The Electric Eels.

The electric eels in the New York Aquarium in length are about four feet, they are thicker in body than the largest common eel. There are two, and they are in two adjoining tanks, glass on both sides. When they were transferred from their small travelling boxes into the more spacious tanks of the Aquarium, they were very restless, and one of the attendants experienced, with out intending it, their electric power, which notwithstanding the fatigue of a long journey, was very respectable. A slight touch of the smooth, slimy body was sufficient to communicate such a severe shock that the man was complaining several hours later of unusual pains in his shoulders and elbows.

The excitement of the fishes upon being placed in their new quarters was very great. They dashed through their tanks in all directions, forward and backward; tried to jump out, and splashed the water all over the neighborhood. It took them a long time to get quiet.

A lively yellow perch was put into the tank of one of the eels, a catfish into that of the other. The presence of the strange visitors excited the eels, and they made directly for them, touching their bodies in several places with the end of their plump snouts. It looked as if they intended to bore into the bodies of the fishes. Both the perch and the catfish palpitated violently at the moment when the eels touched them, exactly like a person who gets a shock from an electric machine when unprepared for it. The perch seemed to have been hit violently so that it lost its balance, and with open mouth, swam on its side. Yet it required only a short time for both fishes to recover, and in two or three minutes they were swimming around apparently as vigorous as before. The eels renewed their attacks, but the result was weaker in both of them, and it really seemed as if they were not able to kill the fishes by their mysterious power. The contest continued, and one of the eels gradually got more excited. Instead of merely touching the perch with the end of its snout, it opened its mouth and laid both lips close to the body of the fish. The electric discharges become more frequent at the same time, and in about twenty-five minutes the perch was dead. The catfish, however, sustained all the discharges of its deadly companion without any apparent consequences, and both fishes are, or were some hours since swimming apparently peacefully and socially alongside of each other.

An unexpected observation, and which we believe has never been mentioned by any naturalist before Dr. Dorner, is the remarkable way in which these eels breathe. As it is generally known, the respiratory movements consist in alternately opening and closing the mouth and gill slit, and only when the fishes are in want of air, having had an insufficient supply from the water, they ascend to the surface in order to swallow air from the atmosphere. Only a few fishes, which are remarkable for their large, cellulated air bladder, as, for instance, the gar pike, or the fresh water dogfish come to the surface regularly in order to inhale and exhale air in the same way that seals and whales do. The dogfish does this about twice in an hour, the gar pike at much longer intervals, and both fishes, when under the surface, open and close their mouths and gill slits quite regularly, like all other fishes. The electric eel, however, takes the greater part of its respiratory air directly from the atmosphere, at intervals of one or two minutes, sometimes less, sometimes more, but generally not slower than the seal.

Each of the electric eels of the Aquarium comes to the surface, brings the end of its snout into the air, takes a portion of it, the throat becoming wider, and in the next moment it gulps the air down, or lets it escape through one of the gill openings. Sometimes, when resting at the bottom, the eel allows a great quantity of air to escape by a deep notch in the centre of the lower jaw, permitting this escape without opening its mouth. In regard to exhalation there is great irregularity—sometimes through the mouth. The quantity of the outgoing air is also changeable, being sometimes four times greater than at other times, but the inhaling is quite regular.

The electric eel has two connected air bladders two and a half feet long, and therefore there is no doubt of its acting as a real lung. The length of the bladders comprises two thirds of the entire body. No doubt the air bladders are of greater importance in the respiratory functions of the electric eels than the gills.

This accounts for the fact that the respiratory movements noticed in other fishes for hours are totally absent in the electric eels. Several visitors, after watching the creatures a few moments, believed them to be dead until the ascending movement convinced them of their being alive. It is only at long intervals that the mouth is slightly opened and closed while in the water, and in these instances the coming to the surface ceases for a length of time. Perhaps the animal sleeps at this time. Its eyes, though, are so small that it is difficult to tell whether they are open or not.

The Extent of London.

London covers nearly 700 square miles. It numbers more than 4,000,000 inhabitants. It comprises 1,000,000 inhabitants from every quarter of the globe. It contains more Roman Catholics than Rome itself; more Jews than Palestine; more Irish than Dublin; more Scotchmen than Edinburg; more Welsh than Cardiff; has a birth in every five minutes and a death in every eight minutes; has seven accidents in every day in its 7,000 miles of streets; has 124 persons every day and 45,000 annually added to its population; has 117,000 habitual criminals on its police register, and has 38,000 drunkards annually brought before its magistrates.

Trouble in the Family.

They were in the parlor together. The light had gone out and they stood at the window in the radiance of the moon. He had his arm about her and was looking dreamily at the queen of night. Softly he spoke:—

"Darling, I am thinking how happy we will be in our home when we are married. It shall be a pretty house, and you shall be its dear little mistress. We will have a little parlor and a little dining-room, and a little kitchen for you to manage. We shall be there all by ourselves, and we shall be so happy, my darling."

"Oh, Henry," she despondently uttered, "I thought we were going to board."

