

# VARIOUS

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**THE TRAVELER; OR, A PROSPECT OF SOCIETY**

BY OLIVER GOLDSMITH

Remote, unfriended, melancholy, slow —  
Or by the lazy Scheldt or wandering Po,  
Or onward where the rude Carinthian boor  
Against the houseless stranger shuts the door,  
Or where Campania's plain forsaken lies  
A weary waste expanding to the skies —  
Where'er I roam, whatever realms to see,  
My heart, untravel'd, fondly turns to thee;  
Still to my brother turns, with ceaseless pain,  
And drags at each remove a lengthening chain.  
Eternal blessings crown my earliest friend,  
And round his dwelling guardian saints attend:  
Bless'd be that spot, where cheerful guests retire  
To pause from toil, and trim their evening fire;  
Bless'd that abode, where want and pain repair,  
And every stranger finds a ready chair;  
Bless'd be those feasts, with simple plenty crown'd  
Where all the ruddy family around  
Laugh at the jests or pranks that never fail,  
Or sigh with pity at some mournful tale,  
Or press the bashful stranger to his food,  
And learn the luxury of doing good.  
But me, not destin'd such delights to share,  
My prime of life in wandering spent and care —  
Impell'd with steps unceasing to pursue  
Some fleeting good that mocks me with the view,  
That like the circle bounding earth and skies  
Allures from far, yet, as I follow, flies —  
My fortune leads to traverse realms alone,  
And find no spot of all the world my own.  
Even now, where Alpine solitudes ascend,  
I sit me down a pensive hour to spend;  
And placed on high, above the storm's career,  
Look downward where an hundred realms appear —  
Lakes, forests, cities, plains extending wide,  
The pomp of kings, the shepherd's humbler pride.

When thus Creation's charms around combine,  
Amid the store should thankless pride repine?  
Say, should the philosophic mind disdain  
That good which makes each humbler bosom vain?  
Let school-taught pride dissemble all it can,  
These little things are great to little man;  
And wiser he whose sympathetic mind  
Exults in all the good of all mankind.  
Ye glittering towns with wealth and splendor crown'd,  
Ye fields where summer spreads profusion round.  
Ye lakes whose vessels catch the busy gale,  
Ye bending swains that dress the flowery vale —  
For me your tributary stores combine;  
Creation's heir, the world, the world is mine!  
As some lone miser, visiting his store,  
Bends at his treasure, counts, recounts it o'er —  
Hoards after hoards his rising raptures fill,  
Yet still he sighs, for hoards are wanting still —  
Thus to my breast alternate passions rise,  
Pleas'd with each good that Heaven to man supplies,  
Yet oft a sigh prevails, and sorrows fall,  
To see the hoard of human bliss so small;  
And oft I wish, amid the scene, to find  
Some spot to real happiness consign'd,  
Where my worn soul, each wandering hope at rest,  
May gather bliss to see my fellows bless'd.  
But where to find that happiest spot below,  
Who can direct, when all pretend to know?  
The shuddering tenant of the frigid zone  
Boldly proclaims that happiest spot his own,  
Extols the treasures of his stormy seas,  
And his long nights of revelry and ease,  
The naked negro, panting at the line,  
Boasts of his golden sands and palmy wine,  
Basks in the glare, or stems the tepid wave,  
And thanks his gods for all the good they gave.  
Such is the patriot's boast, where'er we roam,  
His first, best country ever is at home;  
And yet, perhaps, if countries we compare,  
And estimate the blessings which they share,  
Though patriots flatter, still shall wisdom find  
An equal portion dealt to all mankind —  
As different good, by art or nature given  
To different nations, makes their blessings even.  
Nature, a mother kind alike to all,  
Still grants her bliss at labor's earnest call:  
With food as well the peasant is supplied  
On Idra's cliffs as Arno's shelvy side;  
And, though the rocky-crested summits frown,

These rocks, by custom, turn to beds of down,  
From art, more various are the blessings sent —  
Wealth, commerce, honor, liberty, content;  
Yet these each other's power so strong contest  
That either seems destructive of the rest:  
Where wealth and freedom reign contentment fails,  
And honor sinks where commerce long prevails.  
Hence every state, to one lov'd blessing prone,  
Conforms and models life to that alone;  
Each to the favorite happiness attends,  
And spurns the plan that aims at other ends —  
Till, carried to excess in each domain,  
This favorite good begets peculiar pain.  
But let us try these truths with closer eyes,  
And trace them through the prospect as it lies:  
Here, for a while my proper cares resigned,  
Here let me sit in sorrow for mankind;  
Like yon neglected shrub, at random cast,  
That shades the steep, and sighs at every blast.  
Far to the right, where Apennine ascends,  
Bright as the summer, Italy extends;  
Its uplands sloping deck the mountain's side,  
Woods over woods in gay theatric pride,  
While oft some temple's mouldering tops between  
With venerable grandeur mark the scene.  
Could Nature's bounty satisfy the breast,  
The sons of Italy were surely bless'd.  
Whatever fruits in different climes were found,  
That proudly rise, or humbly court the ground —  
Whatever blooms in torrid tracts appear,  
Whose bright succession decks the varied year —  
Whatever sweets salute the northern sky  
With vernal lives, that blossom but to die —  
These, here disporting, own the kindred soil,  
Nor ask luxuriance from the planter's toil;  
While sea-born gales their gelid wings expand  
To winnow fragrance round the smiling land.  
But small the bliss that sense alone bestows,  
And sensual bliss is all the nation knows;  
In florid beauty groves and fields appear —  
Man seems the only growth that dwindles here!  
Contrasted faults through all his manners reign:  
Though poor, luxurious; though submissive, vain;  
Though grave, yet trifling; zealous, yet untrue —  
And even in penance planning sins anew.  
All evils here contaminate the mind,  
That opulence departed leaves behind;  
For wealth was theirs – nor far remov'd the date  
When commerce proudly flourish'd through the state

At her command the palace learn'd to rise,  
Again the long fallen column sought the skies,  
The canvas glow'd beyond even nature warm,  
The pregnant quarry teem'd with human form;  
Till, more unsteady than the southern gale,  
Commerce on other shores display'd her sail,  
While naught remain'd of all that riches gave,  
But towns unmann'd and lords without a slave —  
And late the nation found, with fruitless skill,  
Its former strength was but plethoric ill.  
Yet, still the loss of wealth is here supplied  
By arts, the splendid wrecks of former pride:  
From these the feeble heart and long fallen mind  
An easy compensation seem to find.  
Here may be seen, in bloodless pomp array'd,  
The pasteboard triumph and the cavalcade;  
Processions form'd for piety and love —  
A mistress or a saint in every grove:  
By sports like these are all their cares beguil'd,  
The sports of children satisfy the child.  
Each nobler aim, repress'd by long control,  
Now sinks at last, or feebly mans the soul;  
While low delights, succeeding fast behind,  
In happier meanness occupy the mind.  
As in those domes, where Cæsars once bore sway  
Defac'd by time and tottering in decay,  
There in the ruin, heedless of the dead,  
The shelter-seeking peasant builds his shed;  
And, wondering man could want the larger pile,  
Exults, and owns his cottage with a smile.  
My soul, turn from them, turn we to survey  
Where rougher climes a nobler race display —  
Where the bleak Swiss their stormy mansions tread,  
And force a churlish soil for scanty bread.  
No product here the barren hills afford  
But man and steel, the soldier and his sword,  
No vernal blooms their torpid rocks array,  
But winter lingering chills the lap of May;  
No zephyr fondly sues the mountain's breast,  
But meteors glare, and stormy glooms invest.  
Yet still, even here, content can spread a charm,  
Redress the clime, and all its rage disarm.  
Though poor the peasant's hut, his feasts though small,  
He sees his little lot, the lot of all;  
Sees no contiguous palace rear its head,  
To shame the meanness of his humble shed —  
No costly lord the sumptuous banquet deal,  
To make him loathe his vegetable meal —  
But calm, and bred in ignorance and toil,

Each wish contracting, fits him to the soil,  
Cheerful at morn, he wakes from short repose,  
Breasts the keen air, and carols as he goes;  
With patient angle trolls the finny deep,  
Or drives his venturous plowshare to the steep,  
Or seeks the den where snow-tracks mark the way,  
And drags the struggling savage into day.  
At night returning, every labor sped,  
He sits him down the monarch of a shed;  
Smiles by his cheerful fire, and round surveys  
His children's looks, that brighten at the blaze —  
While his lov'd partner, boastful of her hoard,  
Displays her cleanly platter on the board:  
And haply too some pilgrim, thither led,  
With many a tale repays the nightly bed.  
Thus every good his native wilds impart  
Imprints the patriot passion on his heart;  
And even those ills, that round his mansion rise  
Enhance the bliss his scanty fund supplies:  
Dear is that shed to which his soul conforms,  
And dear that hill which lifts him to the storms  
And as a child, when scaring sounds molest,  
Clings close and closer to the mother's breast —  
So the loud torrent and the whirlwind's roar  
But bind him to his native mountains more.  
Such are the charms to barren states assign'd —  
Their wants but few, their wishes all confin'd;  
Yet let them only share the praises due,  
If few their wants, their pleasures are but few:  
For every want that stimulates the breast  
Becomes a source of pleasure when redress'd.  
Whence from such lands each pleasing science flies,  
That first excites desire, and then supplies.  
Unknown to them, when sensual pleasures cloy,  
To fill the languid pause with finer joy;  
Unknown those powers that raise the soul to flame,  
Catch every nerve and vibrate through the frame:  
Their level life is but a smouldering fire,  
Unquench'd by want, unfann'd by strong desire,  
Unfit for raptures, or, if raptures cheer  
On some high festival of once a year,  
In wild excess the vulgar breast takes fire,  
Till, buried in debauch, the bliss expire.  
But not their joys alone thus coarsely flow —  
Their morals, like their pleasures, are but low;  
For, as refinement stops, from sire to son  
Unalter'd, unimprov'd the manners run —  
And love's and friendship's finely pointed dart  
Fall blunted from each indurated heart.

Some sterner virtues o'er the mountain's breast  
May sit, like falcons cowering on the nest;  
But all the gentler morals, such as play  
Through life's more cultur'd walks, and charm the way —  
These, far dispers'd, on timorous pinions fly,  
To sport and flutter in a kinder sky.  
To kinder skies, where gentler manners reign,  
I turn; and France displays her bright domain.  
Gay, sprightly land of mirth and social ease,  
Pleas'd with thyself, whom all the world can please;  
How often have I led thy sportive choir,  
With tuneless pipe, beside the murmuring Loire,  
Where shading elms along the margin grew,  
And, freshen'd from the wave, the zephyr flew!  
And haply, though my harsh touch, faltering still,  
But mock'd all tune, and marr'd the dancer's skill —  
Yet would the village praise my wondrous power,  
And dance, forgetful of the noontide hour.  
Alike all ages: dames of ancient days  
Have led their children through the mirthful maze;  
And the gay grandsire, skill'd in gestic lore,  
Has frisk'd beneath the burden of three-score.  
So bless'd a life these thoughtless realms display;  
Thus idly busy rolls their world away.  
Theirs are those arts that mind to mind endear,  
For honor forms the social temper here:  
Honor, that praise which real merit gains,  
Or even imaginary worth obtains,  
Here passes current – paid from hand to hand,  
It shifts, in splendid traffic, round the land;  
From courts to camps, to cottages it strays,  
And all are taught an avarice of praise —  
They please, are pleas'd, they give to get esteem.  
Till, seeming bless'd, they grow to what they seem.  
But while this softer art their bliss supplies,  
It gives their follies also room to rise;  
For praise, too dearly lov'd, or warmly sought,  
Enfeebles all internal strength of thought —  
And the weak soul, within itself unblest'd,  
Leans for all pleasure on another's breast.  
Hence ostentation here, with tawdry art,  
Pants for the vulgar praise which fools impart;  
Here vanity assumes her pert grimace,  
And trims her robes of frieze with copper lace;  
Here beggar pride defrauds her daily cheer,  
To boast one splendid banquet once a year:  
The mind still turns where shifting fashion draws,  
Nor weighs the solid worth of self-applause.  
To men of other minds my fancy flies,

Embosom'd in the deep where Holland lies.  
Methinks her patient sons before me stand,  
Where the broad ocean leans against the land;  
And, sedulous to stop the coming tide,  
Lift the tall rampire's artificial pride.  
Onward, methinks, and diligently slow,  
The firm, connected bulwark seems to grow,  
Spreads its long arms amid the watery roar,  
Scoops out an empire, and usurps the shore —  
While the pent ocean, rising o'er the pile,  
Sees an amphibious world beneath him smile;  
The slow canal, the yellow-blossom'd vale,  
The willow-tufted bank, the gliding sail,  
The crowded mart, the cultivated plain —  
A new creation rescued from his reign.  
Thus, while around the wave-subjected soil  
Impels the native to repeated toil,  
Industrious habits in each bosom reign,  
And industry begets a love of gain.  
Hence all the good from opulence that springs,  
With all those ills superfluous treasure brings,  
Are here display'd. Their much lov'd wealth imparts  
Convenience, plenty, elegance, and arts;  
But view them closer, craft and fraud appear —  
Even liberty itself is barter'd here.  
At gold's superior charms all freedom flies;  
The needy sell it, and the rich man buys:  
A land of tyrants, and a den of slaves,  
Here wretches seek dishonorable graves;  
And, calmly bent, to servitude conform,  
Dull as their lakes that slumber in the storm.  
Heavens! how unlike their Belgic sires of old —  
Rough, poor, content, ungovernably bold,  
War in each breast, and freedom on each brow;  
How much unlike the sons of Britain now!  
Fir'd at the sound, my genius spreads her wing.  
And flies where Britain courts the western spring;  
Where lawns extend that scorn Arcadian pride,  
And brighter streams than fam'd Hydaspes glide.  
There, all around, the gentlest breezes stray;  
There gentle music melts on every spray;  
Creation's mildest charms are there combin'd:  
Extremes are only in the master's mind.  
Stern o'er each bosom reason holds her state  
With daring aims irregularly great.  
Pride in their port, defiance in their eye,  
I see the lords of human kind pass by,  
Intent on high designs – a thoughtful band,  
By forms unfashion'd, fresh from Nature's hand,

Fierce in their native hardiness of soul,  
True to imagin'd right, above control;  
While even the peasant boasts these rights to scan  
And learns to venerate himself as man.  
Thine, freedom, thine the blessings pictur'd here.  
Thine are those charms that dazzle and endear;  
Too bless'd indeed were such without alloy,  
But, foster'd even by freedom, ills annoy.  
That independence Britons prize too high  
Keeps man from man, and breaks the social tie:  
The self-dependent lordlings stand alone —  
All claims that bind and sweeten life unknown.  
Here, by the bonds of nature feebly held,  
Minds combat minds, repelling and repell'd,  
Ferments arise, imprison'd factions roar,  
Repress'd ambition struggles round her shore —  
Till, overwrought, the general system feels  
Its motions stopp'd, or frenzy fire the wheels.  
Nor this the worst. As nature's ties decay,  
As duty, love, and honor fail to sway,  
Fictitious bonds, the bonds of wealth and law,  
Still gather strength, and force unwilling awe.  
Hence all obedience bows to these alone,  
And talent sinks, and merit weeps unknown;  
Till time may come when, stripp'd of all her charms,  
The land of scholars, and the nurse of arms —  
Where noble stems transmit the patriot flame,  
Where kings have toil'd, and poets wrote for fame —  
One sink of level avarice shall lie,  
And scholars, soldiers, kings, unhonor'd die.  
Yet think not, thus when freedom's ills I state,  
I mean to flatter kings or court the great.  
Ye powers of truth, that bid my soul aspire,  
Far from my bosom drive the low desire!  
And thou, fair freedom, taught alike to feel  
The rabble's rage, and tyrant's angry steel —  
Thou transitory flower, alike undone  
By proud contempt or favor's fostering sun —  
Still may thy blooms the changeful clime endure!  
I only would repress them to secure;  
For just experience tells, in every soil,  
That those who think must govern those that toil —  
And all that freedom's highest aims can reach  
Is but to lay proportion'd loads on each.  
Hence, should one order disproportion'd grow,  
Its double weight must ruin all below.  
Oh, then, how blind to all that truth requires,  
Who think it freedom when a part aspires!  
Calm is my soul, nor apt to rise in arms,

Except when fast approaching danger warms;  
But, when contending chiefs blockade the throne,  
Contracting regal power to stretch their own —  
When I behold a factious band agree  
To call it freedom when themselves are free —  
Each wanton judge new penal statutes draw,  
Law grinds the poor, and rich men rule the law —  
The wealth of climes, where savage nations roam,  
Pillag'd from slaves to purchase slaves at home —  
Fear, pity, justice, indignation start,  
Tear off reserve, and bare my swelling heart:  
Till half a patriot, half a coward grown,  
I fly from petty tyrants to the throne.  
Yes, brother! curse with me that baleful hour  
When first ambition struck at regal power;  
And thus, polluting honor in its source,  
Gave wealth to sway the mind with double force.  
Have we not seen, round Britain's peopled shore,  
Her useful sons exchange'd for useless ore?  
Seen all her triumphs but destruction haste,  
Like flaring tapers brightening as they waste?  
Seen opulence, her grandeur to maintain,  
Lead stern depopulation in her train —  
And over fields where scatter'd hamlets rose,  
In barren, solitary pomp repose?  
Have we not seen, at pleasure's lordly call,  
The smiling, long frequented village fall?  
Beheld the duteous son, the sire decay'd,  
The modest matron, and the blushing maid,  
Forc'd from their homes, a melancholy train,  
To traverse climes beyond the western main —  
Where wild Oswego spreads her swamps around,  
And Níagara stuns with thundering sound?  
Even now, perhaps, as there some pilgrim strays  
Through tangled forests, and through dangerous ways,  
Where beasts with man divided empire claim,  
And the brown Indian marks with murderous aim —  
There, while above the giddy tempest flies,  
And all around distressful yells arise —  
The pensive exile, bending with his woe,  
To stop too fearful and too faint to go.  
Casts a long look where England's glories shine  
And bids his bosom sympathize with mine.  
Vain, very vain, my weary search to find  
That bliss which only centres in the mind.  
Why have I stray'd from pleasure and repose,  
To seek a good each government bestows?  
In every government, though terrors reign,  
Though tyrant-kings or tyrant-laws restrain,

How small, of all that human hearts endure,  
That part which laws or kings can cause or cure?  
Still to ourselves in every place consign'd,  
Our own felicity we make or find.  
With secret course, which no loud storms annoy,  
Glides the smooth current of domestic joy;  
The lifted ax, the agonizing wheel,  
*Zeck's* iron crown, and *Damiens'* bed of steel —  
To men remote from power but rarely known —  
Leave reason, faith, and conscience, all our own.

**[From Mayhew's Comic Almanac.]**

## AN INVITATION TO THE ZOOLOGICAL GARDENS

(BY A GENTLEMAN WITH A SLIGHT IMPEDIMENT IN HIS SPEECH.)

I have found out a gig-gig-gift for my fuf-fuf – fair,  
I have found where the rattle-snakes bub-bub – breed.  
Won't you c-c-c-come, and I'll show you the bub-bub – bear,  
And the lions and tit-tit – tigers at fuf-fuf-fuf – feed.

I know where c-c-c-co – cockatoo's song  
Makes mum-mum-mum – melody through the sweet vale;  
Where the m – monkeys gig-gig – grin all the day long,  
Or gracefully swing by the tit-tit-tit-tit – tail.

You shall pip-pip – play, dear, some did-did – delicate joke,  
With the bub-bub – bear on the tit-tit – top of his pip-pip-pip – pole;  
But observe, 'tis for-for-for – bidden to pip-pip – poke  
At the bub-bub – bear with your pip-pip – pink pip-pip-pip-pip –  
parasol.

You shall see the huge elephant pip-pip-pip – play;  
You shall gig-gig-gaze on the stit-tit – ately racoon,  
And then, did-did – dear, together we'll stray,  
To the cage of the bub-bub – blue fuf-fuf-fac'd bab-bab-bab – boon.

