro. Daniel James to be Junior Warden, not doubting of their care to preserve the cement of the Lodge.

"JOHN EVANS, *Master.*"

At the same time it is also ordered by the Master and Wardens that Bro. Daniel James shall provide Three Silver Jewells, Three Aprons, Truells (*sic*), and a Constitution Book, and a Book of Rules, together with any other thing he shall think necessary for opening a Lodge the 29th of this instant October, and to charge the expense of the same to the Lodge.

“At the same time ’tis agreed that advertising the Lodge is necessary; it is likewise ordered that Bro. James should get it advertised, and charge the same to the Lodge. John Evans, Master; Lazarus Thomas, Daniel James, Wardens.

(Can any one explain the use of the *truells*, mentioned in the above minute?)

“29th October, 1753.

“At a Lodge held this night, it is ordered that, upon the good recommendation given by Bro. Lazarus Thomas, that John Evans, carpenter, be admitted a Brother of this Honourable Fraternity, and that he be made next Lodge Night. * * * * *

“By order of the Lodge,

“WILLIAM SEARS, *Secretary.*”

“5th November, 1753.

“By a Dispensation granted by our Right Worshipfull Master, for the Rev. Mr. Francis Beal, it is ordered that the said Mr. Beal be made a Bro. of the Honourable Fraternity at the Lodge held this night, and he is made accordingly.”

(Sir Edward Mansell, Bart., who was appointed in 1726 by Lord Paisley, Grand Master, was the first P.G. Master of South Wales; indeed, as far as I can find, of all P.G. Masters the first—and in that capacity granted the above-mentioned dispensation.)

“December 3rd.

* * * * * It is ordered that every Brother that has been admitted and made Masons in this Lodge, shall have certificates of their being made, and when and what Degree.

“JOHN EVANS, *Master.*”

“December 27th, 1753.

“At a Lodge held this day by proper Summons, and agreeable to an Order made last Lodge Night, ’tis ordered that Bro. Edward Don Lee be raised a Fellow Craft, and he is raised accordingly.

“Upon the motion of Bro. Daniel James, a petition was read of Benjamin M——, clerk, praying he might be made a Mason, and was balloted for accordingly, when it appeared the numbers stood: For, 3; Against, 10 (!) upon which it was rejected.” (No wonder.)

“21st of January, 1754.

“At a Lodge held here this night, and agreeable to an Order made the 17th Dec. last, Herbert Leighton, Esq., was made an Entered Apprentice. (And) upon the motion of the Senior Warden * * * * *, he is raised a fellow Craft.”

“April 22nd, 1754.

“At a Lodge held here this night * * * * * it is ordered that the Secretary should send summons to A. B., Esq., and C. D., Apothecary, to attend here personally next Lodge night to answer what is alledged to their charge.”

“May 15th, 1754.

“It is unanimously agreed upon that the said A. B. and C. D. be expelled this and all other Lodges whatsoever.”

“As it has pleased God to take unto himself our Provincial Grand Master, Sir Edward Mansell, it is desired that the Right (*sic*) Worshipfull Master be pleased to recommend to the Grand Lodge our most worthy Brother David Jones Gwynne, of Taliaris, Esq., to become our Provincial Grand Master.”

“24th June, 1754.

Some interesting inferences may, I think, be drawn from the following curious cash account, which I find under the above date.

	£	s.	d.
By Cash received from Bro. Powell, for being made Entered Apprentice and fellow Craft	1	11	0
By do. from do. for apron and gloves... ..	0	2	0
By do. from Bro. Beale for ye Provincial and himself... ..	0	5	0
By do. from Bro. Lee, for an oath, 1d.; and from Bro. Sears, for a contempt, 1d.	0	0	2
Contra. To Cash paid Bro. Gwynn, for 5 trowells and mending 12 others	0	4	10
To do. for Ale at the Making of Bro. Lloyd	0	17	6
To Ale when the penman was remade (!!)	0	2	0

Among other matters, it appears from the above extract that though fees were high, oaths were cheap at Crmarthen.

“ WOUNDED.”

BY ARTHUR LOCKER.

From the “Graphic.”

UPON the battle-field a wounded Turk
Lies helpless and alone;
The cruel shot has done but half its work,
He lives, though overthrown:
A kindlier bullet would have closed his eyes
At once, to open them in Paradise.

His comrades, one and all, have left the fight,
None stays his help to lend;
In such sore straits even a Muscovite
Would seem a kind of friend
If with his lance he stopped his victim's breath,
And so averted a more hideous death.

But all are gone, Giaour and Moslem too,
And now there gathers round
War's fell menagerie, that hateful crew
Of camp-attendants, found
Most useful scavengers, both bird and beast,
Unbidden guests at many a funeral feast.

With flashing steel he keeps the carrion troop
A long while at arm's length;
But they press on more fierce, as 'gins to droop
Their valiant quarry's strength.
See! a bold raven perches on his heart!
Oh! War! how grand and glorious thou art!

THE WORK OF NATURE IN THE MONTHS.

BY BRO. REV. W. TEBBS.

IX. MARCH.

“ When will the stream be aweary of flowing
Under my eye?
When will the wind be aweary of blowing
Over the sky?
When will the clouds be aweary of fleeting,
When will the heart be aweary of beating,
And Nature die?
Never, oh ! never, nothing will die ;

The stream flows,
The wind blows,
The cloud fleets,
The heart beats,
Nothing will die.

* * * * *

Nothing will die ;
All things will change
Thro' Eternity.
'Tis the world's winter ;
Autumn and summer
Are gone long long ago ;
Earth is dry to the centre,
But spring, a new comer,
A spring rich and strange,
Shall make the winds blow
Round and round,
Thro' and thro'
Here and there,
Till the air
And the ground
Shall be fill'd with life anew.

EVER the same solemnly joyful lesson—decay and change—but still a change through death to “life anew.”

And so through Nature's night we may sleep and brightly dream of Spring, sweet semblance ever recurring of our morn of life—sweet, and yet again how sad the thoughts its memories bring—

“ I dreamed I lay where flowers were springing
Gaily in the summer beam ;
List'ning to the wild birds singing,
By a falling crystal stream.
Straight the sky blew black and daring,
Thro' the woods the whirlwinds rave ;
Trees with aged arms were warring,
O'er the swelling, drumlic wave.

Such was my life's deceitful morning,
Such the pleasures I enjoy'd ;
But lang or noon, loud tempests storming,
A' my flowery bliss destroy'd.
Tho' fickle fortune has deceiv'd me,
She promis'd fair and perform'd but ill ;
Of monie a joy and hope bereav'd me,
I hear a heart shall support me still.”

Truly we ought not to give way to despondency, but rather bear cheerfully the trials of life, remembering how infinitely they are outnumbered by its blessings; for hear once more the voice of Spring—

“ Spring, Spring, eloquent Spring,
Thine is a voice all hearts must love;
Plenty and joy are the tidings you bring,
As an earnest below of the mercy above.
Oh! dull is the spirit and cold the breast,
That forgets not awhile it is earthly born;
While we look on the branch where fruit shall rest,
And the green blade promising golden corn.
Arouse, ye sluggards; awake and sing,
A chorus of welcome to beautiful spring.”

Why then should we “sorrow as those who have no hope?”—

“ Gentle Spring!—in sunshine clad,
Well dost thou thy power display!
For Winter maketh the light heart sad,
And thou—thou makest the sad heart gay.”

It would indeed be a strange heart that the growing brightness of the woods and meadows would fail to gladden—for although the old distich may be true that—

“ March winds and April showers
Bring forth May flowers.”

Yet in April the showers do not fall, nor even in March the rough winds blow, over flowerless wastes. Humble they may be, like those blossoms that we have found so constant through the dark cold months of Winter, yet are they very welcome, for, as with Wordsworth,—

“ To me the meanest flower that blows can give
Thoughts that do often lie too deep for tears.”

But these lowly friends of ours, the Groundsell and Chickweed, are by no means so noticeable as they were, as day by day the advancing Spring brings forth an ever-increasing store of floral treasure, for—

“ The bloom is in the bud, and the bud is on the bough,
And earth is grown an emerald and heaven a sapphire now;
The snowdrop and the daisy wild are laughing everywhere,
And the balmy breath of opening buds steal softly through the air.

* * * * *

What promise in the verdant plains—what hope is on the wing,
A blessing on thy balmy breath, thou merry month of Spring.”

Passing by the Coltsfoot, too, as having been fully dwelt upon last month, we find a plant of a kindred nature, although of a very different growth,—we mean the Butter-bur, which affects wet meadows and brooksides, whilst the Coltsfoot is more abundant in the drier uplands. Like this latter plant, the Butter-bur puts forth its flowers before the leaves; but so insignificant are they in comparison with the foliage, that few would imagine the meagre conical flesh-coloured spikes of bloom had any connexion with the huge leaves—sometimes even a yard across—that planted on stalks a couple of feet long are called, and played with, as “umbrellas” by children in the hot days of Summertime. So free indeed is the leaf-growth of this plant, that it is, perhaps, the nearest approach to the luxuriance of tropical vegetation that we have in England. We have called the flower meagre, but the bees do not think so, as it affords them a rich meal of honey in the short sharp days of their first venturing forth. Another plant of a similar character now in bloom is the Hairy Cardamine. One strange flower, strange on account of its colour—green, is now in blossoming, the Mercury.

A very pretty little plant, though an injurious one in pastures, owing to its trailing growth destroying the sweet grasses, is the Ground Ivy, whose leaves, when bruised,

emit a strong aromatic odour. Bishop Mant describes its pretty flowers, generally however of a lilac colour, which grow in threes between the stalk and leaf—

“ And there upon the sod below,
Ground Ivy's purple blossoms show,
Like helmet of Crusader Knight,
In anther's cross-like form of white.”

Few animals will eat this plant, which is said to be even injurious to horses. Villagers, however, prize it highly, using an infusion of it as a cure for coughs. Formerly the plant was known as Ale-hoof and Tun-hoof, being used in earlier days as a substitute for Hops. Even in recent times a quantity of the plant has been thrown into a vat of ale to clarify it, and the liquor thus treated has been deemed a remedy in certain skin diseases. In the Autumn small hairy tumours may be observed on the leaves of the Ground Ivy. These galls, which are caused of the puncture of an insect, are sometimes eaten by the peasantry in France ; but Reaumur remarks that “ it is doubtful if they will rank with good fruits ;” as they have a strong flavour of the plant on which they are formed, we think that we can conscientiously endorse his opinion.

Another wee blue flower may be found not far off, the Ivy-leaved Veronica. Its blossoms are so small and delicate, and its stems lie so close to the ground, that it is in no small danger of being passed over. Other names for it are the Small Henbit, and the Ivy-leaved Chickweed Speedwell ; from its early blossoming, country people call it Winter-weed. This plant has lost its reputation as a medicine.

We may now gather the blossoms of the Barren Strawberry, so called from the dry, hairy character of its fruit ; whilst in the West of England may be found the blue blooms of the two-leaved Squill. Now, too, in its full luxuriance is the sweet Primrose, with its relatives the Cowslip and Oxlip. Who, seeing them, can ever forget the song of Shakespeare's sweet Ann Page—

“ I know a bank whereon the Wild Thyme blows,
Where Ox-lips and the nodding Violet grows ?—”

which calls to mind, too, that sweetest of our English flowers, that treasure of the Spring *par excellence*, the Violet. By the wayside, and in the woodland alike, we find this much beloved flower, and many an English copse reminds us of our poet's description—

“ Where purple Violets lurk,
With all the lovely children of the shade.”

