

THE HUMAN SYSTEM.

The following, from various sources, are curious calculations, and worthy of deep reflection. It is always good to consider how "fearfully and wonderfully" we are made, and to contemplate the chances which under our continuance in the world almost every moment a miracle.

In the human system are four hundred and forty-five bones, each having forty distinct intentions or functions to fulfil; two hundred and forty-six muscles, and each of them having ten different intentions. Besides the tendons, ligaments, nerves, veins, and glands of the body, there are not less than one thousand five hundred million membranous cells connected with the lungs; more than two hundred million pores in the skin, through which perspiration is constantly flowing, and above one hundred thousand million scales which compose the cuticle or skin of the body. There are also the compound organs of life—the brain, the heart, the liver, the spleen, the kidneys, the intestines, the organs of sense, with their varied connexion: the blood, the bile, the lymph, the saliva, the chyle, etc.

The astonishing ramification of the nerves and veins through the system, may be gathered from the fact, that the least puncture, though made by the smallest possible instrument, (the sting of a gnat, for instance,) will both draw blood and produce pain—a proof that both a nerve and vein have been struck.

Very few, even mechanics, think or know how much machinery there is in their own bodies. Not only are there joints and hinges in the bones, but there are valves in the veins, a forcing pump in the heart, and various other curiosities. One of the muscles of the eye forms a real pulley. The bones which support the body are made precisely in that form which has been calculated by mathematicians to be strongest for pillars and support columns, that of hollow cylinders. This form combines the greatest lightness with the greatest strength. Of this form are the quills in birds wings, where these requisites are necessary.

An ingenious author asserts that the length of a man's life may be estimated by the pulsations he has strength enough to perform. Thus allowing seventy years for the common age of man, and sixty pulses a minute for the common measure of pulses in a temperate person, the number of pulsations in his whole life will amount to 2,207,520,000; but if by intemperance he force his blood into a more rapid motion, so as to give seventy-five pulses in a minute, the same pulses would be completed in fifty-six years; consequently the life would be reduced fourteen years.

There is iron enough in the blood of forty-two men to make a plough-share weighing twenty-four pounds. A man is taller in the morning than at night to the extent of half an inch or more, owing to the relaxation of the cartilages. Total abstinence above seven days is fatal to man, but there are instances of his surviving after a longer period. A religious fanatic, in 1789, determined to fast forty days, and died on the sixteenth.

The aggregate population on the surface of the known habitable globe, is estimated at seven hundred and ninety five millions, three hundred thousand souls. If we reckon with the ancients, that the generation lasts thirty years, then in that space of time, seven hundred and ninety-five millions three hundred thousand human beings will be born and die; consequently eighty-one thousand seven hundred and sixty must be dropping off into eternity every day, three thousand four hundred and seven every hour, and about fifty-six every minute.

For those individuals who have a morbid desire not to have their remains defaced by death and worms, some comfort is offered in the discovery which is said to have been recently made, 'that if the bodies of men or animals be plunged for some time in corrosive sublimate, and afterwards dried, they assume the consistency of wood, and the air produces no effect upon them; and if the bodies be injected before they are plunged in the liquor, they will retain the color and appearance of life, and consequently form mummies far more perfect than the Egyptians.'

WATCH STATISTICS.

Mr. Dent, (Arnold and Dent,) in his illustrations of a lecture on the construction of watches and chronometers, given by him at the Royal Institution on the 7th ult., laid before the meeting the dissection of a detached lever watch (compensation-balance,) every part was separated and displayed, but grouped in one of six larger divisions to which it belonged.

Each part had been previously examined, and its distinct constituent pieces counted by the lecturer; the surprising result of this enumeration was exhibited in a table, of which we lay a copy before our readers. In addition, will be found the number of kinds of artificers concerned in the operations necessary for the construction of a good

to those are added the amount of previous operations which the materials constituting each piece must undergo before it comes into the hand of the watch-artificer, a glimpse may be obtained of the extensive and numerous

changes of form and value which "raw material" receives in its progress, from the mine to so refined a manufacture as a finished watch.

No. of Parts.	No of Pieces.	Trades employed.
1. Pillars	4	1
2. Frame	4	1
3. Cock and Potence	2	1
4. Barrel and Arbor	5	1
5. Going-Fuzee	14	2
6. Wheels	4	1
7. Pinions	4	2
8. Stop-Stud	1	1
9. Stop and Spring	3	1
10. Click and Ratchet	3	1
11. Motion	16	2
12. Jewels (5 holes)	28	2
13. Cap	3	2
14. Dial	5	3
15. Index	1	1
16. Escapement	13	3
17. Compensation-Balance	9	1
18. Case	3	1
19. Pendant	2	1
20. Case-Joint	6	1
21. Case-Spring, &c.	4	2
22. Main-Spring	1	2
23. Chain	826	3
24. Hands	3	1
25. Glass	1	1
Total of Pieces	992	
Engine-Turner		1
Engraver		1
Gilder		1
Examiner		1

Total of kinds of Artificers employed - 43
—Magazine of Popular Science.

THE ENGLISH LANGUAGE.

I love the English language—its energy, its copiousness, its versatility. For variety of expression, strength united with ease, and general, united with the definitive powers, it has, perhaps, no equal. There is no subject, the most vast or minute, the most refined or rude, that it cannot appropriately reach. It conveys the subtle distinctions of the metaphysician, and the coarse sentiments of the street wag. It embodies the lightning of the poet, and the cold calculations of the mathematician. It thunders forth the passions of the orator, and whispers the mild accents of subdued affection. It furnishes a becoming vehicle for the most gigantic conception, and an appropriate conveyance for the sylph-like thought, whose carriage should be "airy nothing." It reflects the glittering hues of unclouded hope, and the deep shadows of blank despair.