There were tears in her eyes for him to kiss away, but he let her remove them with what faculty she could command.

AGRICULTURE.

Sheltering Vehicles and Machines.—Notwithstanding the number of carts, and mowing-machines, and horse-rakes, and other tools that we see standing by the roadside or in the field, the year round, most farmers believe in the economy of housing all these things. They know that iron rusts, and that wood-work swells and shrinks with the changes of the atmosphere. They think it is only a question of time that the new carriage-house or shed shall be built, where the scattered tools and vehicles will have a permanent home. This waiting to provide the needed shelter is the most expensive kind of saving. The elements are all the while at work, depreciating the value of the wood and iron that are exposed to the weather. A scythe and snath hung in a tree through one season is old, warped and rusty. Stored in the tool-room, it is little changed in look or value; no repairs are wanted, and it is ready for use as soon as the grass is ready. The new cart that is left by the roadside soon goes to pieces; even if painted the paint soon wears off; the sun cracks paint and wood, the heat expands the cracks, the rain enters the openings, and decay commences, the joints become loose, the felloes and spokes shrink in in the dry weather, and the tire must be set often to keep the vehicle in running order. Farmers often overestimate the expense of a tool or wagon house. If they have timber or building stone upon their farms, very little money need be laid out to put all running gear under cover. A roof and siding to keep out rain is the main thing. Flooring is not needed. The bare earth under all wooden wheels with tires, if dry, will answer instead of plank. Just enough moisture is absorbed from the earth to keep the wheel in good condition. The tire will not need setting so often. A shed set upon a bank wall makes a good shelter, and is within reach of most farmers.

Clover Aftergrowth.—What is the best course to pursue with the aftergrowth of clover where, as in my case, there is not sufficient stock to feed it down? If the clover is allowed to seed and to stand through the winter, will the crop next year be satisfactory? When the clover comes in luxuriant bunches, crowding out the red-top and other grasses, is it well to pass the scythe over them? Mowing and feeding down are similar in their effect. As much of the clover crop consists in the roots, a second mowing does not exhaust it; and if it prevents the ripening of seed it may prove a positive advantage by preventing the exhaustion of maturing seed. If the land is not rich an autumn top dressing would be well repaid by the increased crop. Some excellent farmers neither mow nor feed down the second crop, but allow it to fall and rot on the ground in autumn, or else mow it to prevent seed forming, when it serves both as manure and as a mulch for the protection of the roots. It is well to pass a reaper a foot over pastures, cutting the seedy tops of the ripe grass, and giving the animals more ready access to the green herbage below.

Broom Corn.—The seed of broom corn, which has hitherto been considered useless except for planting and an inferior article of food for cattle, has been discovered to be very valuable as a breadstuff. It was first used as a substitute for wheat in 1870 and 1871, but like many other good things, was lost sight of, and its manufacture was never carried to success, and never became even partially known until about three years ago. The yield of flour is about one-half in place of two-thirds from wheat. The bran is also as valuable as wheat bran as a food for animals. The flour cannot be told from wheat flower, and the bread, cake, etc., is as delicate, inviting and delicious, and easily digested. The yield of broom corn seed is also enormous, a single spear often producing a pint of seed, and the yield has reached 500 bushels to the acre, while it is safe to estimate the average at 100 bushels.

Steam Power on Farms.—There is probably no single thing which illustrates more clearly the progressiveness of model farming, than the extent to which steam is now used in agricultural operations. Several influences have contributed, more or less powerfully, to the result; prominent among them being the economy in fuel secured in the present style of portable engines, the safety with which they can be managed by any person of ordinary mental capacity, and the extensive farming operations carried on by single individuals in the Southern and Western States of the Union.

Babies cry because they suffer; and the most reliable remedy for the relief of their discomfort is Dr. Bull's Baby Syrup. Only 25 cents per bottle.

Over Production.—Farmers should not be frightened at the idea of over producion. There never can be too much production of any article of use to man. There may be an unequal distribution an thus an apparent excess in some localities; but whatever is grown, is equally advantageous to the country and to the world.

A Dumb Dog.

Mr. Darwin might turn to some account a story which is told in the German papers about the manner in which an intelligent dog adapted himself to his condition. A deaf and dumb lady living in a German city, had as a companion a younger woman also deaf and dumb. They lived In a small set of rooms opening on the public corridor of the house. Somebody gave the elder lady a little dog as a present. For some time, whenever anybody rang the bell at the door, the dog barked to call the attention of his mistress. The dog soon discovered, however, that neither the bell nor the barking made any impression on the women, and he took to the practice of merely pulling one of them by the dress with his teeth, in order to explain that some one was at the door. Gradually the dog ceased to bark altogether, and for more than seven years before his death he remained as mute as his two "companions." When expression by sound was useless, it fell with him into absolute disuse.

A Smart Girl.

