BUILD ON PAPER FIRST

In Planning Farm Buildings a Pencil, Rule and Piece of Paper Are the Tools to Use.

BY D. G. CARTER.

The best suggestion ever made to assist farmers in getting better buildings, is the advice, "Build the barn on paper first." This suggestion applies not only to barns, but to every building on the farm. The farm buildings not only afford a home for the farmer and his family, but they make up the factory in which the farm products are finished.

Manufacturers know that to turn out a product in quantity, economically and efficiently, they must provide factory buildings that are well arranged, clean, light, substantial, and suited to the purpose intended. So many farmers know that their barns, storage buildings, hog houses, and feeding sheds must have certain features to make them satisfactory. Farm buildings, especially barns, are factories where human food is produced. Faulty buildings can never produce the highest quality of products. Farm operators spend several hours of every day in the buildings. Poor arrangement means lost motion, extra labor, and wasted time. Valuable live stock and feed crops are housed and sheltered in the farm buildings; this means that they must be clean, healthful, and substantial.

MANY PROBLEMS.

Indeed, it would be dificult in so short a space of time, even to make a list of all the necessary features that should be considered. There is the problem of materials, whether of wood, stone, brick, tile, or concrete. Then there is fire protection to reduce the many millions of yearly loss. Or there is rat-proofing, for the federal government tells us that every rat eats or destroys two dollars' worth of feed every year. There is the question of how large to build. This answer depends on the farming system, size of farm, financial conditions, and personal desire. There are major problems. There is a whole flock of building problems related to light; ventilation; sizes of pens, stalls, and alleys; arrangement of the stock, and proper use of space. Complicating these questions, is the fact that economy must always be considered if a profit is to be made on the investment. Every barn or other farm building is a special problem, for each one of you have different conditions of location, size of herds, crops raised, and the like.

How shall we then, with the large number of points to be considered, secure the best and most convenient buildings? First, plan on paper before the building is put up; second, use the combined experience of those who have already built, and, third, adapt plans to your special conditions but use those features that have been well standardized.

Planning on paper first is not so very difficult. A farmer, carpenter, or school boy, provided with a table, pencil, and a rule, or a set of drawing instruments, can accomplish much in planning. Incidentally, he can learn a lot about construction.

USE EXPERIENCE OF OTHERS.

The experience of others can be found in books on buildings, in magazines and farm papers and, perhaps best of all, at your provincial agricultural college. Almost every agricultural college has made a large number of building plans available. Their plan service is either given free of at a nominal cost.

Even though most plans have to be specialized to a certain extent, there are some factors that have been pretty definitely settled and can be included in the plan. For example, we know that there are just about three types of roof construction used on modern barns; they are the plank truss, braced rafter, and Gothic arch. The hay loft in the barn can be built free of posts and obstructing braces. We know that most barns should be thirty-four or thirty-six feet wide; windows must be included in every live stock building, with about four square feet of glass for each cow or horse. Cows, horses, and hogs of average size require a rather definite amount of space.

The information available from architects, engineers, colleges, or farm publications, plus your own good judgment, should produce the best possible plan for you. At best, these brief suggestions can only convey this idea: "Plan the building on paper first." The well-planned building is noticeable wherever it is, but aside from its attractiveness, it will stand for years as a tribute to the good judgment of its owner.

The Care of Growing Pullets.

Good parent stock, good shady range, a well balanced ration and comfortable housing, are essential for the development of pullets for early winter egg production. Without a free range they will not be properly matured before weather conditions make it necessary to put them into winter quarters. Dry, well-drained land with plenty of shade and growing green feed are essential.

From the age of two months a dry mash, consisting of equal parts, by weight, of cornmeal, bran, shorts, ground oats, and beef scrap should be kept before the pullets constantly in self-feeding hoppers. In addition a semi-wet mash consisting largely of chopped green feed, such as mangel tops, alfalfa, clover, cabbage leaves, corn or sunflower tops, etc., should be given twice a day. It is also necessary to keep before the pullets constantly a hopper of good mixed grain and a supply of milk. Clean, fresh water should be before the birds at all times and oyster shells and grit should be always available.

