

July 22– From *The Odyssey* by Homer translated by S.H. Butcher and A. Lang

“With this wine I filled a great skin, and bare it with me, and corn too I put in a wallet, for my lordly spirit straightway had a boding that a man would come to me, a strange man, clothed in mighty strength, one that knew not judgment and justice.[16]

[16] Literally, knowing neither dooms, nor ordinances of law.

“Soon we came to the cave, but we found him not within; he was shepherding his fat flocks in the pastures. So we went into the cave, and gazed on all that was therein. The baskets were well laden with cheeses, and the folds were thronged with lambs and kids; each kind was penned by itself, the firstlings apart, and the summer lambs apart, apart too the younglings of the flock. Now all the vessels swam with whey, the milk-pails and the bowls, the well-wrought vessels whereinto he milked. My company then spake and besought me first of all to take of the cheeses and to return, and afterwards to make haste and drive off the kids and lambs to the swift ships from out the pens, and to sail over the salt sea water. Howbeit I hearkened not (and far better would it have been), but waited to see the giant himself, and whether he would give me gifts as a stranger’s due. Yet was not his coming to be with joy to my company.

“Then we kindled a fire, and made burnt-offering, and ourselves likewise took of the cheeses, and did eat, and sat waiting for him within till he came back, shepherding his flocks. And he bore a grievous weight of dry wood, against supper time. This log he cast down with a din inside the cave, and in fear we fled to the secret place of the rock. As for him, he drove his fat flocks into the wide cavern, even all that he was wont to milk; but the males both of the sheep and of the goats he left without in the deep yard. Thereafter he lifted a huge doorstone and weighty, and set it in the mouth of the cave, such an one as two and twenty good four-wheeled wains could not raise from the ground, so mighty a sheer rock did he set against the doorway. Then he sat down and milked the ewes and bleating goats, all orderly, and beneath each ewe he placed her young. And anon he curdled one half of the white milk, and massed it together, and stored it in wicker-baskets, and the other half he let stand in pails, that he might have it to take and drink against supper time. Now when he had done all his work busily, then he kindled the fire anew, and espied us, and made question:

“‘Strangers, who are ye? Whence sail ye over the wet ways? On some trading enterprise or at adventure do ye rove, even as sea-robbers over the brine, for at hazard of their own lives they wander, bringing bale to alien men.’

“So spake he, but as for us our heart within us was broken for terror of the deep voice and his own monstrous shape; yet despite all I answered and spake unto him, saying:

“‘Lo, we are Achaeans, driven wandering from Troy, by all manner of winds over the great gulf of the sea; seeking our homes we fare, but another path have we come, by other ways: even such, methinks, was the will and the counsel of Zeus. And we avow us to be the men of Agamemnon, son of Atreus, whose fame is even now the mightiest under heaven, so great a

city did he sack, and destroyed many people; but as for us we have lighted here, and come to these thy knees, if perchance thou wilt give us a stranger's gift, or make any present, as is the due of strangers. Nay, lord, have regard to the gods, for we are thy suppliants; and Zeus is the avenger of suppliants and sojourners, Zeus, the god of the stranger, who fareth in the company of reverend strangers.'

"So I spake, and anon he answered out of his pitiless heart: 'Thou art witless, my stranger, or thou hast come from afar, who biddest me either to fear or shun the gods. For the Cyclôpes pay no heed to Zeus, lord of the aegis, nor to the blessed gods, for verily we are better men than they. Nor would I, to shun the enmity of Zeus, spare either thee or thy company, unless my spirit bade me. But tell me where thou didst stay thy well-wrought ship on thy coming? Was it perchance at the far end of the island, or hard by, that I may know?'

"So he spake tempting me, but he cheated me not, who knew full much, and I answered him again with words of guile:

"As for my ship, Poseidon, the shaker of the earth, brake it to pieces, for he cast it upon the rocks at the border of your country, and brought it nigh the headland, and a wind bare it thither from the sea. But I with these my men escaped from utter doom.'

"So I spake, and out of his pitiless heart he answered me not a word, but sprang up, and laid his hands upon my fellows, and clutching two together dashed them, as they had been whelps, to the earth, and the brain flowed forth upon the ground, and the earth was wet. Then cut he them up piecemeal, and made ready his supper. So he ate even as a mountain-bred lion, and ceased not, devouring entrails and flesh and bones with their marrow. And we wept and raised our hands to Zeus, beholding the cruel deeds; and we were at our wits' end. And after the Cyclops had filled his huge maw with human flesh and the milk he drank thereafter, he lay within the cave, stretched out among his sheep.

"So I took counsel in my great heart, whether I should draw near, and pluck my sharp sword from my thigh, and stab him in the breast, where the midriff holds the liver, feeling for the place with my hand. But my second thought withheld me, for so should we too have perished even there with utter doom. For we should not have prevailed to roll away with our hands from the lofty door the heavy stone which he set there. So for that time we made moan, awaiting the bright Dawn.

"Now when early Dawn shone forth, the rosy-fingered, again he kindled the fire and milked his goodly flocks all orderly, and beneath each ewe set her lamb. Anon when he had done all his work busily, again he seized yet other two men and made ready his mid-day meal. And after the meal, lightly he moved away the great door-stone, and drove his fat flocks forth from the cave, and afterwards he set it in his place again, as one might set the lid on a quiver. Then with a loud whoop, the Cyclops turned his fat flocks towards the hills; but I was left devising evil in the deep of my heart, if in any wise I might avenge me, and Athene grant me renown.

"And this was the counsel that showed best in my sight. There lay by a sheep-fold a great club of the Cyclops, a club of olive wood, yet green, which he had cut to carry with him when it should be seasoned. Now when we saw it we likened it in size to the mast of a black ship of twenty oars, a wide merchant vessel that traverses the great sea gulf, so huge it was to view in bulk and length. I stood thereby and cut off from it a portion as it were a fathom's length, and set it by my fellows, and bade them fine it down, and they made it even, while I stood by and

sharpened it to a point, and straightway I took it and hardened it in the bright fire. Then I laid it well away, and hid it beneath the dung, which was scattered in great heaps in the depths of the cave. And I bade my company cast lots among them, which of them should risk the adventure with me, and lift the bar and turn it about in his eye, when sweet sleep came upon him. And the lot fell upon those four whom I myself would have been fain to choose, and I appointed myself to be the fifth among them. In the evening he came shepherding his flocks of goodly fleece, and presently he drave his fat flocks into the cave each and all, nor left he any without in the deep court-yard, whether through some foreboding, or perchance that the god so bade him do. Thereafter he lifted the huge door-stone and set it in the mouth of the cave, and sitting down he milked the ewes and bleating goats, all orderly, and beneath each ewe he placed her young. Now when he had done all his work busily, again he seized yet other two and made ready his supper. Then I stood by the Cyclops and spake to him, holding in my hands an ivy bowl of the dark wine:

“Cyclops, take and drink wine after thy feast of man’s meat, that thou mayest know what manner of drink this was that our ship held. And lo, I was bringing it thee as a drink offering, if haply thou mayest take pity and send me on my way home, but thy mad rage is past all sufferance. O hard of heart, how may another of the many men there be come ever to thee again, seeing that thy deeds have been lawless?”

“So I spake, and he took the cup and drank it off, and found great delight in drinking the sweet draught, and asked me for it yet a second time:

“Give it me again of thy grace, and tell me thy name straightway, that I may give thee a stranger’s gift, wherein thou mayest be glad. Yea for the earth, the grain-giver, bears for the Cyclôpes the mighty clusters of the juice of the grape, and the rain of Zeus gives them increase, but this is a rill of very nectar and ambrosia.’

“So he spake, and again I handed him the dark wine. Thrice I bare and gave it him, and thrice in his folly he drank it to the lees. Now when the wine had got about the wits of the Cyclops, then did I speak to him with soft words:

“Cyclops, thou askest me my renowned name, and I will declare it unto thee, and do thou grant me a stranger’s gift, as thou didst promise. Noman is my name, and Noman they call me, my father and my mother and all my fellows.’

“So I spake, and straightway he answered me out of his pitiless heart:

“Noman will I eat last in the number of his fellows, and the others before him: that shall be thy gift.’

“Therewith he sank backwards and fell with face upturned, and there he lay with his great neck bent round, and sleep, that conquers all men, overcame him. And the wine and the fragments of men’s flesh issued forth from his mouth, and he vomited, being heavy with wine. Then I thrust in that stake under the deep ashes, until it should grow hot, and I spake to my companions comfortable words, lest any should hang back from me in fear. But when that bar of olive wood was just about to catch fire in the flame, green though it was, and began to glow terribly, even then I came nigh, and drew it from the coals, and my fellows gathered about me, and some god breathed great courage into us. For their part they seized the bar of olive wood, that was sharpened at the point, and thrust it into his eye, while I from my place aloft turned it about, as when a man bores a ship’s beam with a drill while his fellows below spin it with a

strap, which they hold at either end, and the auger runs round continually. Even so did we seize the fiery-pointed brand and whirled it round in his eye, and the blood flowed about the heated bar. And the breath of the flame singed his eyelids and brows all about, as the ball of the eye burnt away, and the roots thereof crackled in the flame. And as when a smith dips an axe or adze in chill water with a great hissing, when he would temper it—for hereby anon comes the strength of iron—even so did his eye hiss round the stake of olive. And he raised a great and terrible cry, that the rock rang around, and we fled away in fear, while he plucked forth from his eye the brand bedabbled in much blood. Then maddened with pain he cast it from him with his hands, and called with a loud voice on the Cyclopes, who dwelt about him in the caves along the windy heights. And they heard the cry and flocked together from every side, and gathering round the cave asked him what ailed him:

“What hath so distressed thee, Polyphemus, that thou criest thus aloud through the immortal night, and makest us sleepless? Surely no mortal driveth off thy flocks against thy will: surely none slayeth thyself by force or craft?”

“And the strong Polyphemus spake to them again from out the cave: ‘My friends, Noman is slaying me by guile, nor at all by force.’

“And they answered and spake winged words: ‘If then no man is violently handling thee in thy solitude, it can in no wise be that thou shouldest escape the sickness sent by mighty Zeus. Nay, pray thou to thy father, the lord Poseidon.’

“On this wise they spake and departed; and my heart within me laughed to see how my name and cunning counsel had beguiled them. But the Cyclops, groaning and travailing in pain, groped with his hands, and lifted away the stone from the door of the cave, and himself sat in the entry, with arms outstretched to catch, if he might, any one that was going forth with his sheep, so witless, methinks, did he hope to find me. But I advised me how all might be for the very best, if perchance I might find a way of escape from death for my companions and myself, and I wove all manner of craft and counsel, as a man will for his life, seeing that great mischief was nigh. And this was the counsel that showed best in my sight. The rams of the flock were well nurtured and thick of fleece, great and goodly, with wool dark as the violet. Quietly I lashed them together with twisted withies, whereon the Cyclops slept, that lawless monster. Three together I took: now the middle one of the three would bear each a man, but the other twain went on either side, saving my fellows. Thus every three sheep bare their man. But as for me I laid hold of the back of a young ram who was far the best and the goodliest of all the flock, and curled beneath his shaggy belly there I lay, and so clung face upward, grasping the wondrous fleece with a steadfast heart. So for that time making moan we awaited the bright Dawn.

“So soon as early Dawn shone forth, the rosy-fingered, then did the rams of the flock hasten forth to pasture, but the ewes bleated un milked about the pens, for their udders were swollen to bursting. Then their lord, sore stricken with pain, felt along the backs of all the sheep as they stood up before him, and guessed not in his folly how that my men were bound beneath the breasts of his thick-fleeced flocks. Last of all the sheep came forth the ram, cumbered with his wool, and the weight of me and my cunning. And the strong Polyphemus laid his hands on him and spake to him saying:

“Dear ram, wherefore, I pray thee, art thou the last of all the flocks to go forth from the cave, who of old wast not wont to lag behind the sheep, but wert ever the foremost to pluck the tender

blossom of the pasture, faring with long strides, and wert still the first to come to the streams of the rivers, and first did long to return to the homestead in the evening? But now art thou the very last. Surely thou art sorrowing for the eye of thy lord, which an evil man blinded, with his accursed fellows, when he had subdued my wits with wine, even Noman, whom I say hath not yet escaped destruction. Ah, if thou couldst feel as I, and be endued with speech, to tell me where he shifts about to shun my wrath; then should he be smitten, and his brains be dashed against the floor here and there about the cave, and my heart be lightened of the sorrows which Noman, nothing worth, hath brought me!

