

A NEW MULCH FOR GRAPES.—A correspondent of the *Courier and Advertiser* speaks very highly of leached ashes and cut grass as a mulch for grapes. First mellow the soil; spread the grass several inches thick; sprinkle with water, and apply the ashes. Grapes thus treated have grown luxuriantly all through the recent drought.

QUICK GROWTH.—"The new early peas, 'Ring-leader,' sown on the 12th of February, were this week harvested, fully ripe, at Messrs. Sutton's farm, London Road, Reading." So says the *Mark Lane Express* of July 1st. This would be deemed terribly slow growth here, and may illustrate the difference between the British and Canadian climates.

Entomology.

Exhibition of Insects at Paris.

An exhibition of a novel and interesting character is to be held during the present month in the Palais de l'Industrie, at Paris. It is to be confined entirely to insects in their practical relation to Arts and Agriculture, and is intended to include the illustration of the propagation of useful insects, methods of curing or preventing disease, and economical management, and the history of destructive insects, with means of counteracting their ravages. Noxious insects are to be classified according to the plant on which they feed, and not according to their scientific order. The exhibition is to open on the 1st and close on the 31st of August, and is under the management of Dr. Boisduval, M. Guerin-Meneville, and other entomologists and scientific agriculturists. The following are the principal heads of classification:—**First division**—Useful Insects. 1st class.—Silk-producing insects. 2nd class.—Insects producing honey and wax. 3rd class.—Insects used in dyeing and for colour. 4th class.—Edible insects, crustacea and mollusks. 5th class.—Insects employed for medical use. 6th class.—Insects used as ornaments. 2nd division.—Destructive insects. Ten classes, comprising those that attack cereals, the vine, plants used in industry, forage, vegetable and ornamental plants, fruit trees, forest trees, timber used for building, truffles and fungi, dry organic matters and, lastly, parasites of man and domestic animals. The third division comprises three classes, carnivorous and parasitic insects—those that destroy chrysalids and insectivorous animals, birds and reptiles. Fourth division.—Insects and other animals destructive of mollusks, and notices respecting edible snails (!) and the benefit that cultivators may derive from them. Fifth division.—Optical instruments for entomological purposes, and special apparatus connected with the rearing or destruction of insects. Printed or written memoirs are also to be admitted, even without specimens of the insects to which they refer. It is also intended that there shall be conferences during the exhibition on various subjects connected with entomology. Such an exhibition, if well carried out, must surely be productive of great benefit to the agricultural interests of France, and might well be imitated elsewhere.

Specimens reared from Larvæ or Pupæ.

From time to time we have endeavoured to rear specimens that have been sent to us, in order to discover what their perfect state is like, and thus learn their name and whole history. To obtain satisfactory results is by no means an easy matter, as a day's neglect will often prove fatal to the caterpillar, and this, from want of proper food, or absence from home, cannot always be avoided, some, too, die during the winter, and never emerge from their pupa state; and others are destroyed by parasites. The following is a brief account of our limited success.

STRAWBERRY WORMS. In last year's volume (C. F.

Aug. 1, 1867, p. 238; do. Oct. 15, p. 311) we referred to some specimens found feeding on strawberry-leaves, and sent to us by Mr. Arnold, of Paris, Ont.: these we have entirely failed in rearing, much to our disappointment.

FALL WEB-WORM ON APPLE TREES. Last year we received some caterpillars from a correspondent at Halloway, County of Hastings, which we stated were specimens of this insect, the we had for some time, till at length they turned into the pupa state, enclosing themselves in a slight hairy cocoon. On the 20th of June, 1868, a moth emerged from one of these cocoons and during the following week many more came out, they were all, as we expected, specimens of the Fall web-worm (*Hyphletia textor*, Harris) and were the first that we had ever seen. We also raised some specimens of the same insect from caterpillars infesting our own trees. Last year we stated that "they have not, that we are aware, been before recorded as occurring in this country;" we have lately been informed by Mr. Sumner and Mr. Reed, of London Ont., that they have known and reared the insect during two or three years past, though they never recorded its occurrence. During the last few days we have noticed the webs of this insect upon our apple trees, this being the time of year when they first make their appearance; we would strongly recommend our readers to look over their orchards and cut off and destroy any of the webs of these destructive creatures that they may find.

BALSAM-FIR SAW FLY. The correspondent mentioned above also sent us some cocoons of the larvæ that he found injuring his Balsam-fir trees (C. F. Aug. 1, 1867, p. 238, do. Sep. 2, p. 269). From these only one solitary specimen has come out, it is a black-bodied saw fly with beautiful iridescent wings, but we have not yet determined its name.