The praises of this flower, though, are not confined to poets any more than is its growth to England. Mahomet declared that it excelled all other flowers. The modern Arabians compare the eyelids to a Violet dropping dew ; whilst the odour of the half-hidden flower makes it a fit emblem of modesty. Lane, in his “ Arabian Nights,” says that Sherbert is made of its flowers by pounding them and boiling them with sugar. In Palestine it blows, with the Narcissus, in January ; and in Barbary, Japan, and China, it is in full bloom through the Winter. At Stratford-on-Avon this plant was formerly cultivated for its medicinal properties,—and Syrup of Violets is still used by nurses and employed, perhaps more profitably, by chemists as a test. A larger species, called the Dog Violet, is common ; its blossoms, being planted on longer stalks, are often so conspicuously placed as to render the whole bank on which they grow of a lilac tint. Perhaps the sweetest scented, as well as the most delicate of all its varieties, is the White. Ballad singers, as well as our more sober poets, have sung of the Violet ; thus in “ The Friar of Orders Grey :—

“ Weep no more, lady, weep no more,
Thy sorrow is in vain ;
For Violets plucked the sweetest showers
Will ne'er make grow again.”

Now sweet, now sad, are the pictures the Violet conjures up—

“ Even now, what affections the violet awakes ! ”

says Campbell ; whilst Sir Edward Bulwer Lytton, in his “ Corn Flowers,” asks :—

“ Who that has loved knows not the tender tale
Which flowers reveal, when lips are coy to tell ?
Whose youth has passed not, dreaming in the vale
Where the rathe Violets dwell ?

* * * * *
Brief-lived first flowers—first love ? the hours steal on
To prank the world in summer's pomp of hue,
But what can flaunt beneath a fiercer sun
Worth what we lose in you ?

Oft by a flower, a leaf, in some loved book
We mark the lines that charm us most ;—retrace
Thy life—recall its loveliest passage ;—look,
Dead Violets keep the place ! ”

To Eliza Cook's warm heart they told another story :—

“ 'Twas on a day in early spring,
Before the butterfly took wing ;

* * * * *

A tiny boy with pallid face,
Stood in the city's thickest place ;
His limbs were lank as limbs could be,
His tattered garments sad to see ;
A basket on his arm he bore,
Which gave to sight a little store
Of Violets in bunches spread,
Fresh gathered from their native bed.
Their perfume scarcely lived at all,
Their purple heads were very small,
Their leaves were pinched and shrivelled in,
Their stalks were turning dry and thin.
'Twas very, very cold spring weather,
And Boy and Flowers seemed starved together.”

Need we say that she goes on to read us the same lesson that Bulwer does from a companion flower ?—

“ Avarice, remember when the Cowslip's gold
Lured and yet lost its glitter in thy grasp.
Do thy hoards glad thee more than those of old ?
Those wither'd in thy clasp.

From *these* thy clasp falls palsied.—It was then
That thou wert rich—thy coffers are a lie ;
Alas ! poor fool, Joy is the wealth of men,
And Care their penury.”

At least, we shall find it so in the great day of the Master's reckoning with His stewards, when we shall wistfully strain after these words of condemnation of His :—
“ Inasmuch as ye did unto one of the least of these, ye did it unto Me ! ”

This raising up of the lowly and apparently insignificant bids us look lower, as we perhaps consider it, in Nature's kingdom, in order that we may take note of the Great Artificer's hand being over all His works, small as well as great. Doing this, we find that whilst the beautiful and sweet-scented plants are putting forth their flowers, even the humble grasses are coming into bloom. On earth-topped walls, thin-soiled rocks, and even on thatch, the little white-flowered Whitlow-grass is everywhere abundant. The broad-leaved Wood-rush, with its hair-covered leaves, in copses ; and the Hare-tail Cotton-grass, which in summer time adorns the wild moorland with its balls of woolly down, are also now in blossom. As we have said, these may escape the eye of the

cursory observer, but an examination of their beauties will well repay the student of Nature, for—

—“ Not a flower
But shows some touch in freckle, streak, or stain,
Of His unrivalled pencil.
There is not one but
Seems, as it issues from the shapeless mould,
An emanation of the indwelling life,
A visible token of the upholding loves,
That are the soul of this wide universe.”

Passing on we come through such shrub-like plants as the Wood Spurge, with its greenish-yellow blossoms scarcely distinguishable at a distance from its foliage, and the larger Red Shrubby Spurge, to the Trees, of which several are blooming this month.— Amongst such are the Poplars; the Lombardy, with its towering spire-like form which bends before the gale with a plume-like motion of its whole form, instead of merely waving its branches to the blast. Of this Leigh Hunt says :—

—“ The Poplar's shoot,
Which, like a feather, waves from head to foot.”

The White Poplar which Cowper thus beautifully describes :—

“ The Poplar, that with silver lines his leaf.”

The Black Poplar, and the Aspen with its ever-moving foliage, from which has come the proverbial description of “ quivering like an Aspen leaf.” Spenser uses this peculiar quality of the tree descriptively :—

—“ His hand did quake,
And tremble like a leaf of Aspen green.”

Very seldom, indeed, are the Aspens still, indeed, we suppose, never except in that breathless silence that precedes a shower. Thomson thus graphically describes this rare stillness :—

“ Gradual sinks the breeze
Into a perfect calm ; that not a breath
Is heard to quiver through the closing woods,
Or rustling turn the many twinkling leaves
Of Aspen tall.”

The Poplar flower closely resembles the “ catkin ” of the Hazel, and is to the Botanist an exceedingly interesting and beautiful specimen of Nature's handiwork. On the footstalk of the Black Poplar leaf are frequently found small round protuberances, which are the home as well as the handiwork of insects of the Aphis tribe. The wood of all the kinds is valuable for various kinds of turnery,—for building purposes, owing to its extremely slow combustibility,—and particularly for packing cases, owing to its toughness being such that nails may be driven in close to the edge without splitting it. All the Poplar tribe are invaluable to the layers-out of pleasure grounds, on account of their quick growth. Such is the rapidity with which they come to maturity that we may mention, as an instance, that lately there was to be seen at Great Tew, in Oxfordshire, a Lombardy Poplar, which the planter lived to see attain the height of one hundred and twenty-five feet in the space of fifty years.

During this month, too, the Alder bears a somewhat similar “ catkin ” to the Poplar and Hazel, whilst the tiny tufts of purple flowerets are to be found on the Elm, from which are developed those flat, oblong, fruits that come whirling down upon us during the breezes later on in the year. Alderwood is useful for a variety of purposes, charcoal for gunpowder making, soles for clogs, and as a substitute for Ebony when dyed black ; but its greatest use is its applicability for piles, as, whilst under water, it is well-nigh imperishable. It is on Alder piles that the beautiful arch of the famous Rialto of Venice is said to be supported.

The timber of the Elm is extremely valuable for cart-building, for the curbs of wells, and indeed for any underground purpose. Elm is employed, too, in ship-building, for keels and the planking below water-line.

Another tree, or rather group of trees, flowering at this time, is the Willow. To the ordinary observer, who can remember at least half-a-dozen varieties, the statement of botanists that there are some seventy kinds indigenous to Great Britain, would no doubt be startling, yet such is the fact. We must not stay to do more than briefly notice the Common Osier, so much employed, even in the time of the ancient Britons by themselves for the framework of their coracles, and by the Druids for their sacrificial images, and now by ourselves for every species of useful and ornamental basket-work; the Golden Willow; the "Palm Willow; and that most beautiful species of all, the "Weeping" Willow:—

"The dying one will turn from the sun,
The dazzling flowers, and luscious fruit;
To set his mark in thy sombre bark,
And find a couch at thy moss-clad root.
He is fading away like the twilight ray,
His cheek is pale, and his glance is dim;
But thy drooping arms, with their pensive charms,
Can yield a joy till the last for him;
And the latest words on his lips shall be—
'Oh! lay me under the Willow tree!'"

One plant, and that an unique one, now in flower, we must by no means omit to mention:—

"Under the Mistletoe, peace and goodwill
Mingle the spirits that long have been twain;
Leaves of the Olive branch twine with it still,
While breathings of Hope fill the loud carol strain.
* * * * *
Hail it with joy in our yule-lighted mirth,
But let it not fade with the festival sound;
Hang up Love's Mistletoe over the earth,
And let us kiss under it all the year round."

To pass on to the insect kingdom we notice no Butterflies, unless a chance Brimstone or Tortoiseshell that has been wintering, may come for a little while from its hiding-place. Moths are more plentiful, numbering amongst them the Pale Brindled Beauty, the Oak Beauty, and the Drabs or Quakers. The Humble Bee is now on the wing; Dor Beetles may also be heard as well as seen, whilst in the pools the Whirligig Beetles are in a state of great activity. In these same pools may be seen those large masses of Frog-spawn, which will soon become Tadpoles. The Ringed Snake comes forth freely about the middle of the month in search of its Frog-food.

Amongst the Birds we notice the Wryneck, the Greenfinch, and the Chaffinch; whilst many of our favourites, such as the Missel Thrush, Blackbird, Thrush, Woodlark, and Crow begin to build. The Wheatear and the House and Sand Martins arrive, whilst the Redwings and Fieldfares depart. As for the Snipes, some go, some stay; the nest of the latter is a beautiful object with its four eggs disposed cross-wise, small ends in the middle. Dear lover of the Birds was Robert Burns:—

"Sing on, sweet Thrush, upon the leafless bough;
Sing on, sweet bird, I listen to thy strain."

and again—

"O stay, sweet warbling Woodlark, stay,
Nor quit for me the trembling spray,
A hapless lover courts thy lay,
Thy soothing fond complaining.
* * * * *

"Thou tells o' never ending care;
O' speechless grief, and dark despair;
For pity's sake, sweet bird, nae mair!
Or my poor heart is broken?"

The same poet draws a lesson, with which we may well close our thoughts on early Spring, from the little Field Mouse, which now begins to come forth again :—

—“Mousie, thou art no thy lane,
In proving foresight may be vain;
The best laid schemes o' mice an' men
Gang aft a'glee,
An' lea'e us nought but grief an' pain,
For promis'd joy.”

A MABEL VAUGHAN.*

BY BRO. EMRA HOLMES,

Author of "Tales, Poems, and Masonic Papers;" "Mildred, an Autumn Romance;" "My Lord the King;" "The Path of Life, an Allegory;" "Another Fenian Outrage;" "Notes on the United Orders of the Temple and Hospital," &c., &c.

CHAPTER IV.—VALE.

Mabel's visit was now concluded, and she was going home to the North with Fitzgerald as an escort as far as Doncaster, where he had some business. Marcus came with Miss Griss to see them off.

As it happened, they were all early at the Great Northern Terminus—whether by accident or design I cannot tell—so they strolled up and down the great platform chatting pleasantly together.

“I say, Mark!” Mr. Fitzgerald observed, as an old woman passed them, laden with bundles, in an awful flurry lest she should lose the train, although it wanted a quarter of an hour or twenty minutes before it started, “does it strike you who that old party is like?”

“I think I have seen you before;
I think I have seen you before;
Your face seems to be so familiar to me,
I think I have seen you before.”