You wish'd (I r-r-r – remember it well,  
And I l-l-l-lov'd you the m-m-more for the wish)  
To witness the bub-bub-bub – beautiful pip-pip – pel-  
ican swallow the l-l-live l-l-l-little fuf-fuf – fish.

Then c-c-ome, did-did-dearest, n-n-n-never say "nun-nun-nun-nun –  
nay;"  
I'll tit-tit-treat you, my love, to a "bub-bub-bub – buss,"  
'Tis but thrup-pip-pip-pip – pence a pip-pip – piece all the way,  
To see the hip-pip-pip – (I beg your pardon) —  
To see the hip-pip-pip-pip – (ahem!)  
The hip-pip-pip-pip – pop-pop-pop-pop – (I mean)  
The hip-po-po-po – (dear me, love, you know)  
The hippo-pot-pot-pot – ('pon my word I'm quite ashamed of myself).  
The hip-pip-pop – the hip-po-pot.  
To see the Hippop – potamus.

## DEATH OF HOWARD THE PHILANTHROPIST. <sup>1</sup>

On the 5th of July, 1789, Howard quitted England to return no more. Arriving at Amsterdam on the 7th, he proceeded by slow stages through Germany and Prussia into the empire of the Czar, which he entered at Riga. He was destined never more to quit the soil of Russia. The tremendous destruction of human life to which the military system of that country gives rise, had not then, as it has since, become a recognized fact in Western Europe; and the unconceived and inconceivable miseries to which Howard found recruits and soldiers exposed in Moscow, induced him to devote his attention to them and to their cause. In these investigations horrors turned up of which he had never dreamed, and impressed him still more profoundly with a sense of the hollowness of the Russian pretense of civilization. In the forced marches of recruits to the armies over horrid roads, being ill-clothed and worse fed, he found that thousands fell sick by the way, dropped at the roadside, and were either left there to die of starvation, or transferred to miserable hospitals, where fever soon finished what fatigue had begun. This waste of life was quite systematic. An hospital for the reception of the poor wretches had recently been erected at Kremenschuk, a town on the Dnieper, which contained at that time 400 patients in its unwholesome wards. Thither Howard repaired to prosecute his new inquiries. The rooms he found much too full; many of the soldiers were dreadfully ill of the scurvy, yet they were all dieted alike, on sour bread and still sourer quas, alternated with a sort of water-gruel, which, if not eaten one day, was served up again the next. From this place, Howard went down the Dnieper to Cherson, where he examined all the prisons and hospitals, and made various excursions in the neighborhood for the same purpose. The hospitals were worthy of the evil which they were designed to alleviate. Our countryman thus sums up his observations upon them: "The primary objects in all hospitals seem here neglected – namely, cleanliness, air, diet, separation, and attention. These are such essentials, that humanity and good policy equally demand that no expense should be spared to procure them. Care in this respect, I am persuaded, would save many more lives than the parade of medicines in the adjoining apothecary's shop."

While at Cherson, Howard had the profound gratification of reading in the public prints of the capture and fall of the Bastille; and he talked with delight of visiting its ruins and moralizing upon its site, should he be again spared to return to the West. But, however moved by that great event, so important for all Europe, he did not allow it to divert him from his own more especial work; the sufferings of poor Russian soldiers in the hospitals of Cherson, Witowka, and St. Nicholas, had higher claim upon his notice at that moment, than even the great Revolution making in the Faubourg St. Antoine at Paris.

The reader will recall to mind, that, at the time of Howard's residence at Cherson, a desperate war was raging between the Sultan and the Autocrat. The strong fortress of Bender had just fallen into the power of Russia, but as the winter was already too far advanced to allow the army to push forward until spring, the commander of the imperial forces gave permission to such of his officers as chose to go and spend the Christmas with their friends in Cherson. That city was consequently crowded with rank and fashion. All the city was in high spirits. The victories of the imperial troops produced a general state of jubilation. Rejoicing was the order of the day, and dancing and revelry the business of the night. But in the midst of these festivities, a virulent and infectious fever broke out – brought, as Howard believed, by the military from the camp. One of the sufferers from this disorder was a young lady who resided about twenty-four miles from Cherson, but who had been a constant attendant at the recent balls and routs. Her fever very soon assumed an alarming form; and as a last resource her friends waited upon Howard – whose reputation as a leech was still on the increase – and implored him to ride over and see her. At first he refused, on the ground that he was only a physician

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<sup>1</sup> From "John Howard and the Prison World of Europe."

to the poor; but their importunities increasing, and reports arriving that she was getting worse and worse, he at length acceded to their wish – being also pressed thereto by his intimate friend, Admiral Mordvinoff, chief admiral of the Black Sea fleet – and went with them. He prescribed for the lady's case; and then, leaving word that if she improved they must send to him again, but if she did not, it would be useless, went to make some visits to the sick of an hospital in the neighborhood. The lady gradually improved under the change of treatment, and in a day or two a letter was written to Howard to acquaint him with the circumstance, and requesting him to come again without delay. Very unfortunately this letter miscarried, and was not delivered for eight days – when it was brought to him at Mordvinoff's house. When he noticed the date, Howard was greatly alarmed – for he had become interested in the case of his fair patient, and thought himself in a manner responsible for any mishap which might have befallen her. Although, when the note came to hand, it was a cold, wintry, tempestuous night, with the rain falling in torrents, he did not hesitate for a moment about setting off for her residence. Unfortunately, again, no post-horses could be had at the time; and he was compelled to mount a dray-horse used in the admiral's family for carrying water, whose slow pace protracted the journey until he was saturated with wet and benumbed with cold. He arrived, too, to find his patient dying; yet, not willing to see her expire without a struggle to save her, he administered some medicines to excite perspiration, and remained for some hours at her side to watch the first signs of the effect produced. After a time, he thought the dose was beginning to operate, and, wishing to avoid exposing her to the chance of a fresh cold by uncovering her arms, placed his hand under the coverlet to feel her pulse. On raising it up a little, a most offensive smell escaped from beneath the clothes, and Howard always thought the infection was then communicated to him. Next day she died.

For a day or two, Howard remained unconscious of his danger; feeling only a slight indisposition, easily accounted for by his recent exertions; which he nevertheless so far humored as to keep within doors; until, finding himself one day rather better than usual, he went out to dine with Admiral Mordvinoff. There was a large animated party present, and he staid later than was usual with him. On reaching his lodgings he felt unwell, and fancied he was about to have an attack of gout. Taking a dose of sal volatile in a little tea, he went to bed. About four in the morning he awoke, and feeling no better, took another dose. During the day he grew worse, and found himself unable to take his customary exercise; toward night a violent fever seized him, and he had recourse to a favorite medicine of that period, called "James's Powders." On the 12th of January, he fell down suddenly in a fit – his face was flushed and black, his breathing difficult, his eyes closed firmly, and he remained quite insensible for half an hour. From that day he became weaker and weaker; though few even then suspected that his end was near. Acting as his own physician, he continued at intervals to take his favorite powders; notwithstanding which his friends at Cherson – for he was universally loved and respected in that city, though his residence had been so short – soon surrounded him with the highest medical skill which the province supplied. As soon as his illness became known, Prince Potemkin, the princely and unprincipled favorite of Catherine, then resident in Cherson, sent his own physician to attend him; and no effort was spared to preserve a life so valuable to the world. Still he went worse and worse.

On the 17th, that alarming fit recurred; and although, as on the former occasion, the state of complete insensibility lasted only a short time, it evidently affected his brain – and from that moment the gravity of his peril was understood by himself, if not by those about him. On the 8th, he went worse rapidly. A violent hiccuping came on, attended with considerable pain, which continued until the middle of the following day, when it was allayed by means of copious musk drafts.

Early on the morning of the 20th, came to see him his most intimate friend, Admiral Priestman – a Russianized Englishman in the service of the empress. During his sojourn at Cherson, Howard had been in the habit of almost daily intercourse with his gallant ex-countryman. When taken ill, not himself considering it at first serious, no notice of it had been sent out; but not seeing his friend for several days, Priestman began to feel uneasy, and went off to his lodgings to learn the cause. He

found Howard sitting at a small stove in his bedroom – the winter was excessively severe – and very weak and low. The admiral thought him merely laboring under a temporary depression of spirits, and by lively, rattling conversation endeavored to rouse him from his torpidity. But Howard was fully conscious that death was nigh. He knew now that he was *not* to die in Egypt; and, in spite of his friend's cheerfulness, his mind still reverted to the solemn thought of his approaching end. Priestman told him not to give way to such gloomy fancies, and they would soon leave him. "Priestman," said Howard, in his mild and serious voice, "you style this a dull conversation, and endeavor to divert my mind from dwelling on the thought of death; but I entertain very different sentiments. Death has no terrors for me; it is an event I always look to with cheerfulness, if not with pleasure; and be assured, the subject is more grateful to me than any other." And then he went on to say – "I am well aware that I have but a short time to live; my mode of life has rendered it impossible that I should get rid of this fever. If I had lived as you do, eating heartily of animal food and drinking wine, I might, perhaps, by altering my diet, have been able to subdue it. But how can such a man as I am lower his diet, who has been accustomed for years to live upon vegetables and water, a little bread and a little tea? I have no method of lowering my nourishment – and therefore I must die;" and then turning to his friend, added, smiling – "It is only such jolly fellows as you, Priestman, who get over these fevers." This melancholy pleasantry was more than the gallant sailor could bear; he turned away to conceal his emotion; his heart was full, and he remained silent, while Howard, with no despondency in his tone, but with a calm and settled serenity of manner, as if the death-pangs were already past, went on to speak of his end, and of his wishes as to his funeral. "There is a spot," said he, "near the village of Dauphiney – this would suit me nicely; you know it well, for I have often said that I should like to be buried there; and let me beg of you, as you value your old friend, not to suffer any pomp to be used at my funeral; nor let any monument nor monumental inscription whatsoever be made to mark where I am laid; but lay me quietly in the earth, place a sun-dial over my grave, and let me be forgotten."

In this strain of true Christian philosophy did Howard speak of his exit from a world in which he felt that he had done his work. The ground in which he had selected to fix his everlasting rest, situated about two miles from Cherson, on the edge of the great highway to St. Nicholas, belonged to a French gentleman who had treated him with distinguished attention and kindness during his stay in the vicinity; and, having made his choice, he was very anxious to know whether permission could be obtained for the purpose, and begged his gallant friend to set off immediately and ascertain that for him. Priestman was not very willing to leave his friend at such a time and on such a gloomy errand; he fancied people would think him crazy in asking permission to make a grave for a man still alive, and whom few as yet knew to be ill; but the earnestness of the dying martyr at length overcame his reluctance, and he set forth.

Scarcely had he departed on his strange mission, when a letter arrived from England, written by a gentleman who had just been down to Leicester to see young Howard, giving a highly favorable account of the progress of his recovery, and expressing a belief that, when the philanthropist returned to his native land, he would find his son greatly improved. This intelligence came to the deathbed of the pious Christian like a ray of light from heaven. His eye brightened; a heavy load seemed lifted from his heart; and he spoke of his child with the tenderness and affection of a mother. He called Thomasson to his bedside, and bade him tell his son, when he went home, how long and how fervently he had prayed for his recovery, and especially during this last illness.

Toward evening, Admiral Priestman returned from a successful application; with this result Howard appeared highly gratified, and soon after his arrival retired to rest. Priestman, conscious now of the imminency of the danger, would leave him alone no more, but resolutely remained, and sat at the bedside. Although still sensible, Howard had now become too weak to converse. After a long silence, during which he seemed lost in profound meditation, he recovered for a moment his presence of mind, and taking the letter which had just before come to hand – evidently the subject of his thoughts – out of his bosom, he gave it to the admiral to read; and when the latter had glanced it

through, said tenderly: "Is not this comfort for a dying father?" These were almost the last words he uttered. Soon after, he fell into a state of unconsciousness, the calm of sleep, of an unbroken rest – but even then the insensibility was more apparent than real, for on Admiral Mordvinoff, who arrived just in time to see the last of his illustrious friend, asking permission to send for a certain doctor, in whom he had great faith, the patient gave a sign which implied consent; but before this person could arrive he had fallen off. Howard was dead!

This mournful event took place about eight o'clock on the morning of the 20th of January, 1790 – 1500 miles from his native land, with only strangers round about his bed; strangers, not to his heart, though their acquaintance with his virtues had been brief – but to his race, his language, and his creed. He, however, who was the friend of all – the citizen of the world, in its highest sense – found friends in all. Never perhaps had mortal man such funeral honors. Never before, perhaps, had a human being existed in whose demise so universal an interest could be felt. His death fell on the mind of Europe like an ominous shadow; the melancholy wail of grief which arose on the Dnieper, was echoed from the Thames, and soon re-echoed from the Tagus, and the Neva, and the Dardanelles. Every where Howard had friends – more than could be thought till death cut off restraint, and threw the flood-gates of sympathy wide open. Then the affluent tide rolled in like the dawn of a summer day. Cherson went into deep mourning for the illustrious stranger; and there was hardly a person in the province who was not greatly affected on learning that he had chosen to fix his final resting-place on the Russian soil. In defiance of his own wishes on the subject, the enthusiasm of the people improvised a public funeral. The Prince of Moldavia, Admirals Priestman and Mordvinoff, all the generals and staff officers of the garrison, the whole body of the magistrates and merchants of the province, and a large party of cavalry, accompanied by an immense cavalcade of private persons, formed the funeral procession. Nor was the grief by any means confined to the higher orders. In the wake of the more stately band of mourners, followed on foot a concourse of at least three thousand persons – slaves, prisoners, sailors, soldiers, peasants – men whose best and most devoted friend the hero of these martial honors had ever been; and from this after, humbler train of followers, arose the truest, tenderest expression of respect and sorrow for the dead. When the funeral pomp was over, the remains of their benefactor lowered into the earth, and the proud procession of the great had moved away, then would these simple children of the soil steal noiselessly to the edge of the deep grave, and, with their hearts full of grief, whisper in low voices to each other of all that they had seen and known of the good stranger's acts of charity and kindness. Good indeed he had been to them. Little used to acts or words of love from their own lords, they had felt the power of his mild manner, his tender devotion to them, only the more deeply from its novelty. To them, how irreparable the loss! The higher ranks had lost the grace of a benignant presence in their high circle; but they – the poor, the friendless – had lost in him their friend – almost their father. Nature is ever true; they *felt* how much that grave had robbed them of. Not a dry eye was seen among them; and looking sadly down into the hole where all that now remained of their physician lay, they marveled much why he, a stranger to them, had left his home, and his friends, and country, to become the unpaid servant of the poor in a land so far away; and not knowing how, in their simple hearts, to account for this, they silently dropped their tears into his grave, and slowly moved away – wondering at all that they had seen and known of him who was now dead, and thinking sadly of the long, long time ere they might find another friend like him.

The hole was then filled up – and what had once been Howard was seen of man no more. A small pyramid was raised above the spot, instead of the sun-dial which he had himself suggested; and the casual traveler in Prussian Tartary is still attracted to the place as to one of the holiest shrines of which this earth can boast.

Words can not depict the profound sensation which the arrival of this mournful news produced in England. The death-shaft cut the withes which had kept his reputation down. All at once the nation awoke to a full consciousness of his colossal fame and his transcendent virtues. Howard was now –

history. Envy and jealousy were past: rivalry had ended on the brink of the grave. Death alone sets a man on fair terms with society. The death of a great man is always a calamity; but it is only when a country loses one of its illustrious children in a distant land, and under peculiar circumstances, that the full measure of the national calamity is felt. They who can recollect the wild and deep sensation of pity and regret which the arrival of the news of Byron's death at Missolonghi produced in England, can alone conceive of any thing like the state of the public mind on the first announcement of the close of a career still more useful and more glorious. Every possible mark of honor – public and private – was paid to the memory of Howard. All orders of men vied with each other in heaping honors upon his name. The court, the press, parliament, the bar, the pulpit, and the stage – each in its different fashion – paid the well-earned tribute of respect. The intelligence of his demise was publicly announced in the official Gazette – a distinction never before accorded to a private individual. The muses sang his virtues with innumerable voices; the churches echoed with his praise; the senate and the judgment-seat resounded with the tribute to his merits; and even at the theatres, his character was exhibited in imaginary scenes, and a monody on his death was delivered from the foot lights.

Nor was a more enduring memorial wanting. The long dormant Committee of the Howardian fund was resuscitated, and the sculptor Bacon was employed to make a full length marble statue of the Philanthropist. At that time it was in contemplation to make St. Paul's serve the double purpose of a cathedral and a Walhalla; and this design was inaugurated by placing there, as the first great worthy of England, the statue of John Howard. It stands immediately on the right hand of the choir-screen; it is a handsome figure, tolerably faithful, and is illustrated by emblems of his noble deeds, and by the following inscription: "This extraordinary man had the fortune to be honored, while living, in the manner which his virtues deserved; he received the thanks of both houses of the British and Irish Parliaments, for his eminent services rendered to his country and to mankind. Our national prisons and hospitals, improved upon the suggestion of his wisdom, bear testimony to the solidity of his judgment, and to the estimation in which he was held. In every part of the civilized world, which he traversed to reduce the sum of human misery – from the throne to the dungeon – his name was mentioned with respect, gratitude, and admiration. His modesty alone defeated various efforts that were made during his life to erect this statue, which the public has now consecrated to his memory. He was born at Hackney, in the county of Middlesex, September 2, 1726. The early part of his life he spent in retirement, residing principally upon his paternal estate at Cardington, in Bedfordshire; for which county he served the office of sheriff in the year 1763. He expired at Cherson, in Russian Tartary, on the 20th of January, 1790, a victim to the perilous and benevolent attempt to ascertain the cause of, and find an efficacious remedy for the plague. He trod an open but unfrequented path to immortality in the ardent but unintermitted exercise of Christian charity: may this tribute to his fame excite an emulation of his truly glorious achievements!"

## A SKETCH OF MY CHILDHOOD

BY THE "ENGLISH OPIUM-EATER."

(Continued from page 165.)

Once having begun, it followed naturally that the war should deepen in bitterness. Wounds that wrote memorials in the flesh, insults that rankled in the heart – these were not features of the case likely to be forgotten by our enemies, and far less by my fiery brother. I, for my part, entered not into any of the passions that war may be supposed to kindle, except only the chronic passion of anxiety. *Fear* it was not; for experience had taught me that, under the random firing of our undisciplined enemies, the chances were not many of being wounded; but the uncertainties that beset every conflict, as regarded my power to maintain the requisite connection with my brother, and the absolute darkness that brooded over that last worst contingency – the case of being captured, and carried off to Gath as a trophy won from Israel – these were penalties attached to the war that ran too violently into the current of my constitutional despondency, ever to give way under any casual elation of success. Success we really had at times —*often* in skirmishes; and once, at least, as the reader will find to his mortification, if he is wicked enough to take the side of the Philistines, a most smashing victory in a pitched battle. But even then, and while the hurrahs were yet ascending from our jubilating lips, the freezing memento came back to my heart of that deadly depression which, duly at the coming round of the morning and evening watches, traveled with me like my shadow on our approach to the memorable bridge. A bridge of sighs<sup>2</sup> too surely it was for me; and even for my brother it formed an object of fierce yet anxious jealousy, that he could not always disguise, as we first came in sight of it: for, if it happened to be occupied in strength, there was an end of all hope that we could attempt the passage; and *that* was a fortunate solution of the affair, as it imposed no evil beyond a circuit; which, at least, enjoyed the blessing of peace, although the sarcastic public might choose to call it inglorious. Even this shade of ignominy, however, my brother contrived to color favorably, by calling us – that is, me and himself – "a corps of observation;" and he condescendingly explained to me, that although making "a lateral movement," he had his eye upon the enemy, and "might yet come round upon his left flank in a way that wouldn't perhaps prove very agreeable." This, from the nature of the ground, never happened. We crossed the river out of sight from the enemy's position; and my brother's vengeance, being reserved until he came round into the rear of Philistia, from which a good retreat was always open to Greenhay; naturally discharged itself in triple deluges of stones. On this line of policy there was, therefore, no cause for anxiety; but the common case was, that the numbers might not be such as to justify this caution, and yet quite enough for mischief. For my brother, however,

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<sup>2</sup> "Bridge of sighs:" – Two men of memorable genius, Hood last, and Lord Byron by many years previously, have so appropriated this phrase, and re-issued it as English currency, that many readers suppose it to be theirs. But the genealogies of fine expressions should be more carefully preserved. The expression belongs originally to Venice. This *jus postliminii* becomes of real importance in a case like that of Shakspeare. It is a most remarkable fact that he is made to seem a robber of the lowest order by mere dint of suffering robbery. Purely through their own jewelery splendor, have many hundreds of his phrases forced themselves into usage so general, under the vulgar infirmity of seeking to strengthen weak prose by shreds of poetic quotation, that at length the majority of careless readers came to look upon these phrases as belonging to the language, and traceable to no distinct proprietor any more than proverbs: and thus, on afterward observing them in Shakspeare, they regard him in the light of one accepting alms (like so many meaner persons) from the common treasury of the universal mind, on which treasury he had himself conferred them as original donations of his own. Many expressions in the "Paradise Lost," in "Il Penseroso," and in "L'Allegro," are in the same predicament: from glorifying their author, so long as they were consciously referred to him *as* their author, they have, at least, ended in tarnishing his glory. As creations, they were marks of power; as tributes levied upon a common stock, they become arguments of weakness.

stung and carried headlong into hostility by the martial instincts of his nature, the uneasiness of doubt or insecurity was swallowed up by his joy in the anticipation of victory, or even of contest; while to myself, whose exultation was purely official and ceremonial, as due by loyalty and legal process from a cadet of the belligerent house, no such compensation existed. The enemy was no enemy in *my* eyes; his affronts were but retaliations; and his insults were so inapplicable to my unworthy self, being of a calibre exclusively meant for the use of my brother, that from me they recoiled, one and all, as cannon-shot from cotton bags.

