

Agriculture.

WHAT WEEDS COST US.

The utter waste of weeds is never more thoroughly exemplified than in a dry time. We often hear it said that one cannot afford to grow weeds; that they feed on the nutriment the plants ought to consume. But it is not merely a matter of food, it is one of drink also. During the very hot and dry spell last year, we noted a field of corn that had been somewhat neglected, and weeds were "ahead,"—a rather rare thing in these parts, for our farmers, more, perhaps, than any other part, understand the importance of keeping weeds down. Only divided by a fence was another plot. The quality of the land was evidently the same in both instances; and the corn in both cases had grown to about the same height. There seemed, indeed, but little difference in any respect, except that one had been carefully harrowed to keep down the weeds—not one to be seen—while the other was very much neglected in that respect. In the case of the latter the hot weather had curled the leaves, and the plants had evidently received a great check to development, while the clean-kept was as green and vigorous in appearance as if it had had all the moisture it needed. And so it had. The land here had nothing to do but to furnish moisture to the corn plants, while in the other case it had to do for the weeds as well.

We never saw a better illustration of the injury of weeds. It is not only what they eat, but what they drink, that robs us of our due rewards.

HARVESTING TIMOTHY HAY.

The hay harvest is approaching, and it is well to consider the advantages and disadvantages of cutting timothy early or late. If cut early, that is at what is known as the "second bloom," the hay looks brighter, smells sweeter, and stock will eat more of it. Furthermore, the Agricultural Department has advised the early harvesting of meadows, because the hay contains more of the albuminoids and other valuable food elements. Moreover, when the markets are bare as at present, hay when cut early can often be sold in the field more profitably than at any time thereafter. These reasons have prompted the early cutting of timothy in this neighborhood, but the result has not been as profitable as hoped for, since it has been learned that if timothy meadows are cut before the plant has attained a certain stage of growth, exposure to the sun will kill a portion certainly, if not all of the roots. The three Summer drouths in succession in Central Illinois have perhaps required the re-seeding of nearly half the meadow acreage, and it is only lately that it has been ascertained that the timothy bulb matures at nearly the same time with the seed. If the grass is cut early the bulb is left without support in its immature state, and where it is suddenly exposed to the sun and heat it dies. If the meadow is left to stand till the bulbs mature, the plant retains its vigor. This appears to be the explanation why one part of a meadow harvested late in June, or early in July, will show very serious injury, while on the other part, where the harvest was a few weeks later, the stand is good. Cattle feeders of fifty years experience tell me that stock may eat more early cut timothy, but a less quantity of late-harvested does more good.—B. F. J. in *Country Gentleman*.

GREEN MANURING.—A young and progressive New Hampshire farmer,

one of the new school of practice, advised the sowing of two bushels of winter rye to the acre; also to cultivate the corn once between each row. This advice was followed, and in summer his field was green and without injury to the corn. As soon as the corn would do to cut he harvested it and drew it off, then turned on young stock to feed on the land till late in the fall. On the 20th of May following these same fields showed rye waist high and very thick. Our city farmer commenced at once, with three two-horse teams to plow and chain the green rye under the sod, which was soon accomplished. Next he rolled these furrows down and planted the ground to corn. This crop showed great improvement over the previous one. He continued the practice for four years; his land meantime became rich and fertile. Thus much of an annual sowing of two bushels of rye to the acre. The fall feed thus secured each year nearly compensated for the cost of the seed.

THE VALUE OF DRAINAGE.

As a matter of fact, there is very little land in our country that would not be improved by drainage. Many light soils are springy, and the crops in them are injured by stagnant water. Heavy land can never do its best until drained. Vast areas of low-lying but rich lands are practically valueless for want of drains to carry off the redundant moisture which forbids the growth of any but aquatic plants. Many who admit the importance of this improvement are puzzled about the ways and means of effecting it. The *Drainage Journal* mentions the following plan, which is well worthy of serious consideration:

"Some enterprising tile manufacturers select careful farmers who own flat lands, and make something like the following propositions: That the farmer make a careful estimate of his average crops, and the tile manufacturer proposes to furnish tile necessary to drain thoroughly the lands designated in the agreement, the farmer to furnish the labor of putting in the drains at a stipulated price, before agreed upon, to be paid out of the excess of the crops grown on the land over and above the average yield, and the tile manufacturer agreeing to take the balance of the increase in four or five crops (as agreed), to cover the cost of the tile. On level lands, where the average crop in five years runs low and the land by nature is rich, it is a safe proposition for the tile manufacturer if the farmer honestly performs his part of the contract. On rich lands, that need drainage and need it badly, it will pay 25 per cent annually on the investment, and in some instances more."

LOOK OUT FOR THE WEEDS.

The busy time on many a farm has come. The weeds seem to know it, and stealthily they raise their impudent heads, and rapidly send down their roots to steal away the strength of the soil and useful garden vegetables of their needed supply. When the ground is moist and the sun hot, and showers frequent, one week's growth will astonish the farmer, who calculates that weeds grow in the gardens no faster than in the fields. He has manured his garden richly, and the weeds, keen, active fellows that they are, have taken advantage of it. They know where richness lies and mean to reap the benefits. Lock out for them or you will have to hunt among them for your little onions and woody beets, while your struggling peas may use them for brush to climb up on.