Mark chanted in an undertone as he walked along by Mabel's side. “And so I have, but where the dickens it was I can't remember. Oh, now I have it; I believe it's old Mother Stoddart—or somebody very like her.”

“And pray who is she?” Mabel inquired.

“Oh, our old nurse of No. 3 Ward at Hertford. She was a nice old party,” Mark continued. “At Hertford each ward consists of three stories;—the ground floor is the boys' day-room—just off which is the nurse's parlour; the second floor is the large dormitory, in which half the boys sleep, adjacent to which is the nurse's bedroom, and above is the attic where the rest of the boys sleep—with the servant's room adjoining.

“Old Mother Stoddart was a sensible woman, and not wishing to be disturbed at night, she turned all the turbulent boys into the attic overhead, whilst the quiet ones reposed in the dormitory.

* As objections have been made to the “facts” of this story, Bro. Emra Holmes wishes us to say that they are substantially true as regards a state of things twenty years ago. We think, however, that memory sometimes plays tricks with us all, and we much regret if any pain has been caused to the authorities of the school by a representation of a state of things long passed away, whether that representation be more or less coloured by the infirmity of memory or sensationalism of the hour.

"What larks we used to have to be sure; leap-frog over the beds, bolstering matches, and all sorts of fun,—and sometimes a free fight. Of course, Fitz and I were soon banished there. Old Mother Stoddart used to creep up the stairs like an old cat, with a little black cane in her hand, and if she found anybody out of bed, she used to let into them, rather; didn't she, Fitz?"

"Yes," the latter answered, "and what do you think that fellow Mark used to do? He was a pious rogue and no mistake. If the old woman came up rather suddenly and caught him out of bed—which he mostly was for the first hour or two after we were sent to roost—he used to drop on his knees and say his prayers, or pretend to,—and sometimes I have noticed him unusually devout for at least ten minutes or a quarter of an hour, during which the old nurse would remain up, eyeing him suspiciously; but Mark knew what he was about and remained in an attitude of devotion until her patience was exhausted, and she would go down stairs with a grunt of dissatisfaction, for she daren't hit him then, and she dearly loved to leather the boys."

"It is to be regretted that youths should be such dissemblers," Miss Griss observed; "but I suppose conscience makes cowards of us all."

Mabel smiled at her cousin's story and remarked:

"Your stories about that other old nurse amused us very much last night."

"Oh yes, but she was in London you know, a regular Mrs. Malaprop and Mrs. Partington rolled into one. Awfully fond of using long words she was. One day she caught too little boys fighting in the cloisters;—she daren't have tackled big fellows—so she takes them off by the 'scruff of their necks,' as she would say, down to the steward."

"Sir," she said, "as I was a passing through the quadrangle, I saw these two combatantes a combatanting; and if it hadn't have been for my contrafratitizing I don't know what would have been the insequences."

Mabel laughed at the oddness of the old woman's speech; and Miss Griss said:

"It is sad that the boys should fight so much. What was done with them?"

"Oh! well generally when a fight was got up, each boy had his second, and they proceeded with the few who were in the secret, to some secluded spot, the extreme end of the Hall cloisters or near the Buttery. I had an awful fight once, within one of the back tower entrances to the Hall, just out of the Infirmary yard. It was with my best friend, too, a Scotchman; and I remember I thought he didn't fight fair, for he held his head down and pummelled me to my heart's content, and finally blacked both of my eyes to that extent that I was laid up at the Infirmary for days. Somebody came between us, I suppose, because we were such dear friends,—and we were never the same again."

"To prevent interruption from the beadle or others, scouts were posted outside always to give the alarm; so we were very rarely caught, and fights were of daily occurrence. Sometimes, however, a beadle would suddenly pounce in upon us, collar the delinquents and take them off to the steward, whose office is under the Writing School, and close to the beautiful swimming bath they have lately added for the boys' use."

"Well, then, they were caned, and had to stand all day, when they were out of school, side by side against the wall, instead of playing with the other boys. It was a good plan, and they generally became fast friends afterwards."

"Did you like Hertford as well as London?" Mabel asked Mark with interest.

"Yes, I think I did on the whole, the out of school life at all events. The steward was kind and considerate, though sometimes, of course, he had to be severe. The nurses were most of them nice motherly women (ours was an exception). We had a nice field to play in in summer, as well as the School playground, and they were very kind to the little boys in the Infirmary if they were really ill. But the school life was a species of terrorism I shall never forget."

"Under Mr. B. (mentioning the name to Mabel of the under master in the Grammar School), it was worse than being in prison. His cruelty knew no bounds"

He was a great coarse brute of a fellow, who was never so happy as when he was flogging the boys.

"Mr K., the Reverend Mr. K. (for obvious reasons I suppress the name), the head grammar master at that time was just as bad if not worse.

"Many a time I know Fitz, who was a delicate lad, then, and very sensitive, was in such a state of abject terror, because he knew he would be flogged with a birch rod if he didn't know his lesson, that the mere dread of the punishment drove it all out of his head, and of course he was thrashed, and called a beast and a pig, and all that sort of thing. He was only 8 or 9. I was harder grained, I suppose, and didn't care so much, so I got on better—though I know, now, I haven't half his abilities and talent; nor am equal to him in any way I feel," he added humbly.

Mabel smiled very kindly at Mark as he thus praised her favourite cousin.

Whilst they were altogether on the platform before the train started, Mabel was quiet, and just a little tearful at parting, very affectionate in her demonstrations to her aunt, and very kind and pensive to Mark.

"Good-bye, old fellow," Fitz said, wringing his friend's hand, "I shall be back in a few days. Take care of the old lady," he whispered, "she looks wonderfully abstracted to-day, and if you don't look after her she'll be catechising the cabman on his knowledge of 'Pearson on the Creed,' or giving you a trifle of 'Butler's Analogy,' and then end by walking in the way of some carriage and getting run over."

"My dear," Miss Griss said, "will you ask your uncle if he can get me a 'Locke'; one can be procured at Wolverston, I daresay."

'What kind of lock, Aunt, is it you want? Will a Bramah do?'

"You jest, child; I do not allude to any of the idolatrous people, Hindoo or otherwise; but it is a book I wanted, which I do not know precisely where to get here, 'Locke on the Understanding,'"

"Oh, that's it, I really beg your pardon, dear Aunt, but I didn't know."

"Good-bye! good-bye!"

The bell rings, the passengers hurry into their carriages, the engine whistles, and then snorts its way out of the Euston Square Station; and Mark stands looking wistfully at the carriage which contains all he loves in the world. Does she care for me? he asks himself.

Those last letters of hers were strangely capricious and yet kind.

Surely she returned the warm pressure he gave her hand at parting.

Surely she smiled graciously when he asked permission to write to her.

But then, again, had she not been equally kind to Fitz, and had she not shown sometimes a preference for his society? Did she not ask him to escort her that day to Wolverston, and had he not made it convenient to take her as far as Doncaster?

Yes; but then he was her cousin, and that was almost the same as being her brother. Surely she couldn't care for him more than——than she did for anyone else? Cousins do sometimes marry, though, and Fitz had certainly of late shown her more attention than formerly.

All these doubts and suggestions passed through our young hero's brain as they travelled back to the Parsonage; and he ceremoniously handed out the old lady, and then got in and drove back again to Town.

I am afraid Mark Seaton did not go down to the Office during the next few days in the pleasantest of tempers.

(To be Continued.)

ALEXANDER PUSCHKIN.

THE name of this Russian Poet is well known in England, though his poetry is so far practically but a dim tradition or a hazy outcome to us. We have had from time to time translations of portions of his writings, but not, as far as we are aware,

any regular attempt to master the difficulties of the entire Russian original. Bodenstedt's German translation is familiar to some of us, and, if we are not in error, Sir John Bowring gave us some translations from Pusckin. Our knowledge of the Russian Poet comes mainly through Bodenstedt, and some chance translations picked up here and there.

The first remark we will make is this, that we doubt Pusckin ever being very popular amongst Englishmen, and the reason is threefold. First there is the uncertainty whether we reach to the true meaning of Pusckin through the medium of a translation. Bodenstedt's translation is here and there both obscure and doubtful, (according to us,) in the highest degree, but that is not surprising, considering the intense difficulty of the Russian language.

But besides this, there is an occasional, if not intentional, mysteriousness in Pusckin, which is very hard indeed to fathom, much less to explain. He seems to delight in leaving us to guess what it is he wants really to say, rather than to express it himself, and even when you think you have mastered Pusckin's idea, you find that there is something yet beyond, which has, so to say, eluded your grasp. You still are in darkness. Your's is still the Sibylline oracle without its explanation. This is probably after all only an artificial "tour de force" on the part of the poet, but it is one of the main elements which constitutes the great difficulty of perfectly understanding Pusckin's pregnant words.

Another drawback in Pusckin is his morbidity. His is apparently what the Germans call "First Lieutenant's melancholy" in all he writes. He seems to have lived unhappily—we know he died unhappily—and the gloom of his social existence, his outward associations and his inward emotions, seem to throw that tone of unhealthy cynicism over his otherwise fine ideas and poetic beauties.

We find in him, indeed, the aspirations of the Epicurean, nay, and the fortitude of the Stoic, but we look in vain even for one ray of that nobler trust in God, His present Providence, His certain Future, which gleams from amid the often stormy words, and over the erratic pen of Heine. But we always feel sorry for Pusckin, as we cannot shut our eyes to the fact, or resist the conviction, that, despite his wayward fancies and his gloomy fears, his despondent imaginings and his morbid feelings, there runs through all he writes the golden scintillation of true poesy.

We give some translations from Pusckin, partly from Bodenstedt and other sources, some of which we have made ourselves, and contributed specially to the MASONIC MAGAZINE, in order to afford, however imperfectly, an idea of what Pusckin is, and of the truth of our humble if critical remarks respecting him; others we have taken from different sources, and re-translated and re-arranged, we think it fair to observe.

THE ANGEL.

An angel stood, a glorious vision
At Eden's door, the head bowed low;
Meanwhile the wild and crafty Demon
Arose from Hell's abyss below.

The Spirit then of doubt, denial,
Looked on that sinless One sublime,
And grieved Repentance for the appearance
Of wicked thoughts,—for the first time.

"I've not in vain regarded thee,
I don't, (O purest heavenly guest,)
Profess all that's earthly to despise,
All that's heavenly to detest."

WHAT HAST THOU TO DO WITH MY POOR NAME?

What hast thou to do with my poor name,
Which dies just like the murmur of the sea
Breaking on that far shore,—or like in forest wild
A sound by quiet night is heard by me?

It leaves on memory's very solemn page
Its trace behind, so silent and so dead,
Like an inscription on a tombstone writ,
Which none can understand, by none is read.

What remains of it? All forgotten see,
Gone is it in our new and busy life;
It gives no pleasant recollections now,
Nor soothes with tenderness our angry strife.

Yet even now, when grief thy heart invade,
Speak sadly to it still with gentle tone,
Oh say, I know there's one who thinks of me,
There is one heart in which I live—my own!

TO ———.

I mind me still of that strange meeting,
When thou didst pass before my sight,
Like a soft vision by me fleeting,
A spirit pure, and blest, and bright.

By misery hopelessly surrounded,
To me, (amid life's tumult vain,)
Thy gentle voice still softly sounded,
Thy kindly features smiled again.