“Therewith he sent the ram forth from him, and when we had gone but a little way from the cave and from the yard, first I loosed myself from under the ram and then I set my fellows free. And swiftly we drave on those stiff-shanked sheep, so rich in fat, and often turned to look about, till we came to the ship. And a glad sight to our fellows were we that had fled from death, but the others they would have bemoaned with tears; howbeit I suffered it not, but with frowning brows forbade each man to weep. Rather I bade them to cast on board the many sheep with goodly fleece, and to sail over the salt sea water. So they embarked forthwith, and sate upon the benches, and sitting orderly smote the grey sea water with their oars. But when I had not gone so far, but that a man’s shout might be heard, then I spoke unto the Cyclops taunting him:

“Cyclops, so thou wert not to eat the company of a weakling by main might in thy hollow cave! Thine evil deeds were very sure to find thee out, thou cruel man, who hadst no shame to eat thy guests within thy gates, wherefore Zeus hath requited thee, and the other gods.’

“So I spake, and he was mightily angered at heart, and he brake off the peak of a great hill and threw it at us, and it fell in front of the dark-prowed ship.^[17] And the sea heaved beneath the fall of the rock, and the backward flow of the wave bare the ship quickly to the dry land, with the wash from the deep sea, and drave it to the shore. Then I caught up a long pole in my hands, and thrust the ship from off the land, and roused my company, and with a motion of the head bade them dash in with their oars, that so we might escape our evil plight. So they bent to their oars and rowed on. But when we had now made twice the distance over the brine, I would fain have spoken to the Cyclops, but my company stayed me on every side with soft words, saying:

[17] We have omitted line 483, as required by the sense. It is introduced here from line 540.

“Foolhardy that thou art, why wouldst thou rouse a wild man to wrath, who even now hath cast so mighty a throw towards the deep and brought our ship back to land, yea and we thought that we had perished^[18] even there? If he had heard any of us utter sound or speech he would have crushed our heads and our ship timbers with a cast of a rugged stone, so mightily he hurls.’

[18] Neither in this passage nor in B ii. 171 nor in B xx. 121 do we think that the aorist infinitive after a verb of *saying* can bear a future sense. The aorist infinitive after ἐλπῶντή (ii. 280, vii. 76) is hardly an argument in its favour; the infinitive there is in fact a noun in the genitive case.

“So spake they, but they prevailed not on my lordly spirit, and I answered him again from out an angry heart:

“‘Cyclops, if any one of mortal men shall ask thee of the unsightly blinding of thine eye, say that it was Odysseus that blinded it, the waster of cities, son of Laertes, whose dwelling is in Ithaca.’

“So I spake, and with a moan he answered me, saying:

“‘Lo now, in very truth the ancient oracles have come upon me. There lived here a soothsayer, a noble man and a mighty, Telemus, son of Eurymus, who surpassed all men in soothsaying, and waxed old as a seer among the Cyclôpes. He told me that all these things should come to pass in the aftertime, even that I should lose my eyesight at the hand of Odysseus. But I ever looked for some tall and goodly man to come hither, clad in great might, but behold now one that is a dwarf, a man of no worth and a weakling, hath blinded me of my eye after subduing me with wine. Nay come hither, Odysseus, that I may set by thee a stranger’s cheer, and speed thy parting hence, that so the Earth-shaker may vouchsafe it thee, for his son am I, and he avows him for my father. And he himself will heal me, if it be his will; and none other of the blessed gods or of mortal men.’

“Even so he spake, but I answered him, and said: ‘Would god that I were as sure to rob thee of soul and life, and send thee within the house of Hades, as I am that not even the Earth-shaker will heal thine eye!’

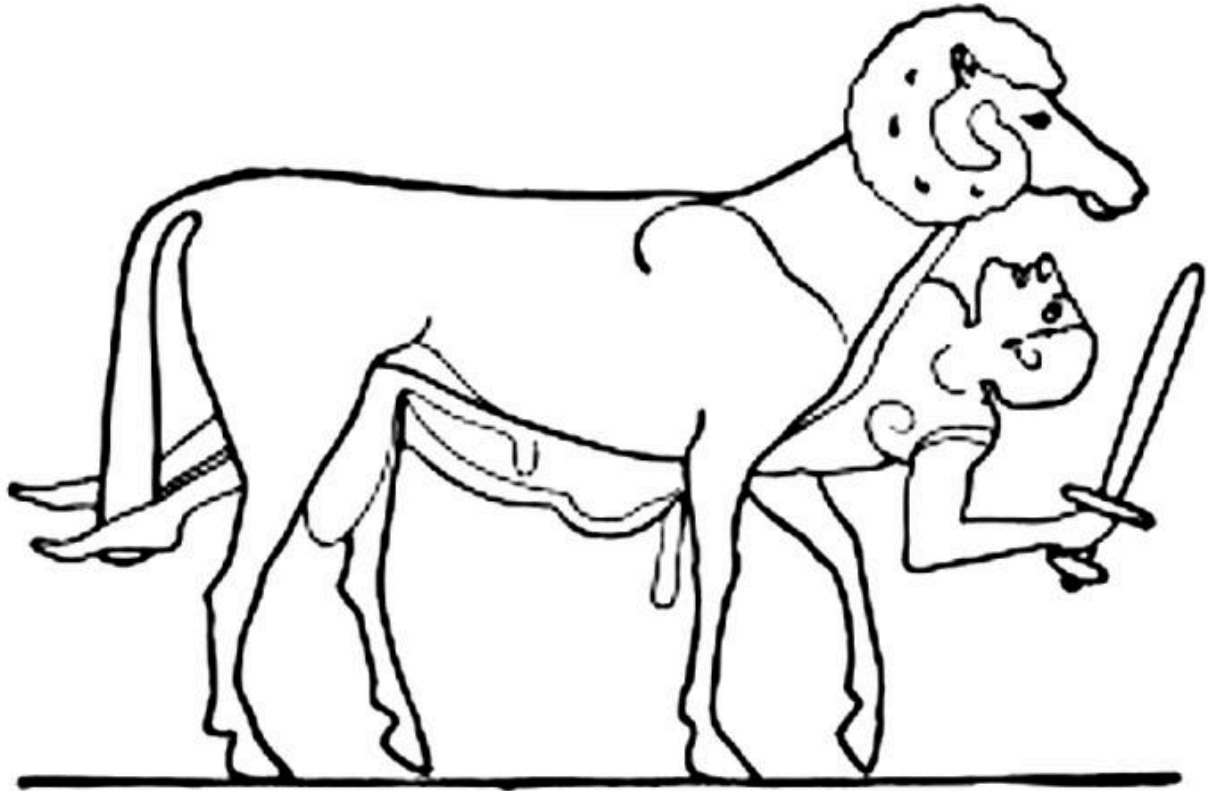
“So I spake, and then he prayed to the lord Poseidon stretching forth his hands to the starry heaven: ‘Hear me, Poseidon, girdler of the earth, god of the dark hair, if indeed I be thine, and thou avowest thee my sire,—grant that he may never come to his home, even Odysseus, waster of cities, the son of Laertes, whose dwelling is in Ithaca; yet if he is ordained to see his friends and come unto his well-built house, and his own country, late may he come in evil case, with the loss of all his company, in the ship of strangers, and find sorrows in his house.’

“So he spake in prayer, and the god of the dark locks heard him. And once again he lifted a stone, far greater than the first, and with one swing he hurled it, and he put forth a measureless strength, and cast it but a little space behind the dark-prowed ship, and all but struck the end of the rudder. And the sea heaved beneath the fall of the rock, but the wave bare on the ship and drave it to the further shore.

“But when he had now reached that island, where all our other decked ships abode together, and our company were gathered sorrowing, expecting us evermore, on our coming thither we ran our ship ashore upon the sand, and ourselves too stept forth upon the sea beach. Next we took forth the sheep of the Cyclops from out the hollow ship, and divided them, that none through me might go lacking his proper share. But the ram for me alone my goodly-greaved company chose out, in the dividing of the sheep, and on the shore I offered him up to Zeus, even to the son of Cronos, who dwells in the dark clouds, and is lord of all, and I burnt the slices of the thighs. But he heeded not the sacrifice, but was devising how my decked ships and my dear company might perish utterly. Thus for that time we sat the livelong day, until the going down of the sun, feasting on abundant flesh and sweet wine. And when the sun had sunk and darkness had come on, then we laid us to rest upon the sea beach. So soon as early Dawn shone forth, the rosy-fingered, I called to my company, and commanded them that they should

themselves climb the ship and loose the hawsers. So they soon embarked and sat upon the benches, and sitting orderly smote the grey sea water with their oars.

“Thence we sailed onward stricken at heart, yet glad as men saved from death, albeit we had lost our dear companions.



July 23– Essays by Francis Bacon (1597)

Of Envy

THERE be none of the affections, which have been noted to fascinate or bewitch, but love and envy. They both have vehement wishes; they frame themselves readily into imaginations and suggestions; and they come easily into the eye, especially upon the present of the objects; which are the points that conduce to fascination, if any such thing there be. We see likewise, the Scripture calleth envy an evil eye; and the astrologers, call the evil influences of the stars, evil aspects; so that still there seemeth to be acknowledged, in the act of envy, an ejaculation or irradiation of the eye. Nay, some have been so curious, as to note, that the times when the stroke or percussion of an envious eye doth most hurt, are when the party envied is beheld in glory or triumph; for that sets an edge upon envy: and besides, at such times the spirits of the person envied, do come forth most into the outward parts, and so meet the blow.

But leaving these curiosities (though not unworthy to be thought on, in fit place), we will handle, what persons are apt to envy others; what persons are most subject to be envied themselves; and what is the difference between public and private envy.

A man that hath no virtue in himself, ever envieth virtue in others. For men's minds, will either feed upon their own good, or upon others' evil; and who wanteth the one, will prey upon the other; and whoso is out of hope, to attain to another's virtue, will seek to come at even hand, by depressing another's fortune.

A man that is busy, and inquisitive, is commonly envious. For to know much of other men's matters, cannot be because all that ado may concern his own estate; therefore it must needs be, that he taketh a kind of play-pleasure, in looking upon the fortunes of others. Neither can he, that mindeth but his own business, find much matter for envy. For envy is a gadding passion, and walketh the streets, and doth not keep home: Non est curiosus, quin idem sit malevolus.

Men of noble birth, are noted to be envious towards new men, when they rise. For the distance is altered, and it is like a deceit of the eye, that when others come on, they think themselves, go back.

Deformed persons, and eunuchs, and old men, and bastards, are envious. For he that cannot possibly mend his own case, will do what he can, to impair another's; except these defects light upon a very brave, and heroical nature, which thinketh to make his natural wants part of his honor; in that it should be said, that an eunuch, or a lame man, did such great matters; affecting the honor of a miracle; as it was in Narses the eunuch, and Agesilaus and Tamberlanes, that were lame men.

The same is the case of men, that rise after calamities and misfortunes. For they are as men fallen out with the times; and think other men's harms, a redemption of their own sufferings.

They that desire to excel in too many matters, out of levity and vain glory, are ever envious. For they cannot want work; it being impossible, but many, in some one of those things, should surpass them. Which was the character of Adrian the Emperor; that mortally envied poets, and painters, and artificers, in works wherein he had a vein to excel.

Lastly, near kinsfolks, and fellows in office, and those that have been bred together, are more apt to envy their equals, when they are raised. For it doth upbraid unto them their own fortunes, and pointeth at them, and cometh oftener into their remembrance, and incurreth likewise more into the note of others; and envy ever redoubleth from speech and fame. Cain's envy was the more vile and malignant, towards his brother Abel, because when his sacrifice was better accepted, there was no body to look on. Thus much for those, that are apt to envy.

