

POTATO-BUG ENEMIES.—Prof. Riley exhibited a specimen of the Colorado Potato-beetle (*Doryphora 10-lineata*) that was so completely covered with a mite parasite belonging to the *Gamasida*, and apparently the *Gamasus coleophorae*, that the point of a needle could not be placed on any part of the beetle's body without touching one of the parasites. He estimated that there were over eight hundred of the mites, and they had killed their victim. Aside from the toad and other reptiles, the crow, rose-breasted grosbeak, and domestic fowls among birds which prey on the potato pest, he had, in his reports, figured or described no less than 23 insect enemies that attack and kill it. Only one of these is a true parasite, and the mite exhibited made the second, or just two dozen insect enemies in all.—*Proceedings of the St. Louis Academy of Science, June 13.*

HANDY HELPS.—There are some things which a farmer wants but once a year, and there are others which he always should have ready. No tool comes oftener into play than a hammer, for example. Every new or old wooden tool should be oiled. Have a barrel or keg or can of crude petroleum always ready in your shop. Keep everything well oiled. The crude oil goes right into the pores, and makes any wood durable as cedar. Keep it constantly on hand. Again, save every piece of rope, cord, and leather strap. They will be useful for repairing. The next time you go to a hardware store, get fifty cents or a dollar's worth of copper wire and copper straps. Copper wire is a great deal better than iron wire, because it is so much more flexible, like cord, and copper straps are capital for repairing any fracture in woodwork, it may be so easily wrapped around, or nailed on with small nails. Then again, always have a pound or two of wrought or annealed nails of different sizes, that will clinch readily when you use them. (You will remember that in driving these or any other nails into hard wood, they will go in more easily by first touching the points with a little grease, but do not let the grease get on the face of the hammer.)

FARM PRIVIES.—We all know how difficult it is to manage privies in cities, as well as at the hotels as those connected with private residences. But there should be no difficulty in the country where there is generally plenty of land. Privies are very easy to manage there, but how seldom do we find them so. Generally speaking a country privy is the most offensive thing about the premises, worse even than a filthy hog-pen, and more deleterious to health. Yet there is nothing more simple to arrange properly, that is to make it free from all unpleasant odor. Always place the building as far away from the house as it can conveniently be done. Let it be of frame and where the ground will not admit of its being lower in the rear, it should be elevated about two steps. Underneath the seats place a tight box of sufficient size to receive the droppings. This box should be movable on smooth skids, so that when the box is full it can be easily drawn out, emptied and returned again, but before being used it should be sprinkled with dry earth, which is the best, as being a great deodorizer, and after each time the privy is used a small shovelful of soil should be thrown in from a box or vessel placed in the privy. This will destroy nearly every trace of offensiveness—he easily kept clean, and all apprehension of fevers be allayed, provided the sinks and drains from the dwelling are kept in the same condition, and the hog-pens are carefully attended to and far enough from the house.

REPAIRING LEAKY CELLAR WALLS.—The repairing of leaky cellar walls should never be delayed, since the crevices are continually widened by the water soaking through. Cement, tar, and water-glass are the best materials for the purpose, but the last two can only be used at a time when the cellar is dry, as in winter, perhaps even in September, or after drying and airing it in winter by artificial means. When nearly dry, the leaky portions of the wall can readily be recognized, and should be marked with charcoal. Holes and cracks should first be filled with hydraulic cement. The marked places, when dry, should be coated three to four times with a solution of 1 volume of commercial water-glass in 2 of water, and finally, after becoming perfectly dry, with a solution of 1 volume of water-glass in 1/2 a volume of water. Instead of the solutions of water-glass, tar, kept quite liquid by heating, may be laid on a number of times. If cement is to be employed, the marked portions of the wall should be cut out wedge-shaped and carefully filled with a cement, rather thickly made up with 1/2 sand. If the cellar cannot be dried, the most places should be cut out somewhat deeper (4 to 6 inches), and filled with cement, by placing a tube of any material, about as thick as a finger, in the middle, and packing the cement in tightly around it, and, if necessary, holding it in place with a board until it hardens, while the water escapes through the tube without exerting any pressure upon it. After twenty to thirty days the opening may be plugged up.

