

the ground, and only dug up as they are wanted; but if they occupy space that will be useful to you, get them up and serve them as potatoes, keeping them dry, or in sand.

The old cucumber and melon frames also can be used for mushrooms, as soon as your fruit is got out of them. We recollect, also, that in many places last winter the parsley crop was cut off by the severity of the weather. This year, therefore, we have determined to provide against the recurrence of such a mishap, by having a few roots put into pots and stowed away in our greenhouse or pit, so that we shall have some to fall back upon.

But the flower garden and window display must not be forgotten in our anxiety about the fruit and vegetables. This is the month for getting in all our bulbs for the spring. Put in plenty of crocuses and let them be in little patches, as they look far better thus when in flower; be careful too about the colours, and do not get them mixed. The hyacinth-bulbs should be put in some six or eight inches apart. See also to the narcissus-roots, and get them in at the same time, while any perennials that were sown during the summer had better now be planted out in the place that you want them to bloom in. The gravel walks and lawn should now be got into good order for the winter. It is, of course, during this month that we use our scythe or mowing machine for the last time in the season. Perhaps some of us are getting to think that a mowing machine is an expensive luxury, as it requires some repair and attention every year: the chain gets out of order, or the knives want grinding, or it won't act properly; but perhaps there would be less cause for complaint if a little more care were taken of the mowing-machine in this very month of October, when we put it away in the shed or tool-house for six months. It is, perhaps, wheeled in and forgotten, and left to shift for itself. Have it, then, thoroughly well greased when put away; see to the machine from time to time during the winter; keep the rust down by renewing the grease when necessary, and keep it in a dry place. This is the

most practical way of avoiding an ironmonger's bill for machine repairs in the following April.

The greenhouse alone will soon now be the only source from which to supply our windows with flowers, but probably when we were taking up our bedding-out plants we selected a few large or, at any rate, shrubby geraniums, or perhaps a fuchsia that seemed disposed to go on blooming, and have already put them in our window. If we had some flowers that had been blooming in the open pots during the summer, it would be better to choose some from this lot for our windows, rather than to take up and pot off some from the beds. Once in the window, give them all the light you can, and only water them moderately, and let your myrtles and evergreens be as near to the window as you can.

A few words must, however, be said about the greenhouse itself, for it is shortly here, as much as anywhere, that we shall hope to be spending our gardening-time during the next few months. Do not be alarmed if, when the first, and perhaps a sudden frost comes outside, your thermometer falls as low as 35° at night. Much, and perhaps nearly all of your stock inside is half hardy—camellias, even, do not mind a degree or two of frost, and if you get too fond of making up a fire in your stove, the camellia-buds will drop off. They cannot stand heat, so put them in the coldest part of your house. Give air daily, and in a long run of damp or muggy weather, have a fire and the lights open during the best of the day, to dry your plants. Be sparing with the water-pot, for damp—in a crowded house more especially—is quite as much your enemy as frost. Our chrysanthemum display is, of course, our next hope. A little weak manure-water will benefit these, and as they are now about to expand their flowers, give them plenty of light and air. Nor let us forget once again to remind our readers that the water used in the greenhouse should be of the same temperature as the house.

Summer, then, is gone, but not necessarily our work, as even dreary November, the month for important alterations, will probably reveal to us.

THE ART OF WOOD-WEAVING.

THE manufacturing district of the Austrian Empire lies in the north of Bohemia, where miniature Birmingham and Manchesters are congregated together by the dozen, and hundreds of thousands of "hands" are actively and ceaselessly employed. For miles the high road is bordered by houses, chiefly one-storeyed wooden buildings with roofs of thatch or shingle, where the rattle of looms may be heard without intermission from early dawn till late at night.

In some of the towns numberless chimneys pour forth volumes of black smoke by day, while by night the windows of the large factories glow with light as if there were a general illumination.

One of the busiest of these little towns and villages is Ehrenberg, which lies close to the Saxon frontier, and is distinguished from the rest by a peculiar industry which appears to be carried on in only two other places besides. The long straggling village, which is divided into Upper, Lower, Old, and New, has a population of more than 6,000 souls, and is most pleasantly situated in a valley watered by the little river Mandau which rises close by, the wooden houses being half buried in fruit-trees, limes, or well-grown oaks.

The peculiar industry for which Old Ehrenberg is distinguished is wood-weaving—*sparterie*-work, as it is called—which was introduced something more than a century ago by a carpenter named Anton Menzel.