PROMETHEA EUPHEON MOTH.—In our issue of the 15th of June of the current year (page 172), we noticed the receipt of two singular cocoons from a lady at Mimico, and we gave an illustration of the large moths we expected them to produce. About ten days after the publication of our notice, two handsome female Promethea moths emerged from the cocoons, similar to the lower figure in our illustration; they now form fine additions to our collection.

THE WHEAT MIDGE.—In June last we received a lump of clay filled with orange larvæ from Mr. Belch, of the St. Mary's *Argus*, and in our issue of the 1st of July we published Mr. Belch's letter, with the result of our examination of the specimens, stating our belief that they were the larvæ of the wheat-midge. During the succeeding fortnight an immense number of the winged midge emerged from the clay, and, being unable to escape through the gauze lid of the box in which they were enclosed, almost covered the surface of the clay with their dead bodies. We hope to hear what effect they had upon the crops in the neighbourhood from which our specimens were brought, but we fear that the account will not be a very cheering one.

THE PRIVET SPHINX CATERPILLAR.—In our last issue we noticed the receipt of one of these caterpillars, and stated that, to our surprise, it had gone thus early into the chrysalis state, from which we did not expect it to emerge till next year. To add to our surprise, on the evening of the 8th of August, we heard something flying up and down our study, which, at first, we took to be a bat, but as the noise of its wings was "wish-a-wish-a-wish" instead of the "flutter-flutter" of a bat, we knocked it down, and found it to be a fine moth (*Sphinx cnicæ*) which had come out of the above mentioned cocoon.

CHAD FLY.—We have received, but not in time for more than this acknowledgement, a communication from Mr. Tait, of Beverley, accompanied by a specimen of a singular and "ferocious" looking insect. It is the Chad Fly. We have placed the specimen in the hands of our artist, and hope to give an illustration and some account of the species in our next issue.

The Household.

Drowning.

In a recent number of this journal we gave a few "hints for emergencies." We propose occasionally, without repeating the heading, to add such suggestions as may appear useful and seasonable, as a guide to the inexperienced. Among the most serious accidents, in connection with which any of us may be suddenly called upon to render aid, there is one that has become recently very frequent, and in which assistance is too often speedily unavailing—the accident of drowning—an instance of which is recorded in nearly every newspaper that we open.

In these melancholy catastrophes, unless the unfortunate individual is quickly rescued from his peril, there is very little hope of restoring animation. A few minutes' complete submersion under water is sufficient to extinguish life. And yet, as we every now and then hear of well attested instances of resuscitation after a comparatively long submersion, it is well, when there is any ground for hope at all, to use every means in our power to recover the drowned. One chief reason of the discrepancy of statement that we have met with in regard to the length of time that a person may be submerged and yet recover, is owing to the different modes of death in drowning. In some instances the person faints almost immediately on the occurrence of the accident; and in these cases animation may be suspended for a much longer period, without proving fatal, than when no such arrest is given to the full activity of the vital functions, and suffocation, neither modified nor complicated, is the cause of death. The appearance of the face will often indicate whether fainting occurred or not. In some drowned persons the countenance is remarkably pale, in others it is livid and swelled. The first would most probably be the result of syncope or fainting, and would leave more hope of recovery than the latter appearance. Still, after five minutes of complete and uninterrupted submersion, very little expectation could be entertained of restoring the breathing and animation.

In the treatment of drowned persons, the greatest gentleness and care should be observed. It is a common opinion that the lungs are filled with water, which is the chief cause of suffocation, whereas usually very little water enters the lungs, the spasmodic effort caused by the contact of water with the glottis preventing the entrance of fluid into the windpipe. Nothing is more foolish, therefore, or more likely to do harm, than the practice of holding the drowned person up by the heels, or with the head in any way low, or rolling the body about, or any other of the rough usages resorted to, with a view of emptying the lungs of water. There are three principal objects to be kept in view in our treatment of the drowned. First, to restore the breathing—Second, to restore or keep up the animal heat—and Third, to rouse dormant animation by stimulants.

The two first objects should, as far as practicable, be attended to immediately; the wet clothes removed, and dry blankets or dry coats substituted; but no time should be lost in the first and most essential part of the treatment, namely, efforts to restore the breathing. First try the following plan. Place the patient on the ground with the face downward, and one of the arms under the forehead, in which position the tongue will fall forward, so as not to obstruct the entrance of air, and fluid from the mouth and throat will naturally escape. If breathing does not immediately commence, move the body on the side, a little over towards the back, apply harts-horn, snuff, or tickle the throat with a feather, and dash a little cold water on the face. If these measures have no effect, replace the patient in the former position, with the face downwards, supporting the chest upon a folded coat or other garment. Then turn the body back again gently on the side, and a little