

II. *Observations on the supposed Effects of Ivy upon Trees, in a Letter to the President. By Humphrey Repton, Esq.*

Read April 17, 1810.

MY DEAR SIR,

FROM the intimacy that subsisted between us in early life, to which I often look back with peculiar delight, and from the knowledge I have of your patient spirit of inquiry in all that relates to Natural History, I venture to address to you the following remarks concerning Ivy.

Although I am afraid that any attempt to remove the long established prejudices concerning it, will be deemed chimerical by those who have taken up a contrary opinion from theory, to that which I deduce from facts and observation, yet I will venture to assert, that Ivy is not only less injurious to trees than it is generally deemed, but that it is often beneficial, and its growth deserves to be encouraged rather than checked, as is too often practised in woodland countries.

I have been led to adopt this opinion during the last two or three years, from having observed the timber in some very old parks and woods, (as at Stoneleigh Abbey, Warwickshire; Langley in Nottinghamshire, and some others,) where the Ivy had not been cut off, and where the timber was in greater perfection than at other places in the same neighbourhoods where the Ivy had been most cautiously destroyed: and during the winter of 1808 and 1809, the contrast betwixt the scenery of different

places with and without Ivy was so striking, that I was insensibly led to collect facts in support of the opinion so diametrically opposite to the theory of those who consider Ivy as a destroyer. In Miller's *Dictionary* by Martyn, we read, "Hedera (ab edendo, quod arbores exedit, because it wastes and devours trees);" and in Evelyn's *Silva*, book ii. chap. vii. it is classed among the things injurious to trees, without any reason assigned, and is thus mentioned: "Ivy is destroyed by digging up its roots and loosening its hold; but even the removal of Ivy itself, if very old, and when it has long invested its support, is attended with pernicious consequences, the tree frequently dying from the sudden exposure to unaccustomed cold." And I have found in the north of England that Ivy is considered as a "clothing to keep the tree warm." Yet the poets of all ages have accused the Ivy of feeding on the tree by which it is supported: although it is now very generally known that it draws its nourishment from the soil by roots, and not from those fibres which have been mistaken for roots, but which are in fact claspers by which it fastens its tendrils to the bark of trees, when the bark is of sufficient thickness: but it is a remarkable fact, that Ivy will not lay hold of the shoots of any tree till the bark is three or more years old; and that it is more apt to attach itself to trees whose bark is decayed, than to young and healthy shoots where the bark is thin and smooth.

It very rarely happens that Ivy climbs to the extremity of a young shoot; and if it were capable of doing so, and of subduing the growth of young branches, it would more easily destroy the shoots of pollards cut down close into very large masses of Ivy, as we often see by the side of high roads; whereas, on the contrary, it will be found, that if there be any difference in the growth of such shoots, it will be in favour of those pollards that are most profusely covered with Ivy.

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Another mistaken idea prevails among woodmen respecting *Ivy-bound trees*, as if the tree were *bound* round by Ivy, as is often the case by honeysuckles, traveller's joy, and other creepers, which form a spiral round the stem, and may perhaps check the circulation of juices in the tree. But this is not the case with Ivy; it goes up straight on one side, or trails along the surface of lateral branches, without attempting to girt round or form a spiral line, or tight bandage: on the contrary, it may be remarked that Ivy appears to *feel its way* with a sort of finger-like extremity, by which it insinuates itself into cavities in bark, or crevices in the wall, but does not affix its holders till it meets with a substance which cannot be injured by them. Indeed, of so singular a nature is the mode of growth and attachment in Ivy, that it seems possessed of some *sensitive quality*; for the first effort to fasten itself is by a kind of gluten, or by a spongy substance like that by which flies walk up the smooth surface of glass windows. This is particularly evident in the five-leaved Ivy; but the common Ivy does not attach itself to smooth or vigorous young bark of the trees that support it, nor will it fasten to its own shoots, but seems cautiously to avoid them, generally by taking a different direction, and sometimes by crossing over the fibres, leaving a space between, for each to swell; while, on the contrary, it feels its way and insinuates itself most closely into all cavities, particularly in old walls, which may sometimes be injured, but I believe are more often supported, by the matted and reticulated fibres which hold the loose stones together.