Years fled. The tempest's blast had harmed me
The former fancies were effaced,
And I forgot the voice that charmed me,
That heavenly smile no longer traced.

In loneliness and desolation
My days dragged on in still despair,
Nor duty, nor inspiration,
Nor tears, nor life, nor love were there.

But woke my soul when at our meeting
Again thou wert before my sight,
Like a soft vision by me stealing,
A spirit pure, and blest, and bright.

And my heart beat with exultation,
And Hope arose again as fair,
And Duty and Inspiration,
And Tears, and Life, and Love were there.

I LOVED THEE.

I loved thee—and perhaps that Fire
 Has not yet expired in my breast ;
 Than thy good name, naught is dearer to me or higher,
 And never will I seek to discompose thy rest !

I loved thee—though dumbly, hopelessly, and sadly,
 In every trial which Love for man can tell :
 I loved thee—oh ! so truly and so gladly !—
 God grant that another may love thee just as well !

TO —.

The Hills of Georgia rest in nightly slumber—
 The Aragua is foaming before me here—
 All is to me so sad and dark—without number
 Are my griefs—thy dear picture still to me is near.

Thou only one—my sweetest sorrow
 Nothing can lessen, nothing can drive away ;
 My heart it beats and glows again to-morrow,
 Because it is impossible not to love to-day.

AN ELEGY.

All slowly fading in her distant home
 She lay a sufferer under that blue sky,
 At last she faded from our earthly sight,
 Though to me now her shade is ever nigh.

A Distance us had sever'd long and wide :
 In vain I call up every tender feeling ;
 Indifferently they told me of her death,
 I heard them coldly that sad news revealing.

Yet it is she, whom I so loved of yore
 In all the warm effusion of my heart,
 In all that tenderness which never left me,
 'Midst all the painful wild o'ermastering smart.

But pain and love, where flit they both to-day ?
 As that still trusting shadow draweth nigh,
 That hour itself still ever sweet I find it,
 Without one tear, or e'en one heartfelt sigh.

A HEART.

Years of my longings have bereft me,
 I've outlived fancies one by one,
 And but some sufferings have been left me,
 Fruits of a heart that's sad and lone.

Beneath the storms of fate hath perished
The wreath whose blossoms I counted dear,
Careworn, without a friend I cherished,
I wait until the end appear.

So stricken by the cold that found it
Still lingering on the naked tree,
(While wintry storms are heard around it,)
The late leaf trembles hopelessly.

These sad verses are said to be some of the last written by Puschkin, and just previous to his melancholy and premature death in 1837.

THE ORIGIN AND REFERENCES OF THE HERMESIAN SPURIOUS FREEMASONRY.

BY REV. GEO. OLIVER, D.D.

(Continued from page 424.)

ASTRONOMY, including the solar worship, was practised on the plains of Shinar, embodied in a secret institution which, for distinction's sake, we call the Spurious Freemasonry; and the circle, the crescent, the triangle, and the square, were used as the authorized symbols of the siderel deities. Hence Babylon is styled "the mother of harlots, and abominations of the earth."* The institution was systematized, and a regular priesthood established prior to the dispersion; for Josephus asserts from Hesticeus,† that the priests of Jupiter, surviving the general destruction, having preserved the holy vessels and ornaments, repaired with them to Babylon.

In the cosmogonies of Paganism there is one striking point of similarity: they each allude to the worship of the Sun as the first apostacy. Sanchoniatho's account is, that in a season of great drought the inhabitants of the earth began to worship the Sun, considering him the Lord of Heaven. Hesiod describes the original sin of man as consisting of stealing fire from that luminary, to animate his female image. Zoroaster says that Ahriman, the author of all sin, leapt from the Sun. These allegories are all explained by Moses, who states that the sin of the woman was the setting up of an idol, calling it Bathshish, the daughter of the Sun.‡

The great pyramidal tower was erected by Nimrod, assisted by his Cuthite followers, on astronomical principles, and dedicated to the Sun, "quia," to use the language of Cicero,§ "Solus ex omnibus sideribus tautus est;" the lower apartments being for the funeral portion of the initiations, or the aphanisus, and the upper for astronomical observations, and the perfect regeneration of the Epopt in the *euresis* by a revelation of the *autopsia*, and a communication of the ineffable secrets of the Greater Mysteries. Hence this lofty apartment was technically called heaven, as the summit of a mountain which it was intended to represent was supposed to be the consecrated residence of the deity.

* Rev. xvii. 5.

† Ant. Jud. l. i. c. 4.

‡ Lamb's Hier., p. 136.

§ De nat. deor. l. ii.

“As the Sun is the fountain of light, this luminary was considered by the Sabaists as the symbol of the deity, who is the fountain of intelligence. They imagined inferior spirits to be divided into certain classes, and these were represented by the stars according to their magnitudes. A pre-established harmony was supposed to exist between the spiritual world and the material, and the latter was held to be a type and a development obvious to the sense of the former. The undeviating order observed in the march of the celestial bodies, their regular revolutions in their orbits, and the concert which exists, or seems to exist, amongst them, were believed to typify the relations established by Infinite Wisdom among the spiritual hierarchs of heaven. While, indeed, those countless and brilliant orbs pursue, in apparent accord, their various paths, while they attract, repel, and avoid each other, and while they course the ethereal plains without ever jarring, they may, perhaps, be not inaptly said to represent, figuratively, the intellectual powers, spirits, or angels, that in uniform agreement obey, in their different spheres, the mandates of the Supreme Ruler of the Universe.”*

Having thus engrafted Sabianism on the patriarchal religion, the devotion of wandering tribes soon became generalized, and peculiar attributes were assigned to the several planetary objects of their worship. Thus Plutarch informs us that a genial influence was ascribed to two of them, the same number being accounted malignant, and the rest neutral.

In like manner the mystics of the last century on the Continent of Europe contended that there is in man seven principles, which are emanations from the seven planets: 1. The divine golden man, from Saturn; 2. The inward holy body, which, like pure silver, is produced from fire and light; 3. The elemental man, from Jupiter; 4. The Mercurial-growing paradisaical man; 5. The Martial, soldier-like man; 6. The Venerine, according to the outward desire; 7. The Solar, a seer of the wonders of God. For they said, “the stars figure God in his almightiness, infinity, and eternity, according to the first principle; in his majestic triumphant kingdom of Light, according to the second; and in his gracious kingdom of Love, according to the third principle. The hosts and legions of the seven angelical kings were figured by the rest of the enumerable constellations and lesser glories.”

But to return. Nimrod, of whom each tribe cherished a pious remembrance, by a practical application of the principles already enumerated, was elevated to the skies as a Mediator, and placed in the constellation Orion, and the symbol was a point within a circle.† And it is a question whether this splendid asterisus, in his famed attack on the Bull, and attended by the brilliant star Sirius, was not intended to prefigure the Deliverer which tradition had instructed mankind to expect.

The tradition of his death ran thus: His mother, Semiramis, being besieged in Babylon, “Nimrod, the true oriental Memnon of classical fable, came with his warlike Cuthites from Nineveh, to aid his mother and the beleaguered Babylonians; but, as an apt requital, he was, by his ambitious parent, blown up from what is now called the Birr Nemroud, either by gunpowder or by some similar composition handed down from the antediluvian science of the Cainites. Her unfortunate offspring having been thus compendiously disposed of, she gave out that he had been miraculously translated to heaven in a storm of thunder and lightning. But she preserved his head, which by art magical she made into an oracular Seraph. And this Seraph was the real prototype both of the Gorgon’s head and of the Cephalic Seraphim of the Rabbins, and of the speaking Brazen Head manufactured by Roger Bacon, and of all other heads of the like quality and description.”‡ This account does not tally with what Pliny records in his seventh Book, where he says that “on the bursting of a mountain in Crete by an earthquake, there was found a body standing upright, with the head in the proper place, which was supposed to be that of Orion.”

(To be continued.)

* Drummond, *Origines*, vol. iii., p. 425.

† *Cedr. Hist. Comp.* fo. 14, *Diod. Bibl.* iv. 284, *Chdr. Alex.* p. 84.

‡ *Fab. Eight Diss.* vol. ii. p. 382.

FREEMASONS' WIVES.

BY MRS. G. M. TWEDDELL,

Authoress of "Rhymes and Sketches to Illustrate the Cleveland Dialect," &c.

My husband is a Mason true,
And a Mason's Wife am I ;
But to learn Masonic Secrets
It is no use to try :
He might tell *me*—just only *me*—
For women never tell
A secret, but to a friend
That they can trust full well.
My friend, Jemima, call'd to-day,
To have a little talk ;
She said that Masons' meetings
Oft had their end in smoke :
Her husband's clothes were full of it,—
She really could not bear
To have them in her room last night,
So threw them on the stair.
Brown said tobacco did no harm,
And it was but a plea
To get his clothes outside the room,
What he had spent to see.
She told him, warmly, that he knew
She would not be so mean ;
And he as coolly made reply,
"Jemima thinks I'm green."
"No Brown," said she, "you are not green,
Or I should very soon
Get at the Secrets that you keep,
So closely, Mister Brown !
The parson said, when we were wed,
We two were one for life ;
But Masonry has made us two—
You've Secrets from your Wife !"
Now was her time to speak, she thought,
But Brown began to snore ;
He always will go off to sleep,
Then she can say no more.
It ever is his way, she says,
When Masonry's her theme ;
And all she meant to say that night,
Just ended in a dream.
We both agreed it was no use
To tease our husbands more ;
For they as Masons were as good
As they had been before ;
And she and I, from what they say,
Have always understood,
That there is nought in Masonry
But what is pure and good.

Rose Cottage, Stokesley.

ON THE TESTING AND STRENGTH OF RAILWAY MATERIALS, &c.

BY BRO. R. M. BANCROFT,

Mem. Civil and Mechanical Engineers' Society.

MODES OF TESTING RAILS.