This inordinate pugnacity of my brother, this rabid appetite for trials of prowess, had, indeed, forced itself into display on the very first interview I ever had with him. On the night of his return from Louth, an artisan, employed in the decorations of Greenhay, had entered into conversation with him upon the pre-eminence of Lancashire among the provinces of England. According to *him*, the county of Lancaster (to translate his meaning into Roman phrase) was the *prerogative tribe* of England. And really I am disposed to think that it still *is* such, mongrelized as it has long been by Cambrian and Hibernian immigrations. There is not on earth such another focus of burning energy. Among other things, the man had magnified the county as containing (which it then *did*) by very much the largest remnant of old Roman Catholic families – families that were *loyal* to the back-bone (in those days a crowning honor); that were of the ancient faith, and of the most ancient English blood; none of your upstart, dissenting *terre filii*, but men that might have shaken hands with Cœur de Lion, or at least come of ancestors that *had*. "And, in short, young gentleman," he concluded, "the whole county, not this part, or that part, but take it as you find it, north and south, is a very tall county."

What it was exactly that he meant by *tall*, I can not say. From the intense predominance in Lancashire of old genuine mother English, it is probable that he meant *stout-hearted*, for *that* was the old acceptance of the word *tall*, and not (as it is now understood) *high in stature*. "A tall ship" meant a stout and sea-worthy ship; "a tall man," meant a man that was at once able-bodied and true-hearted. My brother, however, chose to understand it in the ordinary modern sense, and he replied, "Yes, it's tall enough, if you take it south and north: from Bullock Smithy in the south, to beyond Lancaster in the north, it measures a matter of sixty miles or more; certainly it's tall, but then it's very thin, generally speaking."

"Ay, but," said the man, "thick or thin, it's a county palatine."

"Well, I don't care much for that," rejoined my brother; "palatine or not palatine, thick or thin, I wouldn't take any *jaw* (which meant insolence) from Lancashire, more than from any other shire."

The man stared a little at this unlooked-for attitude of defiance to a county palatine; but, recovering himself, he said, that my brother *must* take it, if Lancashire chose to offer it.

"But I wouldn't," replied my brother. "Look here: Lincolnshire, the county that I've been staying in for these, I don't know how many years – and a very tall county, too, tall and fat – did I take any *jaw* from *her*? Ask the sheriff. And Leicestershire, where I've generally spent my holidays, did I take *jaw* from *her*? Tell me *that*. Neither, again, did Louth ever dream of giving me any of *her* *jaw*; then why should I stand it from Lancashire?"

Certainly, why *should* he? I, who took no part in all this but as a respectful listener, felt that there was much reason in what my brother said. It was true that, having imbibed from my nurses a profound veneration for my native county, I was rather shocked at any posture (though but in a hypothetical case) of defiance to Lancashire; and yet, if three out of four capital L's had been repulsed in some mysterious offense, I felt that it was mere equity to repulse the fourth. But I prepared anxiously to say, on the authority of my last nurse, that Lancashire (I felt sure) was not the county to offer him any "jaw," whatever *that* might be. Unhappily, in seeking for words, which came very slowly at all times, to express my benevolent meaning, the opportunity passed over for saying any thing at all on the subject; but, though wounded by his squaring at Lancashire, I yet felt considerable respect for a brother who could thus resolutely set his arms a-kimbo against three tall counties, two of them tolerably fat, and one decent market-town.

The ordinary course of our day's warfare was this: between nine and ten in the morning, occurred our first transit, and consequently our earliest opportunity for doing business. But at this time the great sublunary interest of breakfast, which swallowed up all nobler considerations of glory and ambition, occupied the work-people of the factory (or what in the brutal pedantry of this day are termed the "operatives"), so that very seldom any serious business was transacted. Without any formal armistice, the paramount convenience of such an arrangement silently secured its own recognition. Notice there needed none of truce, when the one side yearned for breakfast, and the other for a respite; the groups, therefore, on or about the bridge, if any at all, were loose in their array, and careless. We passed through them rapidly, and, on my part, uneasily; exchanging only a few snarls, but seldom or ever snapping at each other. The tameness was almost shocking of those who in the afternoon would inevitably resume their natural characters of tiger-cats, wolves, and hunting-leopards. Sometimes, however, my brother felt it to be a duty that we should fight in the morning, particularly when any expression of public joy for a victory – bells ringing in the distance, or when a royal birthday, or some traditional commemoration of ancient feuds (such as the 5th of November), irritated his martial propensities. These being religious festivals, seemed to require of us some *extra* homage, for which we knew not how to find any natural or significant expression, except through sharp discharges of stones, that being a language older than Hebrew or Sanscrit, and universally intelligible. But excepting these high days of religious solemnity, when a man is called upon to show that he is not a Pagan or a miscreant in the eldest of senses, by thumping, or trying to thump, somebody who is accused or accusable of being heterodox, the great ceremony of breakfast was allowed to sanctify the hour. Some natural growls we uttered, but hushed them soon, regardless (in Mr. Gray's language) "of the sweeping whirlpool's sway, that hushed in grim repose, looked for his evening prey."

*That* came but too surely. Yes, evening never forgot to come – never for once forgot to call for its prey. Oh! reader, be you sure of *that*. Pleasures – how often do they forget themselves, forget their duty, forget their engagements, and fail to revolve! But this odious necessity of fighting never missed its road back, or fell asleep, or loitered by the way, more than a bill of exchange, or a tertian fever. Five times a week (Saturday sometimes, and Sunday always, were days of rest) the same scene rehearsed itself in pretty nearly the very same succession of circumstances. Between four and five o'clock, we had crossed the bridge to the safe, or Greenhay side; then we paused, and waited for the enemy. Sooner or later a bell rang, and from the smoky hive issued the hornets that night and day stung incurably my peace of mind. The order and procession of the incidents after this was odiously monotonous. My brother occupied the main high road, precisely at the point where a very gentle rise of the ground attained its summit; for the bridge lay in a slight valley; and the main military position was fifty or eighty yards perhaps above the bridge; then – but having first examined my pockets in order to be sure that my stock of ammunition, stones, fragments of slate, with a reasonable proportion of brickbats, was all correct and ready for action – he detached me about forty yards to the right, my orders being invariable, and liable to no doubts or "quibbling." Detestable in *my* ears was that word "*quibbling*," by which, for a thousand years, if the war had happened to last so long, he would have fastened upon me the imputation of meaning, or wishing at least, to do what he called "pettifogulizing" – that is, to plead some little technical quillet, distinction, or verbal demur, in bar of my orders, under some colorable pretense that, according to their literal construction, they really did not admit of being fulfilled, or perhaps that they admitted it too much as being capable of fulfillment in two senses, either of them a practicable sense. Unhappily for me, which told against all that I could ever have pleaded in self-justification, my Christian name was Thomas – an injury for which I never ceased to upbraid secretly my two godfathers and my one godmother; and with some reason: they ought to have seen what mischief they were brewing; since I am satisfied to this hour that, but for that wretched wo-begone name, saturated with a weight of predestined skepticism that would sink a seventy-four with the most credulous of ship's companies on board, my brother never would have called me *Thomas à Didymus*, which he did sometimes, or *Thomas Aquinas*, which he did continually.

These baptismal sponsors of mine were surely answerable for all the reproaches against me, suggested by my insufferable name. All that I bore for years by reason of these reproaches, I charge against *them*; and perhaps an action of damages would have lain against them, as parties to a conspiracy against me. For any thing that I knew, the names might have been titles of honor; but my brother took care to explain the qualities, for better and worse, which distinguished them. Thomas à Didymus, it seemed, had exactly my infirmity of doubting and misgiving, which naturally called up further illustrations of that temper from Bunyan – a writer who occupied a place in our childish library, not very far from the "Arabian Nights." Giant Despair, the Slough of Despond, Doubting Castle, mustered strong in the array of rebukes to my weakness; and, above all, Mr. Ready-to-sink, who was my very picture (it seems) or prophetic type. As to Thomas Aquinas, I was informed that he, like myself, was much given to hair-splitting, or cutting moonbeams with razors; in which I think him very right; considering that in the town of Aquino, and about the year 1400, there were no novels worth speaking of, and not even the shadow of an opera; so that, not being employed upon moonbeams, Thomas's razors must, like Burke's, have operated upon blocks. But were these defects of doubting and desponding really mine? In a sense, they were; and being thus embodied in nicknames, they were forced prematurely upon my own knowledge. That was bad. Intellectually, if you are haunted with skepticism, or tendencies that way, morally, and for all purposes of action, if you are haunted with the kindred misery of desponding, it is not good to see too broadly emblazoned your own infirmities: they grow by consciousness too steadily directed upon them. And thus far there was great injustice in my brother's reproach; true it was that my eye was preternaturally keen for flaws of language, not from pedantic exaction of superfluous accuracy, but, on the contrary, from too conscientious a wish to escape the mistakes which language not rigorous is apt to occasion. So far from seeking to "pettifogulize," or to find evasions for any purpose in a trickster's minute tortuosities of construction, exactly in the opposite direction, from mere excess of sincerity, most unwillingly I found, in almost every body's words, an unintentional opening left for double interpretations. Undesigned equivocation prevails every where;<sup>3</sup> and it is not the caviling hair-splitter, but, on the contrary, the single-eyed servant of truth, that is most likely to insist upon the limitation of expressions too wide or vague, and upon the decisive election between meanings potentially double. Not in order to resist or evade my brother's directions, but for the very opposite purpose – viz., that I might fulfill them to the letter; thus and no otherwise it happened that I showed so much scrupulosity about the exact value and position of his words, as finally to draw upon myself the vexatious reproach of being habitually a "pettifogulizer."

Meantime, our campaigning continued to rage. Overtures of pacification were never mentioned on either side. And I, for *my* part, with the passions only of peace at my heart, did the works of war faithfully, and with distinction. I presume so, at least, from the results. For, though I was continually falling into treason, without exactly knowing how I got into it, or how I got out of it, *and*, although my brother sometimes assured me that he could, in strict justice, have me hanged on the first tree we passed, to which my very prosaic answer had been, that of trees there *were* none in Oxford-street – [which, in imitation of Von Troil's famous chapter on the snakes of Lapland, the reader may accept, if he pleases, as a complete course of lectures on the natural history of Oxford-street] – nevertheless, by steady steps, I continued to ascend in the service; and, I am sure, it will gratify the reader to hear,

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<sup>3</sup> Since those years, it is natural that mere culture of the subject, and long, experience in the arts of composition, should have sharpened my vision, previously too morbidly acute, to defects in the construction of sentences, and generally in the management of language. The result is this: and perhaps it will shock the reader, certainly it will startle him, when I declare solemnly my conviction, that no two consecutive pages can be cited from any one of the very best English authors, which is not disfigured by some gross equivocation or imperfection of structure, such as leaves the meaning open, perhaps, to be inferred from the context, but also so little expressed with verbal rigor, or with conformity to the truth of logic, or to the real purpose, that, supposing the passage to involve a legal interest, and in consequence, to come under a judicial review, it would be set aside for want of internal coherency. Not in arrogance, but under a deep sense of the incalculable injuries done to truth, small and great, by false management of language, I declare my belief that hardly one entire paragraph exists in our language which is impregnable to criticism, even as regards the one capital interest of logical limitation to the main purpose concerned.

that, very soon after my eighth birthday, I was promoted to the rank of major-general. Over this sunshine, however, soon swept a train of clouds. Three times I was taken prisoner; and with different results. The first time I was carried to the rear, and not molested in any way. Finding myself thus ignominiously neglected, I watched my opportunity; and, by making a wide circuit, without further accident, effected my escape. In the next case, a brief council was held over me: but I was not allowed to hear the deliberations; the result only being communicated to me – which result consisted in a message not very complimentary to my brother, and a small present of kicks to myself. This present was paid down without any discount, by means of a general subscription among the party surrounding me – that party, luckily, not being very numerous; besides which, I must, in honesty, acknowledge myself, generally speaking, indebted to their forbearance. They were not disposed to be too hard upon me. But, at the same time, they clearly did not think it right that I should escape altogether from tasting the calamities of war. And, as the arithmetic of the case seemed to be, how many legs, so many kicks, this translated the estimate of my guilt from the public jurisdiction, to that of the individual, sometimes capricious and harsh, and carrying out the public award by means of legs that ranged through all gradations of weight and agility. One kick differed exceedingly from another kick in dynamic value: and, in some cases, this difference was so distressingly conspicuous, and seemed so little in harmony with the prevailing hospitality of the evening, that one suspected special malice, unworthy, I conceive of all generous soldiership. Not impossibly, as it struck me on reflection, the spiteful individual might have a theory: he might conceive that, if a catholic chancery decree went forth, restoring to every man the things which truly belonged to him – your things to you, Cæsar's to Cæsar, mine to me – in that case, a particular brickbat fitting, as neatly as if it had been bespoke, to a contusion upon the calf of his own right leg, would be discovered making its way back into my great-coat pockets. Well, it *might* be so. Such things are possible under any system of physics. But this all rests upon a blind assumption as to the fact. Is a man to be kicked upon hypothesis? That is what Lord Bacon would have set his face against. However, some of my new acquaintances evidently cared as little for Lord Bacon as for me; and regulated their kicks upon principles incomprehensible to me. These contributors excepted, whose articles were unjustifiably heavy, the rest of the subscribers were so considerate, that I looked upon them as friends in disguise.

On returning to our own frontiers, I had an opportunity of displaying my exemplary greenness. That message to my brother, with all its *virus* of insolence, I repeated as faithfully for the spirit, and as literally for the expressions, as my memory allowed me to do: and in that troublesome effort, simpleton that I was, fancied myself exhibiting a soldier's loyalty to his commanding officer. My brother thought otherwise: he was more angry with me than with the enemy. I ought, he said, to have refused all participation in such *sansculottes'* insolence; to carry it was to acknowledge it as fit to be carried. "Speak civilly to my general," I ought to have told them; "or else get a pigeon to carry your message – if you happen to have any pigeon that knows how to conduct himself like a gentleman among gentlemen." What could they have done to me, said my brother, on account of my recusancy? What monstrous punishments was I dreaming of, from the days of giants and ogres? "At the very worst, they could only have crucified me with the head downward, or impaled me, or inflicted the death by *priné*,<sup>4</sup> or anointed me with honey (a Jewish punishment), leaving me (still alive) to the tender mercies of wasps and hornets." One grows wiser every day; and on this particular day I made a resolution that, if again made prisoner, I would bring no more "jaw" from the Philistines. For it was very unlikely that he, whom I heard solemnly refusing to take "jaw" from whole provinces of England, would take it from the rabble of a cotton factory. If these people *would* send "jaw," and insisted upon their right to send it, I settled that, henceforward, it must go through the post-office.

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<sup>4</sup> *Priné*– πρινή, the Greek word for a *saw*. The saw was applied to the chest, and the man was sawed into two halves, leaving a sculptor's bust (man's head and shoulders) for the upper half.

But, in that case, had I not reason to apprehend being sawed in two? I saw no indispensable alternative of that see-saw nature. For there must be two parties – a party to saw, and a party to be sawed. And neither party has a chance of moving an inch in the business without a saw. Now, if neither of the parties will pay for the saw, then it is as good as any one conundrum in Euclid, that nobody can be sawed. For that man must be a top-sawyer, indeed, that can keep the business afloat without a saw. But, with or without the sanction of Euclid, I came to the resolution of never more carrying what is improperly called "chaff," but, by people of refinement, is called "jaw" – that is to say, this was my resolution, in the event of my being again made prisoner; an event which heartily I hoped might never happen. It *did* happen, however, and very soon. Again, that is, for the third time, I was made prisoner; and this time I managed ill indeed; I *did* make a mess of it; for I displeased the commander-in-chief in a way that he could not forget.

In my former captures, there had been nothing special or worthy of commemoration in the circumstances. Neither was there in this,<sup>5</sup> excepting that, by accident, in the second stage of the case, I was delivered over to the custody of young woman and girls; whereas the ordinary course would have thrown me upon the vigilant attentions (relieved from monotony by the experimental kicks) of boys. So far, the change was by very much for the better. I had a feeling myself – on first being presented to my new young mistresses – for to be a prisoner, I in my simplicity, believed, was to be a slave – of a distressing sort. Having always, or at least up to the completion of my sixth year, been a privileged pet, and almost, I might say, ranking among the sanctities of the household, with all its female sections, whether young or old (an advantage which I owed to a long illness, an ague, stretching over two entire years of my infancy), naturally I had learned to appreciate the indulgent tenderness of women; and my heart thrilled with love and gratitude, as often as they took me up into their arms and kissed me. Here it would have been as every where else; but, unfortunately, my introduction to these young women was in the very worst of characters. I had been taken in arms – in arms, against whom? and for what? Against their own nearest relations and connections – brothers, cousins, sweethearts; and on pretexts too frivolous to mention, if any at all. Neither was my offense of ancient date, so as to make it possible for desperate good nature to presume in me a change of heart, and a penitential horror of my past life. On the contrary, I had been taken but five minutes before, in the very act of showering brickbats on members of their own factory; and, if no great number of stones appeared to swell my pockets, it was not that I was engaged in any process of weaning myself from such fascinating missiles, but that I had liberally made over to their kinsfolk most of those which I possessed. If asked the question, it would be found that I should not myself deny the fact of being at war with their whole order. What was the meaning of *that*? What was it to which war, and the assumption of warlike functions, pledged a man? It pledged him, in case of an opportunity arising, to *storm* his enemies; that is, in my own case, to storm the houses of these young factory girls; briefly, and in plain English, to murder them all; to cut the throats of every living creature by their firesides; to float the closets in which, possibly, three generations of their family might have been huddled together for shelter, with the gore of those respectable parties. Almost every book of

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<sup>5</sup> From the naked character of the whole *area* on each side of the Oxford-road, at that time, there was very little opening for ambuscades. What little there was, which greatly fascinated my brother as one of the features connecting his own strategies with those of Cæsar, lay exclusively among the brick-kilns. Of these, there were numbers on the clay-fields adjacent to the road; and sometimes having been irregularly *quarried* (so to speak), they opened into lanes and closets, which offered facilities for momentary concealment. But the advantages almost ceased to be such from their obviousness, and the consequent jealousy with which they were watched and approached. The particular mode of my three captures was the constant mode of my danger; two or three parallel files advanced up the rising ground from the river; one or two of these by shouts, by more conspicuous activity, and by numerical superiority, succeeded in winning too exclusive an attention, while a slender thread of stragglers, noiseless, and apparently not acting in concert, suddenly converged when approaching the summit of the ascent, and instantly swept so rapidly round the left of my position, as in one moment to take away all chance of restoring the connection between myself and my brother; while, at the same time, by exposing too decisively for doubt the preconceived plan on which they had really been moving, when most of all simulating the disarray of stragglers, they mortified us by the conviction that students of Cæsar's Commentaries might chance, notwithstanding, to show themselves most exemplary blockheads.

history in the British Museum, counting up to many myriads of volumes would tell them plainly, and in pretty nearly the very same words, what they had to expect from every warrior, and therefore from me, videlicet this – that neither the guileless smiles of unoffending infancy, nor the gray hairs of the venerable patriarch sitting in the chimney corner; neither the sanctity of the matron, nor the loveliness of the youthful bride; no, nor the warlike self-devotion of the noble young man, fighting as the champion of altars and hearths; none of these searching appeals would reach *my* heart; neither sex nor age would confer any privilege with me; that I should put them all to the edge of the sword; that I should raze the very foundations of their old ancestral houses; having done which, I should probably plow up the ground with some bushels of Nantwich salt, mixed with bonedust from the graves of infants as a top-dressing; that, in fact, the custom of all warriors, and therefore by necessity of myself, was notoriously to make a wilderness, and to call it a pacification; with other bloody depositions in the same key, and often in the very same words.