Concerning those that are more or less subject to envy: First, persons of eminent virtue, when they are advanced, are less envied. For their fortune seemeth, but due unto them; and no man envieth the payment of a debt, but rewards and liberality rather. Again, envy is ever joined with the comparing of a man's self; and where there is no comparison, no envy; and therefore kings are not envied, but by kings. Nevertheless it is to be noted, that unworthy persons are most envied, at their first coming in, and afterwards overcome it better; whereas contrariwise, persons of worth and merit are most envied, when their fortune continueth long. For by that time, though their virtue be the same, yet it hath not the same lustre; for fresh men grow up that darken it.

Persons of noble blood, are less envied in their rising. For it seemeth but right done to their birth. Besides, there seemeth not much added to their fortune; and envy is as the sunbeams, that beat hotter upon a bank, or steep rising ground, than upon a flat. And for the same reason, those that are advanced by degrees, are less envied than those that are advanced suddenly and per saltum.

Those that have joined with their honor great travels, cares, or perils, are less subject to envy. For men think that they earn their honors hardly, and pity them sometimes; and pity ever healeth envy. Wherefore you shall observe, that the more deep and sober sort of politic persons, in their greatness, are ever bemoaning themselves, what a life they lead; chanting a quanta patimur! Not that they feel it so, but only to abate the edge of envy. But this is to be understood, of business that is laid upon men, and not such, as they call unto themselves. For nothing increaseth envy more, than an unnecessary and ambitious engrossing of business. And nothing doth extinguish envy more, than for a great person to preserve all other inferior officers, in their full lights and pre-eminences of their places. For by that means, there be so many screens between him and envy.

Above all, those are most subject to envy, which carry the greatness of their fortunes, in an insolent and proud manner; being never well, but while they are showing how great they are, either by outward pomp, or by triumphing over all opposition or competition; whereas wise men will rather do sacrifice to envy, in suffering themselves sometimes of purpose to be crossed, and overborne in things that do not much concern them. Notwithstanding, so much is true, that the

carriage of greatness, in a plain and open manner (so it be without arrogancy and vain glory) doth draw less envy, than if it be in a more crafty and cunning fashion. For in that course, a man doth but disavow fortune; and seemeth to be conscious of his own want in worth; and doth but teach others, to envy him.

Lastly, to conclude this part; as we said in the beginning, that the act of envy had somewhat in it of witchcraft, so there is no other cure of envy, but the cure of witchcraft; and that is, to remove the lot (as they call it) and to lay it upon another. For which purpose, the wiser sort of great persons, bring in ever upon the stage somebody upon whom to derive the envy, that would come upon themselves; sometimes upon ministers and servants; sometimes upon colleagues and associates; and the like; and for that turn there are never wanting, some persons of violent and undertaking natures, who, so they may have power and business, will take it at any cost.

Now, to speak of public envy. There is yet some good in public envy, whereas in private, there is none. For public envy, is as an ostracism, that eclipseth men, when they grow too great. And therefore it is a bridle also to great ones, to keep them within bounds.

This envy, being in the Latin word *invidia*, goeth in the modern language, by the name of discontentment; of which we shall speak, in handling sedition. It is a disease, in a state, like to infection. For as infection spreadeth upon that which is sound, and tainteth it; so when envy is gotten once into a state, it traduceth even the best actions thereof, and turneth them into an ill odor. And therefore there is little won, by intermingling of plausible actions. For that doth argue but a weakness, and fear of envy, which hurteth so much the more, as it is likewise usual in infections; which if you fear them, you call them upon you.

This public envy, seemeth to beat chiefly upon principal officers or ministers, rather than upon kings, and estates themselves. But this is a sure rule, that if the envy upon the minister be great, when the cause of it in him is small; or if the envy be general, in a manner upon all the ministers of an estate; then the envy (though hidden) is truly upon the state itself. And so much of public envy or discontentment, and the difference thereof from private envy, which was handled in the first place.

We will add this in general, touching the affection of envy; that of all other affections, it is the most importune and continual. For of other affections, there is occasion given, but now and then; and therefore it was well said, *Invidia festos dies non agit*: for it is ever working upon some or other. And it is also noted, that love and envy do make a man pine, which other affections do not, because they are not so continual. It is also the vilest affection, and the most depraved; for which cause it is the proper attribute of the devil, who is called, the envious man, that soweth tares amongst the wheat by night; as it always cometh to pass, that envy worketh subtilly, and in the dark, and to the prejudice of good things, such as is the wheat.

July 24— From *The Voyage of The Beagle* by Charles Darwin (1839)

March 4th.—We entered the harbour of Concepcion. While the ship was beating up to the anchorage, I landed on the island of Quiriquina. The mayor-domo of the estate quickly rode down to tell me the terrible news of the great earthquake of the 20th:—"That not a house in Concepcion or Talcahuano (the port) was standing; that seventy villages were destroyed; and that a great wave had almost washed away the ruins of Talcahuano." Of this latter statement I soon saw abundant proofs—the whole coast being strewed over with timber and furniture as if a thousand ships had been wrecked. Besides chairs, tables, book-shelves, etc., in great numbers, there were several roofs of cottages, which had been transported almost whole. The storehouses at Talcahuano had been burst open, and great bags of cotton, yerba, and other valuable merchandise were scattered on the shore. During my walk round the island, I observed that numerous fragments of rock, which, from the marine productions adhering to them, must recently have been lying in deep water, had been cast up high on the beach; one of these was six feet long, three broad, and two thick.

The island itself as plainly showed the overwhelming power of the earthquake, as the beach did that of the consequent great wave. The ground in many parts was fissured in north and south lines, perhaps caused by the yielding of the parallel and steep sides of this narrow island. Some of the fissures near the cliffs were a yard wide. Many enormous masses had already fallen on the beach; and the inhabitants thought that when the rains commenced far greater slips would happen. The effect of the vibration on the hard primary slate, which composes the foundation of the island, was still more curious: the superficial parts of some narrow ridges were as completely shivered as if they had been blasted by gunpowder. This effect, which was rendered conspicuous by the fresh fractures and displaced soil, must be confined to near the surface, for otherwise there would not exist a block of solid rock throughout Chile; nor is this improbable, as it is known that the surface of a vibrating body is affected differently from the central part. It is, perhaps, owing to this same reason, that earthquakes do not cause quite such terrific havoc within deep mines as would be expected. I believe this convulsion has been more effectual in lessening the size of the island of Quiriquina, than the ordinary wear-and-tear of the sea and weather during the course of a whole century.

The next day I landed at Talcahuano, and afterwards rode to Concepcion. Both towns presented the most awful yet interesting spectacle I ever beheld. To a person who had formerly known them, it possibly might have been still more impressive; for the ruins were so mingled together, and the whole scene possessed so little the air of a habitable place, that it was scarcely possible to imagine its former condition. The earthquake commenced at half-past eleven o'clock in the forenoon. If it had happened in the middle of the night, the greater number of the inhabitants (which in this one province must amount to many thousands) must have perished, instead of less than a hundred: as it was, the invariable practice of running out of doors at the first trembling of the ground, alone saved them. In Concepcion each house, or row of houses, stood by itself, a heap or line of ruins; but in Talcahuano, owing to the great wave,

little more than one layer of bricks, tiles, and timber with here and there part of a wall left standing, could be distinguished. From this circumstance Concepcion, although not so completely desolated, was a more terrible, and if I may so call it, picturesque sight. The first shock was very sudden. The mayor-domo at Quiriquina told me, that the first notice he received of it, was finding both the horse he rode and himself, rolling together on the ground. Rising up, he was again thrown down. He also told me that some cows which were standing on the steep side of the island were rolled into the sea. The great wave caused the destruction of many cattle; on one low island near the head of the bay, seventy animals were washed off and drowned. It is generally thought that this has been the worst earthquake ever recorded in Chile; but as the very severe ones occur only after long intervals, this cannot easily be known; nor indeed would a much worse shock have made any difference, for the ruin was now complete. Innumerable small tremblings followed the great earthquake, and within the first twelve days no less than three hundred were counted.

After viewing Concepcion, I cannot understand how the greater number of inhabitants escaped unhurt. The houses in many parts fell outwards; thus forming in the middle of the streets little hillocks of brickwork and rubbish. Mr. Rouse, the English consul, told us that he was at breakfast when the first movement warned him to run out. He had scarcely reached the middle of the courtyard, when one side of his house came thundering down. He retained presence of mind to remember, that if he once got on the top of that part which had already fallen, he would be safe. Not being able from the motion of the ground to stand, he crawled up on his hands and knees; and no sooner had he ascended this little eminence, than the other side of the house fell in, the great beams sweeping close in front of his head. With his eyes blinded, and his mouth choked with the cloud of dust which darkened the sky, at last he gained the street. As shock succeeded shock, at the interval of a few minutes, no one dared approach the shattered ruins, and no one knew whether his dearest friends and relations were not perishing from the want of help. Those who had saved any property were obliged to keep a constant watch, for thieves prowled about, and at each little trembling of the ground, with one hand they beat their breasts and cried "Misericordia!" and then with the other filched what they could from the ruins. The thatched roofs fell over the fires, and flames burst forth in all parts. Hundreds knew themselves ruined, and few had the means of providing food for the day.

Earthquakes alone are sufficient to destroy the prosperity of any country. If beneath England the now inert subterranean forces should exert those powers, which most assuredly in former geological ages they have exerted, how completely would the entire condition of the country be changed! What would become of the lofty houses, thickly packed cities, great manufactories, the beautiful public and private edifices? If the new period of disturbance were first to commence by some great earthquake in the dead of the night, how terrific would be the carnage! England would at once be bankrupt; all papers, records, and accounts would from that moment be lost. Government being unable to collect the taxes, and failing to maintain its authority, the hand of violence and rapine would remain uncontrolled. In every large town famine would go forth, pestilence and death following in its train.

Shortly after the shock, a great wave was seen from the distance of three or four miles, approaching in the middle of the bay with a smooth outline; but along the shore it tore up cottages and trees, as it swept onwards with irresistible force. At the head of the bay it broke in a fearful line of white breakers, which rushed up to a height of 23 vertical feet above the highest spring-tides. Their force must have been prodigious; for at the Fort a cannon with its carriage, estimated at four tons in weight, was moved 15 feet inwards. A schooner was left in the midst of the ruins, 200 yards from the beach. The first wave was followed by two others, which in their retreat carried away a vast wreck of floating objects. In one part of the bay, a ship was pitched high and dry on shore, was carried off, again driven on shore, and again carried off. In another part, two large vessels anchored near together were whirled about, and their cables were thrice wound round each other; though anchored at a depth of 36 feet, they were for some minutes aground. The great wave must have travelled slowly, for the inhabitants of Talcahuano had time to run up the hills behind the town; and some sailors pulled out seaward, trusting successfully to their boat riding securely over the swell, if they could reach it before it broke. One old woman with a little boy, four or five years old, ran into a boat, but there was nobody to row it out: the boat was consequently dashed against an anchor and cut in twain; the old woman was drowned, but the child was picked up some hours afterwards clinging to the wreck. Pools of salt-water were still standing amidst the ruins of the houses, and children, making boats with old tables and chairs, appeared as happy as their parents were miserable. It was, however, exceedingly interesting to observe, how much more active and cheerful all appeared than could have been expected. It was remarked with much truth, that from the destruction being universal, no one individual was humbled more than another, or could suspect his friends of coldness—that most grievous result of the loss of wealth. Mr. Rouse, and a large party whom he kindly took under his protection, lived for the first week in a garden beneath some apple-trees. At first they were as merry as if it had been a picnic; but soon afterwards heavy rain caused much discomfort, for they were absolutely without shelter.

