ART. VIII.-ON AN INSCRIPTION FOUND IN THE HEART OF A GROWING TREE.-BY WILLIAM SHEPPARD, Esq. OF WOODFIELD.

READ 2D FEBRUARY, 1833.

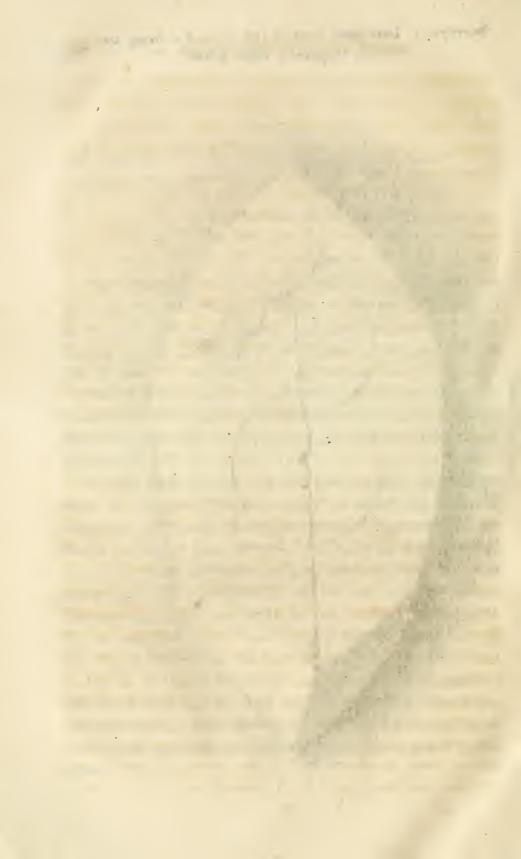
The discovery of a surveyor's mark in the interior of a tree, may possibly tend to illustrate the outward increase of wood, which is admitted to take place annually in those families of the Exogenous class of plants consisting of trees and shrubs. At all events, it may be a curiosity.

The little block of wood exhibited, of which the annexed sketch is a representation, was lately chopped out of a standing Hemlock Spruce, by a surveying party, in the township of Halifax.

On the inner surface, or that towards the heart of the tree, is perceived, plainly raised in relief the figure 8, supposed, with great probability, to have been made by the hand of man; and to have occurred in the following manner.—Some thirty years ago, this and the adjoining townships were surveyed and laid out into ranges and lots; the surveyor employed on this service, besides setting stakes in the usual manner, was in the habit, it is supposed, of scoring corresponding numbers on neighbouring trees, as an index to the post or stake. In the present instance a Hemlock tree was selected for the purpose; first being blazed with an axe, and then scored by a marking iron; two circles, one over the other forming the figure 8 in this case.

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On close inspection of the cast or impression, the blaze appears not to have been made quite smooth and even, one part being more depressed than the rest, which part the scoring iron failed to touch; that portion therefore of the impression is imperfect.

It is a subject of regret that the chip taken from the tree, was not large enough to trace the yearly increment of wood, from the time of being marked; some few circles first formed at the lateral edges of the wound appear to be wanting. It would have afforded a good opportunity of proving the correctness or falsity of the common opinion, of the concentric circles visible in transverse sections of trees being yearly deposits of wood under the bark, by a comparison of the number of these with the date of the survey. Imperfect as is our specimen for this kind of investigation, an approximation may yet be attained.-Nine yearly deposits of wood are counted from the outer edge of the specimen, to a very visible centre line, where the new wood joined over the wound : so that, supposing the block to have covered the whole space blazed, that space was quite covered by annual deposits of wood from the lateral edges of the wound in nine years. The deposits near the blaze appear to be much larger than those formed subsequently; from which circumstance may be implied an increased impulse, or energy of action put forth to cover the wound as speedily as possible. It also appears on close inspection, that the junction of the new wood across the wound, took place earlier in the lower part of it than in the upper; several successive joinings of wood from below upwards being apparent. This circumstance may, however, have arisen from accidental causes; such as the wound having been narrower below than above; it would not, therefore, be safe to build any hypothesis on this appearance.

After the junction of the two lips of the wound, twenty more circles are counted to the bark; some of them very minute, sixteen existing in the space of the outer half inch. We have now got twenty-nine years for the time elapsed since the mark was made on the tree, but which very probably is less than the real time, from the circumstance already stated.

The new wood will be found to have entered all the cavities made in the tree, forming a complete cast over the blaze and number; yet as may be supposed, no perfect union of the wood has taken place; the chip having parted freely from the wound without bringing away a single particle of the old wood beneath.

Although the exhibition of this little piece of wood has failed to throw any light on vegetable physiology, it may be interesting to some persons to know that such marks exist in the surveyed townships, concealed in the hearts of trees; and may be sought for with some probability of success. The experienced woodsman who accompanied this surveying party, perceiving, near where the line was supposed to exist, a tree with cicatrices in the bark, on opposite sides of the stem, as if made by an axe for some purpose at a former period; thought that information might be obtained, as in a previous case, by an inspection of the interior of the tree. He applied his axe above the cicatrice with force sufficient to bring off the chip of wood in question; much to the satisfaction of the parties present, as it displayed to their view the mark of the eighth range of which they were in quest.

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