THE usual modes of testing rails are: *First*, dead central weight or static test; *Second*, dynamic or test by impact; *Third*, a combination of first and second—first by the central and afterwards by the falling load; *Fourth*, chemical or acid test; and *Fifth*, by rolling weight. To these might be added one of torsion or twisting. It should be borne in mind that tests ought to be such as can at all times be easily applied, and not to cause unnecessary inconvenience to the contractor in carrying out his contract. Climate has great influence upon rails, for in tropical countries a comparatively hard rail might be employed, and a greater amount of duty might probably be obtained than from a softer rail. In practise, any sleeper may be badly packed or decayed so as to offer little resistance, therefore it follows that a rail to be safe should not break or take a permanent set under the weight of an engine; if every other sleeper were taken away this would always give a bearing at which to test rails for different lines or gauges. A good steel rail, as used on the English Railways, will deflect about 3-16 of an inch in a span of 6ft. when a locomotive engine is passing over it. Taking the tests seriatim, it seems to me that the test by a falling weight is more to detect brittleness than a test of deflection; and being a destructive one, only 1 or 2 per cent. of the quantities are tested, and the rest of the turn is supposed to be like them. For the test of brittleness, it has been suggested that a good method would be to drop rails from a given height on to a hard platform, which would certainly detect any cold short ones. To detect brittle rails is certainly most important, yet it is difficult to imagine how the loads passing over rails come with the suddenness of a blow from a test monkey. Some engineers say the endeavour to ascertain whether a rail has sufficient toughness by submitting it to the action of a falling weight is most deceptive; the test goes as far beyond the mark, as that by a dead weight falls short of it, because it requires an amount of toughness which is quite unnecessary and inconsistent with a proper degree of hardness. Dead central weight tests determine the strength of a rail as a girder, and are adopted by some engineers, who consider nothing so good as the simple application gradually increasing bending stress to the centre, the deflection and set being noted after each successive increment of stress. These tests being usually made upon bearings, varying from 2ft. 8in. up to 5ft. and 6ft., it is a question whether the amount of deflection shown by so short a length of rail without being damaged by a permanent set, is not too small to be accurately measured; and the difference of the deflection which would be exhibited by a short piece of very good iron and a similar piece of very bad iron would, at any-rate, be very small to afford any certain gauge of its qualities. It would seem that a double test of dead weight and afterwards by impact is a severe and, one would think, a satisfactory one; and, unlike a chemical test, is simple, quick, and inexpensive; it severely tests the qualities of material and workmanship. Some engineers adopt this method, and, though these tests are not designed to represent the wear the rail would have to undergo, yet they are, combined, the safest and simplest that we know of at present to apply. The acid test is made by cutting off a slice from the end of a rail, and, after polishing, immersing it in dilute acid, which eats away all impurities, leaving a lot of cavities and furrows, thus showing up the fibre or grain of the metal very plainly. With most metals, chemical analysis is in itself a complete and sufficient test of quality, but not in steel. The toughness of steel may be altered by sudden coolness; and, although the effect of this operation, and generally the effects of

tempering, are greater when the quantity of carbon is considerable, yet it acts more or less in the mild qualities of steel, so that we cannot rely entirely on the aid of the chemist, but must fall back on mechanical tests, which prove not only the material, but the workmanship. The rolling weight test is made by heavy rollers fixed in a framework and radial bars connected to a centre boss, after the form of a turn-table; motion is imparted to a centre vertical shaft by means of shafting and wheels underneath, which is driven by steam power. It can be made with or without springs; without springs the test is more severe, but by using springs the rollers may be lightened and greater weight thrown into the frame.

The rails to be tested are formed into a circle or polygon, supported on sleepers, packed with ballast in the usual manner. If the rails are bent into a circular form, Mr. Price, the patentee, says, in his experience the texture of the iron is of no moment—provided the rails are bent at a dull red heat—but they may be arranged as a polygon, which plan possesses the collateral advantage that the rollers wear more evenly over their entire surface. These rails are tested by a dead weight produced by hydraulic pressure. A piece of the rail is placed upon 5ft. bearings, and a slightly curved iron surface, $3\frac{3}{4}$ in. in width, is made to press upon the centre of the rail. The test is, that, under these conditions, a pressure of 40,000lb. shall not deflect the centre of the rail more than one inch; also, that 60,000lb. shall deflect it 9in. without breaking it.

TEST FOR IRON RAILS,

75lb. per yard.

1st Test.—Each of these rails placed on two supports, 3ft. 6in. apart, must carry for five minutes in the centre, between points of support, a hanging weight of 12 tons, deflection 0.15in. as a maximum, and when the weight has been taken off, the permanent set must not be more than 0.04in., or 1 millimetre, and on condition that, at the second placing of the same weight, the deflection does not increase more than 1-150in. or 1.5 millimetre.

2nd Test.—Each rail in the same position must carry also for five minutes, without breaking, a weight of 30 tons, then, having nicked the surface of the head, it shall be tested to breaking by the blows of a tup 648lb., weight falling 18ft.; and the fracture must show a combination of iron conforming to aforesaid condition.

3rd Test.—Each of the two halves of broken rail placed on the supports, 3ft. 6in. apart, shall be tested by the blows from a tup 648lb., falling 7ft., on the centre between the point of support; under this test, the rail may bend, but must not show any sign of destruction. The Vignoles section of rail would seem to have some advantage over the double head, as the bottom flange is placed at a greater distance from the neutral axis, besides resisting side-strains and torsions; and, as a matter of practice, none but ductile tough iron can be rolled into a wide flange. But this section of rail cannot be relaid with such facility as the double head shape.

TESTING OF FISH PLATES FOR RAILS.

1. Six fish plates to be taken at random from one day's rolling, and bent to an angle of 60 deg. without any sign of fracture.
2. Holes to be punched at a distance from the edge equal to the diameter of hole, without bulging the metal at sides.

WEAKENING RAILS BY DRILLING AND PUNCHING.

An experiment is mentioned by Hackney in his "Manufacture of Steel":—

1. A piece of rail with no holes in it stood a blow of 1 ton falling 20ft.
2. Piece of same rail with a punched hole through the web, broke under first blow at a 3ft. fall.
3. A piece with a drilled hole same size, while it stood the first blow at 2ft. fall. broke with the 2nd at 4ft.

STEEL.

The Admiralty tests at present for steel are as follows:—

Tensile and Extension Tests. 1. Strips cut lengthwise or crosswise of the plate to have an ultimate tensile strength of not less than 26 and not exceeding 30 tons per square inch of section, with an elongation of 20 per cent in a length of 8 inches.

"*Tempering Tests.*—2. Strips cut lengthwise of the plate $1\frac{1}{2}$ in. wide, heated uniformly to a low cherry red, and cooled in water of 82 deg. Fah., must stand bending in a press to a curve of which the inner radius is one and a half times the thickness of the plates tested."

3. "The strips are to be cut in a planing machine, and are to have the sharp edges taken off."

4. "The ductility of every plate is to be ascertained by the application of one or both of these tests to the shearing or by bending them cold by the hammer on the contractor's premises, and at his expense."

5. "All plates to be free from lamination and injurious surface defects."

6. "One plate to be taken for tensile, extension and tempering tests from every invoice, provided the number of plates does not exceed fifty. If above that number, one for every addition of fifty, or portion of fifty. Plates may be received or rejected without a trial of every thickness on the invoice."

7. "The pieces of plate cut out for testings are to be of parallel width from end to end, or for at least 8 in. of length. When the plates are ordered by thickness, their weight is to be estimated at the rate of 40 lb. per square foot for plates of 1 in. thick, and in proportion for plates of all other thicknesses; the weight so produced is not to be exceeded, but a latitude of 5 per cent below this will be allowed for rolling in plates of $\frac{1}{2}$ in. in thickness and upwards, and 10 per cent on thinner plates. These weights may be ascertained by weighing as much as 10 tons at a time."

"*Tests for Angle, Bulb or Bar Steel.*—The whole of the steel to stand a tensile strain of 26 tons to the square inch, and not to exceed 30 tons to the square inch. Also to stand the extension and tempering tests described for plates. All the cross ends are to be cut off. One bar is to be taken for testing from every invoice, providing the number of bars does not exceed fifty; if above that number, one for every additional fifty, or portion of fifty."

STEEL TESTS.

As the result of the report on steel for shipbuilding of the chief surveyor of Lloyd's, Mr. B. Martell, and his assistants, Messrs. Cornish and John, give the following, which is portion of a notice issued by Lloyds on the 1st Nov., 1877.

The steel to be used in ships building for classification in the register book will be required to stand the following tests; to be applied under the personal inspection of the the surveyors to the society, to samples selected by them whenever deemed by them to be desirable.

Tests.—Strips cut lengthwise or crosswise of the plate, and also angle and bulb steel, to have an ultimate tensile strength of not less than 26, and not exceeding 30 tons per square inch of section, with an elongation of 20 per cent before fracture. Strips cut from the angle or bulb steel to be heated to a low cherry red, and cooled in water of 82 deg. Fah., must stand bending double round a curve of which the diameter is not more than three times the thickness of the plates tested.

TEST FOR BESSEMER STEEL RAILS.

Rails will be taken from each day's rolling and placed upon bearings 3 feet apart, when a ball weighing 10 cwt. is to be raised 10 feet and dropped three times, when the deflection must not exceed 3 inches.

TESTING RAILWAY STEEL AXLES.

As is generally known, the mode of procedure usually adopted by continental railway engineers is to take one out of each hundred axles and test it to destruction. It

is usually stipulated in the specification that the whole lot may be rejected if this one, or at most a second, do not stand the trial, as several English makers have found to their cost. Some of these tests are very severe : such is that required by the Austrian Northern Railway, according to which all five-inch steel axles, when set on supports nearly 5ft. apart, must undergo blows from a weight of about 7 cwt., falling from a height of nearly 19 ft., increased by two feet from each successive blow. In this way it must withstand a bend of 9 in., the operation being continued until the axle has withstood more than six thousand foot pounds. A lighter test is that of the Southern Railway Company, who require for their 4½ in. steel axles that, with a distance between the supports of nearly 5ft., they shall withstand a bend of more than 9¾ in., under a 7cwt. monkey, falling from a height of nearly 15ft. They must then allow themselves to be bent back straight in a same manner without breaking. In fact, almost every other company's engineer has a different test, differing as to the distance between the supports, the weight of the monkey, and the height of its fall. The texture of commercial iron varies greatly according to its mode of manufacture. Pure iron, which has been formed and rolled equally in all directions, exhibits a texture of very small brilliant grains, but when drawn out into bars its texture is fibrous, the fibres always running in the direction of the bar which may be readily proved by breaking it. The fibrous texture is more tenacious than the granular, and bears a greater tensile strain without breaking. Iron of a fibrous nature sometimes changes into the granular when subject to much vibration, as rods in suspension bridges, &c. Its tensile power then rapidly diminishes.

It is well known to manufacturers and to many others, that steel of the strength of 33 to 36 tons per inch can be made, and is made in large quantities at moderate prices, possessing all the toughness and malleability required in engineering structures. We have this on the authority of Mr. W. H. Barlow, and yet engineers, as a rule in England, do not seem to take kindly to it—for bridge building at any rate—in this respect we are behind our American friends. The malleability of steel will be shown by the following test :—

A piece of rail weighing 80lb. per yard, and 12ft. in length, was held by one end, and twisted at the other until it made 6¾ complete revolutions before it broke. The fracture occurred at one end, leaving about 1ft. of the rail in the twisted form which had been given to it. In this twisted state the rail was laid on two bearings, 3ft. 6in. apart, and subjected to the blows of 1 ton weight falling 30ft., and it bore one of these blows without breaking. Mr. Barlow gives the limiting span of a girder in iron at 5 tons per inch strain as 600ft., and in steel at 8 tons per inch strain as 900ft.

We can obtain an idea of the effect of introducing steel by this, and Mr. Barlow says, assuming a load in addition to the weight of the girder of one ton to the foot, the relative weights under these circumstances would be :—

Span.	Weight of Steel girder in tons.	Weight of Iron girder in tons
200	57	100
300	150	300
400	320	800

With these facts before us, surely we ought to turn our attention to this metal, and get the Board of Trade to state a limiting strain as they do in iron.

MALLEABLE CAST IRON.

