them would bear as good fruit as the McIntosh, although it is just possible that even better fruit might be produced. Some day you may find this an interesting thing to investigate."

Fig. 68. A glimpse in the nursery.

"But what do you mean by budding and grafting?" inquired Fred. "These," I replied, "are methods adopted by nurserymen who make a business of growing trees, whereby they can grow any number of trees that will bear the same kind of fruit, without varying, as they naturally would if the trees were grown from seed. These methods of propagating trees depend upon the fact that every perfect bud on a tree is capable, under favorable conditions, of producing another branch; or indeed, a whole tree of the same kind as that on which it grew.

"The McIntosh in our garden is a budded tree, which was obtained from Mr. Smith's nursery, where he grows thousands of other trees just like it. In growing these trees, Mr. Smith had in long rows in the nursery, thousands of little seedling apple trees (that is, little trees grown from apple seeds), which, if allowed to grow naturally would, he knew, bear a great variety of mostly inferior fruit, but he had heard of the excellence of the McIntosh apple, and intended to make them all bear McIntosh apples; so he wrote to Mr. McIntosh and got him to send all the young shoots he could spare from his McIntosh tree. From these shoots, which were obtained in July, Mr. Smith's men budded the little seedling trees in the nursery rows. The bark on each little tree was cut open near the ground, and one McIntosh bud was put in and bound firmly in place.

Fig. 69. Budding the seedlings.