A daughter of Dan Newman, over at Sierra Valley, captured the first prize at last year's Nevada State Fair for being the best equestrienne. After the young lady had been declared boss she turned around and told the world at large that she would just like to see somebody trot out something in the shape of horseflesh that she couldn't ride, if they thought she was sailing under false colors. The result is that, although she has since been on various animals that were brought forward, she has kept her seat in every instance. Now there's a garb that's good for something. She can bake cookies and bread and all such things, darn stockings, make her own dresses, and do anything and everything that makes her a good housekeeper, and when it comes to playing the piano she is no slouch, either. Just think of these things you girls who can't tell a frying pan from a mowing machine, or a balky horse from a cow that gives buttermilk.

The lungs are strained and racked by a persistent cough, the general strength wasted, and an incurable complaint established thereby. Dr. Jayne's Expectorant is an effective remedy for Coughs and Colds, and exerts a beneficial effect on the Pulmonary and Bronchial Organs.

DOMESTIC.

English Bacon.—In England the preparation of bacon is carried on very extensively and systematically, in factories specially constructed and fitted for the purpose. The plan commonly adopted there is as follows: After being fasted twenty-four hours the pig is taken to the slaughter-house and killed. He is then hung up by the hind legs, singed by means of gas lights, scraped, opened, cleaned by powerful jets of water, and dressed. When the carcass has become cool and firm, which is generally the case after about twelve hours, it is ready for boning or cutting up. This is done by placing the pig on a strong table, and cutting off the head close to the ears. The fore feet are then removed, and the hind feet, so as to leave a shank to the ham. The carcass is then divided straight along the back, and the shoulder-blade taken out. The sides are now ready for salting. Each side is laid singly on the floor of a cold cellar, and dressed with a mixture of saltpetre and salt, four ounces of saltpetre being used for each side, together with a quantity of salt corresponding to the size of the side. Brine is also forced into the flesh by means of a force pump and jet. The next day the sides are piled one upon the other, remaining so for four days, when they are turned over and sprinkled with more salt. Thus they remain for twelve days, when they are washed and dried. They are then taken to the smoking-house, where they hang for three days, being continuously smoked during that time with the fumes of burning oak sawdust, thus acquiring the desired color and flavor. The sides, when cold, are ready for market. Cured bacon sometimes becomes rancid through exposure to air, which may be avoided by keeping it in dry bran. Another injury to which bacon is subject arises from the attacks of a small fly, the larvæ of which are known as jumpers. Bacon varies greatly in composition. It always contains less water and more mineral matter than the pork from which it has been prepared, while the fat in it is more digestible. Highly smoked and dried bacon sometimes retains but twelve or fourteen per cent. moisture; but a fair sample of streaky bacon, such as an Englishman would select for the breakfast table, would contain in 100 parts, 22.3 parts of water, 8.1 of nitrogenous matter, 65.2 of fat, 3.8 of salt and 0.6 parts of phosphate, etc. For one part of flesh-formers in the above mentioned bacon there are nearly twenty parts of heat-givers, reckoned as starch, the 65.2 of fat being equivalent to nearly 160 parts of starch. The unsalted trimmings and offal of the English bacon factory are utilized in the form of sausages, the minced materials being mixed with bread, fat and condiments, and then preserved in the previously prepared small intestine of the pig.

Compressed Coffee.—A patent has recently been issued in Germany, for a process of compressing ground and burnt coffee, for the purpose of making it more readily transportable and unalterable for a length of time. For this purpose the coffee is subjected to a pressure of from 40 to 70 atmospheres in suitable cast-iron moulds. The coffee is thus made into cakes, and comes into the market in a form resembling chocolate, divided as the latter is by ribs to facilitate breaking into pieces of suitable size for use. The interior surface of the moulds is highly polished, by which artifice the outer crust of the compressed coffee is made sufficiently smooth and hard to prevent the tendency of the ethereal oil of the coffee to escape from the interior of the cakes. The volume of the coffee thus prepared is reduced to less than one-third of that of the original. It is asserted that the operation does not in the least affect its good qualities, and that it can be packed and transported in tin foil or other packages, preserving its aroma indefinitely.

Churning.—After churning one summer at the rate of three times a week, and each churning lasting almost till the next was ready, we determined to find the cause. Thinking it the fault of pasture or cellar, we changed pasture, cellar and churn, with a neighbor who never churned longer than twenty minutes, and the result was that we churned in just as long and she in just as short time, notwithstanding the change, fully proving the fault to be with the cows, which we soon disposed of for better ones, and have had no trouble in churning since. You may have good milkers, but not good butter-makers.

The Holland Government have used the metric system in weights since 1817, but by law compelled all scales to be adjusted to a graduation of their own.

This caused more or less trouble among their merchants and recently a Board of Engineers was appointed to recommend some improvement. As the result of their observatons the Government has just modified the law, and adopted the plans of Fairbanks & Co., naming that make of scales the new standard.

Attach a piece of muslin to a hoop of cane or wire, with a handle similar to what is used by anglers when fishing with rod and line. Let the muslin be about a yard deep, and taper off to the bottom. Where flies are very troublesome, many hundreds may be caught and destroyed by these means in a few minutes. This instrument is very useful in butchers' shops, or other places where they are very numerous.