All this was passing through my brain as the sort of explanatory introduction which, in mere honesty, I could not disown, if any body should offer it, when suddenly one young woman snatched me up in her arms, and kissed me; from *her*, I was passed round to others of the party, who all in turn caressed me, with scarcely an allusion to that warlike mission against them and theirs, which only had procured me the honor of an introduction to themselves in the character of captive. The too palpable fact, that I was not the person meant by nature to murder any one individual of their party, was likely enough to withdraw from their minds the counterfact – that too probably, in my military character, I might have dallied with the idea of murdering them all. Not being able to do it, as regarded any one in particular, was illogically accepted as an excuse for the military engagement that bound me to attempt it with regard to all in mass. Not only did these young people kiss me, but I (seeing no military reason against it) kissed *them*. Really, if young women will insist on kissing major-generals, they must expect that the generals will retaliate. One only of the crowd adverted to the character in which I came before them: to be a lawful prisoner, it struck her too logical mind that I must have been caught in some aggressive practices. "Think," she said, "of this little dog fighting, and fighting our Jack." "But," said another, in a propitiatory tone, "perhaps he'll not do so any more." I was touched by the kindness of her suggestion, and the sweet merciful sound of that same "*Not do so any more*," which really I fear was prompted by the charity in *her* that hopeth all things, and despairs of no villain, rather than by any signals of amendment that could have appeared in myself. It was well for me that they gave no time to comment on my own moral condition; for, in that case, I should have told them, that, although I had delivered, in my time, many thousands of stones for the service of their near relatives, and must, without vanity, presume that, on the ratio of one wound to a thousand shots, I had given them numerous reasons for remembering me; yet that, if so, I was sincerely sorry (which I was) for any pain I had caused – the past I regretted, and could plead only the necessities of duty. But, on the other hand, as respected the future, I could not honestly hold out any hopes of a change for the better, since my duty to my brother, in two separate characters, would oblige me to resume hostilities on the very next day. While I was preparing myself, however, for this painful exposition, my female friends saw issuing from the factory a crowd of boys not likely at all to improve my prospects. Instantly setting me down on my feet, they formed a sort of *cordon sanitaire* behind me, by stretching out their petticoats or aprons, as in dancing, so as to touch; and then, crying out, "Now, little dog, run for thy life," prepared themselves (I doubt not) for rescuing me, if any recapture should be effected.

But this was *not* effected, although attempted with an energy that alarmed me, and even perplexed me with a vague thought (far too ambitious for my years, but growing out of my chivalrous studies) that one, perhaps, if not two of the pursuing party might be possessed by some demon of jealousy, since he might have seen me reveling among the lips of that fair girlish and womanish bevy, kissed and kissing, loving and being loved; in which case from all that ever I had read about jealousy (and I had read a great deal – viz, "Othello," and Collins's "Ode to the Passions"), I was satisfied

that, if again captured, I had very little chance for my life. That jealousy was a green-eyed monster, nobody could know better than *I* did. "Oh, my lord, beware of jealousy!" Yes; and my lord couldn't possibly beware of it more than myself; indeed, well it would have been for *him* had his lordship run away from all the ministers of jealousy – Iago, Cassio, Desdemona – and embroidered handkerchiefs – at the same pace of six miles an hour which kept me ahead of my infuriated pursuers. Ah, that maniac, white as a leper with flakes of cotton, can I ever forget him, that ran so far in advance of his party? What passion, but jealousy, could have sustained him in so hot a chase? There were some lovely girls in the fair company that had so condescendingly caressed me; but, doubtless, upon that sweet creature his love must have settled, who suggested, in her low, soft, relenting voice, a penitence in me that, alas! had not dawned, saying, "*Yes; but perhaps he will do so no more.*" Thinking, as I ran, of her beauty, I felt that this jealous demoniac must fancy himself justified in committing seven times seven murders upon me, if he should have it in his power. But, thank heaven, if jealousy can run six miles an hour, there are other passions, as for instance, fear, that can run, upon occasion, six and a half; so, as I had the start of him (you know, reader), and not a very short start – thanks be to the expanded petticoats of my dear female friends! naturally it happened that the green-eyed monster came in second best. Time luckily was precious with *him*; and therefore, when he had chased me into the by-road leading down to Greenhay, he turned back; and I, with somewhat sorrowful steps, on the consideration that this scene might need to be all acted over again, when Green-eyes might happen to have better luck, and being unhappy, besides, at having to number so many kind-hearted girls among Philistines and daughters of Gath, pensively pursued my way to the gates of Greenhay. *Pensively* is not the word that meets the realities of the case. I was unhappy, in the profoundest sense, and not from any momentary accident of distress that might pass away and be forgotten, but from deep glimpses which now, as heretofore, had opened themselves, as occasions arose, into the interior sadnesses, and the inevitable conflicts of life. I knew – I anticipated to a dead certainty – that my brother would not hear of any merit belonging to the factory population whom every day we had to meet in battle; on the contrary, even submission on *their* part, and willingness to walk penitentially through the *Furcæ Caudinæ*, would hardly have satisfied his sense of their criminality. Continually, indeed, as we came in view of the factory, he used to shake his fist at it, and say, in a ferocious tone of voice, "*Delenda est Carthago!*" And certainly, I thought to myself, it must be admitted by every body that the factory people are inexcusable in raising a rebellion against my brother. But still rebels were men, and sometimes were women; and rebels, that stretch out their petticoats like fans for the sake of screening one from the hot pursuit of enemies with fiery eyes (green or otherwise), really are not the sort of people that one wishes to hate.

Homeward, therefore, I drew in sadness, and little doubting that *hereafter* I might have verbal feuds with my brother on behalf of my fair friends, but not dreaming how much displeasure I had already incurred by my treasonable collusion with their caresses. That part of the affair he had seen with his own eyes from his position on the field; and then it was that he left me indignantly to my fate, which, by my first reception, it was easy to see would not prove very gloomy. When I came into our own study, I found him engaged in preparing a *bulletin* (which word was just then traveling into universal use), reporting briefly the events of the day. Drawing, as I shall again have occasion to mention, was among his foremost accomplishments; and round the margin of the border ran a black border, ornamented with cypress, and other funeral emblems. When finished, it was carried into the room of Mrs. Evans. This Mrs. Evans was an important person in our affairs. My mother, who never chose to have any direct communication with her servants, always had a housekeeper for the regulation of all domestic business; and the housekeeper for some years at this period was this Mrs. Evans. Into her private parlor, where she sat aloof from the under servants, my brother and I had the *entrée* at all times, but upon very different terms of acceptance: he, as a favorite of the first class; *I*, by sufferance, as a sort of gloomy shadow that ran after *his* person, and could not well be shut out if *he* were let in. Him she admired in the very highest degree; myself, on the contrary, she detested,

which made me unhappy. But then, in some measure, she made amends for this, by despising me in extremity, and for *that* I was truly thankful – I need not say *why*, as the reader already knows. Why she detested me, so far as I know, arose out of my reserve and thoughtful abstraction. I had a great deal to say, but then I could say it only to a very few people, among whom Mrs. Evans was certainly not one; and when I *did* say any thing, I fear that my dire ignorance and savage sincerity prevented my laying the proper restraints upon my too liberal candor; and *that* could not prove acceptable to one who thought nothing of working for any purpose, or for no purpose, by petty tricks, or even falsehoods – all which I held in stern abhorrence, that I was at no pains to conceal. The *bulletin*, on this occasion, garnished with its pageantry of woe, cypress wreaths, and arms reversed, was read aloud to Mrs. Evans, indirectly therefore to me. It communicated, with Spartan brevity, the sad intelligence (but not sad to Mrs. E.), "that the major-general had forever disgraced himself, by submitting to the ... caresses of the enemy." I leave a blank for the epithet affixed to "caresses," not because there *was* any blank, but, on the contrary, because my brother's wrath had boiled over in such a hubble-bubble of epithets, some only half-erased, some doubtfully erased, that it was impossible, out of the various readings, to pick out the true classical text. "Infamous," "disgusting," and "odious," struggled for precedency; and *infamous* they might be; but on the other affixes I held my own private opinions. For some days, my brother's displeasure continued to roll in reverberating thunders; but at length it growled itself to rest; and at last he descended to mild expostulations with me, showing clearly, in a series of general orders, what frightful consequences must ensue, if major-generals (as a general principle) should allow themselves to be kissed by the enemy.

**[From Bentley's Miscellany.]**

## THE HISTORY AND MYSTERY OF THE GLASS-HOUSE

Upward of two thousand years ago, perhaps three, a company of merchants, who had a cargo of nitre on board their ship, were driven by the winds on the shores of Galilee, close to a small stream that runs from the foot of Mount Carmel. Being here weather-bound till the storm abated, they made preparations for cooking their food on the strand; and not finding stones to rest their vessels upon, they used some lumps of nitre for that purpose, placing their kettles and stew-pans on the top, and lighting a strong fire underneath. As the heat increased, the nitre slowly melted away, and flowing down the beach, became mixed up with the sand, forming, when the incorporated mass cooled down, a singularly beautiful, transparent substance, which excited the astonishment and wonder of the beholders.

Such is the legend of the origin of Glass.

A great many centuries afterward – that is to say, toward the close of the fifteenth century of the Christian era – when some of the secrets of the glass-house, supposed to have been known to the ancients, were lost, and the simple art of blowing glass was but scantily cultivated – an artificer, whose name has unfortunately escaped immortality, while employed over his crucible accidentally spilt some of the material he was melting. Being in a fluid state it ran over the ground till it found its way under one of the large flag-stones with which the place was paved, and the poor man was obliged to take up the stone to recover his glass. By this time it had grown cold, and to his infinite surprise he saw that, from the flatness and equality of the surface beneath the stone, it had taken the form of a slab – a form which could not be produced by any process of blowing then in use.

Such was the accident that led to the discovery of the art of casting Plate-Glass.

These are the only *accidents* recorded in the History of Glass. For the rest – the discovery of its endless capabilities and applications – we are indebted to accumulated observation and persevering experiment, which, prosecuting their ingenious art-labors up to the present hour, promise still farther to enlarge the domain of the Beautiful and the Useful.

The importance of glass, and the infinite variety of objects to which it is applicable, can not be exaggerated. Indeed it would be extremely difficult to enumerate its properties, or to estimate adequately its value. This thin, transparent substance, so light and fragile, is one of the most essential ministers of science and philosophy, and enters so minutely into the concerns of life, that it has become indispensable to the daily routine of our business, our wants, and our pleasures. It admits the sun and excludes the wind, answering the double purpose of transmitting light and preserving warmth; it carries the eyes of the astronomer to the remotest region of space; through the lenses of the microscope it develops new worlds of vitality which, without its help, must have been but imperfectly known; it renews the sight of the old, and assists the curiosity of the young; it empowers the mariner to descry distant ships, and to trace far-off shores, the watchman on the cliff to detect the operations of hostile fleets and midnight contrabandists, and the loungee in the opera to make the tour of the circles from his stall; it preserves the light of the beacon from the rush of the tempest, and softens the flame of the lamps upon our tables; it supplies the revel with those charming vessels in whose bright depths we enjoy the color as well as the flavor of our wine; it protects the dial whose movements it reveals; it enables the student to penetrate the wonders of nature, and the beauty to survey the marvels of her person; it reflects, magnifies, and diminishes; as a medium of light and observation its uses are without limit; and as an article of mere embellishment, there is no form into which it may not be moulded, or no object of luxury to which it may not be adapted.

Yet this agent of universal utility, so valuable and ornamental in its applications, is composed of materials which possess in themselves literally no intrinsic value whatever. Sand and salt form the main elements of glass. The real cost is in the process of manufacture.

## CURIOUS PROPERTIES OF GLASS

Out of these elements, slightly varied according to circumstances, are produced the whole miracles of the glass-house. To any one, not previously acquainted with the component ingredients, the surprise which this information must naturally excite will be much increased upon being apprised of a few of the peculiarities or properties of glass. Transparent in itself, the materials of which it is composed are opaque. Brittle to a proverb when cold, its tenuity and flexibility when hot are so remarkable that it may be spun into filaments as delicate as cobwebs, drawn out like elastic threads till it becomes finer than the finest hair, or whisked, pressed, bent, folded, twisted or moulded into any desired shape. It is impermeable to water, suffers no diminution of its weight or quality by being melted down, is capable of receiving and retaining the most lustrous colors, is susceptible of the most perfect polish, can be carved and sculptured like stone or metal, never loses a fraction of its substance by constant use, and, notwithstanding its origin, is so insensible to the action of acids that it is employed by chemists for purposes to which no other known substance can be applied.

The elasticity and fragility of glass are among its most extraordinary phenomena. Its elasticity exceeds that of almost all other bodies. If two glass balls are made to strike each other at a given force, the recoil, by virtue of their elasticity, will be nearly equal to the original impetus. Connected with its brittleness are some very singular facts. Take a hollow sphere, with a hole, and stop the hole with your finger, so as to prevent the external and internal air from communicating, and the sphere will fly to pieces by the mere heat of the hand. Vessels made of glass that has been suddenly cooled possess the curious property of being able to resist hard blows given to them from without, but will be instantly shattered by a small particle of flint dropped into their cavities. This property seems to depend upon the comparative thickness of the bottom. The thicker the bottom is, the more certainty of breakage by this experiment. Some of these vessels, it is stated, have resisted the strokes of a mallet, given with sufficient force to drive a nail into wood; and heavy bodies, such as musket-balls, pieces of iron, bits of wood, jasper, bone, &c., have been cast into them from a height of two or three feet without any effect; yet a fragment of flint, not larger than a pea, let fall from the fingers at a height of only three inches, has made them fly. Nor is it the least wonderful of these phenomena that the glass does not always break at the instant of collision, as might be supposed. A bit of flint, literally the size of a grain, has been dropped into several glasses successively, and none of them broke; but, being set apart and watched, it was found that they all flew in less than three-quarters of an hour. This singular agency is not confined to flint. The same effect will be produced by diamond, sapphire, porcelain, highly-tempered steel, pearls, and the marbles that boys play with.<sup>6</sup>

Several theories have been hazarded in explanation of the mystery; but none of them are satisfactory. Euler attempted to account for it on the principle of percussion; but if it were produced by percussion the fracture would necessarily be instantaneous. The best solution that can be offered, although it is by no means free from difficulties, refers the cause of the disruption to electricity. There is no doubt that glass, which has been suddenly cooled, is more electric than glass that has been carefully annealed – a process which we will presently explain; and such glass has been known to crack and shiver from a change of temperament, or from the slightest scratch. The reason is obvious enough. When glass is suddenly cooled from the hands of the artificer, the particles on the outer side are rapidly contracted, while those on the inner side, not being equally exposed to the influence of the atmosphere, yet remain in a state of expansion. The consequence is that the two portions are established on conflicting relations with each other, and a strain is kept up between them which would not exist if the whole mass had undergone a gradual and equal contraction, so that when a force is applied which sets in motion the electric fluid glass is known to contain, the motion goes on

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<sup>6</sup> Ency. Brit.

propagating itself till it accumulates a power which the irregular cohesion of the particles is too weak to resist. This action of the electric fluid will be better understood from an experiment which was exhibited before the Royal Society upon glass vessels with very thick bottoms, which, being slightly rubbed with the finger, broke after an interval of half an hour.<sup>7</sup> The action of the electric fluid in this instance is sufficiently clear; but why the contact with fragments of certain bodies should produce the same result, or why that result is not produced by contact with other bodies of even greater size and specific gravity, is by no means obvious.

Among the strangest phenomena observed in glass are those which are peculiar to tubes. A glass tube placed in a horizontal position before a fire, with its extremities supported, will acquire a rotatory motion round its axis, moving at the same time *toward* the fire, notwithstanding that the supports on which it rests may form an inclined plane the contrary way. If it be placed on a glass plane – such as a piece of window-glass – it will move *from* the fire, although the plane may incline in the opposite direction. If it be placed standing nearly upright, leaning to the right hand, it will move from east to west; if leaning to the left hand, it will move from west to east; and if it be placed perfectly upright, it will not move at all. The causes of these phenomena are unknown, although there has been no lack of hypotheses in explanation of them.<sup>8</sup>

It is not surprising that marvels and paradoxes should be related of glass, considering the almost incredible properties it really possesses. Seeing that it emits musical sounds when water is placed in it, and it is gently rubbed on the edges; that these sounds can be regulated according to the quantity of water, and that the water itself leaps, frisks, and dances, as if it were inspired by the music; seeing its extraordinary power of condensing vapor, which may be tested by simply breathing upon it; and knowing that, slight and frail as it is, it expands less under the influence of heat than metallic substances, while its expansions are always equable and proportioned to the heat, a quality not found in any other substance, we can not be much astonished at any wonders which are superstitiously or ignorantly attributed to it, or expected to be elicited from it. One of the most remarkable is the feat ascribed to Archimedes, who is said to have set fire to the Roman fleet at the siege of Syracuse by the help of burning-glasses. The fact is attested by most respectable authorities,<sup>9</sup> but it is only right to add, that it is treated as a pure fable by Kepler and Descartes, than whom no men were more competent to judge of the possibility of such an achievement. Tzetzetz relates the matter very circumstantially; he says that Archimedes set fire to Marcellus's navy by means of a burning glass composed of small square mirrors, moving every way upon hinges; which, when placed in the sun's rays, directed them upon the Roman fleet, so as to reduce it to ashes at the distance of a bow-shot. Kircher made an experiment founded upon this minute description, by which he satisfied himself of the practicability of at least obtaining an extraordinary condensed power of this kind. Having collected the sun's rays into a focus, by a number of plain mirrors, he went on increasing the number of mirrors until at last he produced an intense degree of solar heat; but it does not appear whether he was able to employ it effectively as a destructive agent at a long reach. Buffon gave a more satisfactory demonstration to the world of the capability of these little mirrors to do mischief on a small scale. By the aid of his famous burning-glass, which consisted of one hundred and sixty-eight little plain mirrors, he produced so great a heat as to set wood on fire at a distance of two hundred and nine feet, and to melt lead at a distance of one hundred and twenty, and silver at fifty; but there is a wide disparity between the longest of these distances and the length of a bowshot, so that the Archimedean feat still remains a matter of speculation.

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<sup>7</sup> Lard. Cyclo.

<sup>8</sup> The most plausible reason assigned is that of the expansion of the tube toward the fire by the influence of the heat. The fallacy of this theory is at once shown by the fact that, although heat does expand bodies, it does not increase their weight; therefore, notwithstanding that one side of the tube may be expanded, its equilibrium will remain unimpaired.

