

them until he gave them leave." And then seeing that there were no men in the bushes, and that it was only an imagination, all fear was taken away from him; and his courage increasing, he thought with himself, it is better to strike a man than to cleave a man's head, and, turning the boat-hook in his hand, he struck the captain a smart blow, and bade him sit down, which he did instantly, and so did all the rest. After the boat was come so near the shore that they could easily wade, the mate bade the Turks jump out, and so they did; and because they said they were about four miles from a town, he then gave them some loaves, and other necessaries. They would fain have persuaded the English to go with them ashore to a town, promising to treat them with wine, and other good things; but the mate was not so careless as freely to enter into an apparent danger, without being necessitated thereto; for, though he had some thoughts that the Turks would not have done him any evil, yet it was too hazardous thus to have yielded to the mercy of those that lived there; and therefore he very prudently rejected their invitation. The Turks seeing they could not persuade him, took their leave with signs of great kindness, and so went on shore. The English then putting the boat closer in, threw them all their arms on shore, being unwilling to keep any thing of theirs. And when the Turks got up the hill, they waved their caps at the English, and so joyfully took their last farewell. And as soon as the boat came again on board, they had a fair wind, which they had not all the while the Turks were on board. Thus Thomas Lurting saved the ship and its men; which being thus wonderfully preserved, returned to England with a prosperous wind. Now, before the vessel arrived at London, the news of this extraordinary case was come thither; and when she was coming up the Thames, the King, with the Duke of York, and several Lords, being at Greenwich, it was told him there was a Quaker's ketch coming up the river that had been taken by the Turks, and redeemed themselves without fighting. The King hearing this, came with his barge to the ship's side, and, holding the entering-rope in his hand, he understood from the mate's own mouth, how the thing had happened. But when he heard him say, how they had let the Turks go free, he said to the master, "You have done like a fool, for you might have had good gain for them;" and to the mate he said, "You should have brought the Turks to me." But the mate answered, "I thought it better for them to be in their own country."

CURIOS CALCULATIONS.—The following whimsical calculation, placed before us by a friend, was designed by him as an illustration of the divisibility of matter. It appears to us to leave that question where it found it; but the calculation is in itself curious, and will scarcely fail to amuse our readers.

Some years since, as I was sitting by my fireside, I observed several of my family reading by the light of a single candle. The thought occurred—how great a portion of the light of that candle is used by those several persons reading? And then immediately a second thought—for how many persons does that candle furnish light sufficient to enable them to read, provided it could be so distributed that the whole should be used for that purpose, without any loss? The candle was rather a large one, and gave a very clear bright light. I found, on trial, that I could read very well with my book at the distance of three feet from the candle, and with my eyes nine inches from the book. The candle, then, would illuminate the concave surface of a sphere of three feet radius, sufficiently for the purpose of reading. By measuring, I found that the book I made use of, contained on an average twenty letters to an inch, and ten lines to an inch, and consequently, that four hundred letters would be contained in a square inch. A concave sphere, then, of six feet diameter, would contain six millions five hundred and fourteen thousand four hundred letters. This number of letters the candle would illuminate, so that each would be distinctly visible to an eye at the distance of nine inches.

Again, the light reflected from a single letter would render that letter visible to the eye at this distance, not in one direction only, but to an eye placed any where in the concave surface of a hemisphere of nine inches radius. To how many eyes, then, is the light reflected from one letter sufficient to render it visible?

I supposed the pupil of the eye to be an eighth of an inch in diameter, which is probably near the truth. On this supposition, the surface of a hemisphere of nine inches radius, is equal to the pupils of forty-one thousand four hundred and sixty-five eyes; or to half this number of pairs of eyes, the light reflected from a single letter is sufficient to render that letter distinctly visible. But here it may be objected, and it is true, that to an eye placed near the plane of the leaf, a sufficiency of light would not be reflected. But it is also unquestionably true, that not half of the light which falls upon the leaf, is reflected. The light, therefore, which is absorbed, would much more than compensate for this deficiency.

Now, the light which falls upon a single letter being sufficient to render it visible to 20,732 pairs of eyes, and the number of letters to the concave surface of a sphere of three feet radius being 6,514,400, the light which falls upon all these letters is sufficient for 135,06,540,800 pairs of eyes; or the light of one candle, should not a particle be lost, and the whole be so distributed that

each should receive his equal portion, is sufficient to enable 135,056,540,800 persons to read at the same time. If our earth contains 900,000,000 of inhabitants, and that, I believe, is the highest supposition ever made, the light of one candle is more than sufficient to enable all the inhabitants of one hundred and fifty such worlds to be reading at the same instant. This conclusion, I am aware, will appear to many, perhaps to most, altogether incredible. But any one possessing a moderate share of mathematical knowledge, may in a short time satisfy himself, that, rejecting fractions, it is rigidly exact.

