in ancient or modern times, and he says—"The *power of conduction is common* to all substances and the question of discharge is a mere question of time. In some substances, such as the metals this communication takes place with *extreme rapidity*, in others, such as air, water, shellac, &c., the process is difficult and slow—so slow as to admit of such substances being considered as insulators." Again the progress of electrical discharge by conduction through metal is or other substances involves the idea of velocity, and hence Professor Wheatstone has, by a beautiful series of experiments, shown that the velocity of an electrical discharge is at the rate of 576,000 miles in a second of time. Again atmospheric electricity when travelling along the electric wires has been known to disarrange magnetic needles at the stations, and to prevent this an arrangement has been made at the posts nearest to the stations to carry the communicating electro-current over the tops of these posts *fixing* on the tops of the posts points, which attract the atmospheric electricity when the current is passing over the posts, and carries it down the *posts into the earth, while the current* from the battery at the previous station is left to pass on its course uninterruptedly, for it will jump over spaces, as atmospheric electricity is known to do to take *the easiest and* most powerful conductor towards the earth, and hence I do conceive the telegraphic wires, and also the rails, carry off by conduction much electricity from the air, and thereby *reduce the frequency* and intensity of our thunder storms. W. H. WHITE.

—*Mark Lane Express.*

WATER.—*Some four-fifths* of the weight of the *human body are nothing* but water. The blood is just a solution of the body in a vast excess of water—as saliva, mucous, milk, gall, urine, sweat, and tears are the local and partial infusions effected by that liquid. All the soft, solid parts of the frame may be conceived [illegible] rary precipitates, or crystalizations (to use the word but loosely) from the blood, that mother-liquor to the whole body; always being precipitated or suffered to become solid, and always being redissolved, the forms remaining, but the matter never the same for more than a moment, so that the flesh is only a vanishing solid, as fluent as the blood itself. It has also to be observed, that every part of the body, melting again into the river of life continually as it does, is also kept perpetually drenched in blood by means of the blood-vessels, and more than nine-tenths of that wonderful current is pure water. Water plays as great a part, indeed, in the economy of that little world, the body of a man, as it still more evidently does in the phenomenal life of the world at large. Three-fourths of the surface of the earth is ocean; the dry ground is dotted with lakes, its mountain-crests are covered with snow and ice, its surface is irrigated by rivers and streams, its edges are eaten by the sea; and aqueous vapour is unceasingly ascending from the ocean and inland surfaces through the yielding air, only to descend in portions and at intervals in dews and rains, hails and snows. Water is not only the basis of the juices of all the plants and animals in the world; it is the very blood of nature, it is well known to all the terrestrial sciences; and old Thales, the earliest of European speculators, pronounced it the mother-liquid of the universe. In the later systems of the Greeks, indeed, it was reduced to the inferior dignity of being only one of the four parental natures—fire, air, earth, and water; but water was the highest in rank.—*Westminster Review.*

Agriculture.

POTATO DISEASE.—A correspondent of the London *Times*, adopting the signature of "An Eye to the Potatoes," in the course of some admirable observations on this subject, makes the following remarks:—"The potatoes again show unmistakeable symptoms of disease—the leaves and stems appear withered and burnt, and these symptoms were developed immediately after the great thunderstorm of Friday week last. Those plants alone escaping which were under the shelter of some walls. The same effect was produced upon some potatoes of my own, apparently by the same cause, while residing in Guernsey, some few years back; and the present result tends to confirm me in an opinion which I was then led to adopt, owing to the development of the disease appearing to be immediately consequent upon the liberation of a large amount of atmospheric electricity, that the potato rot is due to the formation of ozone, which is an allotrope or electric and more active form of oxygen.

