

**Rot-resisting Potatoes.**

We are in receipt of a letter from Mr. Walter Hargrave, in which he takes exception to the answer given by Prof. Zavitz, of the O. A. C., in our issue of February 2nd, regarding the best potato to withstand potato rot. The result of experiments conducted in 1893 and 1894, Mr. Hargrave considers of little value at the present day, upon the ground that "the potatoes mentioned have by this time probably lost all their strength of constitution and original vigor, and may be the very worst to rot now, as the average 'life' of a potato is only about twelve or fifteen years."

As backing to his views, Mr. Hargrave enclosed the following quotation from Prof. Malden, who is regarded as one of the most reliable potato experts in England: "Up to a certain point—that is, up to a certain period—a variety will withstand disease. After that it is purely a matter of weather whether it breaks down or not. . . . There is only one way to secure crops through a disease period, and that is to grow varieties which have not yet reached that stage in their career when the first damp, warm weather will cause the haulm to blacken and die."

"I am the last to say anything to prevent a change of seed, with the view of increasing the yield in a fine, dry year. A change of seed is necessary to maintain the cropping powers, but the value of the change depends much upon the vigor of the plant."

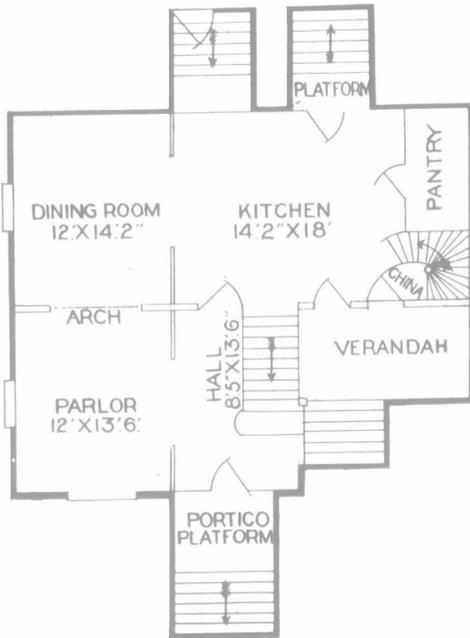
The whole subject is certainly an interesting as well as a profitable one, and we trust it will receive still further attention from our correspondents. Is this theory of Prof. Malden's correct? If so, which of our potatoes, then, are still possessed of sufficiently strong constitution to prove disease-resistant, and which shall we discard?

**First-prize House Plan, Under \$1,500.**

To the Editor "Farmer's Advocate":