ANTIQUITY OF THE PENNY.

The Penny is a coin of vast antiquity. Its familiar copper shape, as may be generally known, is a comparatively modern alteration of the silver form in which it was known to our forefathers. In a curious, though whimsical little work, the silver penny is shown to be derived from the Greek *Drachma* of *Ægina*, which has been traced to a date six hundred years antecedent to the Christian era. The *Drachma* was afterwards coined, not only in Greece, but in Sicily, Syria, and Persia. The same coin, under the name of *Denarius*, was struck by the high consular families during the Roman Republic, and by the Emperors. The author of the work just quoted states, that it must have been a *Denarius* of *Tiberius*, to which Christ drew the attention of the Jews when answering their question as to the lawfulness of paying tribute. (He also mentions a very interesting circumstance respecting the *Aureus* or larger gold coin of the Roman emperors—namely, that, in 685, under Justinian II., one was struck with a head of Christ, giving him the usual placid countenance, with a full round forehead, and ringlets hanging down each side of the face, and the beard parted below in the middle.) From Rome, the *Denarius* was transferred to Saxon England, in 750, being there coined by the Kings of Kent, Mercia, and the other departments of the Heptarchy. Under the name of Penny, and comparatively rudely executed, it was kept up by the Saxon, Danish, and Norman dynasties, in succession, and was the chief coin in circulation down to the reign of John. David I. was the first king of Scotland who is known to have issued the penny. In this kingdom it continued to be coined till the reign of James IV. In the course of its existence from Roman times to the present, the penny has been gradually reduced much in bulk. In the days of the Republic it weighed from 2 pennyweights 10 grains, to 2 pennyweights 13 grains. In the reign of the Emperor Trajan, it weighed barely 2 pennyweights 2 grains. The later Emperors reduced it nearly one-half; and the earliest Saxon specimens weigh less than a pennyweight. The penny of Edward IV. was 15 grains; that of Henry VIII. 10 grains; and that of William IV. only 7 grains.

THE ENTERPRISE OF THE DUTCH.—The arrogance of the English, the vanity of the French, the pride of the German, the superciliousness of the Italian, and the accumulated mass of all these perverse qualities—added to the legion of devils of his own—which exists in the Spaniard, must abate a little of their preponderance, when they reflect on the immense labor of the Dutch in regaining their soil from the sea, and in basing cities on the domain of ocean itself. To plant a house, they proceed as follows:—When the land is marshy, they trace the square of its dimensions, bore to the depth of seven or eight feet, till they find water, pump it dry, and drive stakes round the square; by means of a weight of twelve or fourteen hundred pounds suspended from a pulley; the stakes are from forty to fifty feet in length, and each requires on an average, an hour and a half for driving it down. One hundred of these blocks or stakes are sufficient for a small house. The royal palace at Amsterdam took 13,695. When it is considered what immense labor the towns in Holland have required for construction, what immense sums they must have cost, and what industry the people must have possessed, to enable them to prosper with such drawbacks on their exertions, the Pyramids of Egypt, the ruins of Thebes, the Palaces of Persepolis, the Hanging Gardens of Babylon, appear no longer as visionary dreams of gigantic enterprise, but as the works of man; of a being capable of conquering the elements, of inverting the dispositions of matter, and wanting only pre-science to be divine.—*Standish's Notices of the Northern Capitals.*

THE PASSAGE OF THE RED SEA.—There is an obvious succession in the divine commands to Moses. The first is only to "stretch out his rod over the Red Sea," "that the Israelites may pass on dry ground." The enemy's attack, in the interval, is baffled and bewildered by the preternatural darkness which envelops them. But all is provided for with the same consummate circumspection. Even the passage of the Israelites *by night* may have been a precaution against their habitual fears. They follow through the sea-bed, unappalled by those natural terrors of the transit, from which they might have shrunk in the light of day. The same obscurity which precludes the fears of the Israelites, also precludes the caution of the Egyptians. The movement of so vast a multitude could not have been unheard in the Egyptian camp. They instantly follow the sound, and are led into the track of the retreating nation. But, perplexed by the solid darkness of the cloud, and evidently retarded by the slow movement

of their chariots, "for they drove them heavily," they labour during the night along the channel of the sea, without being able to reach the Israelites.