The strange thing is that an industry capable of so much development should, till within the last few years, have remained at precisely the same stage as when first introduced, and actually at one time ran some danger of dying out altogether. The Ehrenbergers, in fact, contented themselves for a long period with simply weaving the wood into a fabric to be made up and used as a foundation by other and more skilled workmen.

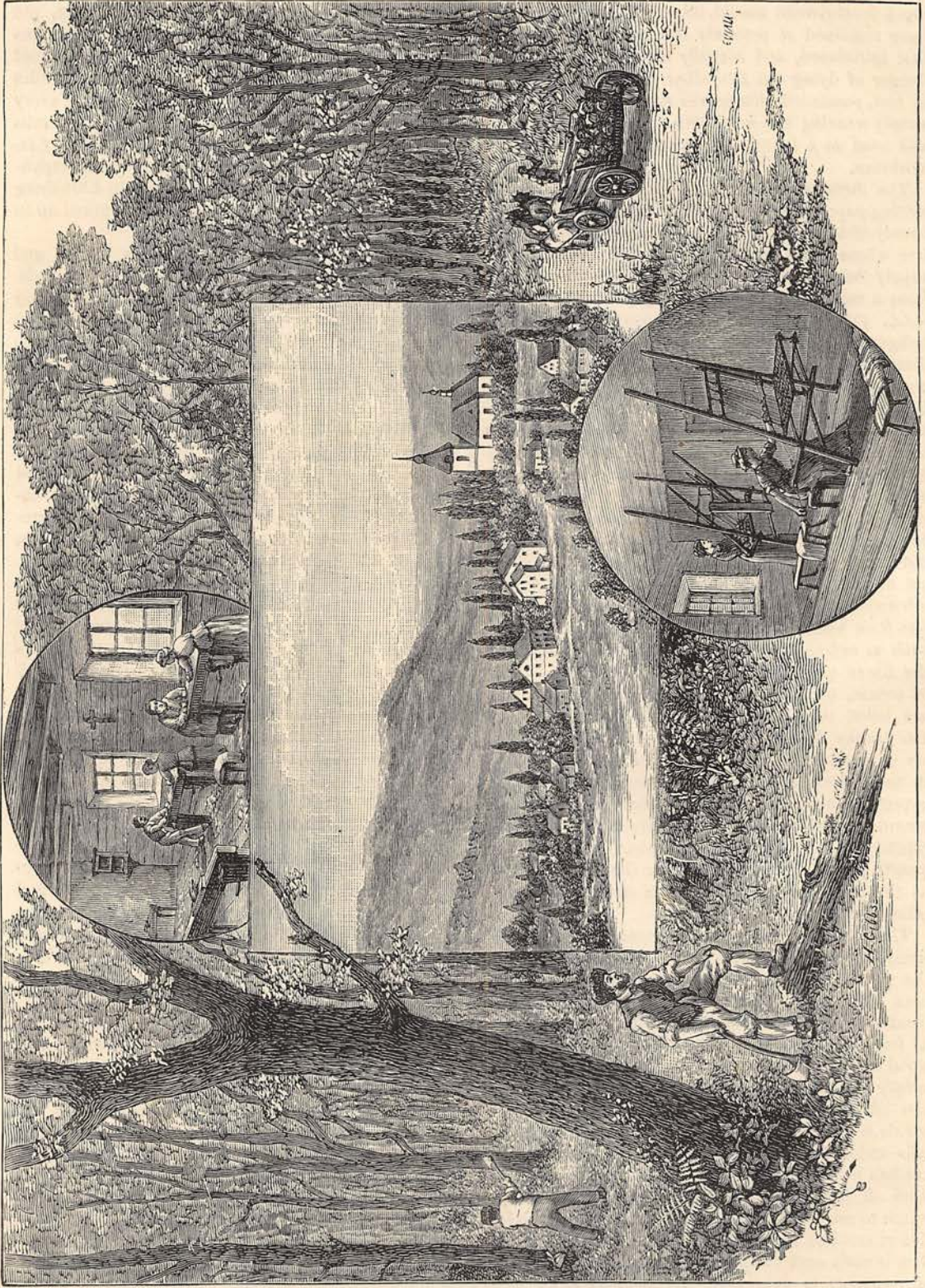
The threads used for weaving are no thicker than writing-paper, and vary in width from the fifth to the twenty-fifth part of an inch. The aspen is the only tree whose wood is sufficiently tough and pliable to supply these threads in the required lengths—that is, from a mètre to a mètre and thirty centimètres long—*i.e.*, 39 $\frac{3}{8}$ to 51 inches. The aspen was formerly indigenous in Bohemia, but has now almost entirely disappeared, or at all events does not exist in sufficient quantities to supply the demand in any degree. Consequently, the raw material for the sparterie-work has to be brought from Russian Poland, which is both a laborious and expensive process. The wood-merchants go to Poland twice every year—in the early spring and in the autumn, the only times at which the wood can be cut with advantage, as none can be used at once but that in which the sap has not yet risen or from which it has departed. Wood cut during the summer has to lie in water for a year, otherwise it is red and useless. It must be quite free from knots, as the smallest defect or irregularity, such as ordinary persons would hardly notice, makes the fibres quite unfit for weaving purposes. This, of course, occasions great waste; many more trees are felled than can be used, and it is found that 100 trunks do not on an average yield more than six or eight fathoms of wood. In fact, at one time it was feared that the supply would fail, but this apprehension is not shared by those who know the enormous extent of the Polish forests and the great rapidity with which the aspen grows. It is this rapid growth which especially fits it for the sparterie-work, as the fibres are in consequence straighter than in other trees.

