

## MAN CONTEMPLATED.

From Gurney's Address to the Mechanics of Manchester.

Let us occupy a few minutes in considering the structure of my friend and brother there, who is sitting in front of me, and whose existence, as we all know, can be traced to a beginning. Let us examine him, body and mind. First, as to his body—it is full of contrivances—full of the evident results of the most profound science, and of the nicest art. How perfectly, for example, is the structure of his eye fitted for the reception of those rays of light, which are falling upon it in all directions from visible objects! How nicely are the rays refracted by its several lenses! How easily do they glide through the pupil! How comprehensive, yet how perfect, is the picture formed on its retina—a picture reversed to inspection from without, but all in upright order to the percipient within! Here, indeed, is the science of optics displayed in its perfection. Then turn to his ear. How finely does it illustrate the principles of acoustics! How nicely are its cavities fitted for the reception and increase of sound! How accurately does the drum in the centre respond to the undulation from without!

Look at that most convenient of levers—my brother's arm; with what ease does he apply its forces! How nicely are its elbow and its shoulder adjusted for their respective purposes; and how admirably is the whole completed by the addition of a hand! Think of the union of strength and pliancy which distinguishes his spine—an effect produced by machinery of the most elaborate description! Contemplate his joints—the hinge where a hinge is wanted—the ball and socket where his comfort demands that peculiar structure; all lubricated by ever-flowing oil; all working with a faultless accuracy! Think of his muscles, endued with that curious faculty of contraction, by which he is enabled to move his members! Think of the studied mechanical adjustment by which, without ever interrupting each other's functions, these muscles pull against each other, and keep his body even! Then turn your attention to his blood; a fluid in perpetual motion—supplied with pure air in one stage of its journey, and, in another, with the essence of his food; and conveying the elements of life, every few moments, to every part of his body; driven from the heart by one set of vessels, and restored to it by another; those vessels, most artificially supplied with valves to prevent the backward motion of the fluid; while the pump in the centre is for ever at work, and makes a hundred thousand strokes in a day, without even growing weary! I will not now dwell particularly on the still more complicated structure of his nerves, on the chemistry of his stomach, on the packing of the whole machinery, on the cellular substance which fills up its cavities, on the skin which covers it, on the sightliness and manly beauty which adorn the fabric. I will rather turn to the mind, which does, indeed, complete the man—its subtle powers of thought, memory, association, imagination—its passions and affections—its natural and moral capacities. Surely we must all acknowledge that our brother is a wonderful creature indeed—an effect for which it is utterly impossible to imagine any adequate cause, but the contriving intelligence and irresistible power of an all-wise Creator.

You tell me that our friend has a father—a grandfather—that he looks back on an indefinite series of progenitors. This fact only strengthens my case. Certain it is that his own structure, both of mind and body, contains numerous and unquestionable proofs of design. Where there is design, there must, of necessity, be a designer. The parent as we are all perfectly aware, is not that designer. Our understanding can find no rest in the mere medium of production. We are compelled to have recourse to an unseen, and superior power, and to confess that the designer is God. But if the workmanship displayed in the formation of the individual proclaims the wisdom and power of God, still more conspicuously are they manifested in a succession of generations—in the wondrous capacity bestowed on every kind of living creature, to produce its own likeness.

Were it possible that a series of successive finite beings

should exist from eternity, (a notion which in my opinion disproves itself,) and, supposing it to be possible, were it probable, or even certain, that mankind have so existed—our argument from a design to a designer, would still remain untouched. It would continue to apply with resistless force to every individual of the species.

But it so happens that we are able to trace not only every individual man, but our whole race to an undoubted beginning. That beginning, which took place about six thousand years ago, is plainly recorded in scripture, and the record is supported by the conclusions of science.

## TELESCOPE AND MICROSCOPE.

About the time of the invention of the telescope, another instrument was formed which laid open a scene no less wonderful, and rewarded the inquisitive spirit of man. This was the microscope. The one leads me to see a system in every star; the other leads me to see a world in every atom. The one taught me that this mighty globe, with the whole burden of its people and its countries is but a grain of sand on the high field of immensity; the other teaches me that every grain of sand may harbour within it the tribes and the families of a busy population. The one told me of the insignificance of the world I tread upon; the other redeems it from all its insignificance; for it tells me that in the leaves of every forest, in the flowers of every garden, and in the waters of every rivulet, there are worlds teeming with life, and numberless as are the glories of the firmament. The one has suggested to me, that beyond and above all that is visible to man, there may be fields of creation, which sweep immeasurably along, and carry the impress of the Almighty's hand to the remotest scenes of the universe; the other suggests to me, that within and beneath all that minuteness which the aided eye of man has been able to explore, there may be a region of invisibles; and that, could we draw aside the mysterious curtain which shrouds it from our senses, we might see a theatre of as many wonders as astronomy has unfolded; a universe within the compass of a point so small as to elude all the powers of the microscope; but where the wonder-working God finds room for the exercise of all his attributes, where he can raise another mechanism of worlds, and fill and animate them all with the evidence of his glory.—*Chalmers.*

## THE ART OF WAR AND MEDICINE CONTRASTED.

How striking is the contrast between the art of medicine and the art of war! The last has for its object the destruction, the first the preservation of the species. The mind of the warrior teems with machinations of ruin, and anxiously, revolves, among different schemes that present themselves, which shall carry destruction to the widest extent and with the surest aim: his progress is marked by devastation and blood, by depopulated fields and smoking villages, and the laurels which he wears are bedewed with the tears of widows and orphans. The acclamations which he wins from one portion of his species are answered by the curses and execrations of another; and the delusive splendour, the proud and imposing array, with which he contrives to gild the horrors of his profession, are but the pomp and retinue of the king of terrors.