At length the morning watch is come: the whole body of the Israelites have reached the shore; the whole body of the Egyptians have poured into the sea bed. The cloud rises, and the entire scene (and surely none more anxious, strange, and magnificent ever lay beneath the human eye) opens to Moses and to Israel: the watery mountains, the solemn and terrible valley, the long array of the Egyptian squadrons glittering round their king: the whole pomp of war, contrasted with the awfulness of nature under the very impress of miracle. Still Moses awaits the divine will; probably to the last moment unconscious of the means by which it was to be fulfilled. The blow does not yet fall; the arrogance of the king and his host is to be humbled to the acknowledgment before they die, that there is no strength in war against the chosen people. At last, they cry out that "the Lord fighteth for Israel." They turn in despair. The command is now given: "And the Lord said unto Moses, stretch out thine hand over the sea, that the waters may come again upon the Egyptians." The destruction was total: "And the waters returned, and covered the chariots and the horsemen, and all the host of Pharaoh that came into the sea after them. There remained not so much as one of them."—The direct result of the miracle in the chosen people was a change of the national heart—from doubt, mutiny, and despair, to faith, obedience, and joy. "And Israel saw that great work which the Lord did upon the Egyptians, and the people feared the Lord, and believed the Lord, and his servant Moses. The mere narration of this mighty miracle is evidence that it was Divine. The simplicity of the means, contrasted with the variety of the objects, the completeness of their accomplishment, and the suitableness of both to the true idea of the Deity, as protector and furnisher, place it as much beyond the conception, as the execution, of human powers.—*Rev. Dr. Croly.*

TO YOUNG MEN.—There is no moral object so beautiful to me as a conscientious young man. I watch him as I do a star in the heavens; clouds may be before him, but we know that his light is behind them, and will beam again; the blaze of others' prosperity may outshine him, but we know that, though unseen, he illuminates his own true sphere. He resists temptation not without a struggle, for that is not a virtue, but he does resist and conquer; he hears the sarcasm of the profligate, and it stings him, for that is the trial of virtue; but he heals the wound by his own pure touch. He heeds not the watch-word of fashion if it leads to sin; the atheist, who says not only in his heart, but with his lips, there is no God, controls him not, for he sees the hand of a creating God, and rejoices in it.

Woman is sheltered by fond arms and loving counsel; old age is protected by its experience, and manhood by its strength; but the young man, stands amid the temptation of the world like a self-balanced tower; happy he who seeks and gains the prop and shelter of morality.

Onward, then, conscientious youth! raise thy standard, and nerve thyself for goodness. If God has given thee intellectual power, awaken it in that cause, never let it be said of thee, he helped to swell the tide of sin by pouring his influence into its channels. If thou art feeble in mental strength, throw not that drop into a polluted current. Awake, arise, young man! assume the beautiful garb of virtue! It is easy to sin; it is difficult to be pure and holy. Put on thy strength then; let thy chivalry be aroused against error; let Truth be the lady of thy love—defender.—*S. Rose.*

HAMLET'S GRAVE.—The objects of interest to a stranger at Elsinore, are the castle or fortress and the garden of Marienslust, where is to be seen what is called the grave of Hamlet. The interior of the fortress contains nothing remarkable; the grave is a misnomer—for Hamlet lived, reigned, and died, and was buried in Jutland. A conspiracy had been formed against his life by his step father and mother, as the ancient Dutch chronicles state; he feigned imbecility of mind, being aware of the plot laid to destroy him, formed another against them, and eventually burned to death the whole family, by setting fire to a house in which they were, and stopping up the doors. He afterwards resigned quietly and respectably, and died a natural death. I may affirm that there is no brook crowned with willows near Elsinore, where Ophelia could have perished; and the enthusiastic reader of Shakspeare may be relieved from the pain her fate has inspired him with, by the conclusion of its falsity. The grave of Hamlet, as seen in Denmark, is to the back of the mansion of Marienslust about a stone's throw; you catch a view of the sea between a contiguous clump of trees planted in a circle, and it is noted by some scattered square stones of small size, which appear to have once served for a cenotaph, and which stand on a knoll or rising mound covered and surrounded by beech trees. I could learn nothing of their history—they seem little respected or thought about by the inhabitants of Elsinore, but pious and romantic pilgrims have conveyed away considerable portions of them, and a few years will probably witness their total dispersion.—*Standish's Notices of the Northern Capitals.*