former possesseda stiffer straw which was almost entirely free from rust, while the latter was troubled with rust to a considerable extent. The berry of each variety is long and large, having a plump | The common six-rowed variety of Ontario gave an average yield kernel covered by a thin hull. The Oderbrucker from Germany, at the rate of 409 bushels per acre. yielding at the rate of 75 bushels per acre, is one of the most promising of all the oats tested. The average length of the straw including head, was upwards of five feet, but the crop stood up well and was almost entirely free from rust. The berry is white, long, and his a thin hull, and one which we consider will be well adapted to meet the various needs both of the farmer and of the oatmeal miller. The Danebrog, another German variety, also gave a yield of twenty-five bushels per acre, but the straw was much weaker than that of the Oderbrucker, and was also considerably troubled with rust. The Siberian, from Russian, yielding at the rate of 73.5 bushels per acre, possesses many excellent qualities, and is also well adapted to meet the oatmeal millers' bill. Among the other new varieties which stand high in both yield of grain and general qualities, may be mentioned the Probitics, Germany; Waterloo, Germany; Improved Besthour, Germany; Legona, Russia; White Tartarian, Russia, and Poland White, from France. Of the ningteen Canadian varieties tested, the Bavarian oats took the lead, yielding at the rate of 72 5 bushels per acre. It has a spreading head, strong straw, and white berry This out was brought from Bayaria to New York State, and from there was introduced into Western Ontario, where it has been grown with much success for a few years.

Spring Wheat Farmers in this section of Ontario, as well as in many others, have ceased almost entirely the growing of spring wheat as the yields from this crop during the past few years have been so unremunerative. Upwards of eighty varieties were imported for the purpose of obtaining a few which might be profitably grown over the Province. Of those tested the Herison Bearded, from France, took the lead, and while only yielding at the rate of about 19 bushels per acre, still gave a vield of 30 per cent, above the best Canadian variety, save the Wild Goose. This French variety has many promising features. The straw is strong and may be said to be free from rust, the head is of a compact, club-like nature, the red berry, although rather small, is very plump and even in form. This grain may do well in many parts of Oaterio. The March wheats from France are also promising and compare very favorably with the best Canadian varieties. The Wild Goose, well known in most parts of the Province, took the lead, giving about 26.5 bushels per acre. This is a very coarse wheat, and always brings less on the market than other varieties, but even at the low price, it is a question if there is not more made by growing this wheat than by most of the other Canadian varieties. The Red Fern gave a yield at the rate of a little over thirteen bushels per acre.

Barleys - The forty-eight varieties of imported barley varied in rate of yield from 7.5 bushels to 47.9 bushels per acre. There were eight kinds of foreign barley which gave a yield of upwards of 40 hushels per acre and out of those eight, five were two-rowed and three six-rowed. The Cheyne, from Germany, a two-rowed barley, and a strong grower, took the lead in point of yield, giving at the rate of 48.9 bushels per acre, and this was closely followed by the Pheonix, 469 bushels per acre, and the Italian Rice, 45.8 bushels per acre. The latter two are also two-rowed varieties from Germany, and possess straw of a better quality than the Cheyne. Of the six-rowed varieties the Oderbrucker from Gerone size. Of the six-rowed varieties the Operorucker from Germany, yielding 44.3 bushels per acre, and the Mandschuri from C. Horneks, Associate of 1882-[180.]

acre. The two varieties are much alike in appearance, but the Russia, 42.7 bushels per acre, came at the top of the list in point of yield. Taking the average of the entire lot of imported varieties, the two-rowed gave a slightly higher yield than the six-rowed.

> Peas. There were sixteen varieties of peas tested, ten of which were imported, the remaining six being selected from among those fairly well known in Canada. The varieties introduced were all obtained from England, and the Glory yielding at the rate of 37.1, and the Early Racehorse at the rate of 36.2 bushels per acre, made the highest yields of the new grains. The former is a large blue pea, and the latter is much smaller and of a yellowish white appearance. Of the six Canadian sorts, five gave a higher yield than the best foreigner, the Prussian Blue even reaching to 45 bushels per acre, and the White-eyed Marrowfat following closely after with a yield of 43.9 bushels per acre.

> These grains are to be grown again during 1890, and more conclusive results may be obtained regarding the respective merits of the several varieties.

## Method of Ascertaining the Weight of Live Cattle.

This is of the utmost utility for those who are not experienced judges by the eye; and by the following direction the weight can be ascertained within a mere trifle:-"Take a string, put it round the beast, standing square, just behind the shoulder-blade; measure on a foot rule the feet and inches the animal is in circumference; this is called the girth; then, with a string, measure from the bone of the tail which plumbs the line with the hinder part of the bullock; direct the line along the back to the fore part of the shoulderblade; take the dimensions on the foot-rule as before, which is the length, and work the figures in the following manner:-Girth of the bullock, 6 feet 4 inches; length, 5 feet 3 inches; which multiplied together, make 31 square superficial feet; that again multiplied by 23 (the number of pounds allowed to each superficial foot of cattle measuring less than 7 and more than 5 in girth) makes 713 pounds. Where the animal measures less than 9 and more than 7 feet in girth, 31 is the number of pounds to each superficial foot.

Again, suppose a pig or any small beast should measure 2 feet in girth, and 2 feet along the back, which multiplied together, make 4 square feet; that multiplied by 11, the number of pounds allowed for each square foot of cattle measuring less than 3 feet in girth, makes 44 pounds. Again, suppose a calf, a sheep, etc., should measure 4 feet 6 inches in girth, and 3 feet 9 inches in length, which, multiplied together make, 1612 square feet; that multiplied by 16, the number of pounds allowed to all cattle measuring less than z feet and more than 3 feet in girth, makes 264 pounds.

The dimensions of the girth and length of cattle, sheep, calves, or hogs, may be as exactly taken in this way as is at all necessary for any computation or valuation of stock, and will answer exactly to the four quarters, sinking the offal, and which every man, who can get a bit of chalk, can easily perform. A deduction must be made for a half-fatted beast of 1 stone (14 lbs.) in 20, from that of a fat one; and for a cow that has had calves, I stone (14 lbs.) must be allowed, and another for not being properly fat.