The pullets should not be kept in the same quarters as hens. A portable colony house on skids can be made inexpensively. It should be dry and well ventilated with plenty of space, as on no account should there be overcrowding.

Quick-Note Paper.

With the help of your sewing machine very attractive and useful hasty-note paper may be devised.

Buy a package of square envelopes. Run each envelope under the unthreaded needle of your sewing machine, flap down, making a perforated margin at each side of the envelope. Take your scissors and cut the side closing of the envelopes. This gives a flat sheet, perforated at the sides with a quarter-inch margin.

Write your message inside the envelope. Paste the perforated rims and seal the envelope. To open, tear off sides and top.

Hasty-line paper may also be made of firm pad sheets, running the sewing machine at the sides and at the top opening of the doubled sheet.

A few of these hasty-line papers and a small tube of paste take practically no room in a traveling bag. They are better than the postal, as they give privacy to the written message and they give more room.—P. B.

Chase Away the Grass Stains.

Since nature has donned her dress of green, the problem of removing grass stains from clothing again faces the busy housewife. The following methods are recommended.

Wash the fresh stain in cold water without soap. Soap sets the stain and should therefore not be used.

Alcohol or ether will dissolve the green coloring matter when the material cannot be washed.

Apply Javelle water and follow immediately with boiling water. Thorough rinsing will prevent Javelle from affecting the fibre.

The Poultry Garden.

A poultry vegetable garden is necessary on every poultry farm to insure an adequate supply of green feed. It is especially necessary where the hens are kept more or less confined or in restricted bare yards, and in the case of the growing range which dries up in the hot months. Likewise the garden should provide an abundance of greens for the pullets and hens in the fall and winter.

Under normal conditions half an acre will provide adequate greens for a poultry flock of 1,000 to 1,200 birds, for both the adult stock as well as the growing chicks on range. This half-acre area should be planted as follows:

Approximately a quarter of an acre in late cabbage. If the cabbage plants are grown in flats and planted late, clubroot will be avoided, all insects will be reduced to a minimum and the cabbages will make substantial heads by cold weather.

An eighth of the acre should be planted to mangel-wurzel beets, about one-sixteenth of an acre to Russian kale and one-sixteenth of an acre to Dwarf Essex rape.

All these plantings, including kale and rape, should be drilled in so they can be cultivated, thus reducing the hand labor to a minimum. The kale and rape will provide luxuriant greens for summer and early fall, the cabbage for late fall and early winter, and the beets can be stored to provide for the balance of the winter.

To Stop Egg Eating.

Often in large flocks birds start egg eating. Though this habit is generally started accidentally, an incomplete ration might tend to help start it. Birds should have limestone or oyster shell before them all the time. Lack of lime will cause birds to eat eggs. Abundance of green feed will help prevent and cure this habit.

To prevent or cure this habit: Supply oyster shell or limestone. Furnish green feed. Have one nest to five birds to prevent crowding. Arrange nests so that they will be dark. Keep nests well supplied with straw or hay. Have nests at least eighteen inches above the floor. Place glass eggs in the nests and on the floor. Dispose of birds caught breaking eggs intentionally.

Spring-sown alfalfa is often killed because the nurse crop of oats or barley is allowed to ripen for grain. Cut the grain for hay as soon as it heads out.

A good way to catch rats, it is said, is to use an earthenware jar, about one foot in diameter, three feet in depth, with a hole, large enough for a rat to enter, in the side near the top. The jar is buried in the earth deep enough to have the hole on the level with the ground. When the rats once enter they are unable to climb up. They can then be destroyed by water. Has anybody tried this?—P. G. N.

THE CAPE FROCK AN ESTABLISHED VOGUE.