Day & Martin's blacking is said to be made as follows: Bone black, in a state of powder, is mixed with sperm oil until the two are thoroughly incorporated. Sugar or molasses is mixed with a small portion of vinegar and added to the mass, oil of vitriol is next added, and when all effervescence has ceased, more vinegar is poured in until the mixture is of a proper consistency.

Fight with a Shark.

Captain John B. Guttmann, of the Pensacola Guards, signalized himself in an odd encounter recently, and came out first best. Riding down to the shore of Escambia Bay, Florida, the captain noticed a strange commotion in the water, and that the beach for a considerable distance was covered with fish from six inches to a foot and a half in length, some dead and some still jumping, while others continued to spring from the water, above which showed the sharp dorsal fin of a shark, cutting the surface as he pursued the fish. The sporting spirit of the captain was fired, and springing from his buggy, he opened his pocket-knife, with a blade less than three inches long, and rushed into the water, which was thigh-deep, where he encountered the shark, and pushed his little knife into it. The creature did not seem to feel it, and its hide was so tough that the captain could not rip it, so he continued his thrusts, while the shark endeavored to turn so as to seize him. Finally the shark felt the blade, and, retreating twelve or fifteen feet, charged back with a rush. The captain sprang aside as it attempted to bite him, and seized it by the fin, which was ten inches long, and plied his knife while they waltzed round, the shark continually turning in the endeavor to bite. Finding his knife of no avail against the nine lives of the shark, the captain caught up a stout, heavy piece of driftwood, which opportunely came within reach, and, as the fish threw its head out of the water, struck it a severe blow at the base of the skull, which instantly stunned it. He then threw it ashore, where it was dispatched. It was exactly five feet in length.

HUMOROUS.

The woman who is always falling to pieces came to the station a little late and had to make a rush for the train. When she reached her seat her hat fell off. She got it on, but it toppled over to one side, and when she tried to straighten it up her hair came tumbling down. She lost her ticket twice before the conductor reached her, and would have lost it again if he hadn't taken it away from her. She reached up to put a bundle in the rack above her head, and burst the collar button off her duster, and stuck her fingers on four pins in her dress before she could find one that she dared take out to repair the damage. Then just as she thought she had got comfortably settled her little hand valise, packed to bursting with enough things to load a Saratoga trunk to the muzzle, exploded, and she nearly worked herself into fragments getting it together again. Then by the time she got the valise shut up, her hat tumbled off again, and by the time she got the hat straightened back into its place, her hair tumbled down again, and as soon as she got her hair twisted up, and harpooned in with a couple of hair pins, the valise went off, and when she got off at New Prague, she tucked the gaping valise under her arm, and tried to corral her toppling hat and wandering hair with one hand, and as she went fluttering and straggling into the depot, one couldn't help thinking that it would be safer and more convenient to run her in sections and flag her against everything. I have seen this woman on several other trains, and she has never been able to keep herself together. She keeps you in a state of agonizing suspense, for you never know where she is going to give way next.

The Silent Traveler.—A stranger sat in a corner of the car hence to Boston, in an easy attitude, his feet upon a large black trunk. The gentlemanly conductor, going his rounds, at the first station politely informed the stranger that the trunk must be put in the baggage car. To which the stranger nothing replied. At the second station the displeased conductor, more decidedly, told the stranger that he must put the trunk in the baggage car. To which the stranger nothing replied. At the fourth station the irate conductor had the trunk put off and left. At the fifth station the mollified conductor, addressing the stranger, begged him to remember that he had but done what his duty required, and that he had only done it after repeated warnings, and that it was solely the stranger's fault. To which the stranger laconically replied: "Don't care; 'taint my trunk!"

A Heavy Collection.—"While I was in Arran, quite recently," said Mr. Spurgeon, "I heard of a minister who preached in a certain church, and at the close of the service was strongly urged to promise for a future supply, the collection after his sermon having been unusually large. 'Dear me,' said the minister, with becoming pride, 'what might your ordinary collections amount to?' 'Last Sunday it was twopence half-penny.' 'What is it to-day, then?" asked the minister, expecting to hear a large sum. 'Eightpence half-penny,' was the reply. 'Was is me,' groaned the minister, 'for I gave the sixpence myself,'"

Rev. Bishop Wightman, Charleston, S. C., says: The fine and striking qualities of deep thought, glowing style, of picturesque scene and character painting, which made Dr. March's former books so attractive, and gave them so wide a circulation are found in his new book, "From Dark to Dawn," published by J. C. McCurdy & Co., Philadelphia. I hope it will have, as it will justly merit, an appreciation as pronounced and extensive.

A gentleman suddenly snatched a kiss from a lady, and excused himself by saying that it was a sort of temporary insanity that now and then came upon him. When he arose to take his leave, the pitying damsel said to him: "If you ever feel any more such fits coming over you, you had better come right here, where your infirmity is known, and we will take care of you."

