DED 1866

ter is very

a cistern d plastered ted in the d by lead the washd-pipe trap gas. The the bathtairs, and 150 gals., which go by cleats. When it is rflow pipe, eneath this com which hus giving er for the h are also runs out he bottom in empties he house.

lid matter ess-pit re ters away as been in t required mply holes ug in the ing. They of cess-pit entilation. gas being to cost osts about for \$15. orv serves ding bath-A SVS

, together orate, and oing, could for very those conich a move do well v attempt put in the s, and emlabor, and amply reort during vears. We have the rticle of our sysives us all es of city minus city

ory, closet are all aps, which dors from escaping room. The haped, and l of water. of the siwith lowrior to the tank sus f pressure nk is con--room, so be pumped

o Leg-

LIAMS.

e in the l like to unning of of Prince the Act,

ers in the we would own busiauto, or k on our

iage passas introwas to be n fear and in serious life. But. from runour local mperative mers and business men, and has been pronounced the best

act ever passed by that body.

Now, Mr. Editor, the result has been surpris ing. Our roads and streets have been filled with teams drawing loads of produce to town, and bringing back merchandise of various kinds, with horses and buggies, on business or pleasure bent, and, best of all, the feeling of security enjoyed by all, added immensely to the enjoyment of a drive through our beautiful country. Every day during summer season one would meet wagon loads of tourists driving quietly along our roads, admiring the scenery, and invigorated by the pure and bracing atmosphere of the "Garden of the Gulf." This was a sight seldom seen when the auto held sway, although there were only a few running, yet one never knew when he would meet Now, according to observation by myself and others, the travel on our roads increased the past season by 50 to 75 per cent., and, on interviewing our dry-goods, grocery, boot-and-shoe men, etc., they unhesitatingly answered, in every case, that their trade had increased.

In the days of the auto, women that would venture to town to sell their butter and eggs, would put up the horse at the first stable they would reach, for fear of reaching one of these vilesmelling things, and carry their stuff to the market, often a good distance; and, to note the difference the past season, on market days the streets were filled with horses and carriages, without dread or anxiety. As I have often been one of the number, I can scarcely describe the feeling of security experienced. And yet, Mr. Editor, in the face of these undisputable facts, I noticed in one of our dailies that the owners of the autos are circulating petitions in some remote districts of the Island to have the Act repealed.

These gentlemen might as well save themselves the trouble, for not for years to come, at least, would our representatives dare to repeal that law, knowing full well that if they did, few of them would ever get a chance to warm the cushions on A. A. MOORE. the seats in the big house. Queen's Co., P. E. I.

## Double Building on the Level vs. Basement Barn.

The very excellent description, with cuts, of plank-frame barn, by D. A. McIntyre, which appeared in our issue of Feb. 20th, 1908 (repeated in January 21st issue, 1909), has received favorable comment from many of our readers. The calculating member of our staff, among others, was impressed with the cheapness of the frame, and the question suggested itself to him, would it not be possible to dispense with basement walls altogether, and erect two buildings on the level, containing as much room, at but little greater cost than the basement barn described? The double building in mind consists of a byre (cattle stable) 40 by 55 ft., with 18-ft. posts, and set across the west end of this, and having roofs joined, a barn of the same size, 40 x 55 ft., with 18-ft. posts, having a drive floor 12 feet wide, and at one side of the floor a horse stable,  $15 \times 40$  ft., on the other side a mow  $28 \times 40$  ft.; both stable and byre to be covered by a loft at a height of 9 ft. Such a building would contain 25 per cent. more storage space (though perhaps not much greater capacity) than the basement barn in question (which was 40 ft. 4 in. x 68 ft. 4 with 18-ft nosts and as much room for The obvious advantages are that, with stock. wooden, instead of masonry, walls, there would be drier and more healthful stables, and a lower overstructure, in which an effective ventilating system could be more cheaply installed; that the hauling-in and backing-out could be done on the level, instead of on a long, steep approach, and that the danger from windstorms would be lessened. In regard to the question as to the advantage of wooden over masonry walls for stables, it is noteworthy that pig-feeders quite generally agree that masonry walls are not satisfactory for pigpens, being damp and chill. If not good for swine, why for cattle? In fact, not a few upto-date dairymen object to basement stables, though there is no doubt they can be improved considerably by building with an air-space and lining with lumber.

In the calculation, the frame and siding lumber are reckoned at \$25 per thousand, and the sheathing, lofting and lining at \$15. This, while not so dear as pine lumber is in London, Ont., will probably be high enough for the country on the Mr. McIntyre's own figures as to material used in frame and other parts of the structure are taken as correct, and the same relative amounts are given for the supposed double building. Four bents were reckoned for the byre, and five for the barn. Care was taken to make calculations fairly, and not twisted to support a theory; and the fact that, according to them, a pair of buildings on the level, containing 25 per cent, more storage space, can be erected for only \$82.95 or 7 per cent.) more than a single base ment bary, gives occasion for thought and further estimation on the part of intending builders

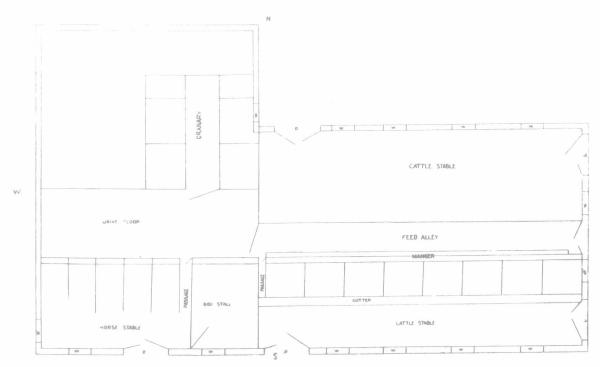


Fig. 1. Plan of Proposed Double Barn on Level.

