

when it (the atmosphere) is loaded with microscopic germ life, as it generally is.

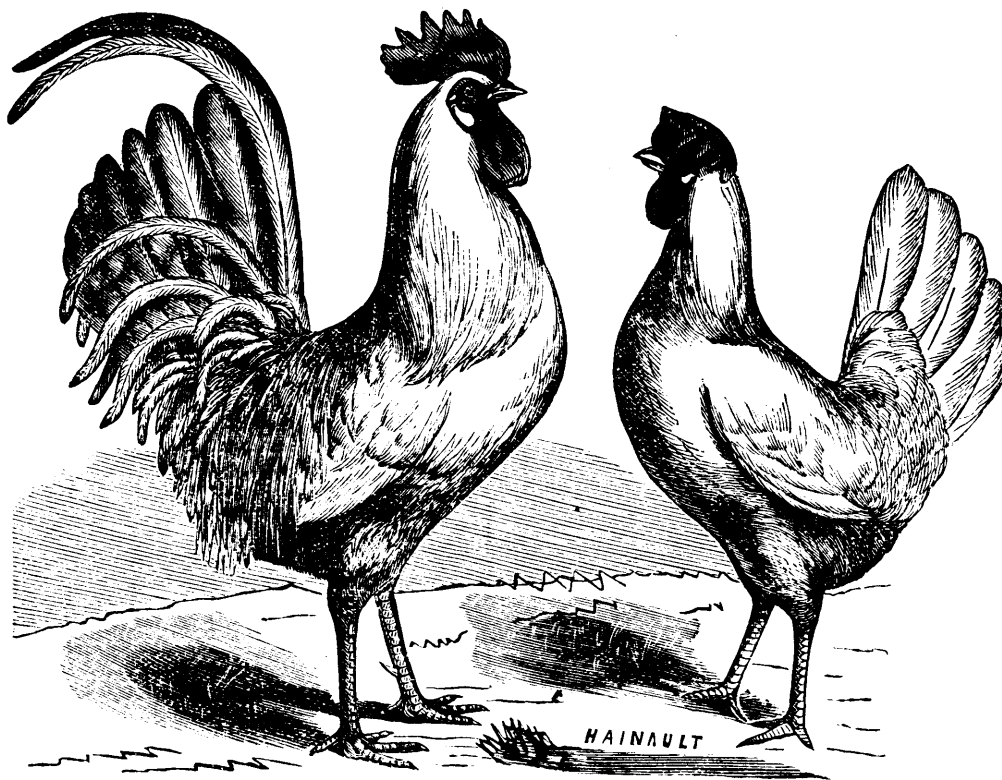
When all the milk has been separated from the cream, the speed of the rotating chamber is allowed to slacken. A portion of the separated milk is then put into the supply vessel, and as this flows down through *a*, into the chamber, it forces up the cream in *w*, by head pressure as formerly indicated.

The advantages of Mr. Gustav de Laval's separator may be summed up as follows:—1. It will do away with the bother and expense of setting up cream in pans. 2. Less capital will be required in the erection of butter dairy-houses, as a separator occupies very little space. 3. The cream can be separated as fast as the milk is withdrawn from the cows, and the cream churned immediately. 4. It will effect the commencement of a new era in the commerce of fresh cream for our tea, coffee, and strawberries; compared with the sky-blue compound which townspeople are now compelled to use the advantage is incalculable. 5. It will be the commencement of a new era in the manufacture of skim-milk cheese, or what will be termed under the new system sweet-milk cheese. The milk comes from the

separator sweet and pure, all the animal and other odours so detrimental to cheese-making being removed, and life germs of the atmosphere excluded, so that it can be made into pure sweet-milk cheese immediately. 6. It will enhance the intrinsic as well as the commercial value of whole milk, sweet milk from which the cream has been removed, and the cream itself. 7. and lastly, it will increase the consumption of and demand for dairy produce.

Separators are made of different size. The size shown at Kilburn is 11 inches by 4 inches inside, and holds ten pints. It separates about 30 galls. per hour, and the price, £28, is exclusive of the intermediate motion, the cost of which will depend upon how the separator is fixed. Hand machines are so easily driven that they can be worked by a foot treadle like a spinning wheel.

Besides separating cream and milk, the machine will separate other liquids of different specific gravities, such as tar from water, &c. The English patent is No. 4459, November 4, 1878, and the patent has been extended to America, and all other States where patents are granted. On the continent and in the United States of America, the project is exciting the same lively interest as in England.



White Leghorns.

## POULTRY DEPARTMENT.

*Under the direction of Dr. Andres, Beaver Hall, Montreal.*

### White Leghorns.

#### DISQUALIFICATIONS.

Comb falling over to either side, or twisted, in cocks, or pricked, or duplicate, in hens; red ear-lobes; legs other than yellow; plumage other than white, or with colored feathers in any part thereof; crooked backs; wry tail.

#### THE COCK.

*Head.*—Short and deep; color, pure white; beak, yellow, rather long, and stout; eyes, full and bright; face, red, and free from wrinkles or folds.

*Comb.*—Red, of medium size, erect, firmly fixed on the head, single, straight, deeply serrated (having but five or six points—five preferred), extending well over the back of the head, and free from twists, side-sprigs, or excrescences.

*Ear-lobes and Wattles.*—Ear-lobes, white or creamy white, fitting close to the head, and rather pendant, smooth and thin, and free from folds and wrinkles; wattles, red, long and pendulous.

*Neck.*—Long, well arched, the hackle abundant, and flowing well over the shoulders; color, pure white.

*Back.*—Of medium length and width; color, white, as free as possible from yellowish tinge.

*Breast and Body.*—Breast; full, round, and carried well forward; body, rather broad, but heaviest forward; color, white.

*Wings.*—Large, well-folded; color, white.