A temperance lecturer in Missouri, who preaches general morality as well as abstinence from strong drink, has an anti-swearing pledge which might create some confusion if taken literally. It promises that the signer thereof will not swear or take the name of God in vain, and that he "will try to influence others to do so."

If what a Belgian physician says be true, that the use of tobacco causes color blindness, how sad to think that after close application through long days and anxious nights, when the ambitious youth has succeeded in coloring his meerschaum, his ability to enjoy the same has forever departed.

The multiplication of poison germs in diseases of the blood is exceedingly rapid, and if unchecked vitiates all the blood of the body. Dr. Bull's Blood Mixture, by its peculiar influence, kills these germs, and purifying the blood, removes all possible chance of disease establishing itself.

A man very much intoxicated was taken to the station-house. "Why did you not bail him out?" inquired a bystander of a friend. "Bail him out!" exclaimed the other; "why, you could not pump him out."

"To see ourselves as others see us," would not be half so disagreeable as to have others see us as we really are.

Everybody must take things as they come. This is especially true of cholera and yellow fever.

Which is the best of the four seasons for arithmetic—The Summer.

An exchange speaks of croquet as an alleged game.

The butcher's song—"The suet buy and buy."

Didn't Marry for Love or Money.

A farmer's son from near Reilly was in town last week selling hogs, and ran into an old acquaintance on the street.

"What dy'e think, Bill? I'm married," said the Butler county youth.

"The deuce you are! Well, I never thought that of you, Sam. Who is she?"

"Old Uncle Dan Farrel's daughter Mary, and I'll open your eyes a bit, Bill. You won't believe it, maybe, but its honest gospel truth. I didn't marry that girl for neither love nor money—honest Injun," said Sam, with a big smile that made his face look as though his eyes were about to be fenced in.

Bill leaned up against a lamp-post and gave him a look of speechless amazement for a second or two, then whistled and slowly said:

"Well, then, by the old Harry, I'd like to know what you did marry her for, anyway."

"Well, Bill, I'll tell you how it was. You see she's one of the best little workers in that part of the country," returned Sam, with a double dose of the old smile.

"Oh, that's how it comes, is it?" exclaimed Bill. "Well, Old John Robinson bought a couple of mules last week on that very same recommendation."

Sam said he had to meet a man at three o'clock, and hurried away.

SCIENTIFIC.

Insect Powder.—Why the flowers of composite plants *Pyrethrum carneum* and *P. roseum*, when pulverized form the well-known "Persian Insect Powder," should prove so destructive to insects, while perfectly innocuous to other forms of animal life, has not hitherto been understood. Rother, who has investigated the chemical composition of *P. roseum*, ascribes its active powers to the presence of an acid, or, more properly, of a glycoside, which he terms Persicin. It is a brown non-crystallizable substance, having the odor of honey, and when boiled with hydrochloric acid is converted into sugar and Pesiretin. With alkalies it forms a neutral amorphous salt, as well as an acid crystallizable one. Pesiretin also behaves like an acid. The plant contains in addition, an oily resin-like acid, Persicein. No alkaloid was found by Rother; Bellesone, however, obtained from the plant a crystallizable substance which exhibited exceedingly acetic properties. Hager, who has examined the flowers of both *P. carneum* and *P. roseum* attributes their insecticide effects to the presence of two substances, one of which, a body allied to trymethylamine, is combined with an acid in the flower. This powder as well as the pollen was a peculiarly powerful effect as an irritant. Hager finds that aqueous or alcoholic extracts of the powdered flowers contain little of these ingredients, and consequently to be of no value as insecticides.

Waste of Artificial Light.—A writer in a London journal presents some interesting calculations in regard to the cost and waste of artificial light. If, he says, we rose with the sun, instead of the usual hour of 8 o'clock, the gain would be, on an average, two hours additional daylight throughout the year, and, by retiring two hours earlier to compensate for the early rising, there would be a saving of expense of artificial light for 730 hours in each year. Now, there are, in round numbers, 450,000 houses in London each of which it may be supposed, requires five gas burners, or their equivalent in lamps or candles, after dark. At present, it is estimated that 2,250,000 gas-burners are burnt for 730 needless hours in each year, and taking the average consumption of gas at three feet per hour, it may be said that each burner consumes, in round numbers, 2,200 feet of superfluous gas per annum—or, a total for the metropolis of some 5,000,000,000 cubic feet of gas, or its equivalent, which might be saved, when, too, this writer remarks, it is considered that every gas-burner requires to be supplied with nearly 2,000 cubic feet of air per hour, and that after dark the demand for fresh air is nearly double in such a close city, the importance of the subject is manifest.