In 1804, Mr. Samuel Lucas, of Sheffield, patented a mode of producing malleable cast iron, his specification clearly showing the theory of conversion, and the firm Edward Lucas and Son, of Dronfield Foundry, are still engaged in its manufacture, The colour, both of external, and that of fractured specimens approach that of steel. The "malleabilized" metal takes readily a very fine polish, which is not easily destroyed, upon exposure to moisture. Malleable cast iron is easily stamped, drawn, and hammered without heating. It can also be worked well under the hammer at a low heat, and at

this stage hammering appears to improve the grain. Very small sections may occasionally be welded, but as a rule, malleable cast iron is not weldable. It is readily brazed with copper. It melts only under a very high heat, and it stands fire so well that it is employed for foundry ladles, crucibles for gold and silver, and for the tubes of some description of boilers. Malleable cast iron may be case hardened more readily and to a greater depth than wrought iron. The castings are not blistered, scaled, or warped in the process, and the case hardening may be effected either with bones, hoofs, or leather in the ordinary manner, or with prussiate of potash. The articles made of malleable cast iron are all kinds of machinery fittings, steam boiler tubes, gas joints, horse shoes, bridle bits, stirrups, gun fittings, bed fittings, railway signal pullies, buffer and axle boxes, tram car wheels, cross heads, portable engine chimney caps and bases, bows for manholes of boilers, link reversing and expansion gear, cranks, pistons, and garden tools in fact, malleable cast iron is used in place of wrought iron to a very great extent, especially since labour became so very dear, as in many cases it comes in cheaper than forged work when the article is of a difficult form or shape—but it cannot compete successfully with forgings when the articles required are heavy and tolerably easy to forge. Castings can be annealed up to any weight and size—the time taken for annealing light casting is about seven days, and for heavy, fourteen days. The metal chiefly used in the production of malleable castings are the finest brands of charcoal and Hematite pigs specially prepared.

TESTS.

Its advantage over cast iron is that the same strength may be obtained with half the weight, and that it is easier to finish and take a finer polish. Unlike wrought iron it is not liable to defective welds, and with ease complicated patterns and shapes can be produced at a reasonable cost. It is more easily worked than steel, is freer from defects through blowing or honeycombing. A superior kind of small, soft casting is made by the Nottingham Malleable Iron Company, which from being subject to a partial annealing, is very easily got up a bright polish—the difference in cost being fully recouped by saving in labour and tools.

The process although very simple is but very little understood; it is a common notion that there is much mystery in the using the "chemicals" required. Making iron castings malleable was, indeed, among the lost arts. The late Zerah Colborn says old records show that it was lost and re-discovered more than once. The French philosopher, Réamur, who wrote upon it 140 years ago, observed that it was then practised as a great mystery in Paris.

At last, chemistry came to the aid of the metal worker, and he learned that what he had so long called sulphur in the iron—and sulphur was once a name applied to many substances—was really carbon, and the same as charcoal or diamond, and chemistry showed him carbon would always forsake iron for oxygen, and the cast iron treated with oxygen was malleable, as it always is, whether in the old refinery fire, in puddling, in pig boiling with forge scales and refinery cinders, in the Bessemer process, and in still other modes of treatment.

THE TRUE HISTORY OF FREEMASONRY IN ENGLAND.

A LODGE LECTURE.

(Continued from page 405.)

AT the commencement of the 14th century we may consider the Fraternity to have been consolidated in this kingdom, as it had been for some years previously in Germany and France. The Abbé Grandidier, a Frenchman, who, in the latter part of

the last century sought to attack the Order, furnishes us, unconsciously and unwittingly, with the most valuable information and the strongest proof of our antiquity when rightly understood. He says:—"I hold in my hands authentic documents and real records, dating more than three centuries back, which enables us to see that this much-boasted Society of Freemasons is but a senile imitation of an ancient and useful fraternity of actual Masons—whose head-quarters were formerly at Strasbourg." He tells us that in 1437 the Masons spread all over Germany—formed themselves into the fraternity of Freemasons, to which they gave the German name of "Hütten," or Lodges, and that the Lodge at Strasbourg was called "Haupt Hütte," or Grand Lodge. He tells us that the Society was composed of Masters, Companions, and Apprentices; that they invented for use among themselves rallying words and tokens of recognition, and other distinguishing signs; that they called the sign of words, "das wortzeichen"—the salutation, and that the apprentices and companions, (gruss,) and masters were admitted into the Order by secret ceremonies.

In 1370, "le loge lathomorum," which was the actual working-shed of the Masons, was pitched in the York Minster Yard. We have an inventory of its contents: among others, two tracing boards and a heavy maul. No Mason was allowed to work who had not been previously admitted into "le loge," and had the approval of the Master, the Guardiani (or Wardens), and the Seniores (or Elders), and the consent of the brethren. They were then, as now, Masters, Fellows, and Apprentices. Some of the very words which we still use, like "hele"—and "heigh noone"—or high twelve, may be found alluded to in the Fabric Rolls, as connected with the usages of Masons. No one can read these Rolls, as published by the Surtees Society, without feeling that whatever Masonry was, it was an independent and self-governed body, with usages and secrets peculiarly its own.

We gain from these Fabric Rolls a strong confirmation of our Roman ancestry in the fact that the Norman-French, "le loge," is from a corrupt Latin word, "Logeta," or "Logerranum," a lodge; and that "Maçon," a mason, and "Maçonner," in Norman-French—to do mason work—are from the Latin word "mansio," a house.

We have seen in the *Freemasons' Magazine* and in other works some wonderful derivations of the word Mason; but these are what the Archbishop of Dublin would call plain and direct derivations. I have seen in the possession of a very able archæologist a coin, found in York Minster Yard, and which dates from not later than the 14th century. It has on it all our Masonic emblems, and one or two words which indisputably allude to our present Masonic secrets. It is believed to have been a token of the York Lodge of Operative Freemasons. Sir Francis Palgrave tells us that there exist in the Exchequer Rolls documents as far back as the reign of Edward, mentioning the Freemasons, Masters, Wardens, Fellows, and Apprentices.

There are three Acts of Parliament passed respectively in the reigns of Edward III., Henry VI., and Henry VII., which serve most strongly to show the existence of such a party in the country, governed by its own laws, and distinguished by secret signs, in a peculiar band or union. Our learned Brother Rev. Mr. Findel alludes, in a note to his History of Freemasonry, to the recognition of the Order in 1326, by the Council of Avignon, where their meeting is forbidden in very striking words.

It is said that the Companions of the Brotherhood came yearly together, bound themselves by an oath to mutual love and assistance, and had certain secret and characteristic signs of recognition; that they chose a President, Majorum (or Master), to whom they pledged obedience.

We have also to consider, in connection with this portion of the evidence, the very startling facts of Masons' marks—that is, the same marks existing on the Pyramids of Egypt, in Roman work, and all ecclesiastical buildings in this country. I have seen a statement that these marks, in the opinion of some able writers, merely pertain to individuals; but many others, besides our learned Bro. Shaw, who was complete master of this interesting subject, believe that they represent system and organization, well known to Freemasons themselves, and point in a very remarkable way to the universal extension of that great and mystical brotherhood, which overleapt the difference of nations, as well as the distance of ages.

We have another crumb of evidence in the fact that all our Masonic evidences point to their operative origin and their operative fraternity. The Masonic poem in the British Museum, written about 1390, tells us that persons of high degree were admitted into the Grand Assembly. He tells us of three degrees, and states that he had seen early histories of the Order.

But all through—though admitting speculative members, and using language we still should use, as regards secret mysteries—he descants entirely on operative guild or brotherhood. So, too, in the earliest prose Constitution in the British Museum, written in the early part of the 15th century, and edited a few years back by Bro. Matthew Cooke, the writer, probably an ecclesiastic, gives us a Traditional History of Freemasonry, talks of speculative and operative, and presents us with the old rules of the operative body.

There are several copies of these Constitutions in the British Museum and among our Lodges and in private hands; but there is one among the Harleian MSS. which is very interesting, because clearly pointing out the time when the operative assemblies were admitting purely speculative members, and when in a little space the speculative element was to absorb the operative.

Among what are called the new regulations of the Grand Assembly of 1663, is this, "that no person of what degree so ever he made or accepted a Mason unless in a regular Lodge, whereof one to be a Master or Warden in that limit or district where such lodge is kept, and one to be a Craftsman in the trade of Freemasonry."

We have thus, very shortly and summarily, very condensedly brought down the History of Masonry to the middle of the 17th century, believing that up to that time it was mainly an operative body, though admitting, always, speculative members, especially from among the monks and ecclesiastics and knightly orders in earlier times.

The evidence of *Scottish Masonry*, as Bro. Laurie shows, I may just add, is very confirmatory of the operative view. Bro. Findel, in his account of the German Masons, to which I have already alluded, gives an account of the reception of the early German Masons, which might almost read for the report of our initiation to-day. If I shall not tire you, I will give you an extract from his work, translated from the German, which is certainly very remarkable, as it alludes to the customs of the operative Masons in the 14th century. He tells us that the operative bodies were under the direction of the learned monastic orders, and that their ritual of reception is still extant. He gives an account of ceremonies, which, if really of early date, are very curious, and interesting to the Masonic Archaeologist, and especially mentions Prayer. He adds that the candidate was led three times round the Lodge, back to the door, where he placed his feet in the form of a right angle, and with three wide steps stepped up to the Master, the open Gospel, together with squares and compasses, laying on the table before him, upon which, according to ancient custom, he placed his right hand and swore to be true to the duties of a Brother, and to undertake to keep secret what he then learnt or should hereafter learn. Then was the binding taken off his eyes, the great light shown to him, a new apron given to him, the Pass-word entrusted to him, the hailing and hand-tokens received, and his place in the meeting pointed out to him.

Thus far, then, a possible and probable History of Freemasonry.

Yet it is not wise when one is laying down a proposition of this kind, which militates very much with preconceived opinions, to keep out of sight, or even to undervalue the difficulties which may fairly be raised against this explanation of our history. And as the end of all such lectures as this is, or should be, truth, regardless of any favourite notions, we will just consider before we separate a few of those objections which have been made to this statement.

The first is, that were it so, how could the operative Masons have handed down to us our present ceremonies and ritual? Of course in the lapse of time considerable alterations have necessarily been made in the mere verbiage, perhaps the form of our ceremonies; but yet there can be no doubt whatever that the ceremonies contain marks of very great antiquity; their phraseology is often that of a time long since passed away, and we retain words and expressions in our ritual long since altogether obsolete.

I think no one can sincerely and carefully consider our Masonic ritual and traditions without feeling persuaded that they represent old forms and usages jealously guarded and carefully retained. And when we remember that the Master Masons, in mediæval times, were all men of education, and held a very high place in society, and that many ecclesiastics were members of these building brotherhoods, there really is very little difficulty in the supposition that they handed on, if mechanically, as intelligently as we do ourselves, the old forms of initiation and reception, which, coming from a long-forgotten past, were bound up with their own existence as a body, claiming special secrets and conferring great and valuable privileges.

Another objection has been raised by one or two writers in the *Freemasons' Magazine* to this theory, that we have no proof that our secrets and those of the operative guilds were the same. But Bro. Findel seems to say, and his statement has so far met with no denial or attempted refutation, that the secrets and ritual of the German Operative Lodges are identically the same with those of the present German Speculative Masons, and their secrets and ritual are almost identical with our own. Indeed, there is a MS. on the Secrets of Masonry in the British Museum, which, as I read it, is in itself a complete answer to such an objection, and a copy of the old Constitution in the handwriting of Randle Holmes further sets this matter at rest. At the same time it is not possible, in my opinion, to dogmatize too much on this point, as we are still much in the dark as to the operative usages, whether Germanic or Anglican. It may be sufficient to say, that it is for our antagonists to prove "a negative."

(To be Continued.)

LOST AND SAVED ; OR NELLIE POWERS THE MISSIONARY'S DAUGHTER.

