

ment of the aggregate of the wealth of the country that is now beyond computation.

THE RECLAMATION OF ARID LANDS.

Second only in importance to the reduction of overflowed lands, is the introduction of a general system of irrigation by which the vast bodies of arid and waste lands of the county may be brought under regular and profitable cultivation. These lands, though now regarded as worthless, except for pasturage for roaming stock, during brief portions of the year, are, in fact, in the nature of the soil, capable of being rendered highly productive. A regular and reliable supply of water is all that is necessary to render them first-class agricultural lands and advance them in market value to an equality with the most highly cultivated lands in the county. The area of the arid lands of the county is greater than that of the tide-lands, and they can be brought under cultivation by irrigation for one tenth of the cost of reclaiming the other class by the exclusion of surplus water.

IRRIGATING CANALS.

Notwithstanding the great natural facilities for a general and scientific system of irrigation applicable to the arid lands of the county, the few works of this character that have been undertaken have been extremely crude in character and superficial in results. Still, enough has been done to demonstrate the fact that in the waters which are annually wasted is a vast reservoir of dormant wealth, only awaiting the helping hand of capital and intelligently directed enterprise to develop it. Already two companies have been formed for the purpose of inaugurating a scientific and comprehensive system of irrigation. The first was organized in 1877, with a view of appropriating the water of the Stanislaus river, which is to be diverted from the channel at a point a short distance above Knight's Ferry, and conveyed to the dry but rich lands in the southern and eastern portion of the county, between the Stanislaus and Calaveras rivers. Operations have been commenced on this important work, and its projectors expect to have it in successful operation in 1879. The heaviest portion of the work is the construction of the dam and the cutting of a sixteen-hundred-foot tunnel, which has been already commenced. The canal is designed to carry a volume of water sufficient to irrigate three hundred thousand acres. The estimated cost of the work is about \$300,000. A similar company has