The Velocity of Light.—"The two methods by which the velocity of light was determined experimentally gave into the hands of Foucault and Cornu results which differ by nearly 1 per cent. To find the corect result is the object of the experiments I have undertaken. The method which I have adopted is essentially that pursued by Foucault, but has this important advantage, that it permits the use of any distance between the mirrors. This is accomplished by using a lens of great focal length which collects the light from the revolving mirror into a series of parallel pencils, which are reflected back from the surface of a plane mirror. The distance between this and the revolving mirror in the preliminary experiments was 500 feet, and the displacement obtained was 0.63 of an inch—about 25 times that obtained by Foucault. The apparatus used was adapted from the material found in the Naval School, and the experiments were performed under difficulties. The following is a table of results: 186,730; 188,820; 186 330; 185,330; 187,900; 185,000; 186 770; 185,800; 187,940; 186,508 mean 185,600 Cornu. 186,200 Foucault."

Some of the so-called Tests for Adulterations are quite amusing to one acquainted with chemistry, but unfortunately may lead astray the ignorant who trust in them. A recent newspaper item, praising the lemon and advised the eating of a whole one before breakfast, adds that lemon juice is a good test for cosmetics. "No lady should employ any cosmetis that effervesces with lemon juice." As this test merely proves the presence of carbonic acid, and thus indicates an admixture of chalk and magnesia, which are among the least objectionable face powders, while it produces no effect upon the more dangerous zinc, lead and bismuth salts, the test is worse than useless, as giving a feeling of security to those using cosmetics which are actually poisonous.

Dr. Heintzel thinks that the influence of light upon cement has not hitherto been sufficiently considered. He instituted some experiments upon a quantity of cement, which he divided into three parcels, exposing parcel A to the air and full light, B to the air and diffused light, and secluding C in the darkness from the air. After six months he found that A made a weak mortar, by absorbing 38 per cent, of its weight in water, and it had become crumbly; B, with 33½ per cent. of water, which was too adhesive to the trowel, and it yielded up none of its water; C, with 33½ per cent. of water, made an excellent mortar, easily stirred and flowing, and it relinquished some of its water. After setting for twenty-eight days, the relative strength was:—A, 3; B, 37,9; C, 44.6.

The disease known as anemia is a serious malady among coal-miners. Its cause is not fully determined. Dr. Reimbault, of St. Etiene does not consider the deleterious gas, the coal-dust, or the want of light in the mines sufficient to produce it. Taking the ordinary number of blood-disks in a healthy man to be 5,000,000, that in an affected miner is frequently as low as 1,500,000. Want of an adequate supply of fresh air has, it is thought, much to do with the disease.

From Acute to Chronic

Is an easy stage in cases of dyspepsia. A slight attack of Indigestion, especially when there is a predisposition to digestive weakness of the stomach, must speedily culminate in the more obstinate form of the disease. It is well, therefore, to adopt preventive measures early. Although Hostetter's Stomach Bitters overcomes, if persisted in, cases of dyspepsia of long standing, it is obviously the part of wisdom to use it ere the malady assumes a chronic phase. This is particularly true, be cause as dyspepsia advances, it engenders other bodily evils, such as disorder of the liver, constipation or undue looseness of the bowels, nervous disorders, hypochondria, sleeplessness. These maladies are both prevented and remedied by the Bitters, but how much better to check them in their outset with the great alterative, than to wait until they establish a firmer foothold in the system. Surely the advisability of this must be apparent.

Hoofland's German Bitters.

During the warm season the nerves become enfeebled and the whole system debilitated. The stomach loses its power of digestion, the liver becomes congested and sluggish, causing constipation or diarrhea, dysentery and cholera morbus; and the prevalence of more or less malaria at this season engenders ague, bilious or typhoid fevers, often of serious import. To avoid these consequences, take, night and morning, a tablespoonful of Hoofland's German Bitters; it is a splendid tonic and alterative, that will restore the appetite and digestion, tone the nerves, regulate the liver and strengthen and build up the whole system to withstand the summer heat and all its baneful influences.

Mrs. General Sherman

Says: I have frequently bought Durang's Rheumatic Remedy for friends suffering with Rheumatism, and in *every instance* it worked like magic. Sufferers with rheumatism make a note of this, and send for circular to Helphenstine & Bentley, Druggists, Washington, D. C. Sold by all druggists.

Biliousness and Liver Complaint cannot withstand Schenck's Mandrake Pills. They act upon the stomach and liver without nauseating or griping, are perfectly safe and harmless, containing no mercury or other injurious drug, and may be used by the most delicate person.

For sale by all Druggists.

Ask and Ye Shall Know.

If you are sufficiently interested to wish to know the wonderful curative power of Dr. Herndon's Gypsey's Gift in bad cases of Rheumatism, enquire of Lieut. Rice, Third Police District, Philadelphia. He well knows its magical influence on members of the police and others. It strikes the disease at the root and drives it from the system. Sold by all Druggists in Philadelphia. Send for circular to J. J. Grindall, Box 520, P. O. Baltimore.

Reliable Dry Goods House.

If you want Silks, Black Goods, Dress Goods, Hosiery or Dry Goods of any kind below the market prices, and wish to have the advantage of all the great trade sales, and of losses made by importers, send your orders or write for samples to B. F. Dewees, 1124 (formerly of 725) Chestnut street. They send out thousands of samples and fill orders daily from all parts of the country.