It conveys the fervid blessing of passionate love, and the chilling curses of unqualified hatred. The rhapsodies of heaven may kindle along its numbers, and the wailings of hell howl through its broken sentences. And it is as much at home in the natural as the moral world. It can represent the most trifling and the most magnificent of nature's works. It exhibits the dew-drop trembling from the leaf of the violet, and the avalanche, crushing, with wide ruin, in its way to the earth. It gives us the sweet notes of the laughing rill, and the sullen roar of the fierce cataract. It mirrors the sparkling surface of the sunny fountain and the terrible aspect of the ocean, when she frowns at the gathering tempest. It spreads the sweet bow of promise when it has heaved around us the wrecks of the storm.—*Rev. Walter Cotton.*

THE EXISTENCE OF GOD.—The physical history of our globe, in which some have seen only waste, disorder, and confusion, teems with endless examples of economy, and order, and design; and the result of all our researches is to fix more steadily our assurance of the existence of one supreme Creator of all things, to exalt more highly our conviction of the immensity of his perfections, and majesty, his wisdom and goodness, and all-sustaining providence; and to penetrate our understanding with a profound and sensible perception of the "high veneration man's intellect owes to God." The earth from her deep foundations, unites with the celestial orbs that roll through boundless space, to declare the glory, and shew forth the praise of their common Author and Preserver; and the voice of natural religion accords harmoniously with the testimonies of revelation, in ascribing the origin of the universe to the will of one eternal and dominant Intelligence, the almighty Lord and supreme First Cause of all things that subsist—"the same yesterday, to-day, and for ever"—"before the mountains were brought forth, or ever the earth and the world were made, God from everlasting, and will continue world without end."—*Dr. Buckland.*

EFFECT OF THE SUN IN DISCOLORING PLATE GLASS.—It was long since observed that by exposing glass to the solar rays it is made to acquire a violet or pur-

ple tinge, and this so rapidly that the alteration is clearly discernible at the end of one or two years. Some plates, originally colorless, which had thus become tinged, having been brought under the notice of a gentleman, he was induced to make an experiment upon the subject. For this purpose he procured three different pieces of plate-glass, which were tinged so slightly as to appear altogether colorless, unless when viewed through their edges. Each of these were broken into two portions, one of which was wrapped in paper and set aside in a dark place, while the portion from which it had been separated was exposed to the air and light of the sun. The exposure was commenced in the month of January, and in the following September a comparative examination was made. The piece from which the light had been excluded exhibited no sign of change, while those which had been exposed had, in this short space of eight months, acquired so considerable a degree of color as would under other circumstances, have created a doubt with regard to their original identity.

LEGAL PLEASANTRIES.—They originate more than half the current wit of the day, in the Great West. There is a racy freshness, moreover, about the pleasantries of that region, that is quite delightful. From late Missouri journal we have clipped the following anecdote of an eminent legal gentleman of that state. If it be as new to the reader as to us, we will guarantee his favorable suffrages: 'Being once opposed to Mr. S—, late member of Congress, he remarked as follows to the jury, upon a point of disagreement between them: 'Here my brother S— and I differ. Now this is very natural. Men seldom see things in the same light; and they may disagree in opinion upon the simplest principles of the law, and that very honestly; while, at the same time, neither can see earthly reason why they should. And this is merely because they look at different sides of the subject, and do not view all its bearings. Suppose, for illustration, a man should come in here, and boldly assert that my brother's S—'s head (here he laid his hand very familiarly upon the large chuckle-head of his opponent) is a *squash!* on the other hand, would maintain, and perhaps with equal confidence, that it is a head. Now, here would be a difference—undoubtedly an honest difference—of opinion. We might argue about it till doomsday, and never agree. You often see men arguing upon subjects as empty and trifling as this! But a third person coming in, and looking at the neck and shoulders that support it, would say at once that I had reason on my side; for if it was not a head, it at least occupied to place of one, and stood where a head ought to be.' All this was uttered in the gravest and most solemn manner imaginable, and the effect was irresistibly ludicrous.'

THE PEARL.

HALIFAX, SATURDAY, JUNE 17, 1837.

TO OUR PATRONS.—This week, reader, we shall not scare you with our thundering lucubrations—we shall leave the waves to roll on in their majesty, and the stars to fight in their courses, whilst we commence our attack on the good-will and benevolent intentions of all our readers. In issuing the third number of our periodical, we feel strongly impelled to the performance of our pleasing and bounden duty, that of returning our sincere and hearty thanks to our numerous patrons and subscribers. We say numerous, for when we consider that we have been in existence but three weeks, that we have no names of celebrity to recommend us—and the wing of no religious or political party to protect and uphold us, we cannot but feel proud of our respectable and encouraging list. That we are anti-sectarian is our boast and glory—not compelled to advocate the principles and interests of any particular denomination, our field is the world, and our chart the world of immutable truth. Untrammelled by the laws or edicts of any single branch of the church of Christ, our pages are thrown open to the insertion of those broad and glorious principles which are admitted by all, who make the Bible the foundation of their hopes, and the standard of their faith. On this wide and general basis we have commenced our career, and we shall continue our course, the friends of all, the enemies of none.

While we embrace the present opportunity to thank our subscribers for the support they have so promptly rendered us, we earnestly solicit the patronage of others, to assist us in our responsible undertaking. At present the limits of our sheet are so contracted that we cannot follow our plan to that extent which may be desirable; but with the addition of a goodly number of names to our list