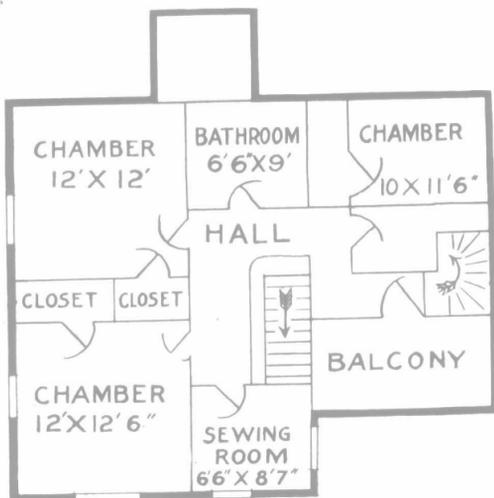
Sir,—I see the announcement of your B competition in "Farmer's Advocate," and I enclose the plan of my house, which was built the summer of 1902, by careful management, at a cost of \$1,495, not including our own work. We furnished all stone from our own quarry, and did hauling, also hauled all brick and lumber, and supplied and hauled all sand and lime. The stone-work is a two-foot wall throughout, seven and a half feet high, and three and a half feet above ground. All face stone above ground is cut sandstone, laid in cement mortar, and pointed neatly with raised pointing. All brickwork, except belts, is pointed with marble-dust mortar, and half-round head belts are finished with red mortar, which has a handsome appearance. The chimneys are panelled and pointed with marble dust. The window sills are all dressed limestone, rock face. The roof is covered with British Columbia shingles, and all gables of house with cut shingle. The cellar is lighted by three windows, hung with hinges, locked with snap locks. The windows in front elevation are plate-glass bottoms and leaded transoms above; all other windows are double-thickness glass below, and colored muffled-glass transoms. The balcony on second floor is covered with galvanized iron, nailed and soldered at joints, which makes a durable job. In the interior, on first flat, the kitchen, pantry and hall floors are hard maple; oil finish. All other woodwork is pure white pine, with oil finish also, which we consider makes a good finish. The first flat can be converted into one room by opening sliding doors between hall and parlor, also sliding doors between dining-room and kitchen, the opening between parlor and dining-room being an arch in plaster of Paris. The sliding doors are hung with ball-bearing hangers, which give perfect satisfaction. The stairs are solid oak throughout, with the exception of the treads, which are pine. The posts are panelled oak, finished in oil. The sink in kitchen is a white-enamelled pan, adjusted on two iron brackets fastened to wall. The force pump is supported by a two-inch plank, ten inches wide, at end of pan, also on brackets, and resting on pan, which does away with all that woodwork which is in connection with closed sinks. With our sink force-pump we supply bathroom, by way of tank in attic. All waste water from bathroom, sink, overflow of cistern, is carried into the cellar to one main five-inch tile under cement floor, which is continued out underground about twenty rods, emptying into a creek, where it is readily carried away. This way of handling waste water we have proved satisfactory, as there is no bad odor whatever. We heat our house with a coal furnace; four hot-air pipes lead to registers in floor at equal distances from furnace, one large register in hall heating rooms upstairs. I might just say that bedrooms are all ventilated by means of fanlights over doors. I think there is no need of further explanation, as plan represents all. We have been constant readers of the "Farmer's Advocate" for many years, and now look upon it as a weekly visitor. I might say we have a number of up-to-date farmhouses and barns throughout the county of Leeds, and as

this is one of the leading dairy sections, would like to see some represented in the "Farmer's Advocate," and consider this a start in the right direction.  
JOEL S. WEBB.  
Leeds Co.



Ground-Floor Plan.

First-prize in house-plan competition for houses costing under \$1,500. Built by Mr. Joel S. Webb, Leeds Co., Ont.



Upstairs Plan of Mr. J. S. Webb's Farmhouse.

**DAIRY.**

**Cream-gathering Creameries.**

To the Editor "Farmer's Advocate":

Sir,—I noted with interest in the issue of the "Farmer's Advocate" for February 2nd, the article on the cream-gathering creamery system, by Mr. J. W. Mitchell. The system of co-operative buttermaking has been a subject for study and discussion long before I was connected with the business, and I have the opinion that to-day there are too many systems in use in the manufacture of creamery butter.

With the aid of science and years of experience, we are coming to know that the cream-gathering system is to be the one followed in co-operative buttermaking in the future. Now, if this system has so many points to commend it, why not adopt this method? Why do we encourage our farmers to buy cream separators, if they are not going to profit by them? If the cream can be separated at the farm, the skim milk used for feeding purposes, the cream hauled to the creamery, and the butter manufactured cheaper than by any other method, why cannot an article be placed upon the market that will command the highest price? If it will not, the fault lies with the neglect of the patron, the carelessness of the manufacturer, or the fancy taste of the critical customer.

I am a strong advocate of co-operative butter-making on the cream-gathering creamery system, and I hope that the time will soon come when the most perishable article of our table food will be placed upon the market, both in this and other countries, not in three or four different grades, but in one only, and that "finest."

CHAS. A. METCALF.  
I ever read.  
ford Co., Ont.

**A Sanitary Milk Pail.**

So strongly is the necessity for pure milk recognized to-day in the manufacture of butter and cheese of good quality, as well as in the interests of health, that any invention to secure sweet, clean milk will be welcomed by every farmer, as well as every dairyman. No one wants to have the "barn flavor," which is only produced by particles of manure and other filth, in either milk, cream or butter.