BY C. H. LOOMIS.

CHAP. V.

MISS POWERS was naturally of a timid nature, and the strange scenes she was now passing through tended to fill her mind with apprehension.

Having spent all her young life among the young ladies of the seminary, and rarely enjoying the society of the opposite sex, she was naturally startled, when alone on the great ocean, and in company with Nature's roughest men, she should perceive two of these rough men staring at her, and she thought wickedly staring at her, from under the main boom. She had been on the sea long enough to have noticed that the officers and men were not intimate one with the other, and therefore wondered that the third mate should be so intimate with the most hardened-looking man aboard the vessel. She did not show any trepidation noticeable to her fellow-passenger, or to Mr. Evans, although her heart seemed about to leap out of her mouth when she opened it to say :—

"I cannot see how men dare engage in such dangerous undertakings," her face changing to fainting whiteness, despite her endeavour to appear calm.

"When danger is far away," replied the mate, "we are brave enough, and when danger does come, we can't get away, and are obliged to grin and bear it. The whale fishery is not half so likely to frighten a seaman as a cyclone in the Indian Ocean."

"Do we go near the Indian Ocean?" timidly inquired Miss Nellie.

Mr. Evans smiled as he answered "No," and as it was near noon he went below to get his quadrant to take the sun. The captain, mate, or navigating officer aboard a

vessel, at noon, takes the altitude of the sun for latitude, and morning and evening, when the sun is nearest east and west, he measures it for local time, obtaining his longitude from his well rated chronometers.

Miss Nellie wished to look at the sun through the quadrant, and by the assistance of the mate, she was enabled to bring the sun down to the water's edge. When the sun, as seen through the quadrant, touches the water's edge, it is crossing the meridian, and it is then high twelve.

The mate told Miss Nellie to cry out "eight bells," when the sun touched the water's edge, which she now did in a maidenly manner, her voice going only, as intended, to the mate, who, in his loud stentorious voice, passed it along to the fore-castle. Taking the sun aboard a vessel is a very important matter, for in this way they direct their course, and keeping clear of the islands, finally reach their destination. When there is no sun for several days, the officers figure out what they call a dead reckoning, which is done by guesswork.

Miss Powers was a naturally gifted musician. She had purchased a piano in the States, which she had taken with her, and which now added to the attractions of the handsome little cabin.

The cabin of the "Sparkling Sea" was done off in black walnut and mahogany, under the supervision of the captain, who thought it was not necessary, because he went to sea, that he should be debarred of all luxuries, so, during his first trip in her the cabin had undergone several changes. Her plain pine-stained doors were transformed into doors with black walnut facings, and embellished by gilded ornamental designs. The china knobs were taken from the doors, and bright, shining brass ones put in their place, and these same brass knobs shone day after day like the inside of a good wife's kettle; the constant rubbing they got seemed to have little effect towards rubbing them out of existence. The state rooms were carpeted with English Brussels, as was also the cabin floor. At the aft end of the table was a large mirror, which covered about half of that end, and the forward end was decorated with a large Swiss clock on a black walnut bracket. On one side of the clock hung a barometer, and on the other a thermometer. In the centre of the cabin stood a black walnut table, and the sofa, chairs, and other furniture were of the most costly and handsome patterns. This furniture was fastened to the floor, and the expensive little oil paintings, of which there were several hanging about, were fastened to the wall. Everything in the cabin was secured so as to be immovable in a heavy sea, with the exception of a beautiful, swinging chandelier, which hung over the centre table, and underneath a stained glass skylight. As the reader will surmise, the passengers of the "Sparkling Sea" were fortunate in sailing with a captain whose ideas of life called for such costly comforts. They might have supposed they were in the cosy parlour of some mansion were it not for the rolling of the vessel, and the sound of the water dashing against its side. After dinner, at the earnest solicitation of Mr. Prescott, Nellie took her position at the piano, which was placed under the mirror. Her first hearty meal having put her in the humour, her fingers chased each other up and down the keyboard in the most artistic manner, and harmonies which, for their soft soothing effect, only found their counterpart in nature, followed after her small, jewelled hands.

"Miss Powers, can you not furnish us with a vocal composition?" inquired the captain, delighted at the change his little palace was undergoing.

"I will, if Mr. Prescott will assist me, sing you the duet, 'The Larboard Watch,' which will, perhaps, be interesting to you."

"I am somewhat acquainted with 'The Larboard Watch,' Miss Powers," said Mr. Prescott, "and although it is some time since I have sang it, our critics are not very discriminating, and I will do my best."

Miss Nellie's music folio was procured, and the music placed before her; then in a clear soprano voice, accompanied by Harry Prescott's fine baritone, she sang these soul-stirring words of Williams':—

“ At dreary midnight’s cheerless hour,
Deserted e’en by Cynthia’s beam,
When tempests beat, and torrents pour,
And twinkling stars no longer gleam ;
The wearied sailor, spent with toil,
Clings firmly to the weather shrouds,
And still the lengthened hours to guile,
Sings as he views the gath’ring clouds,
Larboard watch ahoy !
Larboard watch ahoy !
But who can speak the joy he feels,
As o’er the foam the vessel reels,
And his tired eyelids slumbring fall ;
He rouses at the welcome call
Of Larboard watch ahoy !
Larboard watch ahoy !”

The men of the watch gathered about the companion way, attracted by the voices of the singers, which seemed to transport them to fairy lands, so unaccustomed were they to hear such strains of sweet music so far out at sea.

Tom declared that, as the notes rang through the vessel, dolphins came up alongside, and were so charmed that even Slow Simon caught one with a slip noose. But Blackman, the cook, thought that Tom had not begun to do justice to the occasion at all, so he said :

“ My, yas, I guess dey did, an’ didn’t I see de sea gulls come an’ cock dere heads to one side, an’ put dere ears down to listen ? Wall, I guess I did. It’s not ofen dey gits treated to such delicacies fur notin’.”

Dick Flynn here volunteered the opinion that the fish must have had cotton in their ears if they were obliged to listen so hard and so long as to give Slow Simon time to catch one of them. This joke at Slow Simon’s expense raised quite a laugh among the men. In fact, they had a good many laughs at Simon’s expense, and one of them was on that very night.

“ Simon,” called the first mate, as he put his head out of the companion way, in the middle of the second watch, that evening, “ go below and see if the mules are fast ; it seems to me that I hear some of them running loose.”

Simon, thus enjoined, hastened below. Sometimes mules and horses are killed in various ways by getting loose at sea. They are generally packed together in such a way that they lean against each other, and brace each other up. When one mule becomes loose and falls, or attempts to lay down from exhaustion, the others crowd into his place and trample him to death, or if he succeeds in regaining his feet it is not before he is crowded out of his place, and the only room he can find is behind the heels of his more fortunate neighbours, who, knowing that is not the place for him, give him an unfriendly touch with their heels as he passes behind them ; in this way, unless rescued, he is soon kicked to death.

“ Where’s that Simon ?” asked the third mate, when it came Simon’s turn at the wheel.

“ Gone for’ard to look at them ere mules,” replied Crony ; “ sent by the first mate.”

Radshaw started forward and found Simon coiled upon a lot of hay, fast asleep, near a large white mule, which was making a delicious feast of Simon’s hat. The third mate had sailed before with men who went to sleep in their watch, and knew the remedy. It was but the work of a moment for him to get the tar pot, and spill the contents over Simon’s face, and douse him with a pail of salt water. For many weeks Simon carried the black streaks of punishment on his sleepy features, much to the amusement of his shipmates.

The weather continued clear, and the wind fair for several days, during which the many little incidents of an ocean voyage were enacted aboard the “ Sparkling Sea.” Miss Nellie Powers, in company with Harry Prescott, sang many duets, and each had

separately sung all the songs they knew the best. Miss Nellie had played many fine compositions for the amusement of the captain and mates. The time passed joyously and quickly. Harry found himself thinking that Nellie Powers was the most beautiful and obliging creature he had ever known, and Nellie Powers had learned to admire Mr. Prescott for his fine gentlemanly attention and polite manners.

One evening, about twenty days after leaving port, the captain told the little group gathered around him on the quarter deck, enjoying the gorgeous sunset, that on the following morning the first on deck would see the island. Harry Prescott and Nellie Powers were both on deck as soon as the sun had shown itself above the horizon, to catch the first glimpse of land. They stood for some moments gazing over the vast expanse of water without seeing any land, and a shade of disappointment settled on their faces, for they thought the captain had made a mistake of a few days in his calculations. The captain noticed their bewilderment, and coming aft, laughingly said :

"Do you see the island?"

"No," they answered, looking up as though expecting the sequel to a joke that had been played upon them.

"I supposed you had not by your actions; islands are like a great many other things that you cannot find without you look where they are. There it is, off the quarter," replied the captain.

They both turned their eyes in the direction the captain had pointed, but declared they could see nothing but a cloud on the horizon.

"That cloud you see is the island of Barbadoes," replied the captain, "and before many hours you will see trees and vegetation growing on it."

The sun in splendour shone on a beautiful sea. The "Sparkling Sea," with all her sails and studding sails set, was gracefully moving through the water, and playfully tossing it about her bows. Every moment made bolder the outlines of the island. Barbadoes from the sea presents a flat, whitish appearance. As they neared the island the perfumes from its flowery groves were wafted to their delighted senses. After an hour's sail the pilot came aboard, and the "Sparkling Sea," after the usual taking in of the sails, let go her anchor in Bridgetown harbour.

NOTES ON LITERATURE, SCIENCE AND ART.

BY BRO. GEORGE MARKHAM TWEDDELL.

Author of "Shakspeare, his Times and Contemporaries," "The Bards and Authors of Cleveland and South Durham," "The People's History of Cleveland and its Vicinage," "The Visitor's Handbook to Redcar, Coatham, and Saltburn by the Sea," "The History of the Stockton and Darlington Railway," &c., &c.

I AM glad to see that there is a wide-spread feeling in favour of improving the present rather round-about way of remitting small sums of money by Post Office Order. The labour of the officials might be greatly lightened, and the convenience of the public as greatly increased, by making them payable anywhere, like Bank of England Notes. I have frequently had to wait for payment until the post office where the Orders were made payable at received advice of the same, which, through the negligence of clerks, had not been duly forwarded. I remember, some years ago, having to remain in Halifax until Monday, because advice had not been sent of an Order I received on Saturday morning. Poor people who have received Orders in country

places, and had to walk for miles to the Money Order Office, have frequently their journey in vain, through the negligence of the post office officials who granted the Order not having sent advice of the same to the post office where it is made payable. Surely civilization is sufficiently advanced to allow of making Orders payable at any Money Order Office; and the Government would get the use of a considerable sum without interest, as all Orders have to be paid for when got, and would then frequently circulate from one to another for months before any one would bother to get them cashed—the Government being a safe creditor. Something like what I have pointed out must be done soon, as the present system gets more and more behind the commercial requirements of the age every day; and, being no party question, this reform will not be likely to raise any formidable opposition.

Iron billiard tables are coming into use, as being less liable to be affected by atmospheric changes than those of slate. The frame-work, as well as the table, is of iron. The distressed iron-workers will be glad to see iron used for many more purposes, such as window-frames generally, and a thousand other things equally practicable.