In Captain Fitz Roy's excellent account of the earthquake, it is said that two explosions, one like a column of smoke and another like the blowing of a great whale, were seen in the bay. The water also appeared everywhere to be boiling; and it "became black, and exhaled a most disagreeable sulphureous smell." These latter circumstances were observed in the Bay of Valparaiso during the earthquake of 1822; they may, I think, be accounted for, by the disturbance of the mud at the bottom of the sea containing organic matter in decay. In the Bay of Callao, during a calm day, I noticed, that as the ship dragged her cable over the bottom, its course was marked by a line of bubbles. The lower orders in Talcahuano thought that the earthquake was caused by some old Indian women, who two years ago, being offended, stopped the volcano of Antuco. This silly belief is curious, because it shows that experience has taught them to observe, that there exists a relation between the suppressed action of the volcanos, and the trembling of the ground. It was necessary to apply the witchcraft to the point where their perception of cause and effect failed; and this was the closing of the volcanic vent. This belief is the more singular in this particular instance, because, according to Captain Fitz Roy, there is reason to believe that Antuco was noways affected.

The town of Concepcion was built in the usual Spanish fashion, with all the streets running at right angles to each other; one set ranging S.W. by W., and the other set N.W. by N. The walls in the former direction certainly stood better than those in the latter; the greater number of the masses of brickwork were thrown down towards the N.E. Both these circumstances perfectly agree with the general idea, of the undulations having come from the S.W., in which quarter subterranean noises were also heard; for it is evident that the walls running S.W. and N.E. which presented their ends to the point whence the undulations came, would be much less likely to fall than those walls which, running N.W. and S.E., must in their whole lengths have been at the same instant thrown out of the perpendicular; for the undulations, coming from the S.W., must have extended in N.W. and S.E. waves, as they passed under the foundations. This may be illustrated by placing books edgewise on a carpet, and then, after the manner suggested by Michell, imitating the undulations of an earthquake: it will be found that they fall with more or less readiness, according as their direction more or less nearly coincides with the line of the waves. The fissures in the ground generally, though not uniformly, extended in a S.E. and N.W. direction, and therefore corresponded to the lines of undulation or of principal flexure. Bearing in mind all these circumstances, which so clearly point to the S.W. as the chief focus of disturbance, it is a very interesting fact that the island of S. Maria, situated in that quarter, was, during the general uplifting of the land, raised to nearly three times the height of any other part of the coast.

The different resistance offered by the walls, according to their direction, was well exemplified in the case of the Cathedral. The side which fronted the N.E. presented a grand pile of ruins, in the midst of which door-cases and masses of timber stood up, as if floating in a stream. Some of the angular blocks of brickwork were of great dimensions; and they were rolled to a distance on the level plaza, like fragments of rock at the base of some high mountain. The side walls (running S.W. and N.E.), though exceedingly fractured, yet remained standing; but the vast buttresses (at right angles to them, and therefore parallel to the walls that fell) were in many cases cut clean off, as if by a chisel, and hurled to the ground. Some square ornaments on the coping of these same walls, were moved by the earthquake into a diagonal position. A similar circumstance was observed after an earthquake at Valparaiso, Calabria, and other places, including some of the ancient Greek temples. This twisting displacement, at first appears to indicate a vorticose movement beneath each point thus affected; but this is highly improbable. May it not be caused by a tendency in each stone to arrange itself in some particular position, with respect to the lines of vibration,—in a manner somewhat similar to pins on a sheet of paper when shaken? Generally speaking, arched doorways or windows stood much better than any other part of the buildings. Nevertheless, a poor lame old man, who had been in the habit, during trifling shocks, of crawling to a certain doorway, was this time crushed to pieces.

I have not attempted to give any detailed description of the appearance of Concepcion, for I feel that it is quite impossible to convey the mingled feelings which I experienced. Several of the officers visited it before me, but their strongest language failed to give a just idea of the scene of desolation. It is a bitter and humiliating thing to see works, which have cost man so much time and labour, overthrown in one minute; yet compassion for the inhabitants was almost

instantly banished, by the surprise in seeing a state of things produced in a moment of time, which one was accustomed to attribute to a succession of ages. In my opinion, we have scarcely beheld, since leaving England, any sight so deeply interesting.

In almost every severe earthquake, the neighbouring waters of the sea are said to have been greatly agitated. The disturbance seems generally, as in the case of Concepcion, to have been of two kinds: first, at the instant of the shock, the water swells high up on the beach with a gentle motion, and then as quietly retreats; secondly, some time afterwards, the whole body of the sea retires from the coast, and then returns in waves of overwhelming force. The first movement seems to be an immediate consequence of the earthquake affecting differently a fluid and a solid, so that their respective levels are slightly deranged: but the second case is a far more important phenomenon. During most earthquakes, and especially during those on the west coast of America, it is certain that the first great movement of the waters has been a retirement. Some authors have attempted to explain this, by supposing that the water retains its level, whilst the land oscillates upwards; but surely the water close to the land, even on a rather steep coast, would partake of the motion of the bottom: moreover, as urged by Mr. Lyell, similar movements of the sea have occurred at islands far distant from the chief line of disturbance, as was the case with Juan Fernandez during this earthquake, and with Madeira during the famous Lisbon shock. I suspect (but the subject is a very obscure one) that a wave, however produced, first draws the water from the shore, on which it is advancing to break: I have observed that this happens with the little waves from the paddles of a steam-boat. It is remarkable that whilst Talcahuano and Callao (near Lima), both situated at the head of large shallow bays, have suffered during every severe earthquake from great waves, Valparaiso, seated close to the edge of profoundly deep water, has never been overwhelmed, though so often shaken by the severest shocks. From the great wave not immediately following the earthquake, but sometimes after the interval of even half an hour, and from distant islands being affected similarly with the coasts near the focus of the disturbance, it appears that the wave first rises in the offing; and as this is of general occurrence, the cause must be general: I suspect we must look to the line, where the less disturbed waters of the deep ocean join the water nearer the coast, which has partaken of the movements of the land, as the place where the great wave is first generated; it would also appear that the wave is larger or smaller, according to the extent of shoal water which has been agitated together with the bottom on which it rested.

The most remarkable effect of this earthquake was the permanent elevation of the land, it would probably be far more correct to speak of it as the cause. There can be no doubt that the land round the Bay of Concepcion was upraised two or three feet; but it deserves notice, that owing to the wave having obliterated the old lines of tidal action on the sloping sandy shores, I could discover no evidence of this fact, except in the united testimony of the inhabitants, that one little rocky shoal, now exposed, was formerly covered with water. At the island of S. Maria (about thirty miles distant) the elevation was greater; on one part, Captain Fitz Roy founds beds of putrid mussel-shells still adhering to the rocks, ten feet above high-water mark: the inhabitants had formerly dived at lower-water spring-tides for these shells. The elevation of this province is particularly interesting, from its having been the theatre of several other violent earthquakes, and from the vast numbers of sea-shells scattered over the land, up to a height of

certainly 600, and I believe, of 1000 feet. At Valparaiso, as I have remarked, similar shells are found at the height of 1300 feet: it is hardly possible to doubt that this great elevation has been effected by successive small uprisings, such as that which accompanied or caused the earthquake of this year, and likewise by an insensibly slow rise, which is certainly in progress on some parts of this coast.

The island of Juan Fernandez, 360 miles to the N.E., was, at the time of the great shock of the 20th, violently shaken, so that the trees beat against each other, and a volcano burst forth under water close to the shore: these facts are remarkable because this island, during the earthquake of 1751, was then also affected more violently than other places at an equal distance from Concepcion, and this seems to show some subterranean connection between these two points. Chiloe, about 340 miles southward of Concepcion, appears to have been shaken more strongly than the intermediate district of Valdivia, where the volcano of Villarica was noways affected, whilst in the Cordillera in front of Chiloe, two of the volcanos burst-forth at the same instant in violent action. These two volcanos, and some neighbouring ones, continued for a long time in eruption, and ten months afterwards were again influenced by an earthquake at Concepcion. Some men, cutting wood near the base of one of these volcanos, did not perceive the shock of the 20th, although the whole surrounding Province was then trembling; here we have an eruption relieving and taking the place of an earthquake, as would have happened at Concepcion, according to the belief of the lower orders, if the volcano at Antuco had not been closed by witchcraft. Two years and three-quarters afterwards, Valdivia and Chiloe were again shaken, more violently than on the 20th, and an island in the Chonos Archipelago was permanently elevated more than eight feet. It will give a better idea of the scale of these phenomena, if (as in the case of the glaciers) we suppose them to have taken place at corresponding distances in Europe:—then would the land from the North Sea to the Mediterranean have been violently shaken, and at the same instant of time a large tract of the eastern coast of England would have been permanently elevated, together with some outlying islands,—a train of volcanos on the coast of Holland would have burst forth in action, and an eruption taken place at the bottom of the sea, near the northern extremity of Ireland—and lastly, the ancient vents of Auvergne, Cantal, and Mont d'Or would each have sent up to the sky a dark column of smoke, and have long remained in fierce action. Two years and three-quarters afterwards, France, from its centre to the English Channel, would have been again desolated by an earthquake and an island permanently upraised in the Mediterranean.

The space, from under which volcanic matter on the 20th was actually erupted, is 720 miles in one line, and 400 miles in another line at right angles to the first: hence, in all probability, a subterranean lake of lava is here stretched out, of nearly double the area of the Black Sea. From the intimate and complicated manner in which the elevatory and eruptive forces were shown to be connected during this train of phenomena, we may confidently come to the conclusion, that the forces which slowly and by little starts uplift continents, and those which at successive periods pour forth volcanic matter from open orifices, are identical. From many reasons, I believe that the frequent quakings of the earth on this line of coast are caused by the rending of the strata, necessarily consequent on the tension of the land when upraised, and their injection by fluidified rock. This rending and injection would, if repeated often enough (and

we know that earthquakes repeatedly affect the same areas in the same manner), form a chain of hills;—and the linear island of S. Mary, which was upraised thrice the height of the neighbouring country, seems to be undergoing this process. I believe that the solid axis of a mountain, differs in its manner of formation from a volcanic hill, only in the molten stone having been repeatedly injected, instead of having been repeatedly ejected. Moreover, I believe that it is impossible to explain the structure of great mountain-chains, such as that of the Cordillera, were the strata, capping the injected axis of plutonic rock, have been thrown on their edges along several parallel and neighbouring lines of elevation, except on this view of the rock of the axis having been repeatedly injected, after intervals sufficiently long to allow the upper parts or wedges to cool and become solid;—for if the strata had been thrown into their present highly inclined, vertical, and even inverted positions, by a single blow, the very bowels of the earth would have gushed out; and instead of beholding abrupt mountain-axes of rock solidified under great pressure, deluges of lava would have flowed out at innumerable points on every line of elevation.

July 25– “The Lay of Brynhild” from the *Elder Edda* translated by Eiríkr Magnússon and William Morris

FRAGMENTS OF THE LAY OF BRYNHILD

HOGNI SAID:

"What hath wrought Sigurd
Of any wrong-doing
That the life of the famed one
Thou art fain of taking?"

GUNNAR SAID:

"To me has Sigurd
Sworn many oaths,
Sworn many oaths,
And sworn them lying,
And he bewrayed me
When it behoved him
Of all folk to his troth
To be the most trusty."

HOGNI SAID:

"Thee hath Brynhild
Unto all bale,
And all hate whetted,
And a work of sorrow;
For she grudges to Gudrun
All goodly life;
And to thee the bliss
Of her very body."

.....

Some the wolf roasted,
Some minced the worm,
Some unto Guttorm
Gave the wolf-meat,
Or ever they might
In their lust for murder
On the high king
Lay deadly hand.

Sigurd lay slain
On the south of the Rhine

High from the fair tree
Croaked forth the raven,
"Ah, yet shall Atli
On you redden edges,
The old oaths shall weigh
On your souls, O warriors."

Without stood Gudrun,
Giuki's daughter,
And the first word she said
Was even this word:
"Where then is Sigurd,
Lord of the Warfolk,
Since my kin
Come riding the foremost?"

One word Hogni
Had for an answer:
"Our swords have smitten
Sigurd asunder,
And the grey horse hangs drooping
O'er his lord lying dead."

Then quoth Brynhild,
Budli's daughter;
"Good weal shall ye have
Of weapons and lands,
That Sigurd alone
Would surely have ruled
If he had lived
But a little longer.

"Ah, nothing seemly
For Sigurd to rule
Giuki's house
And the folk of the Goths,
When of him five sons
For the slaying of men,
Eager for battle,
Should have been begotten!"

