

so as to place it on the most stable ground available. These embankments are usually constructed so as to form a rectangular recess set back from the original line. Where the new inset wall parallel to the river runs into the two right-angled walls from the river, flat curves should be laid out so that, when the works are completed, all corners are eased off. Inset walls require to be stone-pitched on the river or sea side, as, in the event of a breach in the front wall, a sudden and dangerous rush of water may result.

In any critical operation upon a sea-wall, such, for instance, as the reconstruction or repair of a sluice, it is essential as a preliminary to build on the inside of the wall a temporary horse-shoe embankment, isolating that part of the wall which will be affected by the works, and care should be taken to bond the temporary earthwork well into the permanent earthwork of the wall. In carrying out a new sluice it is, moreover, necessary to execute the work in short lengths, and make good the bank as the work proceeds, so that at no point in the operations is the water from the sea or river allowed to pass through to the rear of the wall.

Another very important factor is to choose the most favourable season for carrying out such work. According to the countryman's phrase, in the late spring and early summer the "bird tides" occur. In April and May, when the nesting season is timed, an absence of severe weather conditions usually prevails. The tides as a rule are then low, and wind conditions moderate. This season is, therefore, a favourable period for carrying out works of this character, involving risks to a level. In respect of the re-dressing of the slopes of a sea-wall and the raising of it to its standard height, the months of October and November are the most favourable. After the heat and drought of summer walls are apt to crack, and dangerous fissures may thus be produced. The traffic along the crest of a sea-wall, the passage of cattle and sheep, and its normal settlement due to weather conditions cause some subsidence of the apex of a wall, which has periodically to be made good, and at the same time the slopes, which may have become deformed, require trueing to the proper gradient. All this is best done during the period