Mrs. Mary McMorine, Selby, Ont.

THE object of this little essay is to place before you, at the request of the editor of Farm and Dairy, a few practical and commonsense methods in artificial incubation, glean-ed from many sources of personal experience, and to point out a few suggestions that any one can follow. No amount of capital, high-class incubators, or first-grade eggs, will ensure good hatches unless one has not only the right kind of tools to begin with, but these again must be intelligently handled.

Facts are facts, and in a field as vast as poultry culture, the best of us are sometimes apt to go astray, for it is not only the keeping and breeding of fowls through a series of years that make an efficient poultry man or poultry woman; but it is the carrying out of methods, sure in results, which will eventually bring success. eggs arrived at the express office on a bitterly cold day. Being notified by a postal from the breeder that he had sent them, I drove in and asked the express agent for them. He replied "There is nothing here of that description for you." Seeing beside the stove a miscellaneous heap of packages from Simpson's and Eaton's, and sundry other goods, I made a careful inspection, and it is from beneath this heap that eventually my high-priced eggs were pulled out.

The temperature in that room was between 90 and 100 degrees. The temperature outside was at freezing. The drive home of four miles completed the destruction of my eggs. I managed to hatch them, but the chicks were weaklings, and unfortunately for me, with care I have managed to raise every one, but only to my bitter disappointment. Probably a beginner

could not have hatched these eggs at all, and joud lamentations would be raised against everything and everybody; but the actual trouble lay in the handling due to a journey and the elements.

It has been demonstrated beyond doubt that artificial incubation is safer and more profitable than the old method of the sitting hen, because one essential to profitable poultry culture, whether on a large or small scale, lies in prolific egg production; therefore, the frequent sitter is a loss to her

owner. Then, to obtain high-priced broilers, roasters, and winter layers, one must secure



Splendid Eating But Few Eggs

These Dark Brahmas are representative of the Asiatibreeds—Brahmas. Cochins and White Langshans. They are heavy of body, present a splendid appearance anare unexcelled as table fowl.

early hatched chicks and not be dependent on the biddies' temper. Also one must hatch in numbers, and this is impossible under sitting hens.

Provided a standard machine is used and all other essentials strictly adhered to, I will feat lessly add that the incubator will do for you what you do for the incubator. Place it in a cool, dry, well-ventilated cellar, avoid jarring it, slamming of doors, or constant motion around it. Moisture, pure air, and freedom from draughts are absolutely essential to success. Damp, foul air and draughty cellars will not hatch eggs, but will prove prolific hatcheries for moulds and bacterial growths whose species are legion.

## CONTROL OF TEMPERATURE

Use the very best of coal oil in your incubator lamp; keep your lamp clean and the wick trimmed; turn your eggs twice a day, air them once a day, and watch the air spac. In each eg Reep your temperature even, not up one day and down the next; 102 to 103 degrees seems to secure the best results.

Incubator Hatched Chickens as Healthy and Thrifty as the Best
Hundreds of successful soultry men and poultry women can give the lie to the oft
repeaters. The White Wyandotte, seen in the Illustrating.
Their otherwise. The White Wyandotte, seen in the Illustrating of the Chickense of the Wise State o

Absolutely the first requisite for artificial incubation is a strictly first-class standard make machine. A second-grade one is dear as a gift, for the loss incurred through addled eggs would in a very short while knock one's profits into unredeemable losses. Second, when one has secured the right kind of machine, follow to the letter the printed instructions that ge with it. The manufacturer of this particular make alone knows the best way to secure the best results; and you, dear reader, however clever you may be, cannot improve upon them, strange as this may seem. Next we need good fresh eggs, that is, eggs not over a week old, which have neither been chilled nor heated, and produced out of vigorous, mature breeding stock, which has been kept under sanitary conditions, we'll fed, but nevertheless is not forced, for unnatural, heavy winter laying.

The importance of this latter point cannot be too strongly emphasized, and it is here, in this all-important factor, where many beginners fail, for with them "eggs are eggs." I have seen eggs put into first-class incubators which no self-respecting hen would hatch. Nevertheless, it was the incubator, the maker, the thermometer, the lamp, and everything else that were blamed, whereas the eggs themselves were at fault; true, the incubator egg has a far harder gauntlet to run than the hen-hatched egg.

## PANCY EGGS SPOILED

I myself last spring put eggs into my incubator, and I would to-day be in pocket had I thought the manure heap. In the early spring I sent away to a well-known breeder for some high-priced eggs for hatching. These

## Improvement of Market Conditions

A. P. Hillhouse, Brome Co., Que.

HE quantity of poultry and eggs produced in Canada has been greatly increased the last few years. The quality of dressed poultry has much improved. There is now a considerable quantity of specially fattened poultry offered for sale, especially in localities where

educational work has been done along these lines. And yet probably not 10 per cent. of the poultry marketed from the farms is specially fattened. The fattening of this 10 per cent, is a great improvement, and has put thousands of dollars into the farmers' pockets, but there is still the remaining 90 per cent. of all the poultry sold from the farms realizing at least 40 per cent, less a head than if thoroughly fattened for three or four weeks before marketing. This

is a matter that should receive serious consideration, as the agricultural producing end can ill afford to longer suffer this loss, so easily remedied.

In estimating the country as a whole, by conditions in our locality, at least 75 per cent. more



An Indispensable Adjunct to the Incubator-The Wooden Mother

The brooder is now as universally popular as the incubator. The one here set is of the type in which the Wyandottes seen in the illustration above were reared This brooder, too, is owned by Mrs. Mary McMorine.

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