

immense crops yielded by it, the soil retaining its fertility to an unusual degree. As all the detrital deposit is by natural means reduced to extreme fineness, the soil formed by it becomes exceptionally kindly. Mr. Arthur Young, whose observations on agriculture in England in 1807 are well known, frequently refers to the above method of land reclamation. In one case in Essex he records how a ridge of sea-shells, and subsequently of faggots, had converted a large tract of slob land to agriculture. In Lincolnshire he speaks of 10,000 acres reclaimed in a similar way, and he also mentions the dikes of Southern Holland and others in the marsh-lands adjoining the Fen country, which were probably embanked by the Romans.

The report of the Commissioners of Woods in 1838 on Sunk Island on the Humber is instructive. Of this area 3500 acres of drowned land were leased in 1668 at £5 per annum, the tenant undertaking to embank 100 acres in ten years. He failed to achieve results, and in 1675 a new lease was granted. In 1744, 1560 acres had been embanked. In 1755 a fresh lease was granted, the tenant paying 1000 guineas premium, and in 1771 another lease, when the premium was £1550, and the rent £100 per annum. The Crown ascertained by survey that 2700 acres were fit to embank at a cost of about £9000; the estate was then worth £3400 per annum. The next lease expired in 1833, when the area of farm-land was 5929 acres. The next tenancy was at a capital value of £9140, the tenant agreeing to keep all banks in repair, and to spend £8800 in buildings. At the present time the area reclaimed is 6600 acres, producing a revenue of £10,000 per annum. Up to 1850 the beneficial tenants carried out reclamation; since that date the Office of Woods have themselves done the work. In 1896 they started an extensive scheme of reclamation by means of warping cloughs, an arrangement of lock gates for the purpose of impounding tidal waters and letting it escape gradually, so as to catch its detrital matter and thus expedite accretion. This operation, however, proved a failure, as the enclosing walls did not sustain the weight of water admitted.

Recently attention has been directed by Lord Montagu of Beaulieu to the effect of *Spartina* grass on the fixation of mud