

their land, and have no other source of revenue but their soil; and at the end of twenty years, their soil would produce more than twice as much of any kind of crops which they were accustomed to raise, as it would when they commenced their farming operations.

"5th. A good farmer will take an agricultural paper, and will feel willing to communicate a portion of his good experience for the benefit of other farmers, who may be inquiring, with no little anxiety, how they may improve their system of farm management."

"These are a few of the characteristics of a good farmer; and they are communicated simply to awaken a spirit of improvement, and to induce farmers to look around them and see if they come up fully to the standard in all their farm practices."

Great Turnip Match.

The Annual Turnip Match, under the auspices of the Agricultural Societies of North and South Westworth, has been reported upon by the Judges in a very full, interesting, and instructive manner. So much so as to entitle the document prepared by them to more than a passing notice. It constitutes a sort of *mulum-in-parvo* cone of turnip culture. We therefore insert nearly the whole of it, though it occupies considerable space. It will well repay not only attentive perusal, but careful study. The Judges were Messrs. H. R. O'Reilly, of West Flamboro', J. Rymal, of Barton, and J. A. Bruce, of Hamilton:—

The duty assigned was to award a 1st, 2nd, and 3rd prize on fields of turnips of not less than four acres. A 1st, 2nd, and 3rd prize on fields of not less than one acre. A 1st and 2nd prize on fields of carrots of not less than one quarter of an acre. And a 1st and 2nd prize on fields of mangold wurzel, of not less than one quarter of an acre.

In examining fields of turnips, our rule has been to select and measure off a square of 25 feet, (the one-70th of an acre), in such portion of the field as in our judgment represented a fair average of the whole field, and to weigh and measure the produce carefully. In carrots and mangold wurzel, to select a similar piece 12½ feet by 25 feet (the one-140th of an acre), weighing in the same manner.

1st. We proceeded to the field of turnips of James McMonies, Esq., lot No. 5, in the 1th concession, East Flamboro', about 4½ acres; Skirving's purple-top; soil, light loam. Wheat stubble, manured and ploughed; 2 lbs. seed sown to the acre, in drills; 2 feet apart, from 26th to 29th June; thinned and hoed twice, cultivated twice. Yield of the piece examined, 716½ lbs., = 25 tons, 137½ lbs., or \$35 37½-60 bushels per acre.

2nd. John Stock, lot No. 11, in 3rd concession, East Flamboro', about 2 acres of old purple-top Swede; soil, clay loam; clover sod; ploughed in the fall; having had 20 loads barn-yard manure per acre; cultivated and ploughed in the spring; 2½ lbs. seed to the acre; sowed about 12th June in drills, 2 feet apart; yield, 601 lbs., = 21 tons, 280 lbs., or 701 40-60 bushels per acre.

3rd. Thomas Stock, lot No. 9, in 3rd concession, East Flamboro', about 8½ acres, principally Matson's and Skirving's; soil, black alluvial; clover sod; manured with 12 loads barn-yard manure to the acre, and ploughed in the fall, and once in the spring; 3 lbs. seed to the acre; sowed 15th and 16th June, in drills, 26 inches apart, thinned and hoed twice, cultivated three times; yield, 479 lbs., = 16 tons, 1,530 lbs., or 558 30-00 per acre.

4th. Edward Markle, No. 12, in 6th concession, East Flamboro', one acre, purple-top; soil, light loam; sowed in drills, 30 inches apart, very fine even crop, but very badly affected with caterpillar. The leaves nearly all gone; yield, 569½, = 19 tons, 188½ lbs., or 664 42½-60 per acre.

5th. James Black, No. 8, in 4th concession, West Flamboro', about 3 acres Skirving's, soil, clay loam, clover sod, ploughed in fall, manured with 16 loads barn-yard manure per acre; ploughed in the spring; 2½ lbs. seed sown to the acre, 7th and 8th June, in drills, 25 inches apart; yield, 527½ lbs., = 18 tons, 907½ lbs., or 615 7½-60 bushels per acre.

6th. John W. Betzner, lot 3, in 1st concession West Flamboro', about 2 acres, Skirving's, soil, light loam, oat stubble ploughed in the fall, with 12 loads farm-yard manure, ploughed in spring; 2½ lbs. seed to the acre, sown the 10th June in drills, 28 inches apart. Yield 529½ = 18 tons, 1065 lbs., or 617 45-60 bushels per acre.

7th. John Weir, No. 4, in 1st concession West Flamboro', 6½ acres, oat stubble, manured in the fall with 16 loads farm-yard manure per acre, and ploughed 9 inches deep; ploughed once in the spring and cul-

tivated; seed sown 9th, 10th, 11th and 13th June, with purple-top Swede, Matson's and Skirving's improved, drills, 28 inches apart, manured in the drills with 300 lbs. bone-dust per acre; soil, clay loam. Yield 513 lbs. = 19 tons 10 lbs., or 633 30-60 bushels per acre.