<sup>9</sup> Diodorus Siculus, Tzetzetz, Galen, Lucian, Anthemius, and others.

## WHY IS NOT GLASS MALLEABLE?

In the region of glass, we have a puzzle as confounding as the philosopher's stone (which, oddly enough, is the name given to that color in glass which is known as Venetian brown sprinkled with gold spangles), the *elixir vitæ*, or the squaring of the circle, and which has occasioned quite as much waste of hopeless ingenuity. Aristotle, one of the wisest of men, is said, we know not on what authority, to have originated this vitreous perplexity by asking the question. "Why is not glass malleable?" The answer to the question would seem to be easy enough, since the quality of malleability is so opposed to the quality of vitrification, that, in the present state of our knowledge (to say nothing about the state of knowledge in the time of Aristotle) their co-existence would appear to be impossible. But, looking at the progress of science in these latter days, it would be presumptuous to assume that any thing is impossible. Until, however, some new law of nature, or some hitherto unknown quality shall have been discovered, by which antagonist forces can be exhibited in combination, the solution of this problem may be regarded as at least in the last degree improbable.

Yet, in spite of its apparent irreconcilability with all known laws, individuals have been known to devote themselves assiduously to its attainment, and on more than one occasion to declare that they had actually succeeded, although the world has never been made the wiser by the disclosure of the secret. A man who is possessed with one idea, and who works at it incessantly, generally ends by believing against the evidence of facts. It is in the nature of a strong faith to endure discouragement and defeat with an air of martyrdom, as if every fresh failure was a sort of suffering for truth's sake. And the faith in the malleability of glass has had its martyrology as well as faith in graver things. So far back as the time of Tiberius, a certain artificer, who is represented to have been an architect by profession, believing that he had succeeded in making vessels of glass as strong and ductile as gold or silver, presented himself with his discovery before the Emperor, naturally expecting to be rewarded for his skill. He carried a handsome vase with him, which was so much admired by Tiberius that, in a fit of enthusiasm, he dashed it upon the ground with great force to prove its solidity, and finding, upon taking it up again, that it had been indented by the blow, he immediately repaired it with a hammer. The Emperor, much struck with so curious an exhibition, inquired whether any body else was acquainted with the discovery, and being assured that the man had strictly preserved his secret, the tyrant instantly ordered him to be beheaded, from an apprehension that if this new production should go forth to the world it would lower the value of the precious metals.<sup>10</sup> The secret, consequently, perished. A chance, however, arose for its recovery during the reign of Louis XIII., a period that might be considered more favorable to such undertakings; but unfortunately with no better result. The inventor on this occasion submitted a bust formed of malleable glass to Cardinal Richelieu, who, instead of rewarding him for his ingenuity, sentenced him to perpetual imprisonment, on the plea that the invention interfered with the vested interests of the French glass manufacturers.<sup>11</sup> We should have more reliance on these anecdotes of the martyrs of glass, if they had bequeathed to mankind some clew to the secret that is supposed to have gone to the grave with them. To die for a truth, and at the same time to conceal it, is not the usual course of heroic enthusiasts.

Many attempts have been made to produce a material resembling glass that should possess the quality of malleability, and respectable evidence is not wanting of authorities who believed in its possibility, and who are said to have gone very near to its accomplishment. An Arabian writer<sup>12</sup> tells us that malleable glass was known to the Egyptians; but we must come closer to our own times for

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<sup>10</sup> This story is attested, with slight variations, by several writers, Petronius, Dion Cassius, Pliny, and Isidorus. Pliny says that the populace, imagining that their interests would be injured by the discovery, destroyed the workhouse, tools, and dwelling of the artificer.

<sup>11</sup> Blancourt.

<sup>12</sup> Ibn Abd Alhakim.

more explicit and satisfactory testimony. Descartes thought it was possible to impart malleability to glass, and Boyle is reported to have held the same opinion. But these are only speculative notions, of no further value than to justify the prosecution of experiments. Borrichius, a Danish physician of the seventeenth century, details an experiment by which he obtained a malleable salt, which led him to conclude that as glass is for the most part only a mixture of salt and sand, he saw no reason why it should not be rendered pliant. The defect of his logic is obvious; but, setting that aside, the fallacy is practically demonstrated by his inability to get beyond the salt. Borrichius also thought that the Roman who made the vase for Tiberius, may have successfully used antimony as his principal ingredient. Such suppositions, however, are idle in an experimental science which furnishes you at once with the means of putting their truth or falsehood to the test. There is a substance known to modern chemistry, *luna cornea*, a solution of silver, which resembles horn or glass, is transparent, easily put into fusion, and is capable of bearing the hammer. Kunkel thought it was possible to produce a composition with a glassy exterior that should possess the ductile quality; but neither of these help us toward an answer to Aristotle's question. Upon a review of the whole problem, and of every thing that has been said and done in the way of experiment and conjecture, we are afraid we must leave it where we found it. The malleability of glass is still a secret.

### DESCRIPTION OF A GLASS-HOUSE

Dismissing history and theory, we will now step into the glass-house itself, where the practical work of converting sand into goblets, vases, mirrors, and window-panes is going forward with a celerity and accuracy of hand and head that can not fail to excite wonder and admiration. As the whole agency employed is that of heat, the interior of the manufactory consists of furnaces specially constructed for the progressive processes to which the material is subjected before it is sent out perfected for use. Look round this extensive area, where you see numbers of men in their shirt-sleeves, with aprons before them, and various implements in their hands, which they exercise with extraordinary rapidity, and you will soon understand how the glittering wonders of glass are produced. Of these furnaces there are three kinds, the first called the *calcar*, the second the working furnace, and the third the annealing oven, or *lier*.

The *calcar*, built in the form of an oven, is used for the calcination of the materials, preliminary to their fusion and vitrification. This process is of the utmost importance: it expels all moisture and carbonic acid gas, the presence of which would hazard the destruction of the glass-pots in the subsequent stages of the manufacture, while it effects a chemical union between the salt, sand, and metallic oxides, which is essential to prevent the alkali from fusing and volatilizing, and to insure the vitrification of the sand in the heat of the working furnace, to which the whole of the materials are to be afterwards submitted.

The working furnace, which is round, and generally built in the proportion of three yards in diameter to two in height, is divided into three parts, each of which is vaulted. The lower part, made in the form of a crown, contains the fire, which is never put out. Ranged round the circumference inside are the glass-pots or crucibles, in which the *frit*, or calcined *material*, is placed to be melted; and from several holes in the arch of the crown below issues a constant flame which, enveloping the crucibles, accomplishes the process of melting. Round the exterior of the furnace, you perceive a series of holes or mouths; these are called *boccas*, from the Italian, and it is through them the *frit* is served into the crucibles and taken out when melted. The volume of heat is here so intense, that the *boccas* are provided with movable collars or covers, generally composed of lute and brick, to screen the eyes of the workmen who stand outside in recesses formed for the purpose in the projections of the masonry. The severest part of the work arises when any of the pots, or crucibles, happen to become cracked or worn out, in which case the *bocca* must be entirely uncovered, the defective pot taken out with iron hooks and forks, and a new one substituted in its place through the flames by the

hands of the workman. In order to enable him thus literally to work in the fire, he is protected by a garment made of skins in the shape of a pantaloon, and heavily saturated with water. This strange garment completely covers him from head to foot, all except his eyes, which are defended by glasses.

The material being now melted is fashioned into the desired forms by the hands of the workmen while it is yet hot, and then placed to cool gradually in the third furnace, or annealing oven, called the *lier*. This oven is a long, low chamber, heated at one end, and furnished with movable iron trays or pans, called *fraiches* (from the French), upon which the various articles are set down, and finally removed, when they are sufficiently cold, through an opening which communicates with the *sarosel*, or room where the finished articles are kept.

The intensity of the fire requires that the furnaces and crucibles, should be constructed of materials the least fusible in their nature, and the best calculated to resist the violent and incessant action of heat; or the manufacturer will incur the most serious losses and delays from casualties which, even after the most careful and costly outlay, can not be always averted. The crucibles especially demand attention in this respect, in consequence of the solvent property of some of the materials which are melted in them. These crucibles are deep pots, varying in size according to the extent or objects of the manufacture; and some notion may be formed of the importance attached to them from the fact, that they are not unfrequently made large enough to contain individually not less than a ton weight of glass. Great skill and care are requisite in their structure, so as to adapt them to the temperature in which their qualities are to be tested; and even with the utmost attention that can be bestowed upon them, they are often found to break soon after they are exposed to the furnace, by which heavy losses are entailed upon the manufacturer. Nor is this the only point which must be considered. The size of the crucible should bear a proportionate relation to that of the furnace, or one of two consequences, equally to be avoided, will ensue; either that there will be a waste of fuel, if the crucibles are too small, or an inadequate heat, if they are too large.<sup>13</sup>

We have now before us the three principal processes – the calcination, by which the materials are prepared in the first instance – the melting down of these materials into glass in the great working furnace, and the annealing of the finished article after it has been fashioned by the workmen. These processes are broad and simple; but that part of the manufacture which is, probably, most calculated to surprise the uninitiated, is the manner in which the red-hot mass of glass, as it is taken out of the crucible, is instantly, so to speak, shaped into form by the dextrous hands and practiced eyes of those men whom you see standing about at tables and stools, twisting long iron rods called *pontils*, blowing through pipes, and performing mysterious evolutions with scissors, pronged sticks, compasses, and other instruments, with a rapidity that baffles the most vigilant observer. From the infinite diversity of objects into which glass is thus moulded, it must be obvious that the operations of these artificers embrace a variety of curious details which it is impossible to enter upon here; but a glance at some of them will enable the reader to form a general notion of the curious manipulations upon which they are so actively employed.

The initial movement of the glass-blower is to dip a hollow iron rod or tube, about five feet long, through the *bocca*, into one of the crucibles containing the melted glass. Having collected at the end of the tube a sufficient quantity of material for the article he is about to fashion – a drinking-glass, finger-glass, jug, or whatever it may be (which requires, perhaps, two or three dips according to the quantity he wants), he withdraws the tube, and holds it perpendicularly for a few seconds with the heated mass downward, till the fluid drops and lengthens by its own momentum beyond the end of the tube. He then quickly raises it, and rolls it on a smooth horizontal plate till it acquires a cylindrical form. When he has got it into this shape, he applies his mouth to the opposite end of the tube, and blows into the heated mass which swiftly becomes distended into a sphere. But as the globe thus obtained is not rendered sufficiently thin for his purpose by a single blowing, he reheats it by holding

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<sup>13</sup> For details see Loysel "Sur l'Art de la Verrerie;" and Lard. Cyclo.

it within the furnace, and then blows again, repeating the operation till he brings it to the desiderated size and consistency. Thus prepared, he swings it in the air like a pendulum, or twirls it round and round rapidly, according to the elongated or circular form he requires, the molten particles obeying the tendency of the force and motion employed.

Having advanced to this stage, and the mass being ready for fashioning, a new instrument is brought to bear upon it. This is a small, solid, round iron rod, called the pontil, upon one end of which a lesser portion of material has been collected by another workman, and this portion being applied to the extremity of the globe already formed rapidly adheres to it. The whole is now detached from the tube, or blowpipe, by simply damping the point of contact, which causes the glass to crack, so that a stroke upon the tube separates it safely, leaving a small hole in the globe where the tube had originally entered.

By this time the temperature of the mass has cooled down, and it becomes necessary to reheat it, which is done as before. The artificer next seats himself on a stool with elevated arms, upon which he rests the pontil, which he grasps and twirls with his left hand, having thus a command over the red-hot glass with his right hand, in which he holds a small iron instrument called a procello, consisting of two blades with an elastic bow, similar to a sugar-tongs. With this little instrument the whole work of fashioning is performed, and as it must be completed while the glass is yet ductile (having always, however, the power of reheating it when necessary), the process is effected with wondrous celerity. By the aid of the procello he enlarges or contracts the mass, which he adapts to its motions with his left hand, and where any shapeless excrescences appear he instantly cuts them off with a pair of scissors as easily as if they were so much lace or cotton. And thus, almost in less time than it has occupied us in the description, articles of the most exquisite form and delicacy are created by the art-magic of these Vulcans of the glass-furnace.

That which chiefly excites astonishment and admiration in the spectator is the ease and security with which a material so fragile is cut, joined, twirled, pressed out and contracted, by the hands of the workmen. Long practice alone can insure the requisite certainty and quickness of manipulation, and the eye must be highly educated to its work before it can achieve off-hand, and, by a sort of accomplished instinct, the beautiful shapes which are thus rapidly produced.

The moment the article is finished it is detached from the pontil and dropped into a bed of ashes, from whence it is removed while it is yet hot, by a pronged stick or wooden shovel, to the tray to be deposited in the annealing oven where it is gradually cooled.

## HOW CROWN, PLATE, AND WATCH GLASSES ARE MADE

In making crown-glass, which is used for windows, a slight alteration in the process is observed. When the globe is prepared as before at the end of the tube, it is flattened at its extremity by pressure against a plain surface; the new material at the end of the pontil is then attached to the flattened side, and the whole mass detached from the tube, leaving a circular hole at the point of separation. The mass is now twirled round and round, at first slowly, then more quickly, till its diameter, obeying the centrifugal force, becomes wider and wider, the hole expanding in proportion. At last, as the motion increases in velocity, the double portion suddenly bursts open, the whole forming a plain disc of uniform density throughout, except at the spot in the centre where the pontil is attached to it, and where there is accumulated that small lump which is vulgarly called a *bull's eye*. The most surprising incident in this process is the bursting open of the flattened globe, a circumstance which would shiver the entire mass if it were not kept up at a certain heat.

The mode of casting plate-glass presents a remarkable illustration of the skillful adaptation of means to ends. When the glass is melted in the crucible, a portion of it is transferred to a smaller crucible, called a cuvette, which contains the exact quantity requisite for the size of the plate about to be formed. The cuvette is then raised by means of a crane, and lifted over the casting table. These

tables have smooth metallic surfaces which are carefully ground and polished, and wiped perfectly clean, and heated before they are used. Formerly they were made of copper, but the British Plate Glass Company have found that iron slabs answer the purpose better. The table used by them is fifteen feet long, nine feet wide, and six inches thick, and weighs fourteen tons. For the convenience of moving it to the annealing ovens it is placed upon castors. The cuvette being swung over the casting table, is gradually turned over, and a flood of molten glass is poured out upon the surface, and prevented from running off by ribs of metal. As soon as it is entirely discharged, a large hollow copper cylinder is rolled over the fluid, spreading it into a sheet of equal breadth and thickness. When the glass is sufficiently cool to bear removal it is slipped into the annealing oven, where it is placed in a horizontal position,<sup>14</sup> great care having been taken to exclude the external air, it being indispensable to the beauty of these plates that the process of cooling should be regular and gradual.

No less than twenty workmen are engaged in these operations, and during the whole time the apartment is kept perfectly still, lest a motion of any kind should set the air in motion, the slightest disturbance of the surface of the plate being calculated to impair its value. "The spectacle of such a vast body of melted glass," observes Mr. Parks, "poured at once from an immense crucible, on a metallic table of great magnitude, is truly grand; and the variety of colors which the plate exhibits immediately after the roller has passed over it, renders this an operation more splendid and interesting that can possibly be described."<sup>15</sup>

To attempt the briefest outline of the vast number of objects that are composed of glass, and the variety of processes to which the material is subjected in their production, would carry us far beyond the limits within which we are unavoidably confined. Even the most trifling articles of daily use, apparently very simple in their formation, involve many elaborate details. Take a watch, for example. The history from the furnace to the workshop, of those parts of a watch which are composed of glass, is full of curious particulars. The watch-glass maker exercises a function distinct from any one of those we have hitherto been considering. He receives from the blower an accurate hollow globe of glass, measuring eight inches in diameter, and weighing exactly twelve ounces, which is the guarantee at once of the regularity and thinness of the material. Upon the surface of this globe the watch-glass maker traces with a piece of heated wire, sometimes with a tobacco pipe, as many circles of the size he requires as the globe will yield, and wetting the lines while they are yet warm, they instantly crack, and the circles are at once separated. He finds the edges rough, but that is got rid of by trimming them with a pair of scissors. The circles thus obtained are deficient, however, in the necessary convexity; he accordingly reheats them, and, with an instrument in each hand, beats or moulds them into the precise form desired, much in the same manner as a dairy-maid, with her wooden spoons beats a pat of butter into shape. The edges are now ground off, and the watch-glass is complete. The preparation of the dial, which is composed of opaque white glass, ordinarily known as enamel, is a much more complicated work, involving several minute processes and a larger expenditure of time. Upon both sides of a thin plate of slightly convex copper, bored with holes for the key, and the hour and minute hands, is spread with a spatula a coat of pounded glass which has gone through several stages of solution and purification before it is ready for application. In the management of this operation, and the absorption of any moisture that may linger in the enamel, considerable care and delicacy of hand are necessary. As soon as the dial-plate is perfectly dried it is put into the furnace to be heated gradually. These processes of firing and enameling must be repeated altogether three times before the work is finished; after which the lines and divisions for the hours and minutes are marked upon the surface by a totally different process. We have here merely touched the principal points in the formation of dial-plates; the details are too complex for enumeration.

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<sup>14</sup> In this respect plate-glass is treated differently from crown and broad glass, which is always placed on its edge in the annealing furnace.

<sup>15</sup> Lard. Cyclo.

If we find in such articles as these the employment of numerous chemical agencies, special tools, and peculiar manipulation, we may easily give credit to the greater wonders that remain to be developed in more costly processes; such as the composition of artificial gems, of the pastes that are made to resemble diamonds and pearls, amethysts, emeralds, and precious stones of all colors and degrees of brilliancy, beads, bulbs, striped tubes, and a hundred other fanciful toys and ornaments; the formation of lenses and eye-glasses; the coloring of glass for various purposes; and the arts of staining and painting, silvering, gilding, cutting, engraving, and etching, each of which has its own mysteries, and has been prosecuted in different ages by different means. When it is said that some of these arts are lost, the fact must be taken in a restricted sense, as merely implying that certain chemical combinations, formerly in use, are unknown to us; but the same arts are still practiced by other means. It is a peculiarity in the manufacture of glass that almost every establishment has its own receipts, and, consequently, its own secrets. Even in the materials employed in the first process of calcination – not to speak of subsequent working processes – there is an infinite diversity of choice in the ingredients, and the proportions in which they are combined; and such is the jealousy of the great manufacturers respecting these matters, that they never admit visitors into their establishments except under the seal of the strictest confidence.<sup>16</sup> It is not surprising, therefore, that while the elementary principles of the art have descended to us, particular combinations and processes should have died with their discoverers, or be still kept shut up in the manufactories where they are successfully practiced.

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<sup>16</sup>To such an extent has this jealousy been carried, that many adroit expedients have been employed to mislead and baffle curiosity. Hence the infinite variety of receipts for the production of different sorts of glass that have been launched upon the public, a vast number of which have been got up expressly for the purpose of deceiving and misdirecting the inquirer. To this circumstance may be referred the remarkable contradictions and inconsistencies that may be detected in all treatises on the subject.

## AN EXCELLENT MATCH; OR, THE BLESSINGS OF BAD LUCK

"It is quite impossible," said I, as I walked round the garden with my old friend, the vicar; "it is quite impossible to leave home in May; the bees will be swarming, and it is the very week of the school feast."

"We will have the school feast a week earlier," answered he; "and, as to the bees, I will look after them myself, and you will have the pleasure of seeing a new colony or two safely housed, and hard at work, when you come back again."

I was silenced on these points, and began to reflect what other excuse I could find to put off a disagreeable journey. But there was something in my friend's manner that warned me it would be vain to offer any further objection. He looked upon my attendance at my niece's wedding as a matter of duty, and he would have removed every obstacle that my ingenuity could oppose to it, with as much coolness as he displayed at that moment, in sweeping a spider's web from the China rose-tree on my verandah.

I yielded, but not without a sigh. "Dear Amy," I said, "I love her very much, and would do much to serve her, but my presence at her fine wedding will be no advantage to her, and a great annoyance to me, therefore it would be better to put off my visit until the fuss and ceremony is fairly over."