A GORILLA IN LIVERPOOL.—The British and African Steamship Company's steamer *Loanda* entered the Mersey from Africa on Tuesday. Amongst the passengers were a party of Continental gentlemen, who had been on a tour of exploration in Africa, and who returned in the *Loanda*. They were fortunate enough to obtain, while in the interior, a baby gorilla, which they brought with them. Mr. Cross, the naturalist in Oldhall Street, who met the vessel on its arrival to take possession of a number of African birds and curiosities which had been consigned to him, at once noticed the gorilla, and did not hesitate to offer a cheque for

£500 for it, but its possessors, assessing it at a much higher value, declined the offer, which was subsequently repeated, but without success. The travellers, having landed, drove with the gorilla to one of the principal hotels, from which they start for Berlin. The presence of the gorilla was kept intentionally secret, but in the course of the day a number of gentlemen, who had heard of the interesting specimen, visited the hotel, and had their curiosity rewarded by a careful examination of the "baby." The gorilla had the run of two rooms occupied by the travellers, and its harmless antics were highly entertaining to visitors. Although already armed with formidable teeth, it did not attempt to make any savage use of them, though an occasional playful grip on the leg of a visitor gave a realistic idea of what the power of its jaws would be if it lived to grow much bigger. Its present height is about three feet, and it readily embraces in its man-like arms any one who will allow it to do so, climbing the knees like a child about three years of age, and being fond of similar attention. It is treated by its possessors in all respects like a child, and with anyone who, like Mr. Cross, showed a familiarity in handling it, the gorilla was perfectly "at home."

DISINFECTANTS.—The best known disinfectants are chlorido of lime, Condy's fluid, chlorido of zinc, carbolic acid, camphor, carburate of camphor, bisulphate of soda, green copperas, Labarraque's solution of chlorido of soda, salicylic acid. When doctors disagree, who shall decide? Either of the above are efficacious, and objectionable to some of the medical profession. But what chemical substances are truly disinfectant? According to the eminent chemists, Dumas, Chevreuil and Tasse, certain chemical substances are serviceable in neutralizing unpleasant odors, while other chemicals are required in order to arrest the fermentation or decomposition of the decaying substances which produce the epidemic, influenza, and bad odors. For example, while chlorine, chlorido of lime, zinc, and nitrous fumes are well known neutralizers of the odors of sulphureted, carbureted, phosphoreted, hydrogen or ammonia, they have no power to arrest the decomposition whereby these odors are produced. This, moreover, is accomplished readily by carbolic acid, phenyl creosote, and especially carbolate of camphor, which act like tannin on all albuminous substances and prevent further decomposition. But carbolate of camphor has a double action. While it tans dead muscle upon contact, it kills every living spore it touches, and thus, what is now believed to be the active principle of all contagious diseases is rapidly attacked and destroyed, and is therefore admitted to be the great scavenging principle of nature—a most powerful cleansing, neutralizing remedy. The combination and preparation, in a suitable fluid form, of the properties of carbolate of camphor, afford the means of bringing to bear, at any particular time and place, this most remarkable and effective agent in arresting and preventing contagious diseases. From dead bodies all chance of infection will be prevented and all effluvia destroyed by wrapping them in sheets saturated with a solution of carbolate of camphor.

Books and Catalogues Received.

THE FARMER'S VETERINARY ADVISER.—Professor Law of Ithaca, N. Y., has just published a much needed book, the "Farmer's Veterinary Adviser," which is now before us. It is an excellent work, tersely but plainly written, and treats upon almost every ailment of domestic animals in a manner that can be understood by any farmer of ordinary education. Prof. Law is one of the most thorough of veterinary scientists of the day, and we are glad that he, so well qualified, should have undertaken the task of instructing farmers upon some points that it is necessary for them to know. Many a valuable animal is sacrificed and many a slight and arrestable illness becomes dangerous and chronic because in its first stages the farmer does not know how to treat it and the aid of a qualified veterinarian is not at once attainable. For these reasons no farmer's stock in trade is complete without a work on veterinary surgery, and we know of no work that fills the bill so well as this one of Prof. Law. Its price is \$3.00, and it is published by the author.

LIFE is the vibration received by all animated beings from the Creator's breath—a taper whose luminous or flickering light may be extinguished by a gentle wind or firmly brave the fiercest blast.

Life is caloric, electricity and phosphorus acting upon a mass of bones and softer solids, diffusing warmth, motion and animation, activity of muscle, of nerve and of intellect.