Then laughed Brynhild—
Loud rang the whole house—
One laugh only

From out her heart:
"Long shall your bliss be
Of lands and people,
Whereas the famed lord
You have felled to the earth!"

Then spake Gudrun,
Giuki's daughter;
"Much thou speakest,
Many things fearful,
All grame be on Gunnar
The bane of Sigurd!
From a heart full of hate
Shall come heavy vengeance."

Forth sped the even
Enow there was drunken,
Full enow was there
Of all soft speech;
And all men got sleep
When to bed they were gotten;
Gunnar only lay waking
Long after all men.

His feet fell he to moving,
Fell to speak to himself
The waster of men,
Still turned in his mind
What on the bough
Those twain would be saying,
The raven and erne,
As they rode their ways homeward.

But Brynhild awoke,
Budli's daughter,
May of the shield-folk,
A little ere morning:
"Thrust ye on, hold ye back,
—Now all harm is wrought,—
To tell of my sorrow,
Or to let all slip by me?"

All kept silence
After her speaking,

None might know
That woman's mind,
Or why she must weep
To tell of the work
That laughing once
Of men she prayed.

BRYNHILD SPAKE:

"In dreams, O Gunnar,
Grim things fell on me;
Dead-cold the hall was,
And my bed was a-cold,
And thou, lord, wert riding
Reft of all bliss,
Laden with fetters
'Mid the host of thy foemen."

"So now all ye,
O House of the Niblungs,
Shall be brought to naught,
O ye oath-breakers!

"Think'st thou not, Gunnar,
How that betid,
When ye let the blood run
Both in one footstep?
With ill reward
Hast thou rewarded
His heart so fain
To be the foremost!

"As well was seen
When he rode his ways,
That king of all worth,
Unto my wooing;
How the host-destroyer
Held to the vows
Sworn beforetime,
Sworn to the young king.

"For his wounding-wand
All wrought with gold,
The king beloved
Laid between us;

Without were its edges
Wrought with fire,
But with venom-drops
Deep dyed within."

Thus this song telleth of the death of Sigurd, and setteth forth how that they slew him without doors; but some say that they slew him within doors, sleeping in his bed. But the Dutch Folk say that they slew him out in the wood: and so sayeth the ancient song of Gudrun, that Sigurd and the sons of Giuki were riding to the Thing whenas he was slain. But all with one accord say that they bewrayed him in their troth with him, and fell on him as he lay unarrayed and unawares.

July 26– From *The Imitation of Christ* by Thomas A. Kempis (~1420) translated by William Benham

THE FIRST BOOK

ADMONITIONS PROFITABLE FOR THE SPIRITUAL LIFE

CHAPTER I

Of the imitation of Christ, and of contempt of the world and all its vanities

He that followeth me shall not walk in darkness,(1) saith the Lord. These are the words of Christ; and they teach us how far we must imitate His life and character, if we seek true illumination, and deliverance from all blindness of heart. Let it be our most earnest study, therefore, to dwell upon the life of Jesus Christ.

2. His teaching surpasseth all teaching of holy men, and such as have His Spirit find therein the hidden manna.(2) But there are many who, though they frequently hear the Gospel, yet feel but little longing after it, because they have not the mind of Christ. He, therefore, that will fully and with true wisdom understand the words of Christ, let him strive to conform his whole life to that mind of Christ.

3. What doth it profit thee to enter into deep discussion concerning the Holy Trinity, if thou lack humility, and be thus displeasing to the Trinity? For verily it is not deep words that make a man holy and upright; it is a good life which maketh a man dear to God. I had rather feel contrition than be skilful in the definition thereof. If thou knewest the whole Bible, and the sayings of all the philosophers, what should all this profit thee without the love and grace of God? Vanity of vanities, all is vanity, save to love God, and Him only to serve. That is the highest wisdom, to cast the world behind us, and to reach forward to the heavenly kingdom.

4. It is vanity then to seek after, and to trust in, the riches that shall perish. It is vanity, too, to covet honours, and to lift up ourselves on high. It is vanity to follow the desires of the flesh and be led by them, for this shall bring misery at the last. It is vanity to desire a long life, and to have little care for a good life. It is vanity to take thought only for the life which now is, and not to look forward to the things which shall be hereafter. It is vanity to love that which quickly passeth away, and not to hasten where eternal joy abideth.

5. Be oftentimes mindful of the saying,(3) The eye is not satisfied with seeing, nor the ear with hearing. Strive, therefore, to turn away thy heart from the love of the things that are seen, and to set it upon the things that are not seen. For they who follow after their own fleshly lusts, defile the conscience, and destroy the grace of God.

(1) John viii. 12. (2) Revelations ii. 17. (3) Ecclesiastes i. 8.

CHAPTER II

Of thinking humbly of oneself

There is naturally in every man a desire to know, but what profiteth knowledge without the fear of God? Better of a surety is a lowly peasant who serveth God, than a proud philosopher who watcheth the stars and neglecteth the knowledge of himself. He who knoweth himself well is vile in his own sight; neither regardeth he the praises of men. If I knew all the things that are in the world, and were not in charity, what should it help me before God, who is to judge me according to my deeds?

2. Rest from inordinate desire of knowledge, for therein is found much distraction and deceit. Those who have knowledge desire to appear learned, and to be called wise. Many things there are to know which profiteth little or nothing to the soul. And foolish out of measure is he who attendeth upon other things rather than those which serve to his soul's health. Many words satisfy not the soul, but a good life refresheth the mind, and a pure conscience giveth great confidence towards God.

3. The greater and more complete thy knowledge, the more severely shalt thou be judged, unless thou hast lived holily. Therefore be not lifted up by any skill or knowledge that thou hast; but rather fear concerning the knowledge which is given to thee. If it seemeth to thee that thou knowest many things, and understandest them well, know also that there are many more things which thou knowest not. Be not high-minded, but rather confess thine ignorance. Why desirest thou to lift thyself above another, when there are found many more learned and more skilled in the Scripture than thou? If thou wilt know and learn anything with profit, love to be thyself unknown and to be counted for nothing.

4. That is the highest and most profitable lesson, when a man truly knoweth and judgeth lowly of himself. To account nothing of one's self, and to think always kindly and highly of others, this is great and perfect wisdom. Even shouldst thou see thy neighbor sin openly or grievously, yet thou oughtest not to reckon thyself better than he, for thou knowest not how long thou shalt keep thine integrity. All of us are weak and frail; hold thou no man more frail than thyself.

CHAPTER III

Of the knowledge of truth

Happy is the man whom Truth by itself doth teach, not by figures and transient words, but as it is in itself.(1) Our own judgment and feelings often deceive us, and we discern but little of the truth. What doth it profit to argue about hidden and dark things, concerning which we shall not be even reprov'd in the judgment, because we knew them not? Oh, grievous folly, to neglect the things which are profitable and necessary, and to give our minds to things which are curious and hurtful! Having eyes, we see not.

2. And what have we to do with talk about genus and species! He to whom the Eternal Word speaketh is free from multiplied questionings. From this One Word are all things, and all things speak of Him; and this is the Beginning which also speaketh unto us.(2) No man without Him understandeth or rightly judgeth. The man to whom all things are one, who bringeth all things to

one, who seeth all things in one, he is able to remain steadfast of spirit, and at rest in God. O God, who art the Truth, make me one with Thee in everlasting love. It wearieth me oftentimes to read and listen to many things; in Thee is all that I wish for and desire. Let all the doctors hold their peace; let all creation keep silence before Thee: speak Thou alone to me.

3. The more a man hath unity and simplicity in himself, the more things and the deeper things he understandeth; and that without labour, because he receiveth the light of understanding from above. The spirit which is pure, sincere, and steadfast, is not distracted though it hath many works to do, because it doth all things to the honour of God, and striveth to be free from all thoughts of self-seeking. Who is so full of hindrance and annoyance to thee as thine own undisciplined heart? A man who is good and devout arrangeth beforehand within his own heart the works which he hath to do abroad; and so is not drawn away by the desires of his evil will, but subjecteth everything to the judgment of right reason. Who hath a harder battle to fight than he who striveth for self-mastery? And this should be our endeavour, even to master self, and thus daily to grow stronger than self, and go on unto perfection.

4. All perfection hath some imperfection joined to it in this life, and all our power of sight is not without some darkness. A lowly knowledge of thyself is a surer way to God than the deep searching of man's learning. Not that learning is to be blamed, nor the taking account of anything that is good; but a good conscience and a holy life is better than all. And because many seek knowledge rather than good living, therefore they go astray, and bear little or no fruit.

5. O if they would give that diligence to the rooting out of vice and the planting of virtue which they give unto vain questionings: there had not been so many evil doings and stumbling-blocks among the laity, nor such ill living among houses of religion. Of a surety, at the Day of Judgment it will be demanded of us, not what we have read, but what we have done; not how well we have spoken, but how holily we have lived. Tell me, where now are all those masters and teachers, whom thou knewest well, whilst they were yet with you, and flourished in learning? Their stalls are now filled by others, who perhaps never have one thought concerning them. Whilst they lived they seemed to be somewhat, but now no one speaks of them.

6. Oh how quickly passeth the glory of the world away! Would that their life and knowledge had agreed together! For then would they have read and inquired unto good purpose. How many perish through empty learning in this world, who care little for serving God. And because they love to be great more than to be humble, therefore they "have become vain in their imaginations." He only is truly great, who hath great charity. He is truly great who deemeth himself small, and counteth all height of honour as nothing. He is the truly wise man, who counteth all earthly things as dung that he may win Christ. And he is the truly learned man, who doeth the will of God, and forsaketh his own will.

(1) Psalm xciv. 12; Numbers xii. 8. (2) John viii. 25 (Vulg.).

CHAPTER IV

Of prudence in action

We must not trust every word of others or feeling within ourselves, but cautiously and patiently try the matter, whether it be of God. Unhappily we are so weak that we find it easier to believe and speak evil of others, rather than good. But they that are perfect, do not give ready heed to every news-bearer, for they know man's weakness that it is prone to evil and unstable in words.

2. This is great wisdom, not to be hasty in action, or stubborn in our own opinions. A part of this wisdom also is not to believe every word we hear, nor to tell others all that we hear, even though we believe it. Take counsel with a man who is wise and of a good conscience; and seek to be instructed by one better than thyself, rather than to follow thine own inventions. A good life maketh a man wise toward God, and giveth him experience in many things. The more humble a man is in himself, and the more obedient towards God, the wiser will he be in all things, and the more shall his soul be at peace.

CHAPTER V

Of the reading of Holy Scriptures

It is Truth which we must look for in Holy Writ, not cunning of words. All Scripture ought to be read in the spirit in which it was written. We must rather seek for what is profitable in Scripture, than for what ministereth to subtlety in discourse. Therefore we ought to read books which are devotional and simple, as well as those which are deep and difficult. And let not the weight of the writer be a stumbling-block to thee, whether he be of little or much learning, but let the love of the pure Truth draw thee to read. Ask not, who hath said this or that, but look to what he says.

2. Men pass away, but the truth of the Lord endureth for ever. Without respect of persons God speaketh to us in divers manners. Our own curiosity often hindereth us in the reading of holy writings, when we seek to understand and discuss, where we should pass simply on. If thou wouldst profit by thy reading, read humbly, simply, honestly, and not desiring to win a character for learning. Ask freely, and hear in silence the words of holy men; nor be displeased at the hard sayings of older men than thou, for they are not uttered without cause.

CHAPTER VI

Of inordinate affections

Whensoever a man desireth aught above measure, immediately he becometh restless. The proud and the avaricious man are never at rest; while the poor and lowly of heart abide in the multitude of peace. The man who is not yet wholly dead to self, is soon tempted, and is overcome in small and trifling matters. It is hard for him who is weak in spirit, and still in part carnal and inclined to the pleasures of sense, to withdraw himself altogether from earthly desires. And therefore, when he withdraweth himself from these, he is often sad, and easily angered too if any oppose his will.

2. But if, on the other hand, he yield to his inclination, immediately he is weighed down by the condemnation of his conscience; for that he hath followed his own desire, and yet in no way

attained the peace which he hoped for. For true peace of heart is to be found in resisting passion, not in yielding to it. And therefore there is no peace in the heart of a man who is carnal, nor in him who is given up to the things that are without him, but only in him who is fervent towards God and living the life of the Spirit.

