

Varieties.

THE WONDERS OF THE MICROSCOPE.

The recent astonishing discoveries of Ehrenberg, a Prussian naturalist, have given a new aspect to this department of animated nature, even in a geological point of view. He has described seven hundred and twenty-two living species, which swarm almost everywhere, even in the fluids of living and healthy animals, in countless numbers. Formerly they were thought to be the most simple of all animals in their organization; to be, in fact, little more than mere particles of matter endowed with vitality; but he has discovered in them mouths, teeth, stomachs, muscles, nerves, glands, eyes, and organs of reproduction. Some of the smallest animalcula are not more than the twenty-four thousandth of an inch in diameter, and the thickness of the skin of their stomachs not more than the fifty-millionth part of an inch. In their mode of reproduction they are viviparous, oviparous, and gemmiparous. An individual of the *Hydatina senta* increased in ten days to one million; on the eleventh day to four millions, and on the twelfth day to sixteen millions. In another case Ehrenberg says that one individual is capable of becoming in four days one hundred and seventy billions! Leuwenhoeck calculated that one billion animalcula, such as occur in common water, would not altogether make a mass so large as a grain of sand. Ehrenberg estimates that five hundred millions of them do actually sometimes exist in a single drop of water. In the Alps there is sometimes found a snow of red color; and it has been recently ascertained by M. Shuttleworth that the coloring matter is composed chiefly of infusoria, with some plants of the tribe of Algae. And what is most singular is, that when the snow has been melted for a short time, so as to become a little warmer than the freezing points, the animals die, because they cannot bear so much heat! A specimen of meteoric paper which fell from the sky in Courland, 1686, has been examined by Ehrenberg, and found to consist, like the red snow, of conferva and infusoria. On the latter he found twenty-nine species. Surprising as these facts are, it will perhaps seem still more incredible that the skeletons of these animals should be found in a fossil state, and actually constitute nearly the whole mass of soils and rocks, several feet in thickness, and extending over areas of many acres. Yet this too has been ascertained by the same acute Prussian naturalist.

A WORD SPOKEN—UPON WHEELS.

We remember being much struck with a little story, that "a word fitly spoken," or to use the expressive Hebrew reading, "a word spoken upon wheels," even by the weakest and youngest, is precious as gold and silver.

One day a boy was tormenting a kitten, when his little sister said to him, with tearful eyes, "Oh, Philip, don't do that, it is God's kitten." The word of the little one was not lost; it was set upon wheels. Philip left off tormenting the kitten, but many serious thoughts were awakened regarding the creature that he had before considered his own property. "God's kitten—God's creature, for he made it," It was a new idea. The next day, on his way to school, he met one of his companions, who was beating unmercifully a

poor starved-looking dog. Philip ran up to him, and almost unconsciously using his sister's words, he said, "Don't, don't, it is God's creature." The boy looked abashed, and explained that the dog had stoln his breakfast. "Never mind," said Philip, "I will give you mine, which I have in my basket," and sitting down together, the little boy's anger was soon forgotten. Again had a word been unconsciously set upon wheels. Two passers-by heard Philip's words, one a young man in prosperous business in the neighbouring town,—the other a dirty ragged being, who, in consequence of his intemperate habits, had that morning been dismissed by his employer, and was now going home sullen and despairing. "God's creature!" said the poor forlorn one,—and it was a new idea to him also;—"if I too belong to God, He will take care of me, though no one else will." Just then he came to a public house where he had been in the habit of drowning his miseries, and then staggering home to inflict new ones on his wife and children. He stopped, the temptation was strong; but the new idea was stronger. "I am God's creature,"—and he passed on. His wife was astonished to see him sober, and still more when he burst into tears, declaring that he was a ruined man, but that he was determined to give up drinking, and to trust in God. At that moment a knock was heard at the door, and the gentlemen came in to whom we have before alluded. He too has been rebuked by the boy's words, for the scorn and loathing which he had felt to the miserable object before him. "God's creature! therefore entitled to help and pity." We need not detail the words of hope and comfort, the promise and the performance of active assistance, which in a short time lifted up the poor man's head, and made him one of God's thankful and joyful "creatures." It would be well for us all, old and young, to remember that our words and actions, aye, and thoughts also are set upon never stopping wheels rolling on and on into the pathway of eternity.—*Miss Brewster—in Eng. S. S. Tea. Mag.*

