

over a large area enormous; but still non-drainage is the rule, and drainage the exception. In this respect there is a grand future for agricultural improvement. Land drainage was practised in Essex and Suffolk one hundred and twenty years ago, on hard chalky clays, and on friable soils, and no doubt greatly increased the produce and reputation of those counties as grain producers. Strange however, say, it is hard to make farmers believe that in so tenacious (birdlime-like) collapsing clays, drainage is of any use, and there is consequently enormous extent of such soils undrained in Essex and elsewhere. It is easy to understand that this prejudice arose from the impossibility of dealing with advantage in such soils bushes or saw, the only draining materials formerly in use—these butter-like soils collapsing and stopping such drains; but now that we have tiles making pipes or tubes, no such danger need be apprehended, and I hope our friends will soon get over their prejudices, and so fill their pockets. Honourable mention should be made of names of Elkington, Smith of Deanston, John Parkes, Bailey Denton, and Clutterbuck, in connexion with the science of this art. Scotland was seventy years behind Essex and Suffolk in this matter of drainage, but then our Scotch friends did it in earnest, and have connected with deep cultivation and subsoil cultivation, and in this respect are in advance of English agriculturists. Scotland owes to James Smith, of Deanston, her drainage and deeper cultivation, and her early appreciation of town sewage. I had pleasure to know this useful man, and his views agreed with my own, that we were still on the threshold of agricultural perfection. *River Reform*, so ably discredited on by Mr. Algernon Clarke, will surely soon make its mark. In former times, when our daily bread depended on the action of our watermills, the law was strained in favor of the miller, who may be said to have occasionally, and not unfrequently, used the adjoining lands as reservoirs of water for the river to the ruin or injury of said lands: but now that mighty steam has insured us, at all seasons, a comfortable loaf, a change of place, and the Judges have recently, on this most important issue, ruled that the unseen water in the land is the property of the landowner, and that even if sinking wells and using the water should dry up a river by diverting it, and terraneously its waters, no action would lie. In ditches, or rivulets leading to a river, it, however, is still respected. This decision will lead to most important results, enabling landowners to dry or lower the level of the water on their soil, and use it for irrigation if desirable.

*Tenant-Right and Leases.*—The history of the past shows that the former violent fluctuations of the law as a bar to security of tenure by lease: no landlord or tenant believed in an average of 56s. Without going into the question of

Free Trade, our Tithe Commutation Act has afforded us something like an approximation of averages over a given period. Let us hope that the words "average 56s. per quarter for wheats" may give confidence in leases: it is certain that without leases no tenant will invest his capital in improvements, unless secured a tenant-right for such investments. The Scotch 19 years' lease appears to ensure a good improving tenantry, and a large increase of rental at the end of the term. In Essex, a man without a lease may expend £20 an acre in drainage, chalking, and other improvement, and if he dies, and the farm be given up, not a shilling of it would come to his executors.

*The Labour Question.*—Labour is silently, but surely, slipping away from agriculture to use better food and higher pay of other industrial occupations. The parliamentary and excursion trains have provided a quick and cheap transit, and so have our coasting steamers. The new implemental requirements of agriculture, both British and foreign, have absorbed many a farm labourer: and the almost unobserved but regular transmission of the same class to distant colonies, by the Emigration Commissioners, also tells upon the farmer's labour store. This is well for the country, for necessity is the mother of invention; and agriculture may be more readily impelled by need than by persuasion to resort to that mighty power which has enriched our manufacturers. Experience has taught us that, as farm labourers come in contact with manufacturing towns or cities, they can only be retained on the farm by an increase of wages; our southern and non-manufacturing districts will not, therefore, long retain cheap labourers, especially now that the penny press makes them acquainted with the money advantages of an employment elsewhere.

*The Labourer's Condition and Cottage.*—The labourer being the most important tool in agriculture, it is desirable that he should be sharp and well polished as well as strong. This has not hitherto been sufficiently attended to, but it must very soon be. The schools now gradually erecting will enable the rising generation to read the instructions for cleansing, repairing, and managing the steam engines which agriculture must put up. They will also be able to read their Bible and their penny newspapers; probably hereafter they may be not thought unworthy of local libraries and literary institutions, also baths and washinghouses. The extension or abolition of the law of settlement will destroy the old selfish and unfeeling practice of foisting on your neighbour, in his old age or affliction, the man whose labours, in his youthful vigour, contributed to your wealth. The landlords are beginning to believe that the indecent propinquity of crowded bed-rooms, added to the evil sanitary results of insufficient house room, tell indirectly, but most unfavourably, on their pe-