or manure had little to do with forming the difference as the plants stood side, by side, and the land was, in all cases, equally good.

Every farmer knows that wheat plants will not stool well, unless the land is good, and rich, and the season favorable; but in the cases above particularized, of course all were treated alike in that particular.

Many able Agricultural writers, have followed the same course, with pretty much the same results. Before I left England farmers often dibbled in their wheat, and thought that the saving of seed paid them for dibbling. But I was, and am still of the opinion, that the wheat plants were by this case, too thin, to afford any loss by winter killed, and also that individual plants did not so well resist the heaving by frost, as where a mass of roots were entangled, as in drilling; and again some wheat plants were killed, and taken by insects; and great gaps were left from this cause. But that does not go to disprove the present position "viz," that great care ought to be exercised in sowing wheat, at an exactly even depth according to soil, and season, whereby an exactly even plant will be obtained, and the chances of a crop much increased.

C.

How Swedish Turnips were introduced into Scotland.

Mr. Miller, of Dalswinton, near Dumfries, was an eminent Agriculturist. He had been a sailor in his youth, and unhappily, or perhaps happily, he had been wrecked on the coast of Spain, and ever afterwards entertained the belief that a ship had need of something additional to sails to keep her off a lee shore. He accordingly built a small craft, and fitted her up with paddles, which were worked by means of a windlass on board. His success was great; and he even run a race with a revenue cutter, and won it too, on the strength of his paddles. Before, however, he entertained the necessity of steam as a motive power, which was suggested to him by his family's tutor, Mr. Taylor, and which ultimately resulted in the introduction of the steamboat, or steam navigation, he built another vessel (three masted), which he fitted with his paddles. The vessel was offered to the British Government, who refused it. He then offered it to Charles XIII, King of Sweden, who graciously accepted it. But he did more. He sent Mr. Miller an autograph letter, accompanied with a gold snuff-box set with diamonds. Within the box a piece of paper enclosed a few seeds. These Mr. Miller planted, and they brought forth the splendid Swedish turnips. He again and again sowed them, and hence came forth generally the Swedish turnips throughout Britain. In all such matters one cannot help being reminded of the saying—"From trifling causes what great events do spring?"—*Com.*

Destruction of Forests in India.

Some extraordinary disclosures are made by the Governor-General of India, in a document sent to the Council on the 1st of November, in relation to the necessity of prompt and vigorous measures for the preservation of the East India forests. Owing to the reckless destruction of the most important varieties of timber, particularly since the introduction of railroads into British India, the supply has actually run short. Of the result in the presidency of Bengal the Governor makes this astonishing statement: "Till now nothing has been done in the matter of forests, and a sufficient commentary on the results of this neglect will be found in the fact that it is still necessary to import railway sleepers from Norway, because the available supply of suitable timber from indigenous sources is too costly or too small. The Governor goes on to say that in Northwestern India "the difficulty of obtaining timber has been painfully felt for fifteen years or more. In the Punjaub there is no timber of any appreciable value except on the slopes within the Himalaya. To save what is left of the forests, the Government has instituted vigorous measures forbidding the cutting of teak and certain other valuable timber for building dwellings or for any other purpose, except under certain specified and stringent regulations. Government plantations have also been established for the purpose of restoring those forests which have already been destroyed. This will be, even in India, a process requiring time. Nature will renew the forests to some extent by natural seeding; but this is a slow and uncertain process, owing to the fact that the worthless jungle that springs up chokes the chance saplings that may come struggling up through it.

To be told that the East Indies cannot supply timber enough for railroad purposes, but must import the desired commodity from Norway, seems as strange as it would to learn that in Greenland, owing to reckless extravagance on the part of the Esquimaux, the supply of ice had run short, and the Governor of Uppernavick had despatched a vessel to Holland to secure the necessary Summer supply. If in India, where forest trees grow in tropical luxuriance and profusion, the reckless destruction of the forests has caused the needed supply of timber to fail, what is the prospect for us here in the United States, where the destruction of our noble forests proceeds on a more gigantic scale than it does in India? Our locomotives nearly all of them burn wood, instead of coal. By and by they will have no wood to burn, and must use the coal.

The demand for railroad ties has denuded hundreds and hundreds of hillsides in the Eastern States, which were not long ago covered with a goodly crown of waving woods The effect is to shrink up our streams and rivers, producing severe and injurious drouths in Summer, and exposing them to sudden and destructive freshets at all seasons, especially in the Spring. In the vast pine forests of Michigan the army of wood-choppers has swept out of existence an area of woods which would cover Connecticut; and still the destruction, proceeds in response to the imperative demand for timber. Miles on miles of the noblest pines that ever grew have fallen already along the western shore of Lake Huron; miles on miles of such trees have fallen in the interior of the State. In Wisconsin and other States the work goes on. What is to be its effect on the American climate? It must produce drouths. Large areas of forests invite and bring abundant rains. Cut down the woods and the country becomes a parched and suffering land, like Palestine and Greece, and vast sections of Spain and Southern France to-day. In India drouths and famines are occurring. Like causes produces like results. Do not our increasing drouths in the United States indicate the danger to which who are exposed by this reckless destruction of our forests?—*Hartford Times.*

Beet Sugar in the United States.

As our readers are aware, we have done our utmost to promote the establishment o this industry, and we may therefore, with all the more reason, rejoice at the encouraging statements of the Commissioner of Agriculture in regard to it. He regards the future of the industry as now mainly dependent upon the comparative profit of beet sugar and cane sugar manufacturing.

The introduction of this business into this country met with many obstacles, notwithstanding the remission of duties on importations of machinery intended for beet sugar making. Perhaps no branch of chemical manufacturing needs to be conducted with greater nicety; and as in the outset we are to depend on foreign skill—much of it hardly fit to be called skill—there were many failures, and success has come slowly,

The pioneer experiment at Chatsworth, Ill., failed disastrously; yet at Freeport, in the same State, the lessons of that failure are being turned to such good account that success is confidently anticipated. At Black Hawk, Wis., a co-operative beet sugar manufactory is pushed with great vigor, and gives large promise of good results. But the most decided success has been met with in California, where two companies are in full operation, the California Beet Sugar Company at Alvarado having produced over a million pounds of sugar in the second year of its operation. Success is also reported from the Sacramento Valley Beet Sugar Company. A third company is delayed from the difficulty of obtaining seed.

The percentage of sugar obtained from Silesian beets raised in California is quite extraordinary. The superintendent of the Sacramento Valley Beet Sugar Company, Mr. S. Ehrenstein, states that an average