WHAT WASTE!—During the year ending January, 1854, there were distilled in the United Kingdom of England, Ireland, and Scotland, 5,254,968 quarters of malt, being an increase over the preceding year of 12,907 quarters. The average wheat crop of the United Kingdom is 13,500,000 quarters, showing that the quantity of barley made into malt, and thereby withdrawn from the legitimate food market, is equal to one-third of the whole wheat produce. The land occupied in the growth of barley and hops for the brewer's of Great Britain and Ireland is about 1,200,000 acres, which would produce more than twice as much wheat as is annually imported.

CARD PLAYING.—"To dribble away life," says Sir Walker Scott, "in exchanging bits of painted pasteboard round a green table, for the paltry concern of a few shillings, can only be excused in folly or superannuation. It is like riding a rocking-horse, where your utmost exertion never carries you a foot forward; it is a kind of mental treadmill, where you are perpetually climbing, but never can rise an inch."

"I WAS MISTAKEN."—A lively writer has said, "I was mistaken" are the three hardest words to pronounce in the English language." Yet it seems but acknowledging that we are wiser than we were before to see our

error, and humbler than we were before to own it. But so it is and Goldsmith observes, that Frederick the Great did himself more honour by his letter to his senate, stating that he had just lost a great battle by his own fault, than by all the victories he had won. Perhaps our greatest perfection here is, not to escape imperfections, but to see and acknowledge, and lament and correct them.

A GOOD HIT.—We find the following in an Ohio paper.—

"Yesterday the Senate passed a bill imposing penalties of from five to fifty dollars upon distillers who should permit their hogpens to become so unclean as to be offensive in their vicinity. When the bill was upon its passage, Mr Brown remarked that he must be permitted to express his surprise that the Legislature should attempt to remove the lesser nuisance, the hog-pens, while they permitted the distiller to remain!"—*Boston Telegraph.*

DIFFERENCES AND DISTINCTIONS.—A mule laden with salt, and an ass laden with wool, went over a brook together. By chance the mule's pack became wetted, the salt melted, and his burden became lighter. After they had passed, the mule told his good fortune to the ass; who, thinking to speed as well, wetted his pack at the next water, but his load became the heavier, and he broke down under it. Pause therefore, before you follow example; that which helps one man may hinder another.

FAULT-FINDING.—There is a disposition observable in some to view unfavourably everything that falls under their notice. They seek to gain confidence by always differing from others in judgment, and to depreciate what they allow to be worthy in itself, by hinting to some mistake or imperfection in the performance. You are too lofty or too low in your manners, you are too frugal or too profuse in your expenditure; you are too taciturn or too free in your speech, and so of the rest. Now, guard against this tendency. Nothing will more conduce to your comfortableness than living in the neighbourhood of ill-nature, and being familiar with discontent. The disposition grows with indulgence, and is low and base in itself; and if any should be ready to pride themselves on skill and facility in the science, let them remember that the acquisition is cheap and easy: a child can deface and destroy; dullness and stupidity, which seldom lack indisposition or means, can cavil and find fault; and everything can furnish ignorance, prejudice, and envy with a handle of reproach.—*William Jay.*

MEN'S DUTIES.—Men's proper business in the world falls mainly into three divisions:—First, To know themselves and the existing state of the things they have to do with. Secondly, To be happy in themselves and the existing state of things. Thirdly, To mend themselves and the existing state of things, as far as either are marred or mendable. These, I say, are the three plain divisions of proper human business on this earth. For these three, the following are usually substituted and adopted by human creatures. First, To be totally ignorant of themselves and the existing state of things. Secondly, To be miserable in themselves and in the existing state of things. Thirdly, To let themselves and the existing state of things alone (at least in the way of correction).—*John Ruskin.*