

FARM.

Description of John Campbell's First-prize Farmhouse.

This house is a two-story cottage, built of white brick, and was designed and constructed having especially in view comfort, convenience, ventilation, and economy of labor. My wife gave much thought to the latter aim, and is now very much pleased with the result. The cellar is 7 feet high; ground-floor ceiling nearly 10 feet, and upper-story ceiling 9 feet 6 inches.

The water system in use probably gives as much satisfaction as any other feature. Hard water is carried into it from the farm system, in which there is a 60-barrel tank, elevated 20 feet, and filled

ter, and the screens in summer keep the cellar sweet and wholesome. The thorough draining already mentioned also helps in maintaining purity of air. One of the special conveniences in the cellar is a waste-water sink, well trapped where there is direct connection to the soil pipe.

Moving upwards to the ground floor, the pantry is first reached; it is fully shelved on two sides, with doors to close, and numerous drawers. One entrance to it is from the kitchen, and another direct into the breakfast room saves many steps daily. The kitchen, with woodhouse opening directly into it, with cold hard and cold and hot soft water drawn by taps at the sink, and so near to the parts of the house most used, largely lessens labor.

It is scarcely necessary to enter into the details of ground and first floors, as the accompanying plans, I think, make all fairly clear. No pains or

work done, and, with scarcely an exception, the tradesmen were given the prices asked, and in some instances a gratuity was handed where superior workmanship was performed.

In conclusion, I would say to farmers contemplating building a comfortable home, do not begin without a careful preparation of material beforehand, as there is a strong temptation to use inferior qualities if rushed.

JOHN CAMPBELL.

Victoria Co., Ont.

[NOTE.—The plan of this house is such that it can be modified in dimensions, one of the rooms on ground floor used as a bedroom if preferred, and much of the extra finish dispensed with, thus considerably reducing the expense.]

Hints on House Building.

BY A FARMER'S WIFE.

It is said that no one knows how to build a house until they have built three at least, and as I have helped to build one only, I may not know much about it. But most of us have lived in houses that others have erected, and we have wondered how they got so much inconvenience into a house. If I were having another house built I would have a great many things done differently. The very first thing is to count the cost and complete it as far as it goes. I have noticed that if part of the work is left unfinished, it is very likely to remain so for a long time, and I think it is a mistake to put all or most of the outlay on what may be called the fine appearance, at the neglect of those little plain conveniences which are so helpful to a woman's life on the farm. Now, right here I want to say that the woman who is to live, work and care for the comfort of the family ought to have the larger say in the planning of the house. If the good man were building a barn, stable or piggery, it is to be expected that he would know the requirements better than the woman; in just the same way a woman knows more about the arranging of those things which help to make her work easier.

The next important matter is choosing the site. If favorable, build where the ground is high, having a natural drainage. If this cannot be done, it is well to build the foundation well out of the ground and haul stones and earth to fill up. This may seem like a lot of work, but it will pay in the long run, for a wet cellar is the cause of a good deal of sickness. We don't, as a rule, put enough thought and expense on the cellar, where so much of our living is stored away for future use. It is better to have one part for vegetables alone. If the furnace room is on the sunny side, with good windows, it is a fine place to keep those flower plants that you wish kept over, or to start early ones in the spring. When our cellar wall was built, we had an old man around who thought he knew all there was to



RESIDENCE OF MR. JOHN CAMPBELL, FIRST PRIZE IN FARMHOUSE PLAN COMPETITION.

by windmill pump, to furnish the necessary pressure. First, the inch galvanized-iron pipe goes under the foundation into the cellar, where a tap is placed above milk box to water the creamers and furnish water for cellar use. A lead pipe continues upward to the kitchen sink just above, and thence to bath-room, where it furnishes water for flushing tank of closet.

Soft water from roofs is collected into a cistern in cellar under the kitchen. At the bottom of the cistern is placed an iron pipe with plug, which, when unscrewed, empties all water from the cistern into a drainage system placed under the outside cellar walls and cement floors, and carried then to farm system of drains, emptying into a stream. The waste water from milk box is also carried off in the same way by turning a tap.

To get the soft water where wanted, it is first forced by hand pump to a 6 or 7 barrel tank placed outside the bath-room, in back-stairs hall, and up to the ceiling, so as to be entirely out of the way. The water is conveyed to a range boiler in kitchen, which furnishes hot water to kitchen sink, washstand nearby, and to tub and basin in bath-room. Cold soft water is also piped to each point where the hot water is used.

All waste water is conducted by a metal 4-inch soil pipe, top of which goes out through roof to carry off foul air, and at inside cellar wall enters into glazed-pipe drain, which in turn enters into a covered cesspool 100 feet away. An overflow drain from the latter prevents its flooding in wet weather. Special precautions were taken to prevent any gases from cesspool or drain escaping into the house. Just outside the cellar wall the glazed-pipe drain is deeply trapped, and at side of trap, further from the wall, a pipe is carried upwards to over the eave, so that all impure air is conveyed high up, where it is carried away. The heating is done by a No. 4 hot-water boiler, and with a radiator of proper size in each room and hall, uniform heat is easily maintained in every part of the house. Five to six tons of hard coal were found quite sufficient to fully warm it during the past most severe winter.

To get so much comfort and convenience required special care in the manner of building, which I will proceed to describe.