Though we "Britishers," many of us, are afraid that we are degenerating in the breed of horses, (a pure bred Cleveland Bay, for instance, being now almost, if not entirely, impossible to be met with in all broad Yorkshire,) the people of the United States have gone ahead in that as in other matters. One of their literary magazines, *Wallace's Monthly*, states, that "six hundred thoroughbred stallions, and two hundred thoroughbred mares, have been imported, mostly from England, into the United States;" and that "the superior blood, added to the perfection of form and spirit, of endurance and speed, thence derived, has enriched the properties" of their general horse, their trotting horse, their carriage horse, their saddle horse, and their race horse, "to that superlative degree; that nowhere in the world can American driving horses be surpassed, or those employed for general work equalled." It is said the French Champs Élysées and our own Rotten Row combined cannot equal the Central Park, at New York, either for horses or vehicles; thirteen-hundred two-horse carriages, and from a thousand to fifteen hundred other conveyances, most of them of beautiful construction, entering that splendid park daily during the season. Saddling and harness-making, coach-building, and their auxiliary branches of industry, ought to flourish in the neighbourhood of New York.

The Eboracum Masonic Calendar for 1878, a copy of which has been posted to me, contains Lists of the Officers of Provincial Grand Lodge and Chapter for the North and East Ridings; Lodges, Chapters, and Preceptories, of the various degrees, with their times of meeting; the charges in the E.A., F.C., and M.M. degrees, with the Working Tools for each, and the famous E.A. Song. It is very neatly printed, and is for the Province what Bro. Kenning's *Cosmopolitan Calendar* is for the Craft and Chivalric Degrees throughout the world,—a very useful companion, full of information on Masonic matters.

I have received from the celebrated White Star Line of Steamers, so well known for their splendid and commodious vessels plying between Liverpool and New York, a copy of their *Official Guide*, which is worthy of the company that issued it, and that is saying much. I trust, in another Note, to cull from it a few facts for the profit and instruction of Craftsmen. The giving hotel charges for beds, meals, and attendance, is a happy idea; and the handsome *Guide* is as full of information as it is pleasing from its artistic beauty. It deserves an extensive sale.

General Sherman states, that "the valleys of the Upper Yellowstone afford lands capable of cultivation in wheat, corn, oats, barley, and all garden vegetables, with an unlimited range for cattle, horses, sheep, &c. I don't know a single enterprise in which the United States has more interest than in the extension of the Northern Pacific Railroad from its present terminus at Bismarck to the mouth of the Powder River, on the Yellowstone. After that is done we can safely leave to time the extension of the road to the head of navigation of the Columbia River." It is sad to think that hundreds of thousands of able-bodied men and women are pining for want of the bare necessities of life in various parts of the world, whilst immense tracts of fine forest and prairie lands

are only wanting their skill and labour to become fertile fields, orchards and gardens. Great as is the work which has already been accomplished for civilization by emigration, it is capable of much improvement, by more organised efforts on the part of the emigrants. Thus, for instance, if families known to each other, and between whom there had long existed a bond of friendship at home, having all necessary trades among them, could agree to locate themselves in one neighbourhood, who much less of the home-sickness, and how much more of real comfort, they would enjoy from the first!

In a former Note, after noticing the Rev. T. P. Garnier's interesting little volume on *The Parish Church*, I promised my readers his remarks on the building of King Solomon's Temple, which are as follows:—

"Now I am going to take you back to the building of the first Temple. It will teach us a lesson. It was built as no building has ever been built before or since. Thirty thousand Israelites toiled among the mountains of Lebanon. In addition to these, the remnant of the Canaanites that abode in the land were pressed into the service. Seventy thousand there were that were bearers of burdens; eighty thousand that were hewers in the mountains, 'beside the chief of Solomon's officers which were over the work, three thousand and three hundred which ruled over the people that wrought in the work. And the king commanded, and they brought great stones, costly stones, and hewed stones, to lay the foundation of the house.' (1 Kings v.) Through seven long years the hum of this vast multitude went up from the slopes of Lebanon. The stately cedars fell, and the tall fir-trees were sawn asunder; and the wood and the stones, duly shaped, were floated on rafts down the coast to Joppa, from whence they were brought up to Jerusalem. Now we come to the special feature of its building. 'The house, when it was in building, was built of stone, made ready before it was brought thither; so that there was neither hammer nor axe, nor any tool of iron, heard in the house while it was in building.' (1 Kings vi. 7.) As Bishop Heber has described it:—

'In awful state
The temple rear'd its everlasting gate.
No workman's steel, no ponderous axes rung!
Like some tall palm the noiseless fabric sprung.'

These things are all allegory. The turmoil, the labour, the dust on Mount Lebanon, are a type of this world's preparation for a House that is being built eternal in the Heavens. In due course, as each stone is hewn and squared and polished, it is taken away to Mount Zion, in the Heavenly Jerusalem, and there dropped silently into its place. *There* there is no more toil or preparation, for that house is built of stone, made ready before it is brought thither; so that there is neither hammer, nor axe, nor any tool of iron heard in the house while it is in building. Keep this idea in view, and it will explain much that is hard to understand here. *Take the history of a single stone.* It was, first of all, a block of the rough, unsightly granite on the mountain. It had to be hewn out. There was a rending and an upheaving, and at last the huge, unshapely mass came away. What followed? Why, it was probably rolled far away from the quarry, down that mountain side, to the sea coast below. Then, if there be found no flaw in it, the hewers of stone would begin to knock off its angles. Day by day the chisels would travel over its surface. Day by day it would be assuming a new shape. The stone squarers would fashion it according to a plan before them. They would measure it by a rule till they were satisfied. There would be a certain building far away in their eye, and a certain spot in that building, and for that space they would fit it. Then the polishers would take it in hand, and they would cleanse it with water. And at last, when it was fair and beautiful and ready, it would be quietly taken away, to fill its place in the Temple on Mount Zion. So it is with a single soul." And our author then proceeds (in prose that is almost poetry, and much more poetical than many verses of rhyme one sees daily) to complete the comparison, in true Church of England teaching, which belongs rather to the realms of theology than to "Literature, Science, and Art," though there is much of all three in the passages that follow my quotation.

As I have transcribed the foregoing, I have been forcibly reminded of Bro. Duganne's "great Masonic poem," as it is truly called, *King Solomon's Temple*, which Masons in this country as a whole seem incapable of appreciating, seeing that the sale of it has not yet cleared the expenses of making it known among them, although it is published at the low price of twopence! I for one have no objections, at proper seasons, to adjourn from labour to refreshment; but too many Lodges make refreshment the main thing, and look upon all Masonic labour as an irksome task, to be got rid of as much as possible. To read a Masonic book or periodical, even if they could get it for nothing, is far from the wish of their members; hence one meets with past masters and present masters of lodges who never in their lives read the Book of Constitution, though they have "presented" but not *given* it to candidates on initiation, and who do not know but that the Grand Master for England rules over Scotland, Ireland, and Canada, as well as their own country. Our Masonic press is slowly, but surely, penetrating this thick fog of ignorance; and the "incompetent brothers," who have degraded their meetings into mere respectable "free-and-easies," one hopes will soon become shamed into better conduct, or driven from the glorious Craft which they have defiled. To the truly wise, symbolism is the highest of all teaching; but to give it to the ignorant and depraved, is really to "throw pearls before swine." How beautifully does Bro. Duganne conclude his truly great American Masonic Poem:—

"There's a mountain of God in each human heart
For that glorious Temple's base;
And the lines of each loyal Mason's art
May its grand foundations trace;
And within it, the wings of cherubs
May the Holy of Holies embrace!
Through the beautiful aisles of the charmed past,
How its wonderful harmonies swell!
When their meanings arise, at the Templar's blast,
From the mould of each darksome cell;
And the soul of the true no longer
With the dust of the false shall dwell!

When the thoughts of our morning shall royally plan,
And the deeds of our day shall build;
And the arch of perfection eternally span,
With the measure our Master hath will'd;
And the depths of our Holy of Holies
With incense of prayer be fill'd!
When the pillars of strength in our porch shall abide,
With the lilies of beauty above;
And the veil of the Presence, encompassing wide,
Overshadow the ark of our love;
And the peace of the blessed Shekinah
Unfold, like the wings of a dove!

Oh! the cedars of Lebanon grow at our door,
And the quarry is sunk at our gate;
And the ships out of Ophir, with golden ore
For our summoning mandate wait;
And the word of a Master Mason,
May the house of our soul create!
While the day hath light, let the light be used,
For no man shall the night control!
'Or ever the silken chord be loosed,
Or broken the golden bowl,'
May we build King Solomon's Temple
In the true Masonic soul!"

Mr. Henry Ecroyd Smith, of Shotley Bridge, whose long study of Roman antiquities is well known, has now entered on a fresh field of labour, which I fear he will only find to be an unprofitable one in a pecuniary sense, that of genealogy. The work in hand is *Annals of Smith of Balby, Canley, and Doncaster*, with elaborate pedigrees of the connecting families, and biographical notices of their eminent members. North of England and other archæologists may look forward to a treat; as the "family connexions" comprise Akroyd of Akroyd, co. York; Aldam of Wickersley, Warmsworth, &c.; Backhouse of Darlington and Sunderland; Barton of Carlisle; Clough of Pas Clough, Glau-y-Wern, &c., co. Denbigh; Coates of Smelt House, co. Durham; Darby of Coalbrookdale, Salop, and Trebwyfrydd, co. Brecon; Dixon of Raby and Henknowle, co. Durham; Ecroyd of Briercliffe, Marsden, &c., Lancashire, and Muncy, Lycoming co., Pennsylvania, &c.; Ellis of Belgrave, The Newarke, &c., Leicester; Gulston of Wymondham, co. Leicester, Knuston Hall, Kent, Dirleton, Dermydd, &c., co. Caermarthen; Gulston or Gulson of Coventry; Hedley of Hedley Hill, co. Durham; Kilham or Killam of Balby, &c.; Mayson or Mason of Hull; Payne of Hagnaby, co. Lincoln, and Newhill, Yorkshire; Pease of Fishlake, and of Hutton Hall, Yorkshire, and of Darlington, co. Durham; Peckover of Wisbeach, Cambridgeshire; Richardson of Hull and co. Durham; Robson of Darlington and Sunderland; Shipley of Uttoxeter, of Cincinnati, U.S., &c.; Stacey of Ballfield, co. York; Stepney, Bart., of Prendergast, co. Pembroke, Dirleton, Darryd, and Danyrallt, Caermarthenshire; Tyson of Alnwick; Waterhouse of Sandholm, co. York, Liverpool, &c., and Whalley (Br. of Cromwell). The work is to be handsomely bound, illustrated, and privately printed, not published in the popular sense of that word.

Rose Cottage, Stokesley.

A STORY OF CHINESE LOVE.

(From the New York "Dispatch.")

The festive Ah Goo

And Too Hay, the fair—

They met, and the two

Concluded to pair.

They "spooned" in the way

That most lovers do,

And Ah Goo kissed Too Hay,

And Too Hay kissed Ah Goo.

Said the festive Ah Goo,

As his heart swelled with pride:—

"Me heap likee you—

You heap be my blide."

And she, looking down,

All so modest and pretty,

"Twixt a smile and a frown,

Gently murmured, "You bettee."

COPIES of the Christmas Number of the MASONIC MAGAZINE are still on Sale at the Office, 198, Fleet Street, E.C. Price 1s. Post Free, 1s. 1d.