CHAPTER VII

Of fleeing from vain hope and pride

Vain is the life of that man who putteth his trust in men or in any created Thing. Be not ashamed to be the servant of others for the love of Jesus Christ, and to be reckoned poor in this life. Rest not upon thyself, but build thy hope in God. Do what lieth in thy power, and God will help thy good intent. Trust not in thy learning, nor in the cleverness of any that lives, but rather trust in the favour of God, who resisteth the proud and giveth grace to the humble.

2. Boast not thyself in thy riches if thou hast them, nor in thy friends if they be powerful, but in God, who giveth all things, and in addition to all things desireth to give even Himself. Be not lifted up because of thy strength or beauty of body, for with only a slight sickness it will fail and wither away. Be not vain of thy skilfulness or ability, lest thou displease God, from whom cometh every good gift which we have.

3. Count not thyself better than others, lest perchance thou appear worse in the sight of God, who knoweth what is in man. Be not proud of thy good works, for God's judgments are of another sort than the judgments of man, and what pleaseth man is oftentimes displeasing to Him. If thou hast any good, believe that others have more, and so thou mayest preserve thy humility. It is no harm to thee if thou place thyself below all others; but it is great harm if thou place thyself above even one. Peace is ever with the humble man, but in the heart of the proud there is envy and continual wrath.

July 27– “On the Antiseptic Principle of the Practice of Surgery” by Joseph Lister (1867)

In the course of an extended investigation into the nature of inflammation, and the healthy and morbid conditions of the blood in relation to it, I arrived several years ago at the conclusion that the essential cause of suppuration in wounds is decomposition brought about by the influence of the atmosphere upon blood or serum retained within them, and, in the case of contused wounds, upon portions of tissue destroyed by the violence of the injury.

To prevent the occurrence of suppuration with all its attendant risks was an object manifestly desirable, but till lately apparently unattainable, since it seemed hopeless to attempt to exclude the oxygen which was universally regarded as the agent by which putrefaction was effected. But when it had been shown by the researches of Pasteur that the septic properties of the atmosphere depended not on the oxygen, or any gaseous constituent, but on minute organisms suspended in it, which owed their energy to their vitality, it occurred to me that decomposition in the injured part might be avoided without excluding the air, by applying as a dressing some material capable of destroying the life of the floating particles. Upon this principle I have based a practice of which I will now attempt to give a short account.

The material which I have employed is carbolic or phenic acid, a volatile organic compound, which appears to exercise a peculiarly destructive influence upon low forms of life, and hence is the most powerful antiseptic with which we are at present acquainted.

The first class of cases to which I applied it was that of compound fractures, in which the effects of decomposition in the injured part were especially striking and pernicious. The results have been such as to establish conclusively the great principle that all local inflammatory mischief and general febrile disturbances which follow severe injuries are due to the irritating and poisonous influence of decomposing blood or sloughs. For these evils are entirely avoided by the antiseptic treatment, so that limbs which would otherwise be unhesitatingly condemned to amputation may be retained, with confidence of the best results.

In conducting the treatment, the first object must be the destruction of any septic germs which may have been introduced into the wounds, either at the moment of the accident or during the time which has since elapsed. This is done by introducing the acid of full strength into all accessible recesses of the wound by means of a piece of rag held in dressing forceps and dipped into the liquid. ¹ This I did not venture to do in the earlier cases; but experience has shown that the compound which carbolic acid forms with the blood, and also any portions of tissue killed by its caustic action, including even parts of the bone, are disposed of by absorption and organisation, provided they are afterwards kept from decomposing. We are thus enabled to employ the antiseptic treatment efficiently at a period after the occurrence of the injury at which it would otherwise probably fail. Thus I have now under my care, in Glasgow Infirmary, a boy who was admitted with compound fracture of the leg as late as eight and one-half hours after

the accident, in whom, nevertheless, all local and constitutional disturbance was avoided by means of carbolic acid, and the bones were soundly united five weeks after his admission.

[Footnote 1: The addition of a few drops of water to a considerable quantity of the acid, induces it to assume permanently the liquid form.]

The next object to be kept in view is to guard effectually against the spreading of decomposition into the wound along the stream of blood and serum which oozes out during the first few days after the accident, when the acid originally applied has been washed out or dissipated by absorption and evaporation. This part of the treatment has been greatly improved during the past few weeks. The method which I have hitherto published (see Lancet for Mar. 16th, 23rd, 30th, and April 27th of the present year) consisted in the application of a piece of lint dipped in the acid, overlapping the sound skin to some extent and covered with a tin cap, which was daily raised in order to touch the surface of the lint with the antiseptic. This method certainly succeeded well with wounds of moderate size; and indeed I may say that in all the many cases of this kind which have been so treated by myself or my house-surgeons, not a single failure has occurred. When, however, the wound is very large, the flow of blood and serum is so profuse, especially during the first twenty-four hours, that the antiseptic application cannot prevent the spread of decomposition into the interior unless it overlaps the sound skin for a very considerable distance, and this was inadmissible by the method described above, on account of the extensive sloughing of the surface of the cutis which it would involve. This difficulty has, however, been overcome by employing a paste composed of common whiting (carbonate of lime), mixed with a solution of one part of carbolic acid in four parts of boiled linseed oil so as to form a firm putty. This application contains the acid in too dilute a form to excoriate the skin, which it may be made to cover to any extent that may be thought desirable, while its substance serves as a reservoir of the antiseptic material. So long as any discharge continues, the paste should be changed daily, and, in order to prevent the chance of mischief occurring during the process, a piece of rag dipped in the solution of carbolic acid in oil is put on next the skin, and maintained there permanently, care being taken to avoid raising it along with the putty. This rag is always kept in an antiseptic condition from contact with the paste above it, and destroys any germs which may fall upon it during the short time that should alone be allowed to pass in the changing of the dressing. The putty should be in a layer about a quarter of an inch thick, and may be advantageously applied rolled out between two pieces of thin calico, which maintain it in the form of a continuous sheet, which may be wrapped in a moment round the whole circumference of a limb if this be thought desirable, while the putty is prevented by the calico from sticking to the rag which is next the skin. 2 When all discharge has ceased, the use of the paste is discontinued, but the original rag is left adhering to the skin till healing by scabbing is supposed to be complete. I have at present in the hospital a man with severe compound fracture of both bones of the left leg, caused by direct violence, who, after the cessation of the sanious discharge under the use of the paste, without a drop of pus appearing, has been treated for the last two weeks exactly as if the fracture was a simple one. During this time the rag, adhering by means of a crust of inspissated blood collected beneath it, has continued perfectly dry, and it will be left untouched till the usual period for removing the splints in a simple fracture, when we may fairly expect to find a sound cicatrix beneath it.

[Footnote 2: In order to prevent evaporation of the acid, which passes readily through any organic tissue, such as oiled silk or gutta percha, it is well to cover the paste with a sheet of block tin, or tinfoil strengthened with adhesive plaster. The thin sheet lead used for lining tea chests will also answer the purpose, and may be obtained from any wholesale grocer.]

We cannot, however, always calculate on so perfect a result as this. More or less pus may appear after the lapse of the first week, and the larger the wound, the more likely this is to happen. And here I would desire earnestly to enforce the necessity of persevering with the antiseptic application in spite of the appearance of suppuration, so long as other symptoms are favorable. The surgeon is extremely apt to suppose that any suppuration is an indication that the antiseptic treatment has failed, and that poulticing or water dressing should be resorted to. But such a course would in many cases sacrifice a limb or a life. I cannot, however, expect my professional brethren to follow my advice blindly in such a matter, and therefore I feel it necessary to place before them, as shortly as I can, some pathological principles intimately connected, not only with the point we are immediately considering, but with the whole subject of this paper.

If a perfectly healthy granulating sore be well washed and covered with a plate of clean metal, such as block tin, fitting its surface pretty accurately, and overlapping the surrounding skin an inch or so in every direction and retained in position by adhesive plaster and a bandage, it will be found, on removing it after twenty-four or forty-eight hours, that little or nothing that can be called pus is present, merely a little transparent fluid, while at the same time there is an entire absence of the unpleasant odour invariably perceived when water dressing is changed. Here the clean metallic surface presents no recesses like those of porous lint for the septic germs to develop in, the fluid exuding from the surface of the granulations has flowed away undecomposed, and the result is the absence of suppuration. This simple experiment illustrates the important fact that granulations have no inherent tendency to form pus, but do so only when subjected to preternatural stimulus. Further, it shows that the mere contact of a foreign body does not of itself stimulate granulations to suppurate; whereas the presence of decomposing organic matter does. These truths are even more strikingly exemplified by the fact that I have elsewhere recorded (*Lancet*, March 23rd, 1867), that a piece of dead bone free from decomposition may not only fail to induce the granulations around it to suppurate, but may actually be absorbed by them; whereas a bit of dead bone soaked with putrid pus infallibly induces suppuration in its vicinity.

Another instructive experiment is, to dress a granulating sore with some of the putty above described, overlapping the sound skin extensively; when we find, in the course of twenty-four hours, that pus has been produced by the sore, although the application has been perfectly antiseptic; and, indeed, the larger the amount of carbolic acid in the paste, the greater is the quantity of pus formed, provided we avoid such a proportion as would act as a caustic. The carbolic acid, though it prevents decomposition, induces suppuration obviously by acting as a chemical stimulus; and we may safely infer that putrescent organic materials (which we know to be chemically acrid) operate in the same way.

In so far, then, carbolic acid and decomposing substances are alike; viz., that they induce suppuration by chemical stimulation, as distinguished from what may be termed simple inflammatory suppuration, such as that in which ordinary abscesses originate - where the pus appears to be formed in consequence of an excited action of the nerves, independently of any other stimulus. There is, however, this enormous difference between the effects of carbolic acid and those of decomposition; viz., that carbolic acid stimulates only the surface to which it is at first applied, and every drop of discharge that forms weakens the stimulant by diluting it; but decomposition is a self-propagating and self-aggravating poison, and, if it occur at the surface of a severely injured limb, it will spread into all its recesses so far as any extravasated blood or shreds of dead tissue may extend, and lying in those recesses, it will become from hour to hour more acrid, till it requires the energy of a caustic sufficient to destroy the vitality of any tissues naturally weak from inferior vascular supply, or weakened by the injury they sustained in the accident.

Hence it is easy to understand how, when a wound is very large, the crust beneath the rag may prove here and there insufficient to protect the raw surface from the stimulating influence of the carbolic acid in the putty; and the result will be first the conversion of the tissues so acted on into granulations, and subsequently the formation of more or less pus. This, however, will be merely superficial, and will not interfere with the absorption and organisation of extravasated blood or dead tissues in the interior. But, on the other hand, should decomposition set in before the internal parts have become securely consolidated, the most disastrous results may ensue.

I left behind me in Glasgow a boy, thirteen years of age, who, between three and four weeks previously, met with a most severe injury to the left arm, which he got entangled in a machine at a fair. There was a wound six inches long and three inches broad, and the skin was very extensively undermined beyond its limits, while the soft parts were generally so much lacerated that a pair of dressing forceps introduced at the wound and pushed directly inwards appeared beneath the skin at the opposite aspect of the limb. From this wound several tags of muscle were hanging, and among them was one consisting of about three inches of the triceps in almost its entire thickness; while the lower fragment of the bone, which was broken high up, was protruding four inches and a half, stripped of muscle, the skin being tucked in under it. Without the assistance of the antiseptic treatment, I should certainly have thought of nothing else but amputation at the shoulder-joint; but, as the radial pulse could be felt and the fingers had sensation, I did not hesitate to try to save the limb and adopted the plan of treatment above described, wrapping the arm from the shoulder to below the elbow in the antiseptic application, the whole interior of the wound, together with the protruding bone, having previously been freely treated with strong carbolic acid. About the tenth day, the discharge, which up to that time had been only sanious and serous, showed a slight admixture of slimy pus; and this increased till (a few days before I left) it amounted to about three drachms in twenty-four hours. But the boy continued as he had been after the second day, free from unfavorable symptoms, with pulse, tongue, appetite, and sleep natural and strength increasing, while the limb remained as it had been from the first, free from swelling, redness, or pain. I, therefore, persevered with the

antiseptic dressing; and, before I left, the discharge was already somewhat less, while the bone was becoming firm. I think it likely that, in that boy's case, I should have found merely a superficial sore had I taken off all the dressings at the end of the three weeks; though, considering the extent of the injury, I thought it prudent to let the month expire before disturbing the rag next the skin. But I feel sure that, if I had resorted to ordinary dressing when the pus first appeared, the progress of the case would have been exceedingly different.