The art of healing proceeds with a silence and a secrecy, like the great processes of nature, to scatter blessings on all within its reach; and the couch of sickness, the silent retreat of sorrow and despair, are the scene of its triumphs.

The little applause which is bestowed on physicians, compared with what is so lavishly heaped on conquerors, conveys a bitter reflection on human nature; by showing how much we suffer ourselves to be the dupes of our senses to extol the brilliant rather than the useful: whereas, a just and impartial estimate would compel us to assign to skilful practitioners of medicine the very first rank among merely human professions. For when we consider the variety of ills to which we are exposed, and how large a portion is derived from bodily infirmities, it will appear that we are more indebted to their assistance than to that of any other class of persons whatever.—*R. Hall.*

## SUMMER EVENING

Continued from page 115.

Thus Albert listened, thus his thoughts returned,  
His constant heart in meditative mood,  
Now fired with love, in glowing ardour burn'd,  
And now responding, he his way pursued.  
"O thou dear object of my love unfeigned  
Dear Emeline! My treasured all!  
Where art thou now? O why not bless me still?  
Appear thou lovely maiden—at my call.  
The birds around carol their choicest strains,  
But absent thou, no melody will cheer  
Thy only voice is music to my soul:  
O come that voice! Let me such music hear!  
Nature's rich odours might my sense regale,  
But thou, sweet flower, art absent from the eye  
Thou canst not share with me in these delights,  
And therefore nought can true delight supply.  
Enchanting subject of my humble song,  
I catch thine image in the lucid stream:  
Fancy I find thee 'mid the gleaming trees,  
While thro' my soul thine eyes unsullied beam.  
Shall I forget thee? No! not while I live!  
But while these eyes their duty can perform,—  
Long as these feet the paths of life shall tread—  
For ever, thou my constant heart shall warm.  
Love the blest theme, and thou the object dear,  
Wilt lead me often to retrace these scenes:  
My hopes revive, and bid me yet possess  
The prize, toward which anticipation leans.  
Ye smiling lawns, farewell! Your beauties wear  
In sylvan verdure flourishing remain  
For my love's sake, ye hours fly swift away!  
That I with her, may wander here again.  
Witness my love ye fields, ye verdant lawns!  
Think not that it shall falter or decay:  
While fleeting time expires, I'll constant prove;  
Farewell!"—I homeward wend my weary way.  
As turns the cart from the reviving spring,  
Where he his thirst had slaked, so turned he;  
Imagined happier than the scepter'd king  
Of empire spacious as the rolling sea.  
Mending his pace, he leaves these scenes behind  
And soon the summit of the hill he gains,  
Now disappears,—his peaceful rest to find  
Whilst all around unbroken silence reigns.  
Blest are the souls, whom love descends to bless!  
Happy the hearts which feed the sacred flame!  
Which makes each action of the life confess,  
And every thought bear witness to the same  
Witness the truth, and help it to prevail,  
That love is not confined to time or place,—  
That 'tis a life that death cannot assail.—  
That 'tis divine, in origin and grace.  
A virtue—ranked supreme above the rest,  
A lovely power, pursuing and pursued,—  
Through which alone are men or angels blest;  
By her alone with happiness endued.  
A soul commanding principle within—  
Evinced by many a bright enduring sign;  
The fountain whence supernal joys begin,  
A passion which no interest can confine.  
A labyrinth,—a paradise profound,—  
With many an intricate yet pleasing path;  
Where pleasing flowers, and lovely fruits abound  
Tasting of heaven, though scattered o'er the earth.  
The essence of society divine,  
Parent of heaven's benevolence and joy,  
Which doth the great and good in one combine,  
Dispensing virtue's pleasures and employ.  
It is the curb of temper,—end of strife,  
The genuine religion of the heart,—  
It is the precious cordial of our life,  
Which courage doth,—and purest zeal impart.  
Whate'er is lovely, and demands respect,  
All virtues, mingle in her beautiful train:  
She doth all evils banish or correct;  
And good unreckoned marks her holy reign.  
Her parent, is the Eternal great first cause,  
She lived with him before all worlds were made,  
Before he gave to nature, nature's laws;  
Or his strong hand o'er awful chaos sway'd.  
And when his Word went all creating forth,  
His attributes in truth were each unfurled;  
Then love appeared, enrobed with nobler worth,