dance to Mr. Clift's, I estimated roughly the d susceptible of benefit by irrigation, which ed under my eye, at 20,000 acres, assuming before that the increase was only one ton to acre, and its value to be $10 per to , we ld receive from our now wasted waters a ue of $200,000 annually. I fully believe without resorting to any extensive or cost- gineering operations, or any erections more licated than any good farmer is capable of ating with his ordinary help, it will be pos- to increase the annual value of the grass of the State of New York one million of rs, by the judicious use of the streams flowing gh them.

DRAINAGE AND IRRIGATION ASSOCIATED.

have already stated that lands lying on the h side of Mr. Clift's stream is a sandy loam, e that lying on the north is coarse gravel, gh which the water leeches easily and ly. Although the south side is greatly tted by the water, it is very much less so the north side, in consequence of the im- ct drainage. Where lands are flat and re- ve, thorough underdraining is an indispen- accompaniment of irrigation. Without it, ater may prove injurious rather than useful. e land on the south side was well drained, ould without any doubt yield a greater en than the north side.

PARATIVE VIEW OF IRRIGATED AND UNIRRI GATED HAY.

is frequently alleged that the increased pro on of hay from irrigation is apparent rather real, as after drying in the sun there is no ence in the weight, and the irrigated hay s palateable.

ntended to test this point very carefully, but unable to procure any accurate weighing atus of sufficient delicacy for the neces- experiments. I was compelled to relinquish art of my design. I however saw a mow d irrigated hay in Mr. Clift's barn which s bright and sweet as could be desired; and sured me that the cattle eat it with as much y as they do any hay grown upon his farm. Clift's mode of applying the water being very fully in the Society's Transactions 55 and 1858, I refer those interested in the r to those volumes for the informaiion they may require.

was a real pleasure to me, to visit a man as commenced life with little capital save, ing heart and stout arms, and who had ted a rocky and swampy waste into g and fertile fields, who has given his n the best education the country affords, ed a generous and genial hospitality, and careful to embellish as well as utilize his ; and, after doing all this, to accumulate cient fortune without any speculations, but aid of honest straightforward farming alone. Such men are the jewels of our country, worthy of all honor and renown. I congratulated him heartily upon his success in life, and the truly happy position in which he stood. He told me one thing had contributed more than anything else to this result. He had *one of the best wives in the world.* He said he could never have accomplished it but for her.

Mangel Wurzel, on Hardy's Improved Lois Weedon Practice of Husbandry.

TO THE EDITOR OF THE CANADIAN AGRICULTURIST, TORONTO.—SIR,—Inquiries having been made by several correspondents respecting the particulars and truth of a statement made by me of the weight of my experimental plot of mangels (1860), twenty-two square yards, permit me to say further, for their intelligence, that if my good faith was wanting, the said crop was open for the inspection of all visitors who chose to call and see them growing, or to witness their weight when they were pulled. Being intent upon agricultural pursuits, for the good of others as well as myself, by only common personal courtesy, I have pleasure at all times in showing any interested friend my experimental crops when growing; and these are many, as I experiment on a small scale diverse plans of husbandry upon almost every crop I grow, for the advancement of agricultural knowledge. To be more explicit in my description, the crop alluded to was thirty-six roots of yellow globe mangel, grown on 22 square yards, averaging 15 lbs. each, or 4 cwt. 3 qrs. 8 lbs., equal to 53 tons 2 qrs. 24 lbs. per statute acre. I would have it distinctly observed, and kept in mind, that the crop grew on common ploughed land, of a mixed character, and loamy subsoil, well manured, and deeply cultivated by the spade in the winter season, only once dug, and that for the first time. Deep cultivation, or *perfect* culture, for roots especially, is not essential, by whatever method it may be accomplished—whether it be by manual labor, horse power, or mighty steam; but the old practice of digging has not yet been superseded. Shuffle the cards how we will, the spades are pretty sure to win. This crop, let it be understood, was grown in double rows, on the flat, and not on ridges, occupying something less than *one moiety* of the land, or, strictly speaking, on only 11 yards, in the centre of 7ft, 5 in. stetches. This pair of rows was about 2 ft. 6 in. apart; the plants in the rows standing diagonally, or dog-leg fashion, the same distance apart from each other. The remaining counterpart, or moiety, or half of the land, most barren, where were the furrows, being clean fallowed for a similar crop the next season, to within seven inches of each row of plants, it being just half the entire stetch, the plants occupying the other half, 3ft. 8in. In like manner, by the bye, as I advocate wheat,