Staunton (Va.) Vindicator Office.—Dr. C. W. Benson:—We lose no opportunity to recommend your Celery and Chamomile Pills to our friends for Neuralgia and Sick and Nervous Headache. They act like a charm with us. Tinsley & Morton.

Pennsylvania trade supplied by Johnston Holloway & Co., French Richard & Co., Bullock & Crenshaw, of Philadelphia.

Enjoy Life

What a truly beautiful world we live in Nature gives us grandeur of mountains, glens and oceans, and a thousand means for enjoyment. We can desire no better when in perfect health; but how often do the majority of people feel like giving it up disheartened, discouraged and worried out with disease, when there is no occasion for this feeling, as every sufferer can easily obtain satisfactory proof that Green's August Flower will make them as free from disease as when born. Dyspepsia and Liver Complaint is the direct cause of seventy-five per cent of such maladies as Billiousness, Indigestion, Sick Headache, Costiveness, Nervous Prostration, Dizziness of the Head, Palpitation of the Heart, and other distressing symptoms. Three doses of August Flower will prove its wonderful effect. Sample bottles, 10 cents. Try it.

We ask the attention of our readers to the advertisement in another column of Seth S. Hance's "Epileptic Pills." These pills are not a new thing, but are well known to the public, and are an efficient and reliable remedy, and we recommend a careful perusal of the certificates and testimonials from persons who have been benefitted by their use.

Nature's Remedy. VEGETINE The Great Blood Purifier

Druggists' Report.

Dear Sir.—We sell your Vegetine and find it to be good for the complaints for which it is recommended. It is a good medicine. We have many calls for it.

H. F. WHITHERSPOON & CO.,
Druggists and Apothecaries,
Dec. 27, 1877. Evansville, Ind.

Vegetine is acknowledged by all classes of people to be the best, and most reliable blood purifier in the world.

Vegetine is Sold by all Druggists.

FITS!

FITS! FITS! FITS!

CURE OF EPILEPSY; OR, FALLING FITS, BY HANCE'S EPILEPTIC PILLS.

Persons laboring under this distressing malady will find Hance's Epileptic Pills to be the only remedy ever discovered for curing Epilepsy or Falling Fits.

The following certificates should be read by all the afflicted; they are in every respect true, and should they be read by any one who is not afflicted himself, if he has a friend who is a sufferer, he will do a humane act by cutting this out and sending it to him.

A MOST REMARKABLE CURE.

Philadelphia, June 28, 1867.

Seth Hance, Baltimore, Md.—Dear Sir: Seeing your advertisement, I was induced to try your Epileptic Pills, I was attacked with Epilepsy in July, 1861. Immediately my physician was summoned, but he could give me no relief. I then consulted another physician, but I seemed to grow worse. I then tried the treatment of another, but without any good effect. I again returned to my family physician, was cupped and bled several times. I was generally attacked without any premonitory symptoms. I had had from two to five fits a day, at intervals of two weeks. I was often attacked in my sleep, and would fall wherever I would be, or whatever be occupied with, and was severely injured several times from the falls. I was affected so much that I lost all confidence in myself. I also was affected in my business, and I consider that your Epileptic Pills cured me. In February, 1866, I commenced to use your Pills, and only had two attacks afterward. The last one was April 5, 1866, and they were of a less serious character. With the blessing of Providence your medicine was made the instrument by which I was cured of that distressing affliction. I think that the Pills and their good effects should be made known everywhere, that persons who are similarly affected may have the benefit of them. Any person wishing further information can obtain it by calling at my residence, No. 936 North Third Street, Philadelphia, Pa. William Elder.

THERE IS A CURE FOR EPILEPSY.

The subjoined will answer.

Grenada, Miss., June 30.

Seth S. Hance—Dear Sir: You will find inclosed five dollars, which I send you for two boxes of your Epileptic Pills. I was the first person who tried your Pills in this part of the country. My son was badly afflicted with fits for two years. I wrote for and received two boxes of your Pills, which he took according to directions. He has never had a fit since. It was by my persuasion that Mr. Lyon tried your Pills. His case was a very bad one; he had fits nearly all his life. Persons have written to me from Alabama and Tennessee on the subject, for the purpose of ascertaining my opinion in regard to your Pills. I have always recommended them, and in no instance where I have had a chance of hearing from their effect have they failed to cure. Yours, etc., H. Gay.
Grenada, Yalabusha Co., Miss.

ANOTHER REMARKABLE CURE OF EPILEPSY; OR, FALLING FITS, BY HANCE'S EPILEPTIC PILLS.

Montgomery Texas, June 20, 1867.

