

band that made it mine. And thinking of this exception makes me ask if ever the unknown sorrows of the wives of literary men shall be made known, the pining heart with the smiling face, the grief that sees the husband at his best only in his writings, and the pangs of the divorced soul that could have been his mate had he ever laid down his pen or closed his book to welcome her? Ah! Psyche, Psyche, ever seeking Cupid! Have you ever read, dear reader, Carlyle's remorseful tribute to his wife, or Byron's bitter words,—

"'Tis just six years since we were one,
And five since we were two;"

and do you know that Bulwer Lytton is accused of having thrown the carving knife at his wife, varying the monotony of his domestic felicity by sundry gifts, said in the vulgar tongue to be more plentiful than certain small coin of Her Majesty's realm? It is not always right for a husband to "go to Goosebridge," as Boccaccio's story has it; and surely it is not always the woman who is intractable. It requires two natures for incompatibility;—"action and reaction are equal and opposite," says Newton.

It is the unspoken griefs that kill. Let me commit the egoism of quoting some lines of my own from a long poem to be finished and published, probably in the Greek Kalends:

"The poets sang not of her. Poets sing
Least when the heart is deepest moved, for song
Wants calmness for perfection; else it breaks
Into wild rhyme or incoherent speech,
Like bitter grief that hath not any voice,
Or speaks in sobs, or like a joy divine
That silence keeps or rounds itself in tears."

I was speaking of the influence of evening upon the mind when that little quotation from Longfellow led me aside, as a rustling in the underbrush draws us from the forest path. But with your permission I will return to the influence of the hour upon the soul.

If the mind has its owl thoughts that hoot at night, and its nightingales that sing in twilight thickets, it has also its larks that sing best at dawn. Many writers claim that they do their best work in the morning, when mind and body are refreshed by slumber. On the other hand, you doubtless recollect the English divine, whose name I have forgotten and am not going to hunt up—for although I am writing in my library I am not pulling my books about as much as you may think. That wise man, after an experiment in early rising, declared he would never try it again, for he "was conceited about it all morning and stupid because of it all afternoon." I think it a shame, however, that we of the city should reject the pleasures which Nature offers us, even among tiles and chimney pots. We rise early enough in the country or camp, but how many of us have willingly seen the daily miracle of sunrise in town?

"A thousand notes
From glad bird throats,
In the east a flushing of dawn;
A glister of dew
In the sky's pale blue;
Faint stars and a fading—"

What rhymes to dawn? Here is a pretty example of the trials of a poet. The poetess slipped along with no more hitch than the sunrise, until a rhyme was needed for "dawn." I expect she puzzled her head for a while, at least I hope she did, before she accepted such an unpardonable rhyme—or rather no-rhyme—as "moon."

Many a time have I seen the dawn, but I could count on my right hand fingers the dawns I have seen from city windows, except at the call of an inexorable fate. Once

"Fancy and the might of rhyme
That turneth, like the tide,"

as friend Lampman has it, kept me long hours at the desk, time, that was made for slaves, thundering at my door unheeded. When the child of my fancy was born, I went to the window to still the tumult of thoughts that, now the task was ended, were whirring like an engine that has been disconnected from the mill-machinery, and lo! the day was breaking. This was one of my city dawns.

But what dawns I have seen in the country or on the St. Lawrence and Saguenay! It would weary you to hear them described, at least by me, and yet one or two occur so forcibly to my mind that I must unburden myself even at the risk of being prosy.

Imagine a vast lake into whose clear depths one might look several fathoms, and whose shores are chiefly formed of rugged, precipitous hills crowded into the water, as it were, by more stalwart companions behind; mantling

forests the rule, but here and there a lichened exception, rounded and rocky, like the skull of father Time, who has beaten there in vain. A few valleys, waist deep with grass, probably hollowed from some limestone bed amid the Laurentian gneiss, run down to the water and afford glimpses of young poplar groves wherein is heard the whirr of a partridge or seen the grey flash of his body. At one end of the lake, where our solitary camp is pitched, there is a wider valley, with meadows and oat fields in its bosom, but which is lost again on all sides in hills and forests, or shores to another and gloomy lake.

Imagine, further, that it is night, and that the blaze of the camp-fire has built up a wall of impenetrable darkness about us, as one thought or sensation excludes all others. Out from this darkness comes the ripple of the lake waters, the intermittent hoot of an owl, and the bleating of a lamb lost in the mountains, or the cry of a calf. Tiny grasshoppers "flop flop" against the canvas of the tent, and the stealthy tread of a bear in the woods near by reveals itself by an occasional crackle of dry twigs.

Then, the oblivion of sleep with all these influences at work.

And then imagine the waking and the lookout from the tent door. The grass is grey with dew, and we shall leave emerald tracks in it as we walk. A faint film of phosphorescence seems to be over all nature. Yonder are the mountains, under their nightcaps of mist, indistinctly visible, There is a fleecy quilt of mist over the lake, and there seems to be no sky, only a faint hanging star or two. Everything seems disembodied and eerie, as though we were looking at it with a dead man's eyes, in the light of the knowledge that comes when this mortal shall put on immortality. The light is like that which must penetrate a shroud. By and bye, day's rosy, baby hand steals up the bosom of mother earth, and skyward. Then follow gleam after gleam of light, like an army returning with glittering spears from war. They are returning from the battle with night, and their spears drip blood, or are heavy with golden spoils. Then comes the SUN, the *Bonnet Rouge* of Nature's revolutionary forces. How red his shield hangs in those early hours. And how grand he looks! Like many men, he is great and threatening because of the depth of atmosphere through which we regard him, and when he has got to noon, and is exerting his powers most advantageously, he will seem ever so much smaller. But then we shall have to look at him through smoked glass to see him at all, as we fix the smoky glass of our intelligence upon some Sun of genius; and thus measure him.