The cape has become a part of every phase of the mode, and is nowhere more smart than when used on the street frock, as pictured in this model of navy, trimmed with polka-dotted silk. The cape is separate, but so flattering you will never want to take it off. It has a long tie collar of its own to be tied at the neck, or the ends crossed, one at the back and one at the front. The frock underneath is straight, with a tailored collar ending in long revers, and a set-in panel. The tight sleeves are set-in at the armhole, and a wide belt is crushed into a big buckle. No. 1299 is for the miss and small woman, and is in sizes 16, 18 and 20 years. Size 18 years (36 bust) requires 3½ yards 54-inch plain material and 1⅛ yards 54-inch figured. Price 20 cents.

The secret of distinctive dress lies in good taste rather than a lavish expenditure of money. Every woman should want to make her own clothes, and the home dressmaker will find the designs illustrated in our new Fashion Book to be practical and simple, yet maintaining the spirit of the mode of the moment. Price of the book 10 cents the copy.

HOW TO ORDER PATTERNS.

Write your name and address plainly, giving number and size of such patterns as you want. Enclose 20c in stamps or coin (coin preferred; wrap it carefully) for each number, and address your order to Pattern Dept., Wilson Publishing Co., 73 West Adelaide St., Toronto. Patterns sent by return mail.

Taking Self Out of Selfishness.

These days, the child of pre-school age is much the centre of attention. In the past this study has been very much neglected. We wonder how only a few years ago, his domain did not seem to be a no-man's land of education. But wise are the leaders of such an educational movement, for there is no more logical time for the foundation of school training to bubble forth than before he begins school. Experience has taught us that we can adjust ourselves with more ease and appreciativeness to a change in our life's program if we are trained for such a change.

Every mother has it in her power to make the path of her children more smooth if she but trains them in the simple, but all-important duty of living together, which, after all, is one of the greatest problems of life.

Of course, no one likes to see a child deprived of a plaything or a pleasure that will add happiness to his little childish sphere. But the "Ain't he cute? He's only six" attitude toward his carelessness with clothes, furniture, or playthings, does more than keep the house in a Bedlam. On it depends how he will later expect his little school friends to look upon his selfish, careless actions.

An amusing incident happened the other day. Little Jimmy had a bag of candy and kept urging his Aunt Jenny to tape some. When his mother inquired why he urged only Aunt Jenny to take some. When his mother others in the room, he replied, "Well, when I pass it to Aunt Jenny, she nesser takes any. She just thanks me and gives it back!"

Such little happenings, and many, many more, handicap the youngster by not teaching him that in fair play "thine" is as sacred as "mine," and that "thine" and "mine" together make "ours," in which we are all jointly concerned.

It will be years before a child can appreciate his lessons of selfishness, but when he does appreciate them, they will be to him a most valuable community life insurance policy.

To Keep Cut Pumpkin.

When a squash or pumpkin has been cut and a part of it is not to be used at once, press waxed paper over the cut part to seal it. It will stay good for quite a while, especially if kept in a cool place.

S.S. LESSON

July 11. Childhood and Education of Moses, Exodus 2:. 1-10; Acts 7: 22. Golden Text—Train up a child in the way he should go: And when he is old, he will not depart from it.—Prov. 22: 6.

ANALYSIS.

I. THE BIRTH AND HIDING OF MOSES, Exod. 2: 1-4.

II. ADOPTION OF MOSES BY PHARAOH'S DAUGHTER, 2:5-10.

III. EDUCATION OF MOSES, Acts 7:22.

INTRODUCTION—Moses is, unquestionably, one of the most remarkable characters which we meet in the pages of history. Born in the darkest hour of his people's distress, when daily their infant children were cast, by Pharaoh's police, in the Nile river, hidden by a loving mother until she could hide him no longer, then by a stratagem brought to the notice of the Egyptian princess who adopts him as her son, educated at the Egyptian court in all the culture of an extraordinarily gifted people, then, successively, a fugitive learning the ways of wilderness life, a leader of his people in a great adventure for liberty, their judge, their prophet, their lawgiver, and their priest. He left behind him an imperishable memory of courage born of faith in God, of unremitting, self-denying labor, of unselfish devotion to the good of the people, and of skillful and far-seeing organization and direction of their national life.