Now, as the potato disease has been generally found to be the precursor of cholera, some of our chemical philosophers may be led to put the ozone theory (at least, so far as regards the potato disease) to the test of experiment. Surely, nothing would be easier than to ascertain the influence of an atmospheric ozone upon a potato plant; and if it could be shown that all the symptoms of the disease can be thus artificially produced, at least we should have advanced one step towards the discovery of a remedy for it, and, may be, afterwards, for that more terrible scourge, the cholera. Catarrhal complaints, I find, have been very general among my own friends, since the late storms, and that this is an ozonic effect Professor Schonbein, to whom we owe the discovery of the substance or principle itself, has placed beyond doubt. Dr. Faraday, too, recently showed, by some experiments performed at Brighton, that ozone is generally present in the breeze blowing Down is free from it. Those who have consulted Dr. Faraday's admirable map of the cholera in his late voluminous and philosophic report upon the subject, will not have failed to observe that the places where the pestilence committed the greatest havoc were mostly either on the banks of rivers near the sea, or on the coast itself; and that in the inland districts the scourge was comparatively powerless.—*Liverpool Paper.*

Oriental Sayings.

THE STORY OF THE OLD WOLF, IN SEVEN FABLES.

FROM THE GERMAN OF LESSING.

A wicked wolf who was advanced in years, formed the hypocritical resolution of living on friendly terms with the shepherds. He set out, therefore, and came to the shepherd whose folds were nearest to his den.

"Shepherd," said he, "you call me a blood-thirsty robber, which yet in reality I am not. It is true I must rely on your sheep for a meal when I am hungry, for hunger pains me. But protect me from hunger: only satisfy my wants and you will be right content with me. I am truly the tamest and gentlest of animals, when I have enough."

"When you have enough! that may well be," replied the shepherd, "but when will you have enough? You and avarice have never enough. Go your way."

II.

The disappointed wolf then came to a second shepherd.

"You know, shepherd," was his address, "that I can, throughout the year, kill many of your sheep, but if you will each year give me six good sheep, I will be satisfied. Then you can sleep securely, and dispense with your dog without fear."

"Six sheep!" said the shepherd, "that would be a whole flock!"

"Well, then since it is for you, I will content myself with five," said the wolf.

"You jest! five sheep hardly do I offer more than five to Pan in the whole year."

"Nor four, either?" asked the wolf further.

The shepherd shook his head scoffingly.

"Three!" "Two!"—

"Not a single one," was the final reply. "It would be indeed foolish to become tributary to an enemy against whom I can protect myself by my vigilance.

III.

"Three is lucky," thought the wolf as he came to the third shepherd.

"It grieves me to the heart," said he, "that I should be decried among you shepherds, as the fiercest animal. To you will I presently prove what injustice they do me. Give me yearly one sheep, and then shall your flocks be allowed to graze free and unharmed in yonder wood, where none but I cause insecurity. One sheep! What a trifle! Can I possibly act more generously, more disinterestedly? You laugh, shepherd. Why do you laugh?

"Oh, for nothing at all." "But how old are you, my good friend?" said the shepherd.

"What, does my age concern you? I am still young enough to kill your young lambs.

"Don't get angry, old churlish! I am exceedingly sorry that you came a year too late with your proposition. Your worn down teeth betray you. You play the disinterested one, simply that you may the more comfortably and with the less danger support yourself."

[illegible] he went on to the fourth shepherd. His faithful dog was just dead, and the wolf availed himself of this circumstance.

"Shepherd," said he, "I have quarrelled with my brethren of the forest, so, that I can never again be reconciled to them; you know how much you have to fear from them. But if you will take me into your service instead of your dead dog, I will answer for it, that they shall not even look askance at one of your sheep."

"Will you, then," replied the shepherd, "protect them against your brethren of the forest?"

"Certainly. What else do I mean?"

"That is all very good. But if I receive you into my folds, pray tell me, who shall then protect my poor sheep against you. To take a thief into the house in order to secure it from a thief without, they deem we ——"

"I have heard enough," said the wolf. "You begin to moralize. Farewell."

V.

"Were I not so old" snarled the wolf. "But alas, I must adapt myself to the times." And so he came to the fifth shepherd.

"Do you know me, shepherd?" demanded the wolf.

"I know those like you, at least" replied the shepherd.

"Like *me*! that I very much doubt. I am so singular a wolf that I am well worthy of your friendship, and of that of your sheep."

"In what are you singular then?

"I cannot kill a sheep and then devour it, even should it cost me my life. I live entirely on *dead* sheep. Is not that praiseworthy? Allow me, there-