Linnæus affirms that "*it does no injury to buildings*," as quoted in Martyn's *Miller's Dictionary*, from Curtis, who afterwards gives his *Reasons* for thinking Linnæus mistaken. These are very similar to those given me by the most venerable patron of Natural History, to whom I bow with due reverence; but I cannot admit

mit any man's theory to supersede facts ; and the observation of the great Linnæus respecting Ivy on buildings confirms mine respecting Ivy on trees ; that although it may in a few cases be injurious, it is oftener beneficial ; and therefore I hope it will not be deemed presumptuous in me to say, after Linnæus, and in his words, that "*it does no injury to*" TREES.

It is a fact, that of trees covered with Ivy, there are *apparently* more sickly than sound ones. But there are many reasons to be assigned for this appearance : 1st, The Ivy in winter renders the trees more conspicuous, and few people who see dead branches proceeding from such trees examine whether there may not be other trees near them equally decayed. 2dly, Because a decaying or even a dead tree often serves to support Ivy, it is too often hastily supposed that Ivy is the cause of its death or decay. And 3dly, It is the property of Ivy to attach itself to decaying trees in preference to the more healthy ones ; and as such trees are of less value, they are often left after their neighbours have been cut down and sold. This will alone account for the comparative difference in the number of sound and unsound trees supporting Ivy. But if a single instance be produced of a healthy tree covered with Ivy near another tree not so healthy without Ivy, this alone would lead us to pause before we cut the Ivy from the tree, "lest," as Evelyn asserts, "the tree may be killed by the sudden exposure to unaccustomed cold."

Instead of a single instance, I could transcribe from my minutes examples of every kind of tree compared with others of the same kind near it ; and could confirm my facts by sketches taken in various parts of the kingdom : but I shall only subjoin a few specimens of such facts as have induced me to take up an opinion on the subject.

FACTS.

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No. 1.—At Twickenham Park, now Mr. Gosling's, the banker, are two rows of very large cedars; two trees are most profusely covered with Ivy, and a very intelligent nurseryman (Mr. Burchel) proposed cutting its roots to preserve the trees, till I convinced him that these two were the largest trees, and that the Ivy seemed coëval with the cedars themselves, which they had certainly not in the least injured.

No. 2.—At Blickling, in Norfolk, the green-house stands between two very large fir trees; the biggest is covered with Ivy, the other is a bare pole and not so large, though evidently of the same date, and both equally healthy. But the old gardener could not be convinced, and only replied by an answer often made, *viz.* that the tree might perhaps have been still larger if it had not been loaded with Ivy.

No. 3.—The trees on Lord Hardwicke's estate at Wimpole furnish very striking effects of Ivy: in the pleasure ground east of the house, the Ivy trees in the grove are most decidedly the tallest, largest, and most healthy.

No. 4.—A large ash very near the road in Arrington is a curious example of prejudice: it is a forked tree, one half naked, the other has been loaded with Ivy: the naked side shows strong symptoms of decay, the other is quite healthy: but under an idea (I suppose) of saving the tree, the Ivy has been recently cut off, and was hanging in vast masses, with stems of great bulk loosened from the tree without leaving any indenture in the bark of the tree:—but the Ivy is the offender!

No. 5.—At Stoneleigh Abbey in Warwickshire, the timber is generally of prodigious size, some oaks measuring twenty feet round at five feet from the ground, many are richly covered with
Ivy;

Ivy ; but I could not perceive any difference between those and the more naked trees, except that they appeared more luxuriant in the extremity of their branches ; and I observed many coupled trees and forked trees under similar circumstances.

No. 6.—At Langold in Yorkshire, (a seat of Gally Knight, esq.) the trees are not generally so large as those at Stoneleigh ; but the two places agree, in the Ivy not having been so much destroyed as is generally the case ; and, both in examining the trees near each other and those growing from the same root, I was confirmed in my opinion.