The Hon. H. B. Gurler, of Illinois, has perfected a milk pail which promises to do much in the way of securing comparative purity, and as there is no patent on his invention anyone is at liberty to copy it. The variation consists chiefly in the cover, which fits on the top of the pail, has an open space in the center, and hooks placed on the outside. Over this open space, and attached by the hooks, is placed a layer of absorbent cotton, contained between two pieces of gauze. The milk passing through this cover will, as may be seen, be filtered from those fine particles of dust which are always in a stable, even after every precaution towards cleanliness has been taken. The cotton must, of course, be renewed at each milking, but the expense is trifling in comparison with the benefits attained. The use of the Gurley milk pail is not, however, intended to do away with any of the precautions observed by first-class milkers. Ventilation, cleansing of the cows, wiping of the udder, clean hands, clean utensils, are all considered just as necessary with as without the pail. To those interested in securing pure supplies of milk and cream for town and city, as well as country homes, it merits a careful trial. Dr. G. M. Twitchell, of Maine, advises us that a number of pails, arranged according to the above plan, have been tested with entire satisfaction in that State.

**Payment for Milk at Cheese Factories.**

Throughout Eastern Ontario nearly every farmer is a patron of some cheese factory, and at this season of the year very much discussion is heard at the annual business cheese meeting as to what way is the fairest way to pay each individual for his milk. The average farmer seems to be in favor of the old system of paying by the pound of milk. I am led to believe that the reason why the Babcock test + 2% method, as put before the people by Prof. H. H. Dean, Dairy Department, Ontario Agriculture College, is not more generally adopted as a basis for payment of milk, is the lack of knowledge on the part of many patrons. They do not appreciate the true value of milk. As long as they are getting a lot of money from their "farm dairy" they think it is "all right," even if the feed the herd consumes is worth more than the milk they get sells for. Our cheese factory paid 68 cents for every hundred pounds delivered last summer, and I think profit comes after we pay for the feed, care, etc., and that we should have a nice "net gain" left. "Net gain" is what we are after in any business.

If every man's milk could be made up separately at the cheese factory, and sold separately to the buyer, this would be the fairest way to pay for cheese. As this is impracticable, we must then do the next best thing—pay by the fairest way that has been devised and adopted by any practical man yet.

Sometimes we hear men say, "Poor milk will make just as much cheese as rich milk." How absurd this statement is? The statements of the factories of Eastern Ontario are from year to year proving the untruth of this statement, and I hardly think one can find a factory in this Brockville district which is noted for its fine quality of cheese that took more milk to make a pound of cheese in the fall than it did in the spring. You will find that practical experience and the experiments at the Agricultural College prove plainly that "rich milk will make more cheese than poor milk," and I think if I were buying cheese I would like to buy cheese made from good, pure, rich milk.

The patron then who is not willing to be paid by any other way but the pound of milk (where all kinds of milk from all kinds of herds is taken at the cheese factory) is not in favor of honesty and fair play. This is a broad statement, but when I know that milk testing 3.85% takes 10.02 lbs. milk to make one pound of cheese, and that milk testing 4.25% fat requires only 9.28 pounds milk to make a pound of cheese, and that Prof. H. H. Dean submits that result through the "Farmer's Advocate" of Feb. 25th, 1904, in answer to the questions of an Oxford County subscriber, I can easily prove to myself and to others that the statement is true.

If farmers would figure rich and poor milk as to its real manufactured worth, and then compare other methods with that, they would easily see that Prof. Dean's method of payment for milk at cheese factories is the most equitable yet adopted by any "practical man." How, then, can honest men be in favor of anything but that which is most fair? R. CONNELL.

Mr. Jno. T. Watt, Homeopathic Pharmacy, Arnprior, Ont., says: I hand you post-office order for \$2.25, amount due for my subscription up to December 30th, 1905. The "Farmer's Advocate" is a great favorite at my Edgwood and Waba Home. We all get instruction from it, and it is welcomed every week.