My reverend friend shook his head. "We are called on to rejoice with those who do rejoice," said he; "as well as to weep with those who weep, although we may not always be in a mood to obey the summons."

This was very like a passage from one of the good man's sermons, but I knew the sentiment it contained came from his heart, and what was more, I knew it would have influenced his own actions.

"Amy was indeed a charming child," continued he, "when you brought her to be cured of the hooping-cough among our Cumberland mountains. I only hope the little world of boarding-schools, and the great one of fashion, may not have spoilt her by this time."

I hoped so, too, but I was by no means sanguine on the subject. My friend was right; Amy was a charming child when we had her among us. With far more character and greater talent than her elder sisters, she had promised to equal them in grace and beauty; and her warm heart and sunny temper captivated every body who knew her. It would be a pity to spoil such a nature as hers, and yet I could not conceal from myself, that there were points in her character which rendered her peculiarly liable to be spoilt by the favors and flatteries of the world.

"Then you will go?" were the last words the vicar said to me, as we shook hands at parting.

I answered in the affirmative, and a fortnight after, encumbered with rather more in the way of trunks and bandboxes than I usually travel with, I set off.

Mrs. R. met me this time with a load of care upon her brow. She was often anxious-looking, for even her world, light and trifling as it was, had its burdens, and at this time she seemed overwhelmed by them. Who could wonder at it? Next to the great change which removes a beloved child from the embraces of her parents to an unseen world, there is nothing in solemnity equal to that tie which transfers the guardianship of her happiness to a stranger. When a daughter marries, her parents are deprived of the first place in her love and reverence, and bereaved for ever of the daily companionship, which, in the decline of life, becomes so precious a solace and so dear a joy. What a tremendous responsibility there is in the choice of the person who is to be intrusted with so costly a deposit, and in whose favor are relinquished such valued rights? How few are the men whose characters present a combination of qualities, which under such circumstances, could satisfy the fears and misgivings of a parent's love!

Something of all this I could not help expressing. Mrs. R. replied that they had perfect confidence in Mr. Lennox; it was in every respect a most unexceptionable match; there was a splendid income to begin with, and every prospect of an immense fortune in a few years, and an excellent position in society; as to moral character, and that sort of thing, of course, all was perfectly satisfactory. "What you say about parting with one's children," continued she, and here she applied her exquisite pocket-handkerchief to her eyes, "is very true — it *is* very hard to part with Amy; but," she philosophically added, "it must be so, so it is no use grieving about it."

And she did not grieve about it any more, but became very fluent upon other grievances, which this affair had brought upon her; and now I began to perceive that the true causes of anxiety were something widely different from those which I had anticipated.

"I am worried to death," said my poor sister-in-law; "every thing rests with me. I have all the arrangements to make, and no one to consult with, for Mr. R. takes no interest in these matters, and as to Amy, she is a perfect child. Louisa, too, has become so dull and indifferent, she is of no use at all. I miss Fanny beyond every thing; her wedding was comparatively no trouble, for she helped me to think; but now I am positively miserable lest all should not go off as it ought to do."

Here was a species of affliction, for which I had certainly no ready-made speech of condolence, and I should have been somewhat embarrassed how to reply, if the entrance of the girls had not rendered reply unnecessary. It was some years since I had seen Amy, who had always been my darling; and when I could disengage myself from her warm embrace, I looked at her earnestly, to notice all the changes which those years had made in her. Her beauty was something marvelous, and I was so much taken up with her, that I did not at first pay much attention to her sister, but when I did so, I felt both shocked and surprised. The few summers that had passed since I saw her a blooming girl, did not warrant the change which had taken place in her appearance. Her complexion had lost its color; her features looked thin and pinched; there was a querulous expression, which I had never noticed before, about the mouth; and the skin round the eyes had that livid hue, which gives to the countenance so peculiar an appearance of unhealthiness.

"My dear Louisa," I exclaimed, "you are surely not well!"

She answered she was tolerably well, and, as she did not appear to like to be questioned, I made no farther inquiries, but gave my attention to the detail of the various arrangements that had been entered into for the approaching ceremony. I was to see the wedding clothes, of course, and I exposed my ignorance, or at least forgetfulness, of modern fashion, by asking for the bonnet.

"Bonnet! aunt," cried Amy; "wreath I suppose you mean — here it is," and she placed it on her beautiful brow. Louisa threw the costly veil over her head, and there was a picture which a Reynolds or a Lawrence might have been proud to copy. I had not long to admire it. Amy laughed and blushed, and threw the things away again. What strange fashions there are with respect to wedding clothes, thought I; my mother was married in a riding-habit and hat, just as if she had been going fox-hunting; nowadays, nothing but a ball dress will do for the ceremony; albeit it be performed on the stone floor of a country church, at Christmas time. Must a wedding dress, indeed, be one as different as possible to the wearer's daily habits and every-day appearance — a kind of climax to all the little duplicities, voluntary and involuntary, which, it is said, are inseparable from courtship? Well, well, be it so! Thy outward attractions, Amy, will not have lost much, when the blonds and satins are put into the bandbox. God grant that it may be the same with the other and dearer graces of the heart and mind!

The few days which intervened between my arrival and the wedding-day were very busy ones; so busy that I could see very little of the bride elect, and still less of the bridegroom. What I did see of the latter, however, impressed me very favorably. He seemed worthy of all Amy might become, all he thought she was, for he was passionately in love, as it is not difficult to imagine a young man would be with a being so beautiful and attractive. What her feelings toward him were, I could not exactly decide. Everybody said she loved him, and so she thought herself; but I could not bring myself to believe that her heart was yet awakened to a profound and passionate sentiment of affection. She

admired her future husband, and was flattered by being the choice of one who was universally allowed to be a superior man; she liked his company, and felt grateful to him for his love. If this were not love, it was at least a good foundation for it, and, perhaps, the wonder was that it had not yet ripened into a warmer sentiment. But Amy was a child – a child whose whole life had been surrounded by trifles; and there was a depth and seriousness in Edward Lennox's character to which her own was yet but imperfectly attuned. Would the future bring with it companionship and love, or estrangement and indifference? A tremendous question this appeared to me, but one which apparently entered into the head of no one in all that busy house, except into that of the elderly spinster aunt.

The wedding took place. There is no occasion to describe it; most people, at any rate the young ones, know how such things are managed nowadays. The bride and bridegroom departed, and the bridesmaids dispersed until the return of the wedded pair should re-assemble them for the important business of receiving company. As this return was not likely to be speedy, I too said farewell, for I had engaged to visit other friends, before returning to my hermitage – as Mrs. R. persisted in denominating my cottage – although it was situated close to a populous village, and not far from a flourishing market-town.

I went away very anxious about Louisa. Mrs. R. was sensible of the change in her daughter's appearance and professed herself unable to understand it. No girls, as she observed, had more indulgences or greater means of amusement than hers had, but nothing pleased or amused Louisa now. I inquired if any thing had occurred to render her unhappy. Her mother said there had been a slight love affair, but that reasons sufficient to satisfy Louisa herself had set it on one side, and that she did not think the attachment still existed. My future observations inclined me to agree with Mrs. R. in this latter particular, but it seemed to me as if this fancy, slight as it might have been, had awakened the poor girl to the consciousness that she had a heart and a soul; that she possessed capacities which called for nobler objects and a wider sphere of action, than were furnished in the region of frivolity wherein she dwelt. Not that she could have put her feelings into words – they existed in her mind too vaguely for that; her longings were indefinable to herself, but they were real, and I was convinced they were sapping the very foundations of her existence. I would fain have taken her home with me. I would have brought her into contact with the genuine wants and woes of humanity, represented, it might be, in humble types, but varnished over by none of the falsehood and glitter of fashionable society. I would have done so, because I believed that here she might find something to interest and rouse her to action. This once accomplished, her energies would no longer be left to prey upon themselves, and the weariness of an aimless existence would be at an end. But had my abode been, indeed, the cell of an anchorite, and buried in the depth of the wilderness, Mrs. R. could not have shrunk with more horror from the idea of trusting her daughter to my guardianship, than she did when I made the proposal. In vain I represented how happy Amy had always been while under my care, and how infallible had been the effect of Cumberland air upon all her juvenile ailments. In as plain terms as were consistent with her accustomed good breeding, Mrs. R. intimated, that though it might do very well for a child, Louisa would be moped to death at my cottage. She needed amusement, interest, that was certain; she must go to Brighton, to Hastings, to Baden, if possible – any where, to give her a complete change of scene and ideas. I gave the matter up, but I believed that in my solitude she would have found a greater change of scene and ideas than she would be likely to meet with in any fashionable watering-place.

Months rolled on. The bride and bridegroom returned, but not before I was again settled at home. I had letters from Amy, cheerful, happy letters they were. How could they be otherwise? The whole joys of the world were before her, and with a lively fancy, and the keen sense of enjoyment of eighteen, how could she be insensible to their attractions! I had letters from Mrs. R. too, full of Amy's praises. They told me how gracefully she had played her new part – how, whether she appeared abroad or received guests at home, she was the delight of every eye, the praise of every tongue. This was not all I would have known, but I could learn no more, and it was two years before Amy and I met again.

She was then the mother of a fine little boy, and as blooming and beautiful as ever. She seemed happy too, and preserved that uninterrupted flow of gayety which had always been so charming. Not so her husband. The ease and cheerfulness, which had once characterized his conversation, had vanished; he was silent and reserved; it seemed to me that some hidden sorrow, for which he had no confidant, was preying on his mind. When I hinted to Amy the change in her husband's manner, she tossed her pretty head, and poutingly remarked, that she supposed men were always more agreeable in the days of courtship than after marriage. But, in spite of her childish petulance, a tear stole to her eye, which I was not sorry to see there. True it was that Edward Lennox was completely disenchanted. He had found out that the thoughtless, inexperienced girl, who had never been led to reflect on any thing more serious than the amusement of the present hour, was not the perfect woman, the ideal of his fancy, and the echo of his every thought and feeling. He was a man of an almost jealously sensitive turn of mind, and when he found he was not comprehended, he shrank into himself, and took refuge in an impenetrable reserve. Amy, poor child, had no idea of all that was passing in her husband's mind. She was conscious of no change in herself, and she little thought how different had been his conception of her character to its reality. She believed that what her mamma had told her about the caprice of men, explained the change which she could not but be sensible had taken place in his sentiments toward her; and though this change sometimes made her sad, she did not love deeply enough to be quite heart-broken. But Amy was still loved. If Mr. Lennox did not love her as he could have loved the true wife of his bosom, he cherished her as a lovely child, whose happiness was intrusted to his keeping, and it seemed to me as if fears for her, as well as sorrow of his own, harassed and perplexed him.

Mrs. R. was right. Nothing could be more faultless than the easy grace with which Amy presided at her husband's table, or mixed in the gay circles of fashionable amusement. With perfect truth, I could congratulate her mother on this point, but I felt a kind of wonder, well as I knew Mrs. R., to observe what unmingled satisfaction it afforded her. She evidently considered that nothing was wanting to the complete *success* of this marriage. Poor woman! she soon changed her opinion most woefully!

Louisa was still poorly; she had rallied for a while, but now seemed to droop more than ever. I often went to spend the evening with her when Mrs. R. and Amy were from home, and very dear had these hours become to me. The prospect of eternity had opened to that young spirit, and it had caused a rapid development of the noblest powers of the soul. With the waking of the spiritual nature, the intellect had been aroused also, and, animated by these powers, she was a different being. No wonder when her mother caught her cheerful smile, or her beaming eye, that she believed her convalescent, and I, for one, could not destroy the illusion.

One evening when I had left Amy in the hands of her maid, preparing to go out to dine, I went into the library to look for a book which I had promised to read to Louisa that evening, and felt a little disconcerted to find Mr. Lennox seated by the fire, with his arms folded, and apparently so completely engrossed by his reflections as scarcely to notice my entrance. As I had believed him to be preparing to accompany Amy, I had by no means expected to find him here, and I explained my errand somewhat apologetically. He started from his reverie, and rising, completed my astonishment by requesting five minutes' conversation.

"Are you not going out?" I asked.

"Out? Oh, I had forgotten. No, not tonight."

There was something in his whole manner that alarmed me. "What is the matter?" said I, and I believe I changed color, and said something about my brother.

"Don't be alarmed," said he, "no one is in trouble or danger but my unfortunate self, and, through me, poor Amy. To be plain with you, Miss R., for I believe I may speak out to you, without apprehending a fit of fainting or hysterics, I am a ruined man. Mind," he added, quickly, and a look of manly dignity replaced the troubled expression of his brow and eye, "I use the word in its ordinary,

conventional signification. You and I would call no man ruined, in the literal sense of the word, who retained his honor unstained, and the vigor of his head and the strength of his hand unimpaired."

I was so completely taken by surprise, that I had no power to reply, and he went on; "If it were only for myself, I could bear it, I believe, as well as most people, but the thought of that poor girl unmans me. Amusement, society, luxury, seem to make up her very life, and to tell her she must be deprived of these things, is dreadful. Oh!" he continued, bitterly, "if I could be to Amy all that she once was to me, how light would all trials be while our love remained; but that *was* an idle dream!"

"It may be no dream yet," answered I. "Amy has a heart, though her life, hitherto, has offered little to prove its depth. Who knows but that, when she is called on for sympathy and action, she may prove all we could wish?"

"Do not flatter me with false hopes," he said; "I have given up such ideas as those forever."

I had some hope that matters were not so bad as in the first moment I had been given to understand they were, and I begged for further information. I found, however, the statement Mr. Lennox had made was substantially true; he had, indeed, lost a handsome property, and all that remained was an opportunity of realizing a comfortable independence by personal exertion. But the sacrifice of the luxuries, and the worldly consideration which the possession of wealth bestows, was inevitable; a sacrifice which frequently causes distress very disproportionate to the worth of the objects abandoned.

When he had in a few words put me in possession of the actual state of his affairs, he said: "Now comes the question of what is best to be done with Amy. It is possible I may find it advisable to go out to India, but, whether I go or stay, I think it would be better for her to accompany her mother and Louisa to Baden. She will feel the change less at first, I have consulted with her father, and he agrees with me in this opinion."

"Very likely," said I, dryly; "and if it is your intention that Amy should remain all her life a spoiled child of fortune, you could not take better means to attain your end. If she is ever to prove what a rational being should be, it must be by the discipline of life; do not, then, attempt to shield her from trials which may be of more benefit to her than all the favors of fortune. Do not suppose you can guarantee her from sorrow; rather call upon her to share your distresses, than leave her to be consumed by the selfish vexations which inevitably fall to the lot of the idle and indulged. But, if you would inspire her with devotion, you must give her your confidence. Tell her all – let her know your actual position – what you hope from her – what you fear. You and she may live to bless the day which brings these trials."

"Ah! if I could think," he began; "but no – you do but judge after your own earnest nature – you do not know Amy."

"Nor you – nor any one; she does not know herself. A girl's character is like a rosebud, folded up from every eye; but, unlike the flower, it expands more under clouds and tempests than under the genial sun."

There was a pause, during which he sat musing, then he said, "When I called your attention to my unhappy affairs, it was with the intention of requesting you to break the matter to Amy for me, but you have half persuaded me to do it myself."

"Yourself, by all means," said I; "and let there be no concealment between you. What am I to do about telling Louisa and Mrs. R.?"

"Oh! they must know, certainly," answered he. "Mrs. R. will be gone out when you arrive, so you will be spared that scene. Louisa – who has now more sense and courage than all of us put together – will break it to her best in the morning. Here is the carriage, let me put you into it, and then for poor Amy."

He was right. Louisa did seem to have more sense and courage now than any of us. Perhaps, she felt herself too near another world to affix an undue value on the things of this, for none of the agitation which I had feared resulted from the communication, and we consulted together calmly and

rationally on the best means of making present circumstances useful to Amy, and tolerable to her mother. But, calm as she was, I thought it better to spare her the first burst of Mrs. R.'s distress, and therefore I remained the night over, and returned to Amy in the morning.

I found her alone in the nursery, with her sleeping infant in her arms. Her eyes were bent pensively on its countenance, and there was an expression of serious thoughtfulness on her beautiful features, which became them as well as the gayety which was their native character.

"My dear, dear aunt," she said, as I kissed her cheek, "how much I owe you!"

"Owe me, my love! what do you mean?"

"If it had not been for you, Edward would have told me nothing. I should never have known half his causes of distress, and I should have believed him cold and indifferent, when, on the contrary, he was depressed by anxiety for me, and for our boy."

Here was a spring of action at once. The fountains of sympathy, of gratitude, of love, were opened; might not these waters prove sufficient to fertilize a life? I believed so, and I felt that Amy was saved.

I was not mistaken. From that day, she was a new creature. If the sacrifices she was called upon to make at first appeared great, they were soon rendered insignificant by the regret which she felt when she reflected how little her previous education had prepared her to make the best of a limited income, to prove the friend, companion, and confidante, which her husband would now need more than ever, or to fulfill the office of guide and instructress which her little boy would soon call upon her to perform.

"These are not subjects for regret, Amy," said I, when she poured out her heart to me, as she had been in the habit of doing in her childish days; "with youth and health, they are but stimulants to exertion."

Mr. Lennox went to India, but only for a year, and, sorely against her will, Amy was left behind. As she could not accompany him, she wished to return home with me, for a year's schooling, as she playfully expressed it, and, in spite of Mrs. R.'s remonstrances, I carried her off.

What a busy year we had of it! We cooked; we cut out linen (the village schoolmistress was for a time a cipher in that department); we tried experiments in domestic economy; we made calculations; then we read light books and heavy books, history and philosophy, poetry and romance, I being obliged to exercise great ingenuity to avoid an immoderate proportion of educational works, a department of literature to which Amy, in common with many young mothers, manifested a decided preference.

Thus occupied, the days and weeks glided swiftly away, but not without leaving traces of their passage. Amy's intellectual and moral growth in this twelvemonth was as rapid as was her boy's increase in physical proportions. She felt it herself, and, with her increased self-respect, increased her love and admiration of the husband, for whose sake she had been stimulated to self-government and self-tuition. Small had been the joy of her wedding-day, compared to the rapture with which, at the end of the year, she threw herself into his arms; and slight had been his disappointment after the honeymoon, to the delightful surprise which he felt every day on the discovery of some new improvement, or the promise of some fresh excellence in his lovely wife.

"Yes, yes," I thought, as I watched them walking in the garden, and talking over their future plans, with that look of perfect confidence which tells so much; "those hearts are united now – they will soon grow so close that nothing earthly will avail to separate them."

I wiped my spectacles – they had often been dimmed the last day or two – and taking little Herbert's hand, we, too, sallied forth for a confidential *tête-à-tête* among the daisies.

I went to see Amy when she was once more settled in a house of her own, and, though Mrs. R. sighed and shook her head, every time *poor* Amy's domestic arrangements were alluded to, I thought every thing about her charming. True, she was waited upon by a tidy housemaid, instead of a tall footman; true, if she required a special dainty to appear upon her table, she was obliged to soil the

tips of her own delicate fingers, instead of commanding the service of a professional artiste; true, if she wished to go abroad, she walked, instead of using a carriage. But what then? I could not see that she was a bit the worse for any of these changes. Then, again, she did not now go one night to the opera, another to the theatre, and a third to a ball; but she was so busy in the daytime, and so happy in the evening, in the company of her husband, that she had no desire for such amusements. She no longer presided over great entertainments, but her small, cheerful, pretty house, furnished with good taste and thoroughly arranged for comfort, was always hospitably open to those true friends whom adverse fortune had not rendered shy or indifferent.

"Poor Amy does seem happy," remarked her mother, after we had spent a delightful evening with the young folks, and a party of old friends; "it is very strange, but she does seem happy in spite of her misfortunes."

"Misfortunes!" exclaimed my brother; "call them blessings! Yes, Margaret, I am a convert at last, and ready to confess that women are improvable, and that the loss of wealth *may* prove an inestimable blessing!"

## ANECDOTES OF WORDSWORTH

It is not our intention to criticise the writings of the great philosophical poet of modern times, but merely to note down a few recollections of the benign old man before they pass away forever with the fleeting shades of memory.