How the lake throws off its mist gown and the mountains uprise to meet the sun! That was a dawn in the Gattineau region. Another dawn I well remember was one I saw in the Gulf of St. Lawrence, out of sight of land. The great waters were rolling easily, and the early sunlight owed its glory to fleecy clouds and the sides of the swelling waves, as well as the vast expanse of whale-path, as the oldenars called the sea. Besides, it was the first day of the week, and the sun always puts on an especial glory for his own day. That was many years ago. I remember sitting all day on the bridge (except the hour I spent on my back in my bunk), reading "Heat as a mode of Motion." Dull reading, my friend! Not so, I assure you. Is this dull?

"The stone avalanches of the Alps are sometimes seen to smoke and thunder down the declivities, with a vehemence almost sufficient to stun the observer, while the snowflakes descend so softly as not to hurt the fragile spangles of which they are composed; yet to produce, from aqueous vapour, a quantity of that tender material which a child could carry, demands an exertion of energy competent to gather up the shattered blocks of the largest stone avalanche that I have ever seen, and pitch them to twice the height from which they fell."

In the study of science it is the molecular rather than the molar world which astounds us. The astronomer has had the public ear long enough. How he rolls his tongue about the interplanetary distances, 93,000,000 of miles to the sun, "two million radius of the earth's orbit," to the nearest stars (say 186,000,000,000 miles), and how he expatiates upon the size and velocity of the planets, and so on! But when we realize that the rushing together of the atoms of oxygen and hydrogen in quantity to make nine pounds of steam develops energy enough to raise 47,000,000 pounds one foot high or throw a one pound projectile over half way to the sun (ignoring the decreasing power of the earth's gravity in the calculation, and also the increasing attrac-

tive power of the sun) we may well consider the molecules the true wonders of the universe.

Atoms and molecules are probably strange names to many of my readers, and yet, perhaps, not to so many as I may think, for science is no longer the property of wizards and cloistered men, but, to a greater or less extent, the mental pabulum of all. Have you ever considered the profound meaning of this fact? How bitterly eloquent yet shallow-minded divines attack science at every step of its progress, as though nature is not God's bible equally as much as the book which has come down to us. "The laws of Nature are the thoughts of God," a reverent scientist has said. The Romish Church is not alone entitled to the discredit of having been a persecutor, of having made more martyrs than it ever canonized. Every history has its dark ages, and every church has its evolution. Without desiring to court controversy, I may say that few of us know how faithless all churches are proving to what were once considered vital portions of their creed. Think you that all Presbyterian fathers believe their babies have possibly been damned in advance by the Creator "for his own glory," or that when we of the Church of England repeat the Athanasian creed we unfailingly believe that the rest of the world is doomed. "I believe," said a friend to a dear old Scotch lady, noted for her strictness of creed, "that you think everyone in the parish will be damned, except yourself and the minister." "Aweel," was the reply, "I hae ma doubts about the minister."

Science is the quicksand of error. It swallows up a few truths occasionally, which are always recovered, and it is not without its dogmas, founded as much upon *faith* as any in the Church, but it has so few formulæ that it is exceedingly plastic, and moulds itself to newly discovered truths much more speedily than theology. Theology and Science are the Conservative and Liberal politicians of the universe, the one holding fast that which is good and the other proving all things.

It is worth while pondering certain truths lurking in and about these figures. M. Hubner estimates the religions of the globe at 1000, of the followers of which 400,000,000 are Christians, and 992,500,000 non-Christians. The Buddhists are in the largest number, 500,000,000; Catholics next, 200,000,000; Brahminists third, with 150,000,000; Protestants, 110,000,000, and Greeks and Mahometans with 80,000,000 each.

Ask a dozen men how large the moon appears to them at a given instant, and you will get nearly a dozen different replies. Is there no lesson in this for the theologian?

I have spoken of science being founded upon *faith*, which may astonish some "freshman" in the university of nature. Nevertheless, it is true. Upon what but faith in the immutability of natural laws do astronomers calculate future eclipses and conjunctions, or chemists follow certain processes in analysis. Mathematics? I do not call mathematics a science; it is merely the handmaid of the sciences. But, perhaps, I am prejudiced, since I found the little handmaid difficult to woo. Certainly, however, our data in measurements, either of weight or length, rest upon faith. We cannot prove, but must have faith in the *constancy of the units of space or force*, for weight is another name for the force of gravitation. "All reasoned-out conclusions," says Herbert Spencer, "must rest on some postulate." When we trace our knowledge, actual or spiritual, back as far as we can, we find ourselves in a mist of the unknown and unknowable, as Arthur G. Pym of Poe's phantasy approached the south pole, to find it shrouded in a cataract of white ashes, out of which flew birds of dazzling whiteness, which we may metaphorically regard as our *Scientific Truths*.

ARTHUR WEIR.

The defenses of Portsmouth, England, which is one of the most important naval depots in the Old World, bid fair to be the strongest of all the ports in the British possessions. The total number of guns now in the forts of Portsmouth Hills is 103, consisting chiefly of seven-inch and eight-inch Armstrong breechloaders. Two of the forts have 19 of these, two have 22, and one has 21. Besides these heavy guns a large number of field and machine guns will be distributed in the forts, while 28 howitzers, six-inch and eight inch, are to protect the spaces between the forts on "pivots" in the line of defense. In addition to these a quantity of thirty-two pounders, fitted with breechloading action, will be used to protect the gorges and flank ditches, firing case shot. The second line of defense consists of the Hilsea lines, and contains 28 guns, chiefly four-inch breechloaders, which are very powerful weapons.