The merchant who goes to choose the trees sometimes spends six, eight, or even seventeen weeks in the woods, living for the most part in the foresters' huts. The trees must be at least thirty centimètres (nearly 11 $\frac{1}{2}$ inches) in diameter, perfectly straight, and as free from branches as possible. Only the white wood can be used, and such trees as turn out red are simply wasted so far as the merchant is concerned. His life during the few weeks of his sojourn in the woods is a monotonous but busy one. Tree after tree falls under the hands of the Polish wood-cutters, is cut into lengths of fifty inches or so, peeled, and freed from all knots, the merchant being always on the watch to see that no wood which is in any way defective or crooked is included. The wood is so plentiful that it costs next to nothing on the spot, but the cost of transport is enormous. As soon as a sufficient quantity has been obtained it is despatched to the nearest railway station on wooden wagons of the most

primitive description, constructed entirely without iron. Forty-six wagons, each drawn by four horses, are required for the conveyance of ten cords or fathoms of wood; and each driver receives six *gulden*, or about twelve shillings, for the distance of six German miles (about thirty English). The cost of freight for every four or five fathoms of wood conveyed on the rails through Germany by way of Breslau is about £42. The shorter route through Austria is still more expensive. A fathom of wood can be bought in Ehrenberg for about £15, and some 200 or so are worked up in the course of the season.

Arrived in Ehrenberg, the wood is planed and divided into pieces nearly two inches and a half wide. When these have been made perfectly smooth they are divided again by an instrument resembling a plane, but furnished with a number of fine knife-blades, which mark the wood at regular distances according as the strips are to be $\frac{1}{16}$ or $\frac{1}{8}$ of an inch in width. This process requires the utmost dexterity and nicety, as it is absolutely essential that the divider should exactly follow the direction of the fibre; and for this reason among others it must always be done by hand. The divider makes incisions $\frac{1}{8}$ of an inch deep; the wood is then carefully planed, and comes off in thin paper-like strips, some of which are not wider than a stout thread. They are gathered up as they fall by women, who examine them and pick out any defective pieces; and in spite of all the care taken in the selection and manipulation of the wood, there is a good deal of waste in the process. The threads or fibres, being now ready, must be tied in couples at one end before they can be woven. This work is done by children, and in Ehrenberg little creatures of four years old and upwards are employed at it, and earn fourpence a day. The weaving is done chiefly by women, and in looms which differ considerably from those in ordinary use, the fibre being as before mentioned not more than from thirty-nine to fifty inches in length. The longer fibres form the warp, the shorter (twenty-eight to thirty-two inches), the woof, which is passed in and out by means of a little instrument with an eye like a needle. Until within the last few years this concluded the whole process—the "foundations," as they are called, were complete and nothing more was done, except that a few hats and caps were made of them; but these were of the very simplest description and anything but becoming. Moreover, they were glued together, which made them very unpleasant to wear in hot or wet weather, and accordingly they fetched but fifteenpence or two shillings and fourpence per dozen, and were worn only by the very lowest classes.