Glorious old man of the mountain, methinks we see him now: his deep-set gray eyes steeped in contemplation; his hand buried in his waistcoat – one leg crossed over the other – reciting in a deep, but somewhat tremulous voice, a passage, either from Milton or himself – the only two poets he honored by his quotations. While the vision stands before us, let us sketch the outward and visible shape, which held a great spirit within its fold.

Tall, and broadly formed, spare of flesh, with a slight stoop, carelessly dressed; a fine oval face; a nose aquiline, though somewhat heavy; bald about the brow, with a few gray hairs straggling over the forehead; fragments of gray whiskers, and a mouth, inclined to be large, but energetically compressed; his eyebrows turned upward when listening, and contracted when talking, with a deep voice, broken by its very emphasis: this is as near a picture as we can give of the "Bard of Rydal." To a certain extent, although in a different sense, what Pope wrote for Gay, applies to Wordsworth:

"In wit, a man – in simplicity, a child."

Taking wit as poetical intellect, this is Wordsworth's character in a single sentence.

There was a strange mixture of the sublime and the ridiculous in his composition. He would descant on Milton, or the principles of poetry, with a freshness and vigor of mind worthy of the author of the "Laodamia," and the next minute utter such astounding opinions about steamboats, reform, and human progress and politics, as would positively make a child of ten years old smile.

The most remarkable thing about him was his entire ignorance of modern literature: the poetry of the last thirty years was unknown to him: no solicitation would possibly induce him to read it – the only contemporaries he had read or acknowledged, were Scott, Rogers, Landor, Coleridge, and Southey.

The undue attention which he bestowed upon what other men considered trifles, was another remarkable trait in his character: he would correspond perseveringly with the secretary of a railway concerning an overcharge in the carriage of a parcel, and he would walk a dozen miles, and call at a dozen houses, to recover an old cotton umbrella, not worth a shilling. The importance of these small matters had doubtless been forced upon him by his early poverty, and by the manly independence and integrity of his character.

Exact himself, he exacted exactness from others, and if, when in company with a friend, they took a cab together, he would on no account suffer his companion to pay more than his share: when the conveyance stopped, he would inquire of the driver the fare, take out his own half, and give it to the Jehu, leaving his associate to do the same. We remember on one occasion, when we had jumped out first, and paying all the charge, and he afterward paying the sharp Jehu his half, that he, on discovering the imposition, wanted us to run half-way down Southampton-street to get the overcharge back, and regaled the company at dinner that day with an energetic denunciation of the rascality of cab-men, and the idleness and extravagance of youth.

Among his weaknesses was a reverence for rank and wealth, perfectly puzzling in so independent a man: if he had promised to dine with a baronet, and an invitation came from an earl he considered it a piece of religious duty to forfeit his prior engagement, and he would never realize the idea that the baronet could possibly feel offended.

Another curious trait in his character was his inability to understand the slightest approach to a joke: even when explained to him, he would feel uneasy, and put it on a logical rack: with him every

thing was either absolutely true or absolutely false: – he made no allowance for pleasantry, badinage, persiflage, or even playfulness: he took every thing literally.

A young lady, an intimate friend of his, related to us a ludicrous instance of the embarrassments this occasionally led to: being on a visit to the Lakes for the first time, the old poet took great pride in showing her all his pet spots and finest views. They were, consequently, out very often, for hours and hours together.

At an evening party, the niece of Lady F – (whose grounds join the bard's garden), in the gayety of girlhood, said to the poet: "I saw you this morning, Mr. Wordsworth, before any body was up, flirting with my aunt on the lawn; and then how slyly you stole away by the back entrance." This alluded to a gate made to save the *detour* of going into the road. The words had scarcely passed the giddy girl's lips, ere she became painfully aware that she had committed some tremendous crime. Wordsworth looked distressed and solemn at his wife: his wife looked muffled thoughts at her daughter, Miss Wordsworth, and then they all three looked at each other as though, holding a silent conclave. Inspiration and speech came to the poet first. Turning solemnly round to our informant, he said, emphatically, to her: "After the remark just made, it is of course necessary that I should reply. Miss C – , you are young and lovely; you have been alone with me repeatedly in solitary spots, and I now put it to you, if I have ever acted toward you in a manner unbecoming a gentleman and a Christian?" Our friend thus appealed to, could scarcely refrain from roaring with laughter, but she thought it best to answer in accordance with the spirit of the question; and having considerable tact, she managed to patch this "awful matter" up! A damper, however, had fallen on the meeting, and it ended drearily. We might recount other evidence of the unpoetical thralldom to which constant association with a few old ladies of the Rydal neighborhood had bowed down the full, vigorous intellect of Wordsworth. Yet, even in these absurdities, he retains a simplicity and earnestness of character, which almost supply the want of that geniality and dignity we generally associate with the great poet.

## MODERN MUMMIES. – A VISIT TO THE TOMBS OF BORDEAUX

The city of Bordeaux possesses much that is interesting. Many historical associations are connected with it, from the time of its occupation by the Romans, downward. It was the birthplace of the Latin poet Ausonius, and also of the English Edward, the famous Black Prince; Montesquieu was born in its neighborhood, and Montaigne was once its mayor; the district of which it is the centre gave its name to the celebrated party of the Girondins. It enjoys very considerable trade. The country round it produces some of the best wines in France. Its quays and many of its streets are handsome and lively. The public buildings are not a little remarkable. In particular, we may cite the theatre, which, though surpassed by a few others in size, is unrivaled in modern Europe for the combination it presents of elegance, symmetry, and perfect adaptation to its purpose. The noble bridge, too, by which the Garonne – here nearly the third of a mile wide – is crossed, must not be forgotten either. When we consider the difficulties attending the work, or the success which has crowned it, the bridge is perhaps the greatest boast of Bordeaux, and it is not without reason that the pride of the Bordelais pronounces it *unique*.

But the most curious thing, in its way, which Bordeaux possesses, is a vault under St. Michael's church. That edifice itself presents but little worth notice, except its mutilated tower, which, with its spire, was once more than three hundred feet high, and was reduced to its present state by a gale of wind, the upper part of it being literally blown over. Finding so little, therefore, here to interest us, we are about to leave the church, when our guide asks if we would like to see the charnel-house of St. Andrew. The name strikes us; we accept the invitation and follow him, wondering what is before us. We descend a staircase, and exchange the pure air and bright sky of Guienne for the close and stone-smelling atmosphere of a subterraneous passage, and the darkness made visible by the uncertain lamp of our conductor. We arrive at a low doorway, and bend to pass beyond it. This is the place. At first we see nothing; our eyes, however, soon become accustomed to the obscurity, and a strange spectacle is disclosed to them. We find we are standing in a round and vaulted chamber of rough masonry: it resembles an inverted bowl, the spring of its arch being but a little above the floor; this floor is of uneven earth, and may be some twenty feet in diameter. Round the walls, and supported in a standing position, are a great number of human bodies. There are ninety in all. We are in a large company of the dead; and the ground on which we tread is composed of hundreds more, for that whitish dust is the dust of bones, and the original bottom of the pit is many feet below.

The fact is, as the guide informs us, that a cemetery near the church having been disturbed, the vault was made the receptacle of the remains found in it. As for the bodies piled round its sides, some peculiar property of the spot in which they were originally deposited had preserved them entire; and such as they now are they will probably remain, for some of them were living six hundred years ago. Their flesh has been transformed into a substance resembling tinder; the skin has much shrunk, and has become brown, so that they resemble very thin mulattoes, but, in most other respects, they are scarcely changed. Many of them still possess all their teeth; their hair remains – one has a long beard. The expression their countenances wore in death is still perfectly distinct. They are of both sexes and of all ages, and, consequently, of every size. The histories of a few are known. In the case of most, you can read something of their past lives in their faces and forms, as you can in those of the living, so completely does their physiognomy retain the impress of the passions which once moved and agitated them. One is the body of a man who was a street porter in his time: it is fully seven feet high. He was renowned for his strength, but broke his back one day about a hundred years back, under a burden too heavy for him. Another presents the features of a singularly beautiful and graceful woman who died of cancer. On a third body, you remark the nun's dress in which the poor inmate

of the cloister was interred. Her face still wears a look of sadness and melancholy resignation. You see in the breast of one man the sword-thrust wound which had caused his death. The most painful to behold is the body of a young boy, the convulsed contraction of whose features and members presents a frightful appearance of moral as well as of physical agony. Some medical men have given it as their opinion that this unhappy being had been buried alive, and that it was in his frenzied efforts to burst his cerements that his limbs stiffened into their present horrid aspect. Speaking of medical men, there is one of their fraternity in the collection, an old doctor, who thus shares the tomb, it may be, of some of those whom he, perhaps, helped to send to it.

Such are the mummies of Bordeaux. As to the cause of the phenomenon, we can offer no explanation, though more learned men than we will, doubtless, easily find many. We trust, however, that such may be more reasonable than that offered by an author before us, who ascribes the preservation of the bodies to the heat of the climate. The guide, of course, has his own theory. A baker had his oven close to the place in which they were at first interred, and the heat of the said oven petrified them. But, whatever may be the proper solution of the question, St. Michael's church at Bordeaux is not the only locality which possesses such a curiosity, though none that we are aware of can boast a museum so complete. Similar discoveries are said to have been made at Toulouse, under a Franciscan, and also under a Dominican monastery, but we must say that, when in that town, we never heard of them. We have, however, ourselves seen the bodies preserved in a crypt of the cathedral church of Bremen. This crypt is called the Bleikeller, or lead-cellar, for what precise reason we do not remember. It is not entirely underground, but enjoys a certain dubious daylight. The mummies here are contained in rough wooden coffins, and are attired in the usual vestments of the dead, but with their faces exposed. Each has its history, which the respectable lady who showed them to us duly recounted, removing each coffin-lid as she did so, and replacing it as she passed to another. As at Bordeaux, one of them had been slain by the sword; he was a student who fell in a duel. Another was the body of an English lady of the name of Stanhope. If we bore that name, we should take measures to prevent her remains being thus made a show of.

Since we are speaking of Bremen, we may mention another object, of a somewhat similar kind, which that town possesses. Gesche Gottfried was a female prisoner, a modern Brinvilliers. She poisoned her husband (two husbands, unless we are mistaken), some of her children, and several of her friends and relatives. At last, in an attempt to poison a young man, to whom she was about to be married, she was detected, condemned, and decapitated. This was a few years back, and they have now got her head, preserved in spirits, in the Bremen Museum.

## RECOLLECTIONS OF CHANTREY, THE SCULPTOR

Of Chantrey the recorded life and character are eminently simple and compact. Easy of comprehension is the tenor of both. The one was marked by steady common-sense; the other by progressive success. Chantrey was born at Norton, in Derbyshire, in 1782. The son of one of the few remaining small proprietors cultivating their own land, he received a moderate education, and was apprenticed, at his own instance, to a working wood-carver. Every onward step was marked by native sagacity. His natural gifts led him to the more ambitious branches of art. He began with portrait-painting. But his craft of wood-carving, securing, as it did, a subsistence, he did not relinquish till his position as sculptor was assured: a wise plan, since for eight years he, according to his own account, scarce realized £5 by modeling. He began with an imaginative effort or so, but soon found his legitimate field. With the £10,000 brought him by his wife in 1811, he provided himself with house, studio, offices, marble, &c., like a prudent speculator. From the epoch of his bust of Horne Tooke – an important patron to him – dates his success. This brought him into notice. Commissions thenceforward flowed in. The remainder of his life was a course of regular labor, relieved by constant hospitality and the periodic relaxation of country visits, and his favorite amusement, angling: interspersed with such occurrences as the visit to Italy; a few other continental trips; the erection, at a cost of £20,000, of a new house and offices, adapted to the growing largeness of his dealings, and his knighthood. With characteristic shrewdness, he early avoided committing himself to any political or party opinions. This, his prosperity, and his common-sense rendered him a great favorite with the English aristocracy. But too often, indeed, is the inane world of aristocratic Dilettantism felt hovering dimly near, as we read these pages. His large income and social disposition induced him to keep a hospitable house. And it was part of his tact to secure, without much reading, varied average knowledge, by frequent intercourse with men of science and letters. During the last two years of his life, his health rapidly and wholly gave way: the ordinary fate of his class, the hard workers and social livers. He was in the maturity of middle age, on his sudden death in 1841.

This course is as much that of a man of business as of an artist. Yet Chantrey's was a truly estimable, though no exalted, or rare character. There was a native dignity, a reality, an English genuineness about the man, legible in his whole life, and very engaging; even amid the chaotic adumbrations of the present biography. He was a favorable sample of a class not uncommon among us, the prosperous men who have risen through their own efforts, and deservedly. Generous, frank, hearty he was; above all, eminently *direct* in his dealings and character. One of his distinguishing features as a man, and as one of the class just mentioned, was his honest pride in his origin and progress in life. Without self-complacency, a manly consciousness of his true relations to the world pervaded him. The taint of flunkeyism in his position so facile to catch, touched him not. That respect for the intrinsic and essential, in character and position, his early circumstances naturally inspired, was never forsaken for worship of the privileged caste which favored and surrounded him.

One of those receiving freely and spending freely, he showed his sense of the value of money by its liberal devotion to the enjoyment of himself and all around. Ever open to tales of distress, he was the frequent dupe of his kind impulses. To his brother artists, he was generous in more ways than that of hospitality. Few earning a large income have manifested a better title thereto, by their use of it. In a profession inevitably unequal in the attainment of the prizes of fortune, compensation for the direction of so large a share into one or two fashionable channels, is found in so genial a worldly head of it as Chantrey. His generosity bordered on lavishness; yet even here, his prudence did not wholly forsake him. He left a large property; bequeathed, after Lady Chantrey, to the Royal Academy in trust, for purposes of doubtful judiciousness, but unquestionable good intention; in the way of fostering the "higher branches of art."

Rough and free in his manners, he was as full of *bonhomie* as good feeling. His letters are instinct with the heartiness and good fellowship of the man, and have a very agreeable freshness, and freedom from effort, if also, from any claims in the matter of thought.

In person, Chantrey did not belie his inner self. Mr. Jones, his biographer, indeed, gives us to understand, in one place, he resembled Shakspeare; in another, that it was Socrates he was like; and thereon, would have us accept a deeper similarity, of mind, to the Greek philosopher! A notion nearer the mark, is graphically supplied by his friend Thomson, when he begins his letter with a red wafer stuck on the paper; eyes, nose, mouth, &c., given in black. The symbol so pleased the sculptor, he adopted it himself as an occasional jocose signature.

Chantrey's intellect was a limited but emphatically capable, if not a very elevated one; ready at command and certain. All he said or did was, as far as it went, to the purpose. Altogether practical was the whole man. The sagacity of a sublimated common sense, was his prevailing characteristic. His mind was a perceptive one, not thoughtful or intense; making use of all that came in his way; gleaning information; receiving results, and applying them shrewdly. He attained proficiency in all he undertook, whether it were wood-carving, painting, portrait-busts, fishing, shooting. Without his range, were it but one step, he was helpless. But then, as a rule, he took care never to advance that step. And this was easy to him; for he was averse to all beyond the literal, and the every-day. The singular, the eccentric, in thought, manner of art, way of wearing one's hair, or any other department, he detested. "Let us stick to the broad, common high-way, and do our best there," was the instinctive feeling of the man. He was haunted by no unattainable, ever-retreating, fair ideals. No dreaming aspirations, or indefinite yearnings, had part in his life. His somewhat extreme, and in Mr. Jones's hands, quite over-done devotion to "*simplicity*," was very characteristic; in unison with that really satisfactory in him, but pointing to his wants, his restrictedness of feeling and unimaginativeness.

The same practical tendency and restriction of effort to things within reach, the sagacious, unerringly successful application of himself to the certain and definite, characterize his art: in the artist, ever the blossom and result of the whole man. Emphatic fulfillment does his success afford of the celebrated apophthegm of Mulready, "Know what you have to do, and do it." He did not spend himself on false aims, nor once lose himself in a wrong track. Having early ascertained his true field, portraiture, he consistently adhered to it, notwithstanding all "advice of friends;" though far from lacking ambition, or high ideas of the so-called higher branches. In this, his history is especially instructive, worthy of heed. He was faithful to the light that was in him. And in better times of art he might have been a still better artist.

## SAILING IN THE AIR. – HISTORY OF AERONAUTICS

*(Continued from page 173.)*

In the history of aeronautics, the name of Mr. Charles Green, who first turned his attention to the art in 1821, occupies a prominent place. To him the art is indebted for the introduction of carbureted-hydrogen, or coal gas, as the means of inflating balloons. Great as was the improvement effected by the substitution of hydrogen gas for rarefied air, there are serious disadvantages connected with the use of that gas. In the first place, it is procured at vast expense; and, in the second place, it is difficult to obtain it in sufficient quantity, several days of watchful anxiety having been often expended in the vain endeavor to generate a sufficiency of the gas, which, on account of the subtilty of its particles, and its strong affinity for those of the surrounding atmosphere, continued to escape almost as fast as it was produced. Perplexed at the outset with these difficulties and inconveniencies, which had not only rendered experiments comparatively rare, but even threatened the art with premature extinction, Mr. Green conceived that if coal gas, which is much cheaper and can be generated with much greater facility than hydrogen, could be employed for the purpose of inflation, an important object would be gained. To put the truth of his theory to the test, he prepared a balloon, which he inflated with coal gas, and made a successful ascent from the Green Park, on the day of the coronation of George IV. He has subsequently made some hundreds of ascensions from the metropolis, and various other parts of the empire, with balloons so inflated; and, from the year 1821, coal gas has been very generally used in experiments of this nature. Besides its economy and easy production, it has the advantage of being more easily retained than hydrogen, which, for the reasons already given, is much more readily dissipated.

The ingenuity of Mr. Green has been exerted with the view of discovering other improvements in the art of aerial navigation. One great obstacle to the successful practice in the art is, the difficulty of maintaining the power of the balloon for any length of time undiminished in its progress through the air. It is ascertained by the uniform experience of aeronauts, that, between the earth and two miles above the level of the sea, a variety of currents exist, some blowing in one direction and some in another; and when the aeronaut has risen to the elevation where he meets with a current that will waft him in the desired direction, it is of importance for him to be able to preserve that elevation. But the balloon, in consequence of the increase or diminution of weight to which it is liable from a variety of causes, will not keep at that altitude. The great changes which are constantly taking place in the weight of the atmosphere, the deposition of humidity on the surface of the balloon, and its subsequent evaporation by the rise of temperature, the alternate heating and cooling of the gaseous contents of the balloon, according as it may be exposed to the action of the solar rays or screened from them by the interposition of clouds, not to advert to other agencies, less known though not less powerful, all combine in making the machine at one time to ascend and at another to descend. Thus it may be removed out of a favorable into an adverse current. To overcome this difficulty, and enable the aeronaut to keep the balloon at the same level without expending its power, by discharging gas from the valve to lower it, or by casting out a portion of the ballast to raise it – processes which must in time waste the whole power of the largest balloon, and bring it to the earth – Mr. Green suggested the contrivance of a rope of sufficient length and material trailing on the ground beneath, and if over the sea, the rope is to be tied to a vessel filled with liquid ballast, which floats on the surface. This rope will act as a drag on the balloon, when, from any of the causes we have referred to, it tends to rise, for, in that case, it will draw up a portion of the rope, and, by thus adding to its weight, will be impeded in its upward course; and, on the other hand, when, from opposite causes, it tends to

descend, it will, during every foot of its descent, have its weight, and consequently its descending tendency, diminished, by throwing on the earth the labor of supporting an additional portion of the rope. This, however, at best, is a clumsy contrivance, and there are various objections to its practical utility. It could hardly be practicable on land, on account of the damage and danger that would be occasioned by the entanglement of the rope in trees and buildings; and at great elevations above the earth, the weight of the rope would become so considerable as to require for its support a large portion of the ascending power of any balloon.