8th. George Leith, No. 41, in 1st concession Ancaster, 5 acres, purple-top; soil, clay loam; oat stubble, ploughed in fall and spring, manured in the drills with 10 loads farm-yard manure, and 200 lbs. Coc's superphosphate of lime per acre; 2 lbs. seed per acre sown on the 15th to 21st June in drills 28 inches apart. Yield 670 = 23 tons 900 lbs., or 781 40-60 bushels per acre.

9th. William Templar, No. 33, in 2nd concession Ancaster, about 3 acres Skirving's; soil, sandy loam, clover sod, ploughed in the fall with 25 loads manure to the acre, ploughed twice this spring; 2 lbs. of seed sown on the 25th of June in drills 30 inches apart. Yield 623 lbs. = 21 tons 1610 lbs., or 726 50-60 bushels per acre.

10th. W. A. Cooley, No. 49, in 2nd concession, Ancaster, 5 acres, half Laing, half old purple-top; soil, black alluvial and sandy loam; oat stubble, manured with 18 loads of farm-yard manure per acre, ploughed with Trench plough in the fall; cultivated, harrowed and ploughed, ploughed again last of May, harrowed and rolled; 3 lbs. seed to an acre, sown 15th, 16th, 17th and 18th June, in drills 24 inches asunder; seed came up very irregularly at first; horse-hoed 12th July; commenced thinning 20th July; plants 8 to 10 inches asunder; horse-hoed 3rd August and hand-hoed again. Yield 538½ = 18 tons 1695 lbs., or 628 15-60 bushels per acre.

11th. Thomas Dunbar, No. 12, in 3rd concession Ancaster, 5 acres, half Laing, half purple top; soil, sandy loam; oat stubble ploughed in the fall; ploughed in the spring, 12 loads farm-yard manure to the acre; 3½ lbs. seed to the acre, sowed 20th June in drills 26 inches apart. Yield 503½ lbs. = 17 tons 1215 lbs., or 587 25-60 bushels per acre.

12th. Thomas Dunbar, No. 41, in 2nd Con. Ancaster, 1 acre purple top, sandy loam—oat stubble ploughed in spring, and again with jointer, manured with 20 cart loads farm-yard manure to the acre; ploughed again; 3½ lbs. seed to the acre, sown 12th June in drills 24 inches apart. Yield, 515 lbs. = 19 tons 150 lbs., or 635 50-60 bushels per acre.

13th. Jonathan Kelly, No. 41, 4th concession, Ancaster, 1 acre purple top Swede, soil sandy loam; Timothy sod, manured and ploughed in the fall, ploughed in the spring; manured again in drills; 1½ lbs. seed sown per acre, 2nd July, in drills 28 inches apart, and cultivated twice, thinned and hoed again. Yield, 609½ lbs. = 21 tons, 609 lbs., or 711 0-60 bushels per acre.

14th. A. J. Sweeney, No. 46, in 3rd concession, Ancaster, about 3 acres; soil, sandy loam. Turnips in 1863; ploughed in the spring; 2 lbs. Skirving's purple top to the acre; sown 6th July in drills 24 feet apart; thinned on 28th July to one foot apart. Yield, 528½ lbs. = 18 tons, 960 lbs., or 6-16 bushels per acre.

15th. Jacob Rymal, No. 10, in 8th concession, Barton; about 2½ acres; Matson's, Skirving's, and Skirving's King of Swedes; soil, clay loam; spring wheat stubble, manured with 20 loads manure to the acre, and ploughed in the fall; ploughed in the spring and ganged twice; 2½ lbs. seed to the acre, sown on the 22nd June in drills 26 inches apart. This was a very fair crop, and had been well dressed and cared for, but one certainly not within the prize quantity, and consequently were not pulled.

16th. Lewis Springer, No. 8, in 3rd concession, Barton; 5 acres King of Swede; soil, sandy loam; sod ploughed in the fall; twice ploughed in the spring; manured in drills, 15 loads farm-yard manure to the acre; 3 lbs. seed per acre, sowed 15th to 20th June in drills 30 inches apart; hand hoed twice, cultivated once. Yield, 535 lbs. = 18 tons, 1,450 lbs., or 624 11-60 bushels per acre.

17th. Peter Grant, No. 8, in 1st concession, Barton; 5½ acres King of Swede and Laing's, soil, sandy loam; oat stubble ploughed in fall and again in the spring, manured with leached ashes and farm-yard manure; sown in drills 28 inches apart. In this field we selected a portion of the King of Swedes and a portion of Laing's. The King yielded 615 lbs. to 25 feet square, and Laing's yielded 593, making the average 604 lbs. = 21 tons, 280, or 701 40-60 bushels per acre.