The next class of cases to which I have applied the antiseptic treatment is that of abscesses. Here also the results have been extremely satisfactory, and in beautiful harmony with the pathological principles indicated above. The pyogenic membrane, like the granulations of a sore, which it resembles in nature, forms pus, not from any inherent disposition to do so, but only because it is subjected to some preternatural stimulation. In an ordinary abscess, whether acute or chronic, before it is opened the stimulus which maintains the suppuration is derived from the presence of pus pent up within the cavity. When a free opening is made in the ordinary way, this stimulus is got rid of, but the atmosphere gaining access to the contents, the potent stimulus of decomposition comes into operation, and pus is generated in greater abundance than before. But when the evacuation is effected on the antiseptic principle, the pyogenic membrane, freed from the influence of the former stimulus without the substitution of a new one, ceases to suppurate (like the granulations of a sore under metallic dressing), furnishing merely a trifling amount of clear serum, and, whether the opening be dependent or not, rapidly contracts and coalesces. At the same time any constitutional symptoms previously occasioned by the accumulation of the matter are got rid of without the slightest risk of the irritative fever or hectic hitherto so justly dreaded in dealing with large abscesses.

In order that the treatment may be satisfactory, the abscess must be seen before it is opened. Then, except in very rare and peculiar cases, ³ there are no septic organisms in the contents, so that it is needless to introduce carbolic acid into the interior. Indeed, such a procedure would be objectionable, as it would stimulate the pyogenic membrane to unnecessary suppuration. All that is requisite is to guard against the introduction of living atmospheric germs from without, at the same time that free opportunity is afforded for the escape of the discharge from within.

[Footnote 3: As an instance of one of these exceptional cases, I may mention that of an abscess in the vicinity of the colon, and afterwards proved by post-mortem examination to have once communicated with it. Here the pus was extremely offensive when evacuated, and exhibited vibrios under the microscope.]

I have so lately given elsewhere a detailed account of the method by which this is effected (Lancet, July 27th, 1867), that I shall not enter into it at present further than to say that the means employed are the same as those described above for the superficial dressing of compound fractures; viz., a piece of rag dipped into the solution of carbolic acid in oil to serve as an antiseptic curtain, under cover of which the abscess is evacuated by free incision, and the antiseptic paste to guard against decomposition occurring in the stream of pus that flows out beneath it; the dressing being changed daily until the sinus is closed.

The most remarkable results of this practice in a pathological point of view have been afforded by cases where the formation of pus depended on disease of bone. Here the abscesses, instead of forming exceptions to the general class in the obstinacy of the suppuration, have resembled the rest in yielding in a few days only a trifling discharge, and frequently the production of pus has ceased from the moment of the evacuation of the original contents. Hence it appears that caries, when no longer labouring as heretofore under the irritation of decomposing matter, ceases to be an opprobrium of surgery, and recovers like other inflammatory affections. In the publication before alluded to, I have mentioned the case of a middle-aged man with a psoas abscess depending in diseased bone, in whom the sinus finally closed after months of patient perseverance with the antiseptic treatment. Since that article was written I have had another instance of abscess equally gratifying, but the differing in the circumstance that the disease and the recovery were more rapid in their course. The patient was a blacksmith, who had suffered four and a half months before I saw him from symptoms of ulceration of cartilage in the left elbow. These had latterly increased in severity so as to deprive him entirely of his night's rest and of appetite. I found the region of the elbow greatly swollen, and on careful examination found a fluctuating point at the outer aspect of the articulation. I opened it on the antiseptic principle, the incision evidently penetrating to the joint, giving exit to a few drachms of pus. The medical gentleman under whose care he was (Dr. Macgregor, of Glasgow) supervised the daily dressing with the carbolic acid paste till the patient went to spend two or three weeks at the coast, when his wife was entrusted with it. Just two months after I opened the abscess, he called to show me the limb, stating that the discharge had been, for at least two weeks, as little as it was then, a trifling moisture upon the paste, such as might be accounted for by the little sore caused by the incision. On applying a probe guarded with an antiseptic rag, I found that the sinus was soundly closed, while the limb was free from swelling or tenderness; and, although he had not attempted to exercise it much, the joint could already be moved through a considerable angle. Here the antiseptic principle had effected the restoration of a joint, which, on any other known system of treatment, must have been excised.

Ordinary contused wounds are, of course, amenable to the same treatment as compound fractures, which are a complicated variety of them. I will content myself with mentioning a single instance of this class of cases. In April last, a volunteer was discharging a rifle when it burst, and blew back the thumb with its metacarpal bone, so that it could be bent back as on a hinge at the trapezial joint, which had evidently been opened, while all the soft parts between the metacarpal bones of the thumb and forefinger were torn through. I need not insist before my present audience on the ugly character of such an injury. My house-surgeon, Mr. Hector Cameron, applied carbolic acid to the whole raw surface, and completed the dressing as if for compound fracture. The hand remained free from pain, redness or swelling, and with the exception of a shallow groove, all the wound consolidated without a drop of matter, so that if it had been a clean cut, it would have been regarded as a good example of primary union. The small granulating surface soon healed, and at present a linear cicatrix alone tells of the injury he has sustained, while his thumb has all its movements and his hand a fine grasp.

If the severest forms of contused and lacerated wounds heal thus kindly under the antiseptic treatment, it is obvious that its application to simple incised wounds must be merely a matter of detail. I have devoted a good deal of attention to this class, but I have not as yet pleased myself altogether with any of the methods I have employed. I am, however, prepared to go so far as to say that a solution of carbolic acid in twenty parts of water, while a mild and cleanly application, may be relied on for destroying any septic germs that may fall upon the wound during the performance of an operation; and also that, for preventing the subsequent introduction of others, the paste above described, applied as for compound fractures, gives excellent results. Thus I have had a case of strangulated inguinal hernia in which it was necessary to take away half a pound of thickened omentum, heal without any deep-seated suppuration or any tenderness of the sac or any fever; and amputations, including one immediately below the knee, have remained absolutely free from constitutional symptoms.

Further, I have found that when the antiseptic treatment is efficiently conducted, ligatures may be safely cut short and left to be disposed of by absorption or otherwise. Should this particular branch of the subject yield all that it promises, should it turn out on further trial that when the knot is applied on the antiseptic principle, we may calculate as securely as if it were absent on the occurrence of healing without any deep-seated suppuration, the deligation of main arteries in their continuity will be deprived of the two dangers that now attend it, viz., those of secondary haemorrhage and an unhealthy state of the wound. Further, it seems not unlikely that the present objection to tying an artery in the immediate vicinity of a large branch may be done away with; and that even the innominate, which has lately been the subject of an ingenious experiment by one of the Dublin surgeons, on account of its well-known fatality under the ligature for secondary haemorrhage, may cease to have this unhappy character when the tissues in the vicinity of the thread, instead of becoming softened through the influence of an irritating decomposing substance, are left at liberty to consolidate firmly near an unoffending though foreign body.

It would carry me far beyond the limited time which, by the rules of the Association, is alone at my disposal, were I to enter into the various applications of the antiseptic principle in the several special departments of surgery.

There is, however, one point more that I cannot but advert to, viz., the influence of this mode of treatment upon the general healthiness of an hospital. Previously to its introduction the two large wards in which most of my cases of accident and of operation are treated were among the unhealthiest in the whole surgical division of the Glasgow Royal Infirmary, in consequence apparently of those wards being unfavorably placed with reference to the supply of fresh air; and I have felt ashamed when recording the results of my practice, to have so often to allude to hospital gangrene or pyaemia. It was interesting, though melancholy, to observe that whenever all or nearly all the beds contained cases with open sores, these grievous complications were pretty sure to show themselves; so that I came to welcome simple fractures, though in themselves of little interest either for myself or the students, because their presence diminished the proportion of open sores among the patients. But since the antiseptic treatment has been brought into full operation, and wounds and abscesses no longer poison the atmosphere with

putrid exhalations, my wards, though in other respects under precisely the same circumstances as before, have completely changed their character; so that during the last nine months not a single instance of pyaemia, hospital gangrene, or erysipelas has occurred in them.

As there appears to be no doubt regarding the cause of this change, the importance of the fact can hardly be exaggerated.

July 28– “Of Agriculture” by Abraham Cowley (1650)

The first wish of Virgil (as you will find anon by his verses) was to be a good philosopher, the second, a good husbandman: and God (whom he seem'd to understand better than most of the most learned heathens) dealt with him just as he did with Solomon; because he prayed for wisdom in the first place, he added all things else, which were subordinately to be desir'd. He made him one of the best philosophers and the best husbandmen; and, to adorn and communicate both those faculties, the best poet. He made him, besides all this, a rich man, and a man who desired to be no richer

O fortunatus nimium, et bona qui sua novit!

["O fortunate exceedingly, who knew his own good fortune."—Adapted from Virgil, Georgics, II., 458.]

To be a husbandman, is but a retreat from the city; to be a philosopher, from the world; or rather, a retreat from the world, as it is man's, into the world, as it is God's.

But, since nature denies to most men the capacity or appetite, and fortune allows but to a very few the opportunities or possibility of applying themselves wholly to philosophy, the best mixture of humane affairs that we can make, are the employments of a country life. It is, as Columella calls it,

Res sine dubitatione proxima, et quasi consanguinea sapientiae,

the nearest neighbour, or rather next in kindred, to philosophy. Varro says, the principles of it are the same which Ennius made to be the principles of all nature, Earth, Water, Air, and the Sun. It does certainly comprehend more parts of philosophy, than any one profession, art, or science, in the world besides: and therefore Cicero says, the pleasures of a husbandman,

mihi ad sapientis vitam proxime videntur accedere,

come very nigh to those of a philosopher. There is no other sort of life that affords so many branches of praise to a panegyrist: the utility of it, to a man's self; the usefulness, or rather necessity, of it to all the rest of mankind; the innocence, the pleasure, the antiquity, the dignity.

The utility (I mean plainly the lucre of it) is not so great, now in our nation, as arises from merchandise and the trading of the city, from whence many of the best estates and chief honors of the kingdom are derived: we have no men now fetched from the plow to be made lords, as they were in Rome to be made consuls and dictators; the reason of which I conceive to be from an evil custom, now grown as strong among us as if it were a law, which is, that no men put their children to be bred up apprentices in agriculture, as in other trades, but such who are so poor, that, when they come to be men, they have not wherewithal to set up in it, and so can only farm some small parcel of ground, the rent of which devours all but the bare subsistence of the

tenant: whilst they who are proprietors of the land are either too proud, or, for want of that kind of education, too ignorant, to improve their estates, though the means of doing it be as easy and certain in this, as in any other track of commerce. If there were always two or three thousand youths, for seven or eight years, bound to this profession, that they might learn the whole art of it, and afterwards be enabled to be masters in it, by a moderate stock, I cannot doubt but that we should see as many aldermen's estates made in the country, as now we do out of all kind of merchandizing in the city. There are as many ways to be rich, and, which is better, there is no possibility to be poor, without such negligence as can neither have excuse nor pity; for a little ground will, without question, feed a little family, and the superfluities of life (which are now in some cases by custom made almost necessary) must be supplied out of the superabundance of art and industry, or contemned by as great a degree of philosophy.

As for the necessity of this art, it is evident enough, since this can live without all others, and no one other without this. This is like speech, without which the society of men cannot be preserved; the others, like figures and tropes of speech, which serve only to adorn it. Many nations have lived, and some do still, without any art but this: not so elegantly, I confess, but still they live; and almost all the other arts, which are here practised, are beholding to this for most of their materials.