In the United States, many aerial voyages have been performed. The first of these was made by a Frenchman, M. Blanchard, in Jan., 1793, from Philadelphia, at which General Washington was a spectator. Gillio and Robertson, both Europeans, were the next after Blanchard. No Americans were engaged in the business until Mr. Durant, an ingenious citizen of New York, took it up after Robertson. He made a number of aerial excursions, and was shortly followed by new adventurers in the art, among whom the most celebrated is Mr. Wise, a piano-forte maker in Philadelphia, who in 1835 betook himself to the trade of ascending in balloons, and who up to this date has made upward of a hundred ascents.

Mr. Wise is entitled to the merit of having carefully studied and mastered the scientific principles of aeronautics, and he is among the most enthusiastic of his profession. While admitting that the art has advanced but little since its first discovery, compared with other sciences, he anticipates from it, if perseveringly cultivated by men of genius, the most splendid results, adopting, as the motto on the title-page of his work, the couplet from Shakspeare:

"There are more things in heaven and earth, Horatio,  
Than are dreamt of in your philosophy."

Some of his feats have been daring enough, and others still more perilous he is willing to undertake.

Not long after commencing the practice of his new profession, Mr. Wise resolved to test the practicability of descending in safety with the balloon, after it had burst, at the elevation of a mile or two. It would then, he conceived, form a parachute, and, from the resistance it would meet with from the atmosphere in its descent, would gently let him down to the earth. Having prepared a balloon of cambric muslin, which he coated with his newly-invented varnish, he ascended, as had been advertised, from Easton, in Pennsylvania, on the 11th of August, 1838, at a few minutes before two o'clock, afternoon, with the full determination of making the experiment, though he had concealed his intention both from the public and from his personal friends. He carried up with him two parachutes, the one containing a cat, and the other a dog. As the balloon approached a dense body of black thunder-clouds, some vivid flashes of lightning, accompanied by violent peals of thunder, greeted his upward course. This gave the first part of his voyage a terrific but grand and imposing appearance. It seemed to him as if heaven's artillery were celebrating these efforts of the new-born science, and, acting on his imagination, this inspired him with a fresh determination to explode the balloon. At different elevations, he detached first one and then another of the parachutes, with their occupants, which landed in safety. At the altitude of about 13,000 feet, the gas became expanded to its utmost tension, and the balloon was still rising, making it evident that, unless the safety-valve were speedily opened to allow a portion of the gas to escape, an explosion would speedily ensue. At this critical moment he became somewhat excited, and looking over the side of his car, he observed the sparkling coruscations of lightning springing from cloud to cloud, a mile beneath him, as the thunder-storm was passing, in its last remnants, below. He took out his watch, noted on his log-book the time – twenty minutes past two – and as he was about returning it to his pocket, thinking at the time whether it were not best, by opening the valve, to abandon, for the present, his favorite idea, the balloon exploded. His confidence in the success of the experiment never forsook him, and yet he admits that this was a moment of awful suspense. The gas rushed with a tempestuous noise from the rupture in the top,

and in less than ten seconds, the balloon was emptied of every particle of hydrogen. The descent at first was rapid, and in a moment or two, on looking up, he discovered that the balloon was canting over, but the weight of the car counteracted its tilting tendency, giving it an oscillating motion, which it retained until it reached the earth, which it struck with a violent concussion, and the car striking the earth obliquely, Mr. Wise was thrown forward from it about ten feet. The landing was made on a farm about ten miles from Easton, and many minutes had not elapsed before he had resolved in his mind to repeat the experiment in Philadelphia on the first opportunity.

Having arrived in Philadelphia in the month of September immediately following, he consulted several scientific gentlemen as to his intention. Doubtful of the safety of the experiment, though neither questioning the philosophy of atmospheric resistance, nor the theory of converting the balloon into a parachute, they earnestly endeavored to dissuade him from his purpose. But confident of the perfect safety with which, on scientific principles, he would descend, he publicly announced that he would ascend on the first of October, and explode the balloon at the height of upward of a mile. On the day advertised, at twenty minutes before five o'clock, afternoon, he left the earth in the presence of assembled thousands, and rose almost perpendicularly, in a perfectly clear sky. When the explosion took place, the lower part of the balloon did not immediately invert, as in the former experiment, for in this case the balloon burst open from top to bottom, and caved sideways. At the first discovery of this, he was somewhat alarmed, fearing that it might come down with a continuous accelerated velocity; but from this anxiety he was soon relieved, for it caught the wind like the mainsail of a ship, and *slid* down upon the atmosphere in a spiral course with a *uniform* velocity. The concussion, though from the apparent rapidity of the descent it threatened to be violent, was not harder than that which would follow the jumping from an elevation of ten feet to the ground.

From the experience of his numerous aerial excursions, Mr. Wise is of opinion, that, at a considerable elevation, there is a constant and regular current of wind blowing at all times, from west to east, with a velocity of from twenty to forty, and even sixty miles per hour, according to its height from the earth. On the strength of this conviction, he believes it to be perfectly practicable and safe, not only to cross the Atlantic, but even to circumnavigate the globe, in a balloon; and he has expressed his readiness to undertake either of these voyages. About the beginning of the year 1843, he actually proposed to some gentlemen of the city of Philadelphia, the project of making an aerial trip across the Atlantic, in undertaking which, he assured them, he would have as little hesitation as about embarking in the most approved steam-vessel that plied between the ports of New York and Liverpool. At first, supposing him to be in jest, they expressed their willingness to promote the design, but finding that he was in sober earnest, they began to evince conscientious scruples as to the responsibility they would incur, if by any chance his life should fall a sacrifice to the bold adventure. He next determined to petition the Congress of the United States, at their ensuing session, for the necessary pecuniary means; and flattering himself with the hope of the success of his application, to provide against the accidents which might arise from opposing local currents and storms, or from omissions, imperfections, and unforeseen necessities attendant upon all first trials, he issued a proclamation, addressed to all publishers of newspapers in the world, announcing it as his intention to make a trip across the Atlantic in a balloon in the summer of 1844, and calling upon the seafaring community of all climes not to be alarmed should they happen to be in the vicinity of a balloon, either on the ocean or in the atmosphere, but endeavor to give aid to the adventurers. He proposed to have for the car a sea-worthy boat, which would be of service in case the balloon should fail to accomplish the voyage; and the crew was to consist of three individuals – an aeronaut, a sea-navigator, and a scientific landsman.

By the time the Congress met, Mr. Wise had enlarged his idea of crossing the Atlantic to a purpose of sailing round the world. In a petition he presented to that assembly, dated Lancaster City, Dec. 20, 1843, he certifies, that by taking advantage of the current from west to east, which, governed by a great general law, blows at all times round the globe, it was quite practicable, from the improved

state to which aeronautic machinery can now be perfected, to travel eastward in a balloon with a velocity that would circumnavigate the globe in from thirty to forty days, and that the aeronaut, by taking advantage of the local currents, could vary from a straight course thirty or forty degrees from the latitude of departure, so as to be able to leave dispatches in Europe and China, and return by way of Oregon Territory to Washington City. He therefore prays the Congress to appropriate the money necessary for constructing an aerostadt of 100 feet in diameter of substantial domestic cotton drilling, with a sea-boat capable of enduring the ocean for a car, and so constructed that the masts and rigging may be stowed, ready for erection into sea service at any time that emergency might require. And he concludes by engaging, that, should his proposal meet with the approbation of the Congress, he would readily submit a plan in detail, and would cheerfully superintend the construction of the machinery at his own expense, asking nothing more than the command or directorship of the first experimental aerial voyage round the globe.

This petition was received and read by the Congress, and referred to the committee of naval affairs. But though the committee to which it was committed might not doubt that Mr. Wise had nerve sufficient to make the attempt, they probably had some doubts as to its practicability and safety, and therefore they made no report. Most men will think that the committee of Congress acted wisely, and that it is fortunate for Mr. Wise himself, that neither the Congress nor his private friends have, by supplying the necessary funds, put it in his power to risk his life in either of those foolish projects. The many accidents and hairbreadth escapes from severe bodily injury, if not from death, which he has met with, during the course of his profession, when undertaking much smaller excursions, scarcely warrant him to conclude, as he does, that such voyages would be attended with fewer risks than sailing in the most approved steam-vessels. To attempt to realize even his first idea of crossing the Atlantic in a balloon, would, in the present imperfect state of aeronautics, be nothing less than madness; to attempt to realize the second, would be "cyclopicus furor," to borrow a phrase from John Calvin — "a gigantic madness;" and we can only account for his forming or broaching such ideas, on the principle of vanity, or of that insensibility to physical danger which the adventurous gradually and unconsciously contract. We do not affirm that such schemes are absolutely impracticable, or that they will never be safely accomplished; for the astonishing discoveries already made in science render it impossible for us to say to what extent the elements may be rendered obedient to the sway of the human will. To speak of crossing the ocean, against wind and tide, in a vessel, by the simple aid of a kettle filled with boiling water, was, not many years ago, laughed at as the ravings of a crack-brained fool. A shaved head and a strait waistcoat were the promised rewards of the original projector of that most noble enterprise. And yet the foaming billows of the great deep are at this day hourly plied by the rushing steam-ship, bounding and puffing recklessly along, as though it were itself the victim of the madness ascribed to its projector, but landing, nevertheless, its precious freight unharmed upon the distant shores. Now, if such stupendous and astonishing results *have been* realized, what may not man, under the irresistible dominion of the great master-spirit of the age —*progress*— what may he not accomplish?" But it remains yet to be demonstrated that a pathway in a balloon through the atmosphere is less perilous than one in a ship on the ocean. The safety of traveling in balloons must be tested by smaller trips, before men will believe that these frail vessels of silk, or cambric muslin, may be safely trusted as a means of locomotion across the mighty Atlantic, or, what would be a still greater achievement, around the globe itself.

Having thus briefly traced the history of aeronautics, we shall now inquire into the practical value of the art.

After the discovery of the hydrogen-gas balloon, the most extravagant projects dazzled and bewildered the minds of men. To journey through the air from one part of the globe to another, or even to circumnavigate the globe itself, in balloons, was child's play, compared with the magnificent results that were anticipated. It was fondly expected that the new discovery would open up a channel of communication between the earth and its sister planets, and that the time was not far distant when

men would be embarking from the Earth, in a balloon, for the Moon, or for Mercury, Venus, Mars, the Asteroids, or some of the other planets, just as they embarked in a ship for France, Italy, India, China, Africa, or America. They forgot that the laws of gravitation, which bind man as by chains of adamant to this world, would ever interpose an insurmountable obstacle to the realization of such wild imaginings; that the atmosphere has its limits as well as the ocean, extending, it is calculated, not much beyond forty miles above the earth's surface; that, at a certain height, it is as light, by reason of its rarity, as the lightest gas with which a balloon can be inflated, thereby rendering all farther ascent impossible; and that, even before the aeronaut had reached that height, very serious consequences would ensue from the intense cold, from the diminution of atmospheric pressure, and from the inadequacy of a too rarified atmosphere for supporting respiration. Such overwrought expectations, however, produced by the first excitement of a great discovery, soon subsided, when men began soberly to reflect on the immutable laws, or, which is the same thing, the powerful mandate of the Creator, which confines all things within their appointed sphere.

But though the idea of emigrating by means of balloons to foreign worlds was relinquished, there still existed a desire to render them subservient to important terrestrial purposes, and various suggestions were made as to the uses to which they might be applied. It was proposed to employ their power of ascension as a mechanical force for raising water from mines, for transporting obelisks, and placing them on greater elevations, or for raising, without any scaffolding a cross or a vane to the top of a high spire. It was proposed that they might be employed as a means of making an escape from surrounding icebergs in the ocean, or for effecting a landing to otherwise inaccessible mountains, and observing their cloud-capped peaks – for exploring the craters of volcanoes – for traversing vast swamps and morasses – and for the improvement of the infant science of meteorology. It was besides predicted that they would become a safe, easy, and expeditious mode of traveling, and of conveying the products of every land and clime from one part of the globe to another. It is long since Dr. Dick suggested, in his "Christian Philosopher," that the missionaries of the cross might yet be able to avail themselves of the aid of balloons in going forth to distant regions to proclaim to the heathen the unsearchable riches of Christ, and that then there would be a literal fulfillment of the prediction of the last of the inspired seers, "And I saw another angel fly in the midst of heaven, having the everlasting gospel to preach unto them that dwell on the earth, and to every nation, and kindred, and tongue, and people." But to only two purposes has the ascending power of the balloon been as yet applied – to the reconnoitring of hostile armies, by the French, for a short time – and, in one or two instances, to the making of scientific observations. Only a single attempt, and a very absurd one, has been made to get up a traveling balloon. The gold-hunters of America, impatient of the slow process by which ships transport them to the golden regions of California, and, as if determined to press the air into the service of giving them a speedier conveyance, lately proposed to build a balloon, to carry them out at the rate of 200 miles per hour. A model of the machine was exhibited in New York and Philadelphia, and it created considerable sensation in the minds of the credulous. It was stated, in a respectable journal of New York, in 1849, that the machine was actually in course of construction, and the steam-engine finished, but nothing more has since been heard of it. "Had these projectors," says Mr. Wise, "gone on from their miniature model, to the erection of one capable of carrying one or two persons, in order to prove its practicability on a larger scale, there might have been reason to believe that they harbored an idea of its general usefulness. But when the project embraced at once so magnificent a scheme, as that contemplated in the swooping strides toward the modern *Dorado*, with a cargo of a hundred gold-hunters, it seemed too much for sober-minded people; and brought upon itself philosophical criticism and scientific condemnation, and, with that, a good share of opposition to the hopes and expectations of aerial navigation in any shape."

Aerostation is at present applied to no practical useful purpose; it is a mere plaything, occupying no higher a position than catchpenny mountebank exhibitions. Ascents are made in balloons from no other motive, or for no other object, than to draw money from the pockets of the multitude, by

ministering to their enjoyment; and when made by persons properly acquainted with the principles and practice of the art – for by such alone can they be effected with safety – and with those precautions which experience has shown to be requisite, they might be liable to no great objection, so long as the people are willing to pay for them; but if conducted by unqualified persons, or by the most skillful, with a daring recklessness of personal danger, or in a manner involving suffering to any sentient being, they ought to be discouraged in every legitimate way by every friend of humanity, as at variance alike with the principles of morality and with the benevolent lessons of the Christian faith. No man may lawfully peril his own life, or subject the inferior animals to unnecessary pain, for the gratification of the all-devouring thirst of the public for exciting exhibitions; and in the very act of encouraging and witnessing such exhibitions, we are quenching the merciful and fostering the cruel in our natures. Of this objectionable character is the practice recently introduced into France of carrying up donkeys in balloons. The adventure is indeed no new one. It was performed by Mr. Green some twenty years ago. But the merit, or rather the demerit, of having turned it into one of the most popular shows in France, is due to M. Poitevin, who has lately been exciting the gaping admiration of thousands in Paris, by this fool-hardy, barbarous, and contemptible mode of aerostation. Early in July this year (1850), he ascended on horseback in a balloon from Champ de Mars, in the presence of upwards of 10,000 persons, who had paid for admission, and the President of the Republic was one of the spectators. The horse, a handsome dapple gray, had stout cloth placed round its body, and several straps, passed over the shoulders and loins, were united in rings, which were attached by cords to the network of the balloon. In this manner was the animal cruelly suspended in the air, having no resting-place for its feet, nor was there any thing to protect the rider, had he lost his balance or been thrown off. The feat having been more successful than could reasonably have been expected, Mr. Green proposed to amuse the inhabitants of London by a similar adventure. Some of the more humane of the English capital were shocked at the announcement; and the secretary of the Society for the Prevention of Cruelty to Animals made application on the 30th of July to the magistrates to put a stop to the ascent. A case of interference not having been made out to the satisfaction of the magistrates, Mr. Green next day started on his journey to the clouds mounted on a pony. It was put in the car – a plan more humane than that of M. Poitevin, who suspended his pony in the air. But the whole affair was a miserably poor one, and well fitted to bring all such experiments into contempt. The nag was not larger than an under-sized Newfoundland dog; and what made the thing more ridiculous still, the poor creature – which, by the way, had its eyes bandaged, and was strongly tied by cords to the network of the balloon – was so feeble that, on mounting it, Mr. Green had to sustain his own weight by a pile of sand bags placed on either side. This sham equestrian excursion through the air appears to have generally disappointed onlookers, and pony ascensions have not been attempted a second time in England. In France they have met with greater favor. They have been repeated by M. Poitevin and others in the presence of immense multitudes: and it should not be passed over without remark, as one proof among others of what the animals suffer, and, consequently, of the cruelty of the practice, that, in some of these instances, blood flowed from their ears and nostrils. That the practice is dangerous to the aeronaut as well as cruel to the animal, has been the judgment of all reflecting men from the first; and the late melancholy fate of Lieutenant Gale, an English, naval officer, who ascended from the Hippodrome of Vincennes, near Bordeaux, on Sabbath – a very unsuitable day, surely, for such exhibitions – the 8th of September last, mounted on a horse, which was suspended beneath the car of the balloon by girths passed under its body, reads a lesson to which it would be wise to listen. By the aid of several peasants who were in the fields, he effected his descent without any accident to himself or the horse; but, having unfastened the animal, he again rose into the air, and was afterward found dead in a field about a mile from the place where the balloon made its second descent. That this dreadful close of the aeronautic career of Mr. Gale, which he commenced only in 1848, will serve as a warning to this reckless class of adventurers, we hardly anticipate. That it will put a stop to such fool-hardy and hazardous exhibitions, by bringing them into disrepute with

the idle multitude, is what we as little expect. So long as men are found sufficiently daring to run the risk, there will not be wanting crowds abundantly ready to pay down their money, and gaze upon the spectacle with a stupid admiration.

It is a wretched result of the art of ballooning, if it can be turned to no better account than this. Can, then, nothing more important be brought out of it? Can it never be rendered subservient to the ordinary purposes of human life? The opinion almost universally prevalent among men, not excluding scientific men, is that it can not. Some aeronauts, indeed, assure us that the time is fast approaching when aerial transition will inevitably be placed as far before railroad and steam-boat transition as the latter are before the old-fashioned sail and horse-power modes. But the most of men place little faith in these flattering anticipations; they listen to or read them with as dogged a skepticism as they read or hear the celebrated vaticination of Bishop Wilkins, that it would be as common for man hereafter to call for his wings when about to make a journey, as it then was to call for his boots and spurs. They doubt whether, with all the characteristic marks of progress that distinguish the present age, balloons will ever become a safe, cheap, and expeditious means of traveling. Whether the aeronauts are most to be justified in their sanguine expectations, or the rest of mankind in their cautious incredulity, time alone will determine. Our judgment, we confess, strongly inclines to the side of the skeptics.

Much is still desiderated, in order to the practicability of ballooning as a generally useful art. A new gas, at once cheap in its production, and of sufficient buoyancy, must be discovered. The gases at present employed for inflating balloons are either too expensive or too heavy. Hydrogen, which is almost fourteen times lighter than common air, is the lightest gas known, but the expense at which it is procured is an insuperable objection to its practical utility. To produce a quantity sufficient to raise the weight of a pound, four and a half pounds of iron or six of zinc, with equal quantities of sulphuric acid, would be required. Carbureted hydrogen or coal gas is much cheaper, and brings the cost of what may be necessary for experimental purposes – though this is by no means inconsiderable – within the compass of more ordinary means. But, as it is only about one half lighter than atmospheric air, it would require a machine of immense size to support any great weight; and the whole experience of ballooning proves the difficulty of managing a body of great magnitude. Another great desideratum in aerial navigation is a power of guiding the balloon according to a given direction – of propelling it through the atmosphere as steam-boats are propelled on the ocean. It has indeed been said that, as nature is very profuse in the variety of atmospherical currents within two miles above the level of the sea, we are not, in sailing through the air, driven to the necessity of attempting to go right against the wind, but have only to ascend or descend, as the case may be, to a current, which will waft the vessel to its desired destination. But were we even sure of always getting a favoring current, which, from the limited amount of observations made, is not yet established beyond a doubt, there is another desideratum – we are in want of an agent adapted for raising and lowering the balloon without any waste of its power, so as to get within the propitious current. Mr. Green's contrivance of the guide rope, is, as we have seen, not likely to answer in practice; and nothing better has yet been discovered.

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