CARROTS.

1st. Thomas Stock, No. 9, in 3rd concession, East Flamboro', 4 acre white Belgian, soil, sandy loam, potatoes in 1863; ploughed in the spring, with 15 loads farm-yard manure to the acre; 3 lbs. seed to the acre, sowed 1st June in drills 22 inches apart. Yield, 275½ lbs. = 19 tons, 570 lbs., or 642 50-60 per acre.

2nd. Thomas Dunbar, No. 41, in 2nd concession, Ancaster, 4 acre white Belgian; sandy loam; oat stubble ploughed in spring, and again with jointer plough; 20 cart loads manure to the acre; 2 lbs. seed to the acre, sown in middle of May in drills 20 inches

apart. Yield, 260½, = 18 tons, 470 or 607 50 60 per acre.

3rd. S. D. Hess, No. 11 in 6th Con. Barton; 3 acre white Belgian carrots; soil, black alluvial; barley stubble, ploughed once in the fall, cultivated in the spring; no manure; 3 lbs. of seed to the acre, sowed in middle of May on the flat, rows 32 inches apart. Yield, 354 lbs. = 24 tons, 1,560 lbs., or 825 bushels per acre.

MANGOLD WURZEL.

Two fields only of this root were exhibited. The first the judges did not consider worthy a prize. The second, on the farm of S. D. Hess, No. 11 in 6th Concession Barton; soil and cultivation same as his carrots. Yield 321 lbs. = 22 tons, 940 lbs., or 749 bushels per acre.

RECAPITULATION.

RESULT OF EXAMINATION OF 4-ACRE FIELDS.

	Tons.	Cwt.	Lbs.
James McMonies.....	25	1	37½
Thomas Stock.....	16	15	30
John Weir.....	19	0	10
George Leith.....	23	9	00
W. A. Cooley.....	18	16	95
Thomas Dunbar.....	17	12	45
Lewis Springer.....	18	14	50
Peter Grant.....	21	2	80

RESULT OF EXAMINATION OF ONE-ACRE FIELDS.

	Tons.	Cwt.	Lbs.
John Stock.....	21	2	80
Edward Markle.....	19	18	81½
James Black.....	18	9	7½
J. W. Betzner.....	18	10	56
Wm. Templar.....	21	16	10
Thomas Dunbar.....	19	1	50
Jonathan Kelly.....	21	6	65
H. J. Swayze.....	18	9	60

CARROTS.

Thomas Stock.....	19	5	70
Thomas Dunbar.....	18	4	70
S. D. Hess.....	21	5	60

MANGOLD WURZEL.

S. D. Hess.....	22	9	40
-----------------	----	---	----

From these premises we award for the 4 acre fields the 1st prize to Jas. McMonies, Esq., of East Flamboro'; the second prize to George Leith, Esq., of Ancaster; and the 3rd prize to Peter Grant, Esq., of the city of Hamilton.

For the one-acre fields we award the first prize to Mr. William Templar, of Ancaster; the second to Mr. Jonathan Kelly, of Ancaster; and the third to Mr. John Stock, of East Flamboro'.

CARROTS.

We award the first prize for the best quarter acre of carrots to Mr. S. D. Hess, of Barton, and the second to Thomas Stock, Esq., of East Flamboro'.

MANGOLD WURZEL.

The first and only prize in this class we award to Mr. S. D. Hess, of Barton.

Before concluding this report, the judges bear testimony of the excellence of the care and culture of all the fields they have visited. The improvement in this respect, since the institution of the annual turnip match, is very remarkable. They are happy, also, to observe that the increase in the breadth sown is very satisfactory, furnishing, as it does, every evidence that farmers are beginning to appreciate properly the advantages of this most invaluable crop. This season has been one of the most unfavourable for the cultivation of the field root crops which has occurred for many years; the average yield will consequently be found somewhat lower than the general average for some years.

With respect to the different varieties sown, the judges think that the examination of the several fields justifies them in recommending the Skirving and Skirving's King of Swedes varieties for heavy upland soils, and the old purple-top and Matson's and Laing's purple-top for alluvial and lighter and more level loamy soils. The Skirving and King of Swedes are inclined to grow more necky on the last-mentioned soils than the other three varieties, and produce a larger yield on the upland heavy soils.

CHEAP MICROSCOPE.—We have received from Mr. C. Potter, Optician, of this city, a sample microscope of the kind advertised by him in our present issue. It is a very cheap and effective little instrument, showing the animalcule in a drop of water quite distinctly. It is at once useful and entertaining. The farmer will find it of service in examining injured grain, and studying the forms and habits of his insect enemies. Its low price brings it within the reach of all.