The innocence of this life is the next thing for which I commend it; and if husbandmen preserve not that, they are much to blame, for no men are so free from the temptations of iniquity. They live by what they can get by industry from the earth; and others, by what they can catch by craft from men. They live upon an estate given them by their mother; and others; upon an estate cheated from their brethren. They live, like sheep and kine, by the allowances of nature; and others; like wolves and foxes, by the acquisitions of rapine. And, I hope, I may affirm (without any offence to the great) that sheep and kine are very useful, and that wolves and foxes are pernicious creatures. They are, without dispute, of all men, the most quiet and least apt to be inflamed to the disturbance of the commonwealth: their manner of life inclines them, and interest binds them, to love peace: in our late mad and miserable civil wars, all other trades, even to the meanest, set forth whole troops, and raised up some great commanders, who became famous and mighty for the mischiefs they had done: but I do not remember the name of any one husbandman, who had so considerable a share in the twenty years' ruin of his country, as to deserve the curses of his countrymen.

And if great delights be joined with so much innocence, I think it is ill done of men not to take them here, where they are so tame, and ready at hand, rather than hunt for them in courts and cities, where they are so wild, and the chase so troublesome and dangerous.

We are here among the vast and noble scenes of nature; we are there among the pitiful shifts of policy: we walk here in the light and open ways of the divine bounty; we grope there in the dark and confused labyrinths of human malice: our senses are here feasted with the clear and genuine taste of their objects, which are all sophisticated there, and for the most part overwhelmed with their contraries. Here, pleasure looks (methinks) like a beautiful, constant,

and modest wife; it is there an impudent, fickle, and painted harlot. Here, is harmless and cheap plenty; there, guilty and expenceful luxury.

I shall only instance in one delight more, the most natural and best-natured of all others, a perpetual companion of the husbandman; and that is, his satisfaction of looking round about him, and seeing nothing but the effects and improvements of his own art and diligence; to be always gathering of some fruits of it, and at the same time to behold others ripening, and others budding: to see all his fields and gardens covered with the beauteous creatures of his own industry; and to see, like God, that all his works are good:

Hinc atque hinc glomerantur Orcades; ipsi Agricolae tacitum pertentant gaudia pectus.

[“On this side and on that gather the Orkneys; joys pervade the silent breast of the farmer.”—A parody of Virgil’s Aeneid, l. 500, 503.]

On his heart-string a secret joy does strike.

The antiquity of his art is certainly not to be contested by any other. The three first men in the world, were a gardener, a plowman, and a grazier; and if any man object, that the second of these was a murderer. I desire he would consider, that as soon as he was so, he quitted our profession, and turned builder. It is for this reason, I suppose, that Ecclesiasticus forbids us to hate husbandry; ‘because (says he) the Most High has created it.’ We were all born to this art, and taught by nature to nourish our bodies by the same earth out of which they were made, and to which they must return, and pay at last for their sustenance.

Behold the original and primitive nobility of all those great persons, who are too proud now, not only to till the ground, but almost to tread upon it. We may talk what we please of lillies, and lions rampant, and spread-eagles, in fields d’or or d’argent; but, if heraldry were guided by reason, a plough in a field arable would be the most noble and ancient arms.

All these considerations make me fall into the wonder and complaint of Columella, how it should come to pass that all arts or sciences (for the dispute, which is an art, and which a science, does not belong to the curiosity of us husbandmen) metaphysic, physic, morality, mathematics, logic, rhetoric, &c. which are all, I grant, good and useful faculties, (except only metaphysic which I do not know whether it be anything or no;) but even vaulting, fencing, dancing, attiring, cookery, carving, and such like vanities, should all have public schools and masters, and yet that we should never see or hear of any man, who took upon him the profession of teaching this so pleasant, so virtuous, so profitable, so honourable, so necessary art.

A man would think, when he’s in serious humour, that it were but a vain, irrational, and ridiculous thing for a great company of men and women to run up and down in a room together, in a hundred several postures and figures, to no purpose, and with no design; and therefore dancing was invented first, and only practised antiently, in the ceremonies of the heathen

religion, which consisted all in mummery and madness; the latter being the chief glory of the worship, and accounted divine inspiration: this, I say, a severe man would think; though I dare not determine so far against so customary a part, now, of good-breeding. And yet, who is there among our gentry, that does not entertain a dancing-master for his children, as soon as they are able to walk? But did ever any father provide a tutor for his son, to instruct him betimes in the nature and improvements of that land which he intended to leave him? That is at least a superfluity, and this a defect, in our manner of education; and therefore I could wish (but cannot in these times much hope to see it) that one college in each university were erected, and appropriated to this study, as well as there are to medicine and the civil law: there would be no need of making a body of scholars and fellows with certain endowments, as in other colleges; it would suffice, if, after the manner of halls in Oxford, there were only four professors constituted (for it would be too much work for only one master, or principal, as they call him there) to teach these four parts of it: First, Aration, and all things relating to it. Secondly, Pasturage. Thirdly, Gardens, Orchards, Vineyards, and Woods. Fourthly, all parts of Rural Economy, which would contain the government of Bees, Swine, Poultry, Decoys, Ponds, &c. and all that which Varro calls villaticas pastiones, [the keeper of farm animals] together with the sports of the field (which ought to be looked upon not only as pleasures, but as parts of housekeeping), and the domestical conservation and uses of all that is brought in by industry abroad. The business of these professors should not be, as is commonly practised in other arts, only to read pompous and superficial lectures, out of Virgil's Georgics, Pliny, Varro, or Columella; but to instruct their pupils in the whole method and course of this study, which might be run through perhaps, with diligence, in a year or two: and the continual succession of scholars, upon a moderate taxation for their diet, a lodging and learning, would be a sufficient constant revenue for maintenance of the house and the professors, who should be men not chosen for the ostentation of critical literature, but for solid and experimental knowledge of the things they teach; such men, so industrious and public-spirited, as I conceive Mr. Hartlib to be, if the gentleman be yet alive: but it is needless to speak further of my thoughts of this design, unless the present disposition of the age allowed more probability of bringing it into execution. What I have further to say of the country life, shall be borrowed from the poets, who were always the most faithful and affectionate friends to it. Poetry was born among the shepherds.

Nescio qua natale solum dulcedine Musas Ducit,
_et immemores non sinit esse sui.

The Muses still love their own native place;
it has secret charms, which nothing can deface.

The truth is, no other place is proper for their work; one might as well undertake to dance in a crowd, as to make good verses in the midst of noise and tumult.

As well might corn, as verse, in cities grow;
In vain the thankless glebe we plow and
sow; Against th' unnatural soil in vain we strive;
'Tis not a ground, in which these plants will
thrive.

It will bear nothing but the nettles and thorns of satire, which grow most naturally in the worst earth; and therefore almost all poets, except those who were not able to eat bread without the bounty of great men, that is, without what they could get by flattering of them, have not only withdrawn themselves from the vices and vanities of the grand world,

pariter vitiisque jocosque Attius humanis exeruere caput

[They have raised their head above both human vices and vanities.—Ovid, *Fasti*, l. 300.]

into the innocent happiness of a retired life; but have commended and adorned nothing so much by their ever-living poems. Hesiod was the first or second poet in the world that remains yet extant (if Homer, as some think, preceded him, but I rather believe they were contemporaries); and he is the first writer too of the art of husbandry: “and he has contributed (says Columella) not a little to our profession;” I suppose, he means not a little honour, for the matter of his instructions is not very important: his great antiquity is visible through the gravity and simplicity of his stile. The most acute of all his sayings concerns our purpose very much, and is couched in the reverend obscurity of an oracle.

The half is more than the whole [Hesiod, “*Works and Days*,” 40]. The occasion of the speech is this: his brother Perses had, by corrupting some great men (great bribe-eaters he calls them), gotten from him the half of his estate. It is no matter (says he); they have not done me so much prejudice, as they imagine.

Unhappy they, to whom God ha'n't reveal'd,
By a strong light which must their sense control,
That half a great estate's more than the whole.
Unhappy, from whom still conceal'd does lye,
Of roots and herbs, the wholesome luxury.

This I conceive to be honest Hesiod's meaning. From Homer, we must not expect much concerning our affairs. He was blind, and could neither work in the country nor enjoy the pleasures of it; his helpless poverty was likeliest to be sustained in the richest places; he was to delight the Grecians with fine tales of the wars and adventures of their ancestors; his subject removed him from all commerce with us, and yet, methinks, he made a shift to shew his goodwill a little. For, though he could do us no honour in the person of his hero Ulysses (much less of Achilles), because his whole time was consumed in wars and voyages; yet he makes his father Laertes a gardener all that while, and seeking his consolation for the absence of his son in the pleasure of planting, and even during his own grounds. Ye see, he did not contemn us peasants; nay, so far was he from the insolence, that he always stiles Eumaeus, who kept the hogs, with wonderful respect, ulov upoPBov, the divine swine herd; he could ha' done no more for Menelaus or Agamemnon. And Theocritus (a very antient poet, but he was one of our own tribe, for he wrote nothing but pastorals) gave the same epithete to an husbandman. The divine husbandman replied to Hercules, who was but ulos himself. These were civil Greeks, and who understood the dignity of our calling!

Among the Romans we have, in the first place, our truly divine Virgil, who, though, by the favour of Maecenas and Augustus, he might have been one of the chief men of Rome, yet chose rather to employ much of his time in the exercise, and much of his immortal wit in the praise and instructions, of a rustique life; who, though he had written, before, whole books of pastorals and georgics, could not abstain, in his great and imperial poem, from describing Evander, one of his best princes, as living just after the homely manner of an ordinary countryman. He seats him in a throne of maple, and lays him but upon a bear's skin; the kine and oxen are lowing in his court-yard; the birds under the eaves of his window call him up in the morning, and when he goes aboard, only two dogs go along with him for his guard: at last, when he brings Aeneas into his royal cottage, he makes him say this memorable complement, greater than even yet was spoken at the Escorial, the Louvre, or our Whitehal:

Haec (inquit) limina victor Alcides subiit,
_haec illum regia cepit: Aude, hospes, contemnere opes:
_et te quoque dignum Finge Deo,
_rebusque veni non asper agenis.

This humble roof, this rustic court, (said he)
Receiv'd Alcides, crown'd with victory:
Scorn not, great guest, the steps where he has trod;
But contemn wealth, and imitate a God.

The next man, whom we are much obliged to, both for his doctrine and example, is the next best poet in the world to Virgil, his dear friend Horace; who, when Augustus had desired Maecenas to persuade him to come and live domestically and at the same table with him, and to be secretary of state of the whole world under him, or rather jointly with him, for he says, *ut nos in epistolis scribendis adjuvet*, ["That he may assist us in writing letters."] could not be tempted to forsake his Sabin, or Tiburtin mannor, for so rich and so glorious a trouble. There was never, I think, such an example as this in the world, that he should have so much moderation and courage as to refuse an offer of such greatness, and the emperor so much generosity and good-nature as not to be at all offended with his refusal, but to retain still the same kindness, and express it often to him in most friendly and familiar letters, part of which are still extant. If I should produce all the passages of this excellent author upon the several subjects which I treat of in this book, I must be obliged to translate half his works; of which I may say more truly than, in my opinion, he did of Homer.

Qui, quid sit pulchrum, quid turpe, quid utile, quid non, Planius et melius Chrysippo et Crantore dicit.

["Who says, more plainly and better than Chrysippus and Crantor, what is beautiful, what base, what useful, what the opposite of these." Horace, *Epist.* l. 2. 4. Chrysippus and Crantor were noted philosophers.]

I shall content myself upon this particular theme with three only, one out of his Odes, the other out of his Satires, the third out of his Epistles; and shall forbear to collect the suffrages of all other poets, which may be found scattered up and down through all their writings, and especially in Martial's. But I must not omit to make some excuse for the bold-undertaking of my own unskillful pencil upon the beauties of a face that has been drawn before by so many great masters; especially, that I should dare to do it in Latine verses, (though of another kind), and have the confidence to translate them. I can only say that I love the matter, and that ought to cover many faults; and that I run not to contend with those before me, but follow to applaud them.