We have stole a march on our weeds by planting all our garden truck in rows three hundred feet long, and cleaning out the villains weekly with a horse-hoe. One who has tried this method once will never do without a garden again, as he can make the weeds his servants instead of having them masters of the ground.

A well-cultivated garden, planted in straight rows, kept clean, is a thing of beauty and of profit. But a garden full of weeds—I will let a better hand than mine describe it. "I went by the field of the slothful, and the vineyard of the man void of understanding; and lo, it was all grown over with thorns and nettles, and had covered the face thereof, and the stone thereof was broken down. Then I saw and considered it well; I looked upon it, and received instruction."

The lesson is general. Look out for the weeds, lest poverty come as one that travelleth; and want as an armed man.—*Uncle Robert in Practical Farmer*.

Horticulture.

THE HANSELL RASPBERRY.

A Meeting of Fruit Growers at Raucocas—A Very Early Raspberry—Endorsed by Prominent Nurserymen and to be Introduced by J. T. Lovatt, the Well-known Small Fruit Grower of Little Silver.

New Jersey is again to the front with a new fruit, and this time it is a new raspberry which will prove an acquisition to the fruit growers throughout the country. It seems the proper thing to do now-a-days, when introducing a new fruit, to send general invitations to fruit growers and others interested, to see the fruit growing on its natural soil, and give all an opportunity of seeing for themselves. It seems to be a very excellent plan, as seeing is believing. None are inclined to doubt the evidence presented to their own eyes. However, your reporter was somewhat skeptical about the wonderful stories told of this new berry, as it seemed hardly possible that lightning should strike twice in the same place. Mr. Lovatt having introduced the Manchester strawberry so successfully last year, it would seem that he is getting more than his share of good things in the way of new fruit. It was upon his invitation that the farm of the Hansell Brothers in Burlington county was visited by a large party of intelligent fruit growers and nurserymen.

Tuesday of last week, (June 27th), was the day selected as likely to be the time when the fruit would be ripened in sufficient quantities to enable the party to form an opinion of its merits. The thrifty appearance of everything upon the Hansell fruit farm, and general good cultivation of the soil indicated that the proprietors were active and intelligent fruit growers. The particular field upon which the new raspberry was growing was a soil composed of heavy clay and coarse gravel, not as well adapted for raspberry culture as it might be. Yet the plants showed a vigorous and healthy growth, and were heavily laden with clusters of delicious fruit.

Upon the arrival of the people at Beverly station they were conveyed in wagons the distance of about four miles to the farm, where, as a preliminary to the sight seeing, an excellent and substantial collation was served. The party then scattered about the field, tasting and gathering samples of the fruit. After assembling again the inevitable photographer put in an appearance and photographed the group. From the length of time he kept the

party standing I should think he took them all double. Samples of the fruit were also photographed. Retiring again to the neighborhood of the house an impromptu meeting was held under the trees, of which Mr. Ezra Stokes, of Berlin, acted as chairman on the motion of Dr. J. B. Ward of Newark, and Mr. Thomas H. Child, of Philadelphia, acted as secretary.

The chairman called for an expression of opinion on the fruit that the company had assembled to examine. The following is a sketch of the remarks made upon the berry:

Mr. John S. Collins, of Moorestown: I have a very favorable opinion of the fruit; as to the quality of the berry I am not qualified to express an opinion as I do not like the taste of red raspberries at all, but the berry being so early it is certainly very desirable. It is fine looking, fair size, productive apparently—nobody would doubt that I think. I am pleased with the appearance of it. I was here a year ago and saw it, and I think it looks as well now as it did then, if not a little better.

Dr. J. B. Ward: Have been very favorably impressed indeed with the appearance of the fruit. It is certainly a very early variety. I saw a plantation of the Highland Hardy a few days ago; a very few of them were just beginning to color. I saw them on the place of Mr. Quinn. With the general conditions of this fruit I am wonderfully well pleased. Under better culture and on different soil it might prove to be a still more excellent berry.

Mr. Jesse B. Rodgers: The berry and the color is good. I do not consider the soil on which it grows the best for raspberries, and under better culture it would be greatly improved I have no doubt.

Wm. Parry, of Parry, N. J.: This is my first sight of this berry although I have heard of it for several years. I am very much pleased with the appearance of it. It is proof in itself of its earliness, as every one who has witnessed it can bear testimony. It is of fair size, fine color, and because of its firmness of flesh it must carry well, look well, and sell well in the market. It possesses all of these essential and most desirable qualities, and from appearance it must be perfectly hardy, as there has been no protection whatever to it. It stands exposed on soils not particularly well suited to grow raspberries, but on fair farm land, that gives assurance that it will do well anywhere that a hardy raspberry will grow. I think it will be an acquisition among small fruits, coming in earlier than any raspberry, black, white, purple or any color; it stands single and alone, and above all competition. At the present time I think there is no other raspberry that can compete with it in all the qualities that are desirable for a raspberry for the market.

James Lippincott: It is a fine looking and very early berry.

J. C. Burrow, Fishkill, N. Y.: I do not know how there can be anything more said than Judge Parry has remarked. I think he has said all that could be said in its favor and I endorse his statements.

J. S. Collins: The Highland Hardy is grown somewhat in this section. You would not find more than one berry to a yard among them now ripe. A few of the Early Welsh are ripe, but very few.

E. R. VanScliver: Its shipping qualities are first-class. It appears to be a dry berry; I have shipped it 400 miles from here and made money on it.