which is itself made of paper, additional paper slides should be placed to receive the dung, and the worms must not be kept any longer in the second and third drawers, so soon as the litter alluded to becomes so large as to stick in the cat­gut meshes, without falling through upon the paper slides beneath. By means of these additional slides, this litter may be removed any time the worms are fed, without the necessity of handling the latter. When the fresh food is placed in the drawers they will speedily creep upon it, and any remnants of old leaves can be picked up by a pair of small pincers.

Silk worms ought to be fed with regularity at least four times a-day ; additional or intermediate meals being given when any extraordinary appetite is manifested. The du­ration of the lives of these animals depends, to a certain ex­tent, upon temperature and locality ; warmth, well kept quarters, and abundance of food, being found to hasten the spinning process. All these things should be very sedu­lously attended to by those who rear silk worms in large quantities with a view to profit, time being so important an element in all commercial undertakings.

When the silk worm makes its first appearance, it is of a dark colour, and measures only one or two lines in length ; after the lapse of eight days, it is attacked by a lethargic sickness, which will cause the heart of the young or inex­perienced breeder to despond, but he need fear no evil, for this is only an unavoidable symptom of the ordinary on­goings of nature. The creature is about to cast its skin, and for about three days it remains motionless, refusing food. On the termination of this period the old skin opens at the anterior end, the fore-legs are disengaged, and the new and delicately attired worm escapes forth, to enjoy it­self once more on pastures green, It had previously ex­uded a peculiar fluid, and had also, by means of a few silken strings (how provident is benign nature !) fastened down its old and useless coat, that it might not be dragged after it when the hour of delivery has arrived. This coat­ing is so complete, that even the skin which covers the eyes and teeth is thrown away. Immediately after this renewal, the body of the worm appears pale and somewhat wrinkled, the new coat being made full size to admit of future growth ; but the latter attribute speedily disappears. It feeds freely for five additional days, during which it grows to about half an inch in length, and is then seized by its second sickness, and again casts its skin. Then succeed other five days of feasting, in the course of which it increases to three quar­ters of an inch, when it sickens a third time, and acquires in a similar manner a third suit of clothes. Again five days of feeding ; again a removal of the outer garment, or a fourth casting of the skin. The caterpillar now measures from an inch and a half to two inches long, and for a continuous pe­riod of about ten days it eats voraciously, and increases greatly both in length and thickness. On the expiry of this last-mentioned period, it has attained the full stature of a silk-worm, being from two and a half to three inches long. Its desire for food abates, it nibbles and wastes its leaves, then ceases to eat, and becomes restless and uneasy, moving circularly from side to side, owing to some instinc­tive feeling of desire to secure a quiet haven in which to spin its silken shroud. Its colour is now of a palish green, with a mingling of a deeper hue. In the course of about twenty-four hours from the time of its having ceased to feed, the silky texture becomes abundantly supplied to its interior reservoirs ; the green colour disappears, the body becomes glossy, and somewhat transparent towards the neck. Previous to spinning, the general dimensions rather de­crease than otherwise, but greater firmness of substance is acquired.

When the desire to spin is thus unequivocally manifest­ed, art must come in aid of nature. Our own method for­merly was *(we* worked, however, in this department on a

narrow scale,) to supply our caterpillars with small twisted paper bags, open at one end, such as any old woman may use on a Saturday night to carry from the grocer’s her so­litary ounce of tea. Into each of these would creep a sin­gle caterpillar, and weave his golden woof incessantly, till the loved work was done. But those who rear extensively, supply their completed caterpillars with small twigs or branches of broom, heath, or any other brushwood, which happens to unite tenderness and tenacity.

Great attention must now be paid in regard to keeping up a warm temperature. The observations of a writer in the fifth volume of the Society for the Encouragement of Arts, amply illustrate this important point. He had suc­cessfully reared thirty thousand silk-worms, when in the be­ginning of July, just as they were about to spin, there came a chilly north-east wind, and many assumed the chry­salis state, without making any attempt to form a protecting covering. On examining these individuals, it was apparent that their silken reservoirs had been congealed by cold, so that the insects were unable to draw out the filaments in their usual slender state, their own capacity of movement and exertion being no doubt at the same time chilled. Even when they have commenced to spin, or have made some progress in their labours, they will cease if exposed to cold, and if the surrounding web is still of sufficient transparency, they may be seen lying idle and inactive in the interior of their cocoons. But if the temperature is raised, they will immediately resume their work. A heat as high as 70o is thought advisable at this time.

These beautiful silken coverings, or coc∞ns as they arc called, are generally completed in three or four days. They are commenced by the formation (among the twigs or in paper bags, as the case may be) of a loose decomposed structure of an oval form, made of what is denominated *floss* silk. Within this, in the course of the ensuing days, the firmer cocoons are completed. These are rounded somewhat oval balls, varying in tint, but usually more or less of a golden hue, though sometimes white. Those of a bright yellow hue yield the greater weight of reeled silk, but as the finer colouring substance is contained chiefly in the gum which is boiled out before weaving, less advantage is reaped by the grower. Raw silk, of a pale colour, is moreover preferred, on account of its better reception of certain dyes. The included worm, having finished its la­bour, casts its skin once more, but never appears again as a caterpillar, as it now assumes that rounded shapeless form termed *chrysalis.* The cocoons may be selected for reeling in about a week, and then comes the ungrateful and un­gracious task of destroying the peaceful tenants of the tomb. This is variously accomplished, either by exposure (in sunny climates,) for some hours to unclouded solar light and heat; by steam; or by placing the cocoons in a tempe­rature corresponding to that of an oven from which loaves have just been withdrawn after being baked.

If not killed, the chrysalis remains in its naturally dor­mant state for a longer or shorter time, in accordance with the clime in which it has had its birth. In eastern coun­tries this is not more than eleven days; in the most south­ern parts of Europe from eighteen to twenty ; in France about three weeks; in England, if unaided by artificial means, about a month. After these respective periods, ac­cording to climate, whether natural or acquired, the perfect moth emerges, and the reason for destroying the chrysalis is this, that in emerging *she* (the moth) destroys the silk, un­der the impression probably, that she may do what she likes with her own. A few, however, are of course spared for the sake of a future progeny, sound coc∞ns being select­ed, and in equal numbers as to sex, those containing the males being sharper or more pointed at the ends.

Such as have been killed for reeling are, before the com­mencement of that process, placed in warm water, so that