Beginning with the cellar, the walls were built with ordinary field stones of good quality; the walls are two feet thick. Floors are made of good cement concrete, 3 inches thick, and finished smoothly with an inch of sharp sand and cement mortar. Ceilings are all lathed and plastered, and walls are smoothly plastered on the stones. The partition walls are of brick, 9 inches thick. All doors and exposed wood are well painted. Windows are double; inside sashes are on hinges, and outside sashes are movable, with perforated tops. Hooking up inside sash gives free ventilation in win-

reasonable expense were spared in getting first-class material, and workmen were not stinted in contracts. Brick walls are 14 inches thick, built with an inch air-space the width of a brick from inside. The walls are heavily blind plastered, then strapped with 1½ inch pieces, to which laths are nailed, and the plaster is finished with white lime.

Ground floor was first laid with matched pine flooring, and when the finishing was done, a second floor of maple was laid over the pine. Upper floors are all single maple, matched. Most of rooms are finished with white pine. Dining and breakfast rooms are finished in oak. Office is finished in oak and birch, nicely panelled.

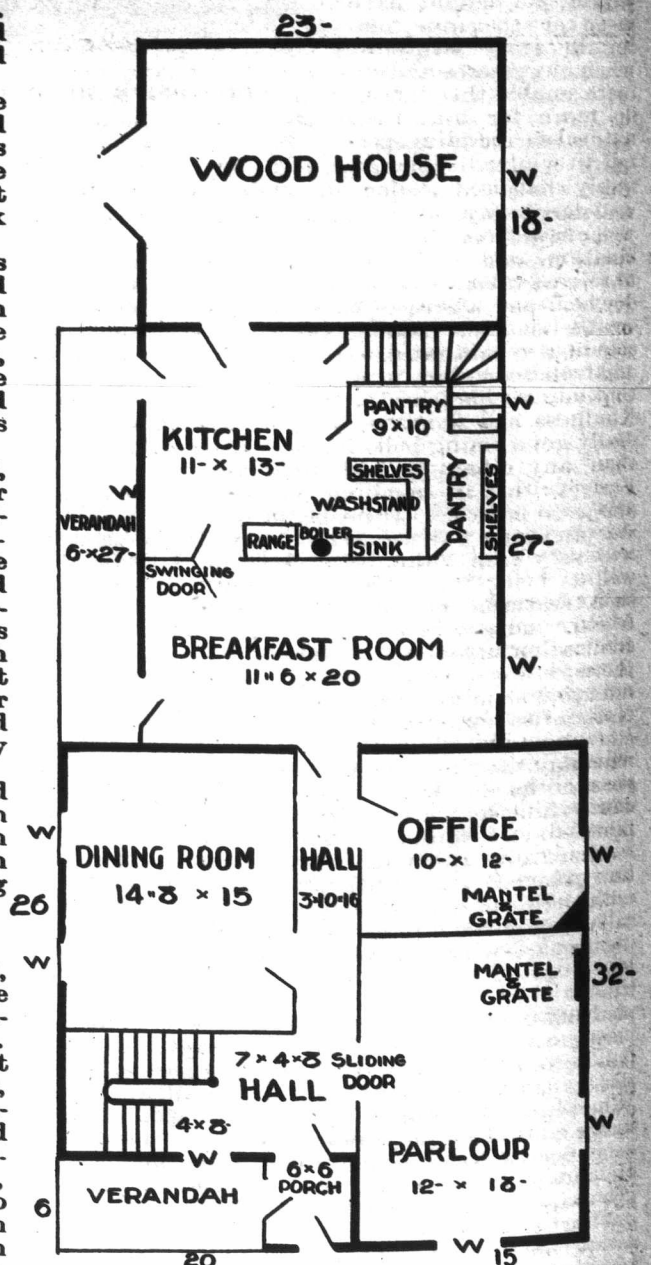
Front hall finish is of birch and walnut, sides and ceiling throughout being neatly panelled, and every panel molded. Front hall and dining-room have a wide border of inlaid oak and white maple in floors. These, with all the hardwood finishes, are oiled, rubbed, and varnished, bringing out the grain of the different woods in nice contrast, and showing what a pretty effect our Canadian woods are capable of making.

The front veranda is carried up to the roof, making it two-story. A door leading to the upper part is found very useful in giving perfect ventilation in the warm season to the bedrooms upstairs. Left open, fresh air passes freely along the halls, and finding a vent in the man-hole, situated above the back stairs, opening into the unused garret. Other means of ventilation are by the flues and windows hung on weights. The storm sash are made with perforated tops and the usual slit at bottoms. That, with the raising of lower inner sash and lowering of inner top sash, gives good ventilation in the most extremely cold or stormy weather.

A point or two in favor of the upward extended veranda. There are fewer gutters necessary in the roof, and the appearance of the house is much improved. The shade afforded prevents so much of the wall from being heated by the sun, making the upper story a pleasant retreat in the evenings.

COST.

As much of the work, such as hauling material, digging cellars, and clearing away rubbish, was done in connection with the farm work, it is not possible to arrive at a very correct estimate of cost. But an approximate figure will be near about \$3,000, but not to exceed that. Of that amount, the plumbing and heating system cost \$600. Considerable could be saved in the plumbing and have probably as useful a job. We got in a porcelain tub and nickel-plated fittings throughout, with marble washstands and closet fixtures to match. Without being extravagant, the aim throughout was to get a strong, substantial job in all details. In letting contracts, the first consideration in every case was the getting of first-class



GROUND-FLOOR PLAN, JOHN CAMPBELL'S HOUSE.