To Seth S. Hance:—A person in my employ had been afflicted with Fits, or Epilepsy, for thirteen years; he had these attacks at intervals of two to four weeks, and often across several in quick succession, sometimes continuing for two or three days. On several occasions they lasted until his mind appeared totally deranged, so that he would not continue for a day or two after the fits had ceased. I tried several remedies prescribed by our resident physicians, without success. Having seen your advertisement I concluded to try your remedy. I obtained two boxes of your Pills gave them according to directions, and they effected a permanent cure. The person is now a stout and healthy man, about 30 years of age, and has not had a fit since he commenced taking your remedy, and would like every one who has fits to give it a trial. B. L. DeFassan.

STILL ANOTHER CURE.

Read the following testimonial from a respectable citizen of Granada, Miss.

Seth S. Hance, Baltimore, Md.—Dear Sir:—I take great pleasure in relating a case of Spasms or Fits, cured by your invaluable Pills. My brother, J. J. Ligon, has long been afflicted with this awful disease. He was first attacked while quite young. He would have one or two spasms at one attack at first, but as he grew older they seemed to increase. Up to the time he commenced taking your Pills he had them without any premonitory symptoms. He would fall wherever he was, and would be severely injured by the fall, or else would be perfectly senseless, prostrating him, body and mind. His mind had suffered seriously, but now, I am happy to say, he is cured of these fits. He has enjoyed fine health for the last five months. His mind has also returned to its original brightness. All this I take great pleasure in communicating, as it may be the means of directing others to the remedy that will cure them.

Yours respectfully etc. W. P. Ligon.

Sent to any part of the country, by mail, free of postage, on receipt of a remittance. Address SETH S. HANCE, 108 Baltimore St., Baltimore, Md. Price, one box, $1, two, $5; twelve, $27.

☞ Please mention where you saw this advertisement.

Established 1833.

MERCHANT'S

GARGLING OIL LINIMENT.

Yellow Wrapper for Animal and White for Human Flesh.

IS GOOD FOR

Burns and Scalds,	Spraine and Bruises,
Chilblains, Frost Bites,	Stringhalt, Windgalls,
Scratches or Grease,	Foot Rot in Sheep,
Chapped Hands,	Foundered Feet,
Flesh Wounds,	Rough in Poultry,
External Poisons,	Cracked Heels,
Sand Cracks,	Epizootic,
Galls of all kinds,	Lame Back,
Sitfast, Ringbone,	Hemorrhoids or Piles,
Poll Evil,	Toothache,
Swellings, Tumors,	Rheumatism,
Garget in Cows,	Spavins, Sweeney,
Cracked Teats,	Fistula Mange,
Callous, Lameness,	Caked Breasts,
Horn Distempers,	Sore Nipples,
Crownscab, Quittor,	Curb, Old Sores,
Foal Ulcers, Fever,	Corns Whitlows,
Abscess of the Udder,	Cramps, Boils,
Swelled Legs,	Weakness of the Joints,
Thrush,	Contraction of Muscles.

Merchant's Gargling Oil is the standard Liniment of the United States. Large size, $1; medium, 50c.; small, 25c. Small size for family use, 25c. Manufactured at Lockport, N. Y., by Merchant's Gargling Oil Company.

JOHN HODGE, Sec'y.

LANDRETHS' SEEDS

ARE THE BEST.
D. LANDRETH & SONS,
21 & 23 South SIXTH St., Philadelphia.

Mack's New and Improved School for Parlor Organ—Sent by mail for $2.50—has the most thorough system of instruction and an elegant collection of vocal and instrumental melodies. Lee & Walker, 1113 Chestnut St., Philad'a.

Representative Business Houses OF PHILADELPHIA.

TYPE FOR ALL, at the Lowest Prices. THE NATIONAL TYPE CO. Catalogue, six cents. PHILADELPHIA

Cheapest Toy Lantern to Best Stereopticon: MAGIC LANTERN 60 VIEWS $25. Catalogue Free! Outfits Wanted! Great Needham Musical Marvel. THEO. J. HARBACH 809 Filbert St., Philada., Pa.

EYE GLASSES, Barometers, Telescopes, Spy Glasses, Spectacles, Thermometers and Opera Glasses AT GREATLY REDUCED PRICES. R. & J. BECK, Manufacturing Opticians, 921 CHESTNUT ST., PHILA. Illustrated price catalogue of 135 pages mailed to any address on receipt of three stamps.

INTERNATIONAL EXHIBITION. OPEN EVERY DAY. MAGNIFICENT DISPLAY OF EXHIBITS. MACHINERY IN MOTION. SPECIAL ATTRACTIONS ADDED EVERY DAY. GRAND SACRED MUSIC Every Sunday. PROMENADE AND DRESS HOPS WEDNESDAY EVENINGS. Under the direction of Prof. D. C. CARPENTER, when the building will be lighted with the NEW ELECTRIC LIGHT. Recitals on the GREAT ROOSEVELT ORGAN, and Solos on the Cornet by the celebrated performer, Mr. WM. NORTHCOTT, every afternoon. ADMISSION during the day, Adults, 15 cents; Children, 5 cents. EVENINGS, 25 cents.

GEESE FEATHERS, MATTRESSES, BLANKETS, COMFOR