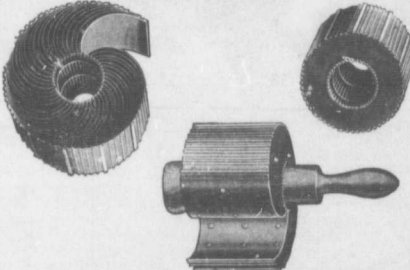


## Two Leading Features OF "SIMPLEX" CREAM SEPARATORS

1. The Link-Blade Skimming Device
2. The Self-Balancing Bowl

Note the Principal Advantages of the Above-Mentioned Features:



The Link-Blades closed for skimming, open for cleaning and held by standard for convenience in cleaning.

1. Increased capacity of from 30 to 50 per cent. over the most efficient of previous devices, combined with very clean skimming under a wide range of conditions as to milk, temperatures, etc.
2. Great convenience in cleaning and handling, because the blades do not come apart, and do not have to be re-assembled in any particular order.
3. The device being expandible, and fitting the bowl snugly, it can never become loose, or shift in the bowl, and throw the same out of balance.
4. The pressure being transmitted through a series of brass rivets, there is no strain on the blades themselves, and there is no rusting formed by the points of contact of the rivets.
5. The device, being much more efficient, is a great deal lighter and smaller in order to do the same amount of work, making it still easier to handle, and requires less power to run than other devices of same capacity.

## D. Derbyshire & Company

Head Office and Works: BROCKVILLE, ONT.

Branches: PETERBOROUGH, ONT. MONTREAL and QUEBEC, P. Q.

WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

## No Extra Charge for This Extra Service!

Notwithstanding the fact that through the efforts of our friends we have gone ahead upwards of 3,000 in circulation since a year ago and in spite of the fact that our Special Magazine Numbers cost 2 cents from 1,000 to 3,000 extracirculation over our regular issues, our rate remains the same as hitherto.

Remember, our great **Poultry** Annual is out February 1st. It will abound in interest and show that marvellous helpfulness. It will be kept as a reference by 98 per cent. of Farm and Dairy readers.

Come on in this number and plan to use special space in all eight of Farm and Dairy Special Magazines for 1912.

Forms close for **Poultry Special** January 25-27. Page, \$47.04; Half Page, \$23.52; Quarter Page, \$11.76. A full rate of 7 cents a line.

Adv. Dept., FARM AND DAIRY, Peterboro. Ont.

It is desirable to mention the name of this publication when writing to advertisers



### CONSULTATION ON THE RUN-DOWN CONDITION OF FARMER GRAY

Dr. Combine.—"After considering your case very carefully, Mr. Gray, we desire to say that you are very sorry to find that you are in such a run-down condition. Our verdict is that it is all your own fault. We are convinced that if you will only sow better seed, breed better stock, under-drain your low land and continue to take medicine out of the bottles we have here, you will soon be as fat and prosperous as we are."

### Experimental Union Meets

Great indeed has been the service rendered to Ontario agriculture by the work of the Ontario Agricultural and Experimental Union, the 33rd annual meeting of which was held in Guelph last week. During the 33 years of its existence the Union has been a connecting link between the Ontario Agricultural College and the farmers of the province. Many of our best varieties of grains have first been made known through experiments conducted by the Experimental Union.

An idea of the importance of the work of the Union was given in the report presented by the secretary, Prof. C. A. Zavitz. In 1886 there were 12 experimenters throughout the province. In 1911, 4,400 farmers took part in conducting the experiments; 40 series of experiments were conducted and as many as 1,045 individual farmers took part in one experiment. In the last 26 years the number of experiments conducted has been 63,302. In those experiments all of the most important farm crops grown in Ontario have been tested, the best varieties determined, and lately the Union has added to its line of activities experimental work with bees, forestry and school garden work.

#### A WONDERFUL NEW OAT

The most important result of the experiments conducted during the past year will be the introduction to Ontario farmers of a new variety of oat, O.A.C. No. 72. This new variety, a strain of the Siberian, was developed at the College from a single plant selected as the best amongst 10,000 plants. In compounding the results of the experimental work with this oat, Prof. Zavitz found that it yielded 1.1 bushels per acre more than the Siberian; 1.6 bushels more than the Regenerated Abundance and five bushels more than the Lincoln. It is intermediate between the Siberian and the other two varieties in straw production, but the straw is stiffer and freer from rust than the other varieties. O.A.C. No. 72 was the most popular oat with the experimenters in 1911. Prof. Zavitz's famous No. 21 barley has always yielded more pounds of grain per acre than oats, but this year O.A.C. No. 72 exceeded it.

Great interest has again been exhibited by Union experimenters in alfalfa. The Variegated and Grimm alfalfa have both proven themselves more hardy than the common alfalfa and better adapted to Ontario conditions.

Reports from over the province indicate that the acreage planted to potatoes is increasing very slowly. Professor Zavitz attributed the small development in potato growing to the lack of uniformity in varieties and scarcity of labor. In most Ontario sections it is impossible to secure a good load of potatoes that are uniform in variety and for this reason the pattern potatoes are preferred. The Davies' Warrior, a new variety of potato sent to Union members this year, has surpassed in production all varieties tested at the College, and also throughout the province.

Prof. Zavitz, in reporting on the experiments with fertilizers, explained that results of fertilizer experiments conducted at the College would be very narrow in their application, each farmer having different soil conditions. Through the work of the Union, however, the fertilizer requirements of soils in all parts of the province are tested and are of value both to the farmer himself and to his neighbors. In connection with fertilizer experiments, Prof. Harcourt gave a synopsis of experiments that will be conducted with peach and apple trees and garden crops. As the work has just commenced, however, Prof. Harcourt had no results to report this year.

#### BEST SIZE OF FARM

Of peculiar interest were the two lectures given by Prof. G. F. Warren, of Cornell University. In the past five years, Prof. Warren has conducted an investigation into the business of every farm in two counties in New York State. An inventory was taken at each farm of the value of stock, machinery, etc., and the receipts and expenditures for one year. Allowing five per cent for interest on capital invested, the labor income of the proprietor was determined on each of these farms. As a result of his investigations, Prof. Warren decided that farmers with less than \$25,000 capital are poorer off than if they worked as hired men and invested their money elsewhere.

The result of the investigation was to Prof. Warren conclusive proof that the larger the farm the greater the labor income up to a maximum of 600 acres. He found that where the farm consisted of 30 acres or less the farmer received on the average only \$168 for his year's work; 100 acres to 150 acres, \$490; and over 300 acres (averaging 261), \$946. "I doubt," said Prof. Warren, "if it is worth while trying to farm with less than 100 acres or \$5,000 capital. We can farm

(Continued on page 8)

Issued  
Each W

Vol. XXXI

IM

Fresh Air of

SOUND  
attribu  
is prof



Prof. Geo.

wider range  
ently health  
longer perio  
stock. The  
to believe th  
and thrifty  
point of vie  
less in come

It is time,

ters from a  
member that  
that the seed  
developed be  
symptoms, a  
diseases that  
ditions, it is  
edy when the

L

Tuberculosis  
of diseases j  
believes that  
cause there  
fore regard  
is liable to  
Many well  
no clinical  
healthy cow  
to the herd  
afford, there  
tain sanitary  
we never kn  
work its way  
aim to main  
able to the

Effective  
sites of a  
tion which  
of windows  
tory, for th  
is scarcely  
sequently th  
stable has  
system of v  
it is necess  
during both

\*An address