Of late years the attention of the Government has been called to the matter, and the inquiry instituted showed a state of things very far from satisfactory. Owing to the dulness of the workmen, of whom 2,500 were employed, and their repugnance to all innovations, the industry had not advanced beyond the most primitive stage, but the only thing Government could do was to send them patterns and milliners to impart some notion of taste and style. It seemed very



1, VIEW OF EHRENBERG, 2, 3, CUTTING AND CARRYING THE WOOD, WOOD-WEAVING (p. 686), 4, 5, PROCESSES OF MANUFACTURE.

doubtful, however, whether much good would be done in this way, as the people themselves had no idea how greatly their industry might be developed. The accounts showed, too, that they were being systematically plundered by the dealers; for, while the firms which dealt in sparterie goods were not only flourishing but wealthy, the producers could hardly procure the bare necessities of life.

By keeping the buyers, chiefly French and English, in ignorance as to the place where the hats were made, by threatening to cut off the supply of goods if they attempted to visit it, and by threatening the manufacturers with the withdrawal of their custom if they tried to sell independently, the dealers had succeeded in getting the people entirely into their hands.

Such having been the state of things for more than 100 years, it is not wonderful that the manufacture had retrograded instead of advancing, or that many of the workmen, finding they could not earn even a bare livelihood by weaving wood, gave up the attempt and tried some other occupation. There was another drawback, also, in the fact that the workers had not the skill to convert the raw material into exportable goods ready for sale; and the dealers, finding it more to their advantage to sell the raw material, did not encourage them to make the attempt. The Ehrenberg "foundations," therefore, travelled to Paris and London, where they were converted into tasteful hats for ladies and gentlemen, such as were preferred to any others by the fashionable world.

Within the last few years, however, a great change for the better has taken place, thanks probably in part to the interest shown by the Government in the manufacture, in part to the establishment of an enterprising firm, and in part perhaps to the fact that the Ehrenbergs have at last become alive to their own interests. At present Ehrenberg sends out not only the raw material, but ready-made goods—fashionable hats of all kinds, and a variety of fancy articles skilfully concocted out of the wood fabric; ladies' hats of every possible description and the latest fashion, such as no one need be ashamed to wear, are made entirely of wood, and sold at astonishingly low prices. Men's hats are to be had of all shapes, from the Panama hat—not a whit inferior to that bought in Paris—to the common hats exported in large quantities to China, and the linings or foundations

which give stiffness to the fez of the Turkish soldier. The export trade embraces all Europe, from Spain to Russia, extends beyond the Caucasus to India and China, and maintains active relations with North and South America, as well as Australia. The manufacturers are in direct communication with the four quarters of the world, and their goods are being introduced into Africa by French and English traders.

It is satisfactory to find from Herr Otto Purfürst, who gives the foregoing particulars, that the "hands" now earn more than treble what they did before by the hardest work, when they produced nothing but "foundations." A number of young girls, too, now earn good salaries by trimming ladies' hats.

Wood-weaving is likewise carried on at Zeidler, also a place in Bohemia, where it affords employment to a large number of families. One manufacturer of Zeidler received the large silver medal and a diploma from the international jury of the Paris Exhibition in 1878, for the goods exhibited by him. He can boast a branch establishment at Ebersbach in Saxony, and has a patent for interweaving the sparterie with threads of gold, silver, or coloured worsted, thus producing an ornamental fabric, which is used for a variety of fancy bookbindings, and is also made up into fashionable hats for men, women, and children.

In conclusion, we may mention that the attempts from time to time made to introduce the sparterie industry in other places have always hitherto proved unsuccessful, even in the immediate neighbourhood. For the reasons given above, it must always remain a handicraft; and as it has been carried on by the people of Old Ehrenberg for more than 100 years, and every one of them takes some part in it, from infancy to old age, they have very naturally acquired a degree of skill which others cannot reasonably expect to attain without long practice. It is hardly likely, moreover, that a whole population should suddenly agree to devote itself to a new branch of industry which it would take time to learn; and unless all the members of the community did so devote themselves, it would be impossible for them to turn out their goods as cheaply as the people of Ehrenberg can afford to do. This, in the opinion of Herr Purfürst, is the main reason why the attempt to establish sparterie workmen from Ehrenberg in Dresden and elsewhere has always hitherto failed.

SELINA GAYE.

BY THE SEA.

IN shady nook
That peeps down on the sun-kissed sea,
A lassie sits with far-off look
In loving eyes that seem to me
Mirrors of truth and purity.

And all in vain
Do little hands caressing stray,
And seek to bring her thoughts again
To centre on their childish play:
For once they've wandered far away

O daughter mine,
I ought to bring you sympathy,
And yet I cannot but repine!
The love-light in your eyes I see,
And know that you are lost to me.

Yet, little one,
When it befalls you pass away
To be another's light and sun,
Though life will lose its glow for aye,
I'll try to smile and bless the day.

G. W.