No. 7.—In a lane betwixt Hertford and Hatfield there are many very large old thorns in the paling of Hatfield park, so covered with Ivy, that in the winter of 1808 I thought it an evergreen hedge, and the sprays of the thorns were hardly visible ; yet when compared with a few thorns in the same lane, they appeared to be equally vigorous. In the last summer I was surprised to miss the Ivy, till I perceived that the foliage of the thorns had so entirely covered it, that the Ivy was only a secondary object in Nature's great plan of decoration, and seemed humbly to retire into the shade of more luxuriant ornament, to come forward again, as I have lately seen it this last winter, when the neighbouring bushes were reduced to mere sticks :

“ Vernantesque comas tristis ademit Hyems.”

No. 8.—At Woburn Abbey the timber has so generally been denuded of Ivy, that I despaired of finding any example, except in the elm near the Duke's apartment, and which is very conspicuous (in winter) from its profuse mantle of Ivy. But this was deemed inconclusive, although much superior in growth to some other trees near the same spot, because it was supposed that they might have contributed to its growth by sheltering it from the south-west winds. I afterwards discovered in the park a remarkable

markable specimen, which is the outermost tree of a grove, and the most exposed to the south-west. The tree nearest to it has some dead branches, and seems evidently to have yielded to its neighbour's superior vigour. As this is an example obvious to all the agriculturists who attend the Woburn sheep-shearing, I have, with the Duke of Bedford's permission, marked a drive very near this specimen, which may serve to call the attention of the curious to this subject. I should here further add the result of some experiments made by Mr. Salmon, who is well known for his mechanic ingenuity, and who has the superintendence of His Grace's woods at Woburn. He tried the comparative substance and strength of several kinds of timber with the same kinds *Ivy-bound* as he calls it; but he could not find any difference, and is of opinion "that in old trees it does no harm; and that in trees of ten or twelve years old it neither checks the growth, nor is the wood lighter or weaker; but he is still convinced that he has seen young trees killed by the Ivy." It is, therefore, in this sense of the word that Ivy may be considered as a destroyer. But experience has discovered that the destruction of turnips and other plants while young, and the thinning of green fruit from trees, is a part of the economy of nature; and in this instance its injury may be granted,—although, for the reasons already assigned, I do not see how Ivy can oppress plants to whose bark it cannot attach itself.

It remains only to mention the advantages to be expected from a less rigorous persecution of this plant: 1st, It may be stripped from the trees in winter to feed sheep and deer, to whom it is grateful and wholesome food. 2dly, Its berries are a great resource to pheasants, poultry, and every kind of bird, during very severe weather. And lastly, If it were more generally encouraged, or rather if it were less unmercifully destroyed, our winter's

landscape would be greatly improved. I could not but observe the contrast of places visited during the same winter. Instead of that melancholy scenery in parks where no Ivy is permitted to grow, and where each rugged and venerable oak, without its foliage, presents in winter a picture of old age with poverty and nakedness; the rich mantle of Ivy thrown over the trees of Langold and Stoneleigh gave grace and dignity to age, while it concealed its decrepitude.

The mass of mankind look on the vegetable part of the creation with a view only to its producing food, or medicine, or materials for economical purposes, or *money*, which includes all the rest. But every pupil of the Linnæan school, if I may judge from his labours, and from your pursuits who are so justly at the head of that school, must have more exalted notions of the Creator; and must be well aware that the *BEAUTY* of His works is equal to their *UTILITY*, and that the *PLEASURE* of man is provided for as bountifully as his *NECESSITIES*. It is therefore, my dear sir, with peculiar satisfaction that I address these remarks to you, as the best means of insuring and exciting attention to a subject, which may eventually prove beneficial to the agriculturist and the sportsman, while it may tend to improve the beauty of our winter scenery: and I beg you will with this view communicate the whole, or any part, of what I have written, and suppress any part, or throw it out into separate notes in any way that you may judge most likely to call attention to the subject, and suspend for a while the destruction of a plant, which I cannot but consider as one of the most useful and ornamental works of the Creator. Believe me with great regard, my dear sir,

Yours most faithfully and cordially,

H. REPTON.

April 8, 1810.

III. *Ans*