be done at all. But to this objection we reply, that ſuch an agreement might be made with the inſpectors of foreſts, as to make it their own intereſt to cultivate trees with as much care as poſſible. Their ſalary might be fixed very low, and raiſed in proportion to the number of trees which they could turniſh of ſuch a ſize in a certain number of years. After all, we muſt acknowledge, that we muſt de­pend greatly on Ruſſia, Sweden, Norway, and America, for ſupplying us with timber ; and while theſe countries take our manufactures in exchange, we have no reaſon to com­plain. Still, however, we ought ſurely not to neglect the cultivation of what is of so much importance to our exiſtence as a nation, for it may often be impoſſible in time of war to obtain timber from foreign countries.

in the beginning of this article we mentioned the gene­ral diviſion of trees into timber or foreſt-trees and fruit trees. We have already ſaid all that our Emits will permit rspecting the former: we will now, therefore, ſay ſomething of the latter. Our obſervations ſhall be confined to the methods of preſerving fruit trees in bloſſom from the effects of froſt, and from other diſeaſes to which they are liable.

The chevalier de Bienenberg of Prague, we are told, has diſcovered a method of effectually preserving trees in bloſ­ſom from the fatal effects of thoſe froſts which sometimes in the ſpring deſtroy the moſt promising hopes of a plenti­ful crop of fruit. His method is extremely simple. He ſurrounds the trunk of the tree in bloſſom with a wiſp of straw or hemp. The end of this he sinks, by means of a ſtone tied to it, in a veſſel of ſpring water, at a little di­ſtance from the tree. One veſſel will conveniently ſerve two trees ; or the cord may be lengthened ſo as to ſurround ſeveral, before its end is plunged into the water. It is neceſſary that the veſſel be placed in an open ſituation, and by no means ſhaded by the branches of the neighbouring trees, that the froſt may produce all its effect on the water, by means of the cord communicating with it.— This pre­caution is particularly neceſſary for those trees the flowers of which appear nearly at the ſame time as the leaves ; which trees are peculiarly expoſed to the ravages of the froſt. The proofs of its efficacy, which he had an opportu­nity of obſerving in the ſpring of 1787, were remarkably striking. Seven apricot espaliers in his garden began to bloſſom in the month of March. Fearing that they would suffer from the late froſts, he ſurrounded them with cords as above directed. In effect, pretty ſharp froſts took place six or eight nights : the apricot trees in the neighbouring gardens were all frozen, and none of them produced any fruit, whilſt each of the chevalier’s produced fruit in abun­dance, which came to the greatest perfection.

The following is the method propoſed by Mr William Forſyth for curing injuries and defects in trees; for which a reward was given to him by his majesty, on condition that he ſhould make it public. It is equally applicable to forest as to fruit trees @@(b).

Take one buſhel of freſh cow-dung, half a buſhel of lime rubbiſh of old buildings (that from the ceilings of rooms is pre­ferable); half a buſhel of wood-aſhes ; and a ſixteenth part of a buſhel of pit or river sand. The three laſt articles are to be sifted fine before they are mixed ; then work them well to­gether with a ſpade, and afterwards with a wooden beater, un­til the ſtuff is very ſmooth,like fine plaſter uſed for the ceil­ings of rooms. The compoſition being thus made, care muſt be taken to prepare the tree properly for its applica­tion by cutting away all the dead, decayed, and injured parts, till you come to the freſh sound wood, leaving the ſur­face of the wood very smooth, and rounding off the edges of the bark with a draw-knife, or other inſtrument, per­fectly ſmooth, which muſt be particularly attended to. Then lay on the plaſter about one-eighth of an inch thick all over the part where the wood or bark has been ſo cut away, finiſhing off the edges as thin as poſſible. Then take a quantity of dry powder of wood-aſhes, mixed with a sixth part of the same quantity of the aſhes of burnt bones ; put it into a tin box, with holes in the top, and ſhake the powder on the surface of the plaſter, till the whole is cover­ed over with it, letting it remain for half an hour to abſorb the moiſture ; then apply more powder, rubbing it on gently with the hand, and repeating the application of the powder, till the whole plaſter becomes a dry ſmooth sur­face.

All trees cut down near the ground ſhould have the ſur­face made quite smooth, rounding it off in a ſmall degree, as before mentioned ; and the dry powder directed to be uſed afterwards ſhould have an equal quantity of powder of alabaſter mixed with it, in order the better to refill the dripping of trees and heavy rains. If any of the compe­tition be left for a future occaſion, it ſhould be kept in a tub or other veſſel, and urine of any kind poured on it, ſo as to cover the ſurface ; otherwise the atmoſphere will great­ly hurt the efficacy of the application. Where lime-rubbish of old buildings cannot be eaſily got, take powdered chalk, or common lime, after having been slaked a month at leaſt. As the growth of the tree will gradually affect the plaſter, by raiſing up its edges next the bark, care ſhould be taken, where that happens, to rub it over with the finger when oc­caſion may require ( which is beſt done when moiſtened by rain), that the plaſter may be kept whole, to prevent the air and wet from penetrating into the wound.

By this process, ſome old worn-out pear trees, that bore only a few ſmall, hard fruit, of a kernelly texture, were made to produce pears of the beſt quality and fineſt flavour the ſecond ſummer after the operation ; and in four or five years they bore ſuch plenteous crops, as a young healthy tree would not have produced in four times that period.

By this proceſs, too, ſome large ancient elms, in a most decayed ſtate, having all their upper parts broken, and a ſmall portion only of the bark remaining, ſhot out items from their tops, above thirty feet in height, in six or ſeven years from the firſt application of the compoſition.

Thus may valuable fruits be renovated ; and foreſt trees, which are uſeful or ornamental from their particular ſitua­tion, be preſerved in a flouriſhing ſtate. But what is far more intereſting, a perfect cure has been made, and ſound timber produced, in oak trees, which had received very conſiderable damage from blows, bruiſes, cutting of deep let­ters, the rubbing off the bark by the ends of rollers, or wheels of carts, or from the breaking of branches by ſtorms.

TREFOIL, in botany. See Trifolium.

TREMELLA, in botany ; a genus of plants belonging to the claſs of *cryptogamia,* and natural order of *algae.* It

@@@(b) A paste for covering the wounds of trees, and the place where grafts are inſerted, was diſcovered long ago. It is recommended in a Treatiſe on Fruit Trees, publiſhed by Thomas Hitt in 1755 ; a third edition of which, with additions, was publiſhed in 1768. It conſists of a mixture of clay and cows-dung diluted with water. This paſte he directs to be laid on the wound with a bruſh ; it adheres firmly, he ſays, without cracking till the wound heals. We are informed by a gentleman, to whoſe opinion and experience we pay great reſpect, that this paſte answers every purpoſe which Mr Forſyth’s can ſerve.