of maps of the region in the time of the Revolutionary War shows that the land extended considerably farther out than it does at present, and that there was a road approximately in the position of the corduroy recently uncovered; it therefore seems quite probable that this corduroy road is the old road leading to the now submerged Prissy Wick Shoal.

On April 6, 1931, the road was again exposed, this time more distinctly. On a patch of sod, about one tenth of a mile west of the log road, were seen several horse footprints. As far as can be learned, this patch of sod had not been uncovered for at least several years. This locality is about one half a mile distant from the one near South Cape May where the tracks had been seen some fifteen years previously.

The fact that these tracks were of shod horses, while those reported by Cook at Harvey Cedars were of unshod animals, suggests that these tracks may not be quite as old as those previously seen. Nevertheless, the fact that these tracks have persisted in this sod superimposed by a thin layer of sand and covered by the sea twice a day seems interesting and suggestive of how fossil tracks are actually preserved. These horse tracks may possibly be regarded as "fossils in the making."

A more detailed and illustrated account of the occurrence of this meadow sod beneath the New Jersey beaches will be published elsewhere in the near future. This preliminary note is published in the hope that some one may report similar occurrences elsewhere.

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TWISTED TRUNKS OF APPLE TREES

THE recent discussion relative to the twist in the trunks of certain trees has been interesting. I have carefully examined apple trees in orchards from Iowa and Minnesota to New York and Pennsylvania, and have noted that a large percentage of old trees are strikingly twisted. The twist has nearly always been to the right. The variety of apple does not seem to make any difference. It is more likely a matter of age. At least it is more readily seen in the older trees. Soil and position of the orchard does not change the character of the twist. In some orchards nearly 100 per cent. of the trees were twisted. It probably has nothing to do with wind or weather, but is more likely a form of tropism. A great many climbing plants twist in the same direction. Many species of trees also twist the same way. So far as I have observed, a twist to the left is rare. I have been told that in the southern hemisphere the twist is dominantly to the left. If this is so, then the condition is surely the result of the influence of sunlight and position with respect to the equator. In this respect it is like the trade-winds. I am strongly inclined to believe that the twist is the direct result of the influence of sunlight, similar to the turn of the sunflower and the leaves of the compass-plant of the western prairies.

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EARLY UTILITARIAN APPLICATION OF TWIST IN TREES

THE twist in the grain of coniferous and deciduous trees discussed by Chas. K. Wentworth in SCIENCE, February 13, and by Arthur Tabor Jones in the issue for March 27 was advantageously adapted to the service of agriculture in America in the 18th and the early part of the 19th centuries. Trees having a left-hand twist were then used in the construction of the mold-board portion of the so-called "wooden plow" of that period.

The length of the mold-board was determined in a measure by the angle of the grain twist since its strength depended upon the extent to which cutting across the grain of the wood became necessary in the shaping of its warped surface. The length of the wooden mold-board was, for this reason, considerably greater than that of the present day all metal plow. Clearly enough a large size hardwood tree having a close left-hand twist was greatly prized by the plow maker as he was able to secure from such a tree the raw material for the mold-boards of several plows.

When the mold-board, land-side, handles and other portions of a plow had been assembled all parts that came into contact with the soil in plowing were armored, or as it was then termed "plated," with thin wrought iron straps and plates formed to fit the wooden parts to which they were riveted. At that time all bolts and their nuts were hand made and were, therefore, more costly than hand-made rivets and key-bolts.

The occupation of "wooden plow" making was entirely confined to the individually owned small-shop period of American manufacturing industry. The plow maker, assisted, possibly, by one or more apprentices—men legally bound by agreement (articled) to his service for a period of years—performed every portion of the work. He selected the twist grain trees in the woods, cut and hauled them to his shop, attended to the proper seasoning of the wood and in the actual manufacturing operations became carpenter and blacksmith in turn. He marketed his finished product and for the most part received therefor other goods in exchange rather than real money.

One of these early American "captains of industry" was a Nathaniel Edwards, who was born June 21, 1752, Haverhill, Mass., and who died June 14,