As caloric, electricity and phosphorus are induced and supplied by Fellows' Compound Syrup of Hypophosphites, it only requires the administration of this successful invention to fortify the feeble, give sprightliness of motion to the torpid, and bring about a condition which not only secures tenaciousness of life BUT MAKES LIFE REALLY ENJOYABLE.

CONTENTS OF THIS NUMBER.

AGRICULTURE:	PAGE
Composting in Fall and Winter	141
Conserving Pasture	141
Hand Corn-Shell (Ill.)	141
Leaves from Farming Experience—No. 11	111
Superphosphate and Top Dressing	1-2

The Double Furrow Plough	142
Draining	142
The Side Hill or Swivel Plough (Ill.)	142
Oats and Barley, Comparative Exhaustion by	142
Manures, Application of	142
Stack, The Middle of	142
Gate, A Good	142
Prickly Comfrey (Ill.)	142
Laying out a Farm	142
Indigenous Forest Trees and Shrubs of Ontario	144
Manures for Root Crops	144
Winter Wheat	144
Canada Thistle	144
Hay, Salting	144
Hay Fork, Using the	144

HORTICULTURE.

Strawberries, What Sorts to Plant	145
Roots Growing for the Farm (Ill.)	145
Insects, New Treatment for	145
Potato Planting in Autumn	145
Plum Knot	145
Cabbage, Non Heading	145
Phylloxera	146
Winter Berry (Ill.)	146
Currant Worm	146
Black Slugs	146
Pear Blight, Linseed Oil for	146
Protecting Melons	146
Apple Orchards, Cultivating	146
Tomatoes, Pruning	146

LIVE STOCK:

Treatment of Young Horses	147
Rams and Ewes, Selection of	147
Wool, Packing	147
Feeding Values	147
Thorough-bred Stock	147
Grades, Experimenting with	148
Sheep Treatment in California	148
Horse, Comfort of	148
Corn and Pork	148
Hay or Meal for Cows	1-8
Horse Feeding at Cirencester	148
Shorthorn, Feed for	148
Balky Horses	148

THE DAIRY:

Salting the Milk in Cheese-Making	149
The Annatto Plant	149
Souring of Milk in Thunder Storms	149
Butter Packing	149
Gilt-Edged Butter	149
Cream, Something About	149
Butter, Novel Method of Making	149

VETERINARY:

Laminitis, Founder	150
Inflammation of Bladder in Sheep	150
Calving Time, Hints for	150
Ticks, Killing	150
Saddle Galls	150
Bishoping Horses	150
Foot Rot	150

THE POULTRY YARD:

Gravel or Sand for Fowls	151
Marking Eggs	151
Geese	151
Helping Chicks out of the Shell	151
Eggs, How Increased	151
Cooked Feed	151
Eggs Preserving (2)	151
Turkey Incubators	151

THE APIARY:

Timely Hints	151
Changing Situation of Bees	151

GENERAL MATTERS:

Seed Wheat, The Lesson of the Season	152
Farm Machinery, Care of	152
Sanitary Effects of Sewage Farming	152
The Crops	152
Lightning Rods	153
Lightning Rod Swindles	153
Drinks for the Harvest Field	153
Farm Horses and Town Stables	153
Swindling by Pretended Purchase of Farms	154
Leucania Albicincta	154
Phytocoris lineolaris	154
Charbon	155
Tomato Leaves, Singular Property of	155
Hops, Picking and Drying	155
Hand Hoing Matches in Scotland	155
Angora Goat	155
Coffie Dog Trials	155
Sand for Building Purposes	156
Grapes, Value for Food	156
Fish Culture in Canada	156
Cutting Flowers	156
Horses, Way to Drive	156
Why Soles Fail	157
Strange Fight	157
The Old Wooden Plough	157
Food Facts	157
Eating Too Much	157
Drowned Persons, Resuscitating	157
Position in Sleeping	158
Rats Made Useful	158
Stock Notes	158
Clydesdales for Canada	158
New Granges	159

CORRESPONDENCE:

Rust	159
Clover and Nitrogen	159
Concrete	159
Incubation	159
Oats to the Acre	159

MISCELLANEOUS:

Homing Pigeons at Sea	159
How to Treat Crows	159
The Toad	159
Working Dogs	159
Disinfecting Carriages	159
Boils, Cure for	159
Poison, Remedy for	159
Colors and Light	159
Burglar Proof Doors	159
Potato Bug Enemies	160
Handy Helps	160
Frames, Farm	160
Cellar Walls, Repairing	160
Disinfectants	160