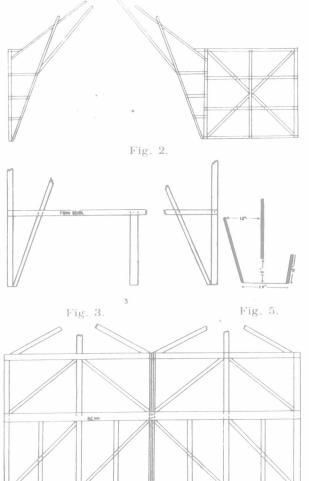


Fig. 4

Estimated cost of D. A. McIntyre's b	asement
barn:	
Frame, two end bents, each	
680 ft 1,360 ft.	
Three middle bents, each 630 ft. 1,890 "	
Side girts, braces, and door	
caps 470 "	
Purline plates 340 "	
Wall plates 272 "	
Tie girts 160 "	
Center posts 180 "	
Purline braces 180 "	
Sills 648 "	
Rafters 1,008 ''	
Total 6,508 ft.	
Total, 6,508 ft., at \$25 per thousand\$	162.70
Flooring and sheathing, 7,060 ft, at \$15	105.90
Siding, 4,408 ft., at \$25	110.20
Shingles, 31,000, at \$2.75	85.25
Beams and joists for flooring, 3,000 ft.,	
at \$25	75.00
Wall-Gravel and stone	50.00
" -Cement, 54 barrels, at \$2	108.00
" -Labor, 55 days, at \$1.75	96.25
Stable floor and fittings, say	200.00
Approach, retaining wall and bridge	50.00
Labor of carpenters for superstructure	120.00
Total	1,163.30

Estimated cost of double building set on the

Frame, four end bents, each 680 ft 2,720 ft.	
Five middle bents, each 630 ft. 3,150 "	
Side girts, braces and door	
caps 630 "	
Purline plates 550 "	
Wall plates 440 "	
('enter posts	
Purline braces	
Sills for three sides of byre 450 "	
Rafters 1,630 "	
Total10,185 ft.	
Total, 10,185 ft., at \$25 per M\$	254.60
Flooring and sheathing, 9,260 ft., at \$15	138.90
Siding, 6,150 ft., at \$25	153.75
Shingles, 50,000, at \$2.75	137.50
Beams, joists and supports for lofts	75.00
Inside boarding for byre and stable,	

2,700 ft., at \$15	40.50
Tarred felt	
Byre and stable floor, stalls, etc	200.00
Foundation, concrete wall, one foot	
above ground on three sides of byre,	
and foundation pillars for barn	60.00
Labor of carpenter on building, exclusive	
of inside work of byre and stable	176.00
-	

Total .....\$1,246.25

40.50

Exceeds cost of basement barn by only \$82.95.

Windows, doors and granary not reckoned in

either calculation. In the above proposed barn plan, minute details have not been worked out. It is assumed that there will be horse-fork track at the ridge of both byre and barn, and that in the barn, hay will be unloaded from the drive floor, while it would be taken into the byre loft through a door in the gable end. Thus, there would be hay stored above both horses and cattle, and at threshing time a considerable portion of the straw would also be put away in the byre loft. Probably not more than 25 per cent. of the fodder and bedding need be where it is not convenient for use, and, towards the end of winter, a day with the horsefork or slings would put that right. In the case of those who have a truck for silage, it might be While it used to dispense dry roughage also. has been stated that the double building on the level contains 25 per cent. more storage space than the basement barn, it is not contended that much more could be packed into it, because so much of the space is of loft-9 feet to the plate. It is to be noted, however, that 40 per cent. of the total storage space is contained in the bay mow, which is the same depth as the mows in the basement barn. The intention was to suggest a size of double building having at least equal capacity for both stock and fodder. A much more economical one could, no doubt, be devised, For instance, by adding but one foot to the height of the byre building, its loft capacity would be increased by 10 per cent. or 12 per cent. It is not forgotten that when the building has to be reshingled it will take nearly 20,000 shingles more than the other, but that extra item of expense would not be an obstacle to many, in view of the advantages to be gained. Of late years, in Western Ontario, concrete-basement buildings have become deservedly popular, until now the natural tendency to go to extremes has made itself manifest. People have not only thought that they were the thing, but the only thing. In many cases, where old buildings are being made over, other ways are not only possible, but advisable. Other advantages than those mentioned might be spoken of. Suppose a farmer took a notion to keep a few sheep, how