I searched also for intermingling of roots and evidences of frequency of root-graft in neighboring areas where stump pulling and land clearing operations were taking place, and carefully inspected many spots ni the local forests in which intermingling of roots was to be seen. While overseas I had especial opportunities of noticing whether in intermingling of roots, inarching and root grafting occurred among conifers, since in England and France, the stumps were usually removed after the felling of the trees. The results of these observations and investigations seem to prove:

Firstly—that in some species root-unions, direct and indirect, with a tree possessing foliage, cause healing and overgrowth to occur on the stump of the tree felled, but in other species do not do so. I have never been able to learn of or to discover a healed stump quite isolated, which thorough investigation did not prove to have direct or indirect root-union with a standing tree retaining its crown.

Secondly—that roots of the same tree or of a similar species of tree, can intermingle without intergrafting. Natural grafting, however, readily occurs through or by friction and pressure when roots of a single tree or of two separate trees of the same species are brought into contact by their increase in size, by elongation in growth, or where the tap-root of one tree in descending meets the secondary root of another tree spreading horizontally.

Here we see a stump of a California Sequoia tree wholly covered over with a cap of live wood.