I. THE BIRTH AND HIDING OF MOSES, Exod. 2:1-4.

A man of the house of Levi, v. I. In chap. 6, verse 20, we are told that his name was Amram, and his wife's name Jochebed, and that Moses had an older brother called Aaron. His sister, Miriam, is mentioned in verses 4 and 7. Compare Num. 26: 58-59. If the period of the sojourn of Israel in Egypt was four hundred and thirty years (Exod. 12:40), and if Levi was living at the time of the settlement of the Israelites there (Exod. 1:12), it is not easy to understand how the father of Moses can have been Levi's grandson, and his mother Levi's daughter (Exod. 6:18 and 20). It is quite possible that some of the names given in Exod. 6:14-25, are names of families or clans, and not of individual persons.

A goodly child, v. 2. So, in the speech of Stephen, Acts 7:20, he is described as "exceeding fair." "It was by faith," says the writer of the Epistle to the Hebrews, "that Moses was hidden for three months after birth by his parents, because they saw the child was beautiful." (Heb. 11:23, Moffatt's translation).

An ark of bulrushes, v. 3. That is, a box or basket shaped like a little boat and made waterproof by daubing with bituminous slime or mortar. It was made of the stalks of the papyrus reed, which grew in marshy places and along the banks of the Nile, and from which the first paper was made.

II. ADOPTION BY PHARAOH'S DAUGHTER, 5-10.

The daughter of Pharaoh. We do not know the name of the kindly princess who had compassion on the little child doomed to a cruel death. Josephus, a Jewish historian of the time of Christ, calls her Thermutis, and Eusebius, an early Christian writer, calls her Merris. For want of better knowledge we may call her by one of these names. This bathing in the sacred waters of the river Nile was a religious custom (compare 7:15).

She had compassion on him," v. 6. There is a strong appeal in the simple naturalness of the story. It bears on the face of it all the marks of simplicity and truth. It is no evidence against the truth of it to say that other child stories have come down to us from the ancient world. Seeing that all the world loves a child it would be a marvel indeed if they had not. Among the most interesting is the story of Sargon, king of Akkad, in Mesopotamia, more than 3000 B.C., who writes, "My mother of noble race conceived me and bore me in secret. She put me in a basket, and closed up the openings with bitumen. She cast me into the river, which did not drown me. The river carried me along to Akki, the irrigator, who took me up, reared me, and made me a gardener, etc." Like in some respects, this is very unlike in others to the story of Moses.

Called the child's mother, v. 8. In this way it is brought about that the child Moses is nursed by his own mother and grows up with knowledge of his own people, their customs, their traditions, and their religion.

He became her son, v. 10. He would, therefore, receive the education of an Egyptian prince. The name "Moses" is probably Egyptian, and meant "child," or "son."

III. EDUCATION OF MOSES, Acts 7:22.

Twelve hundred or more years later, Stephen made his great defence of his Christian faith before the high priest and council of the Jewish nation. He recalls the story of the patriarchs, and the providential raising up of Moses to be the deliverer and lawgiver of Israel. Incidentally he shows, with increasing force as he proceeds, how much older and greater religion is than Jewish law, and what was Moses' rightful place as a minister of God in the long history of religious progress.

Learned in all the wisdom of the Egyptians. Recent discoveries have supplemented what we have learned of that wisdom from the Bible and the classical literature of ancient Greece and Rome. The Egyptians had some knowledge of astronomy, mathematics, medicine, and other sciences. They developed the art of writing, they were skilled in agriculture, they made boats for river navigation, and even ventured out upon the sea, they erected great buildings and monuments, among the most wonderful ever known, and they were among the first ambitious builders of empire. Josephus, the Jewish historian mentioned above, says that Moses became a general of the Egyptian army, and fought with success against the Ethiopians.

"FAIR EXCHANGE—NO ROBBERY"

Economic Axioms is Applied to the Problem of Entertaining.

BY CITY COUSIN.

In an old agricultural paper wrapped around some country produce was a statement by a country woman, who did not sign her name, to the effect that her own town relatives and friends over-ran the farm all through the summer and until late in the fall when work was pressing and help hard to get. But that did not exasperate her as did the fact that they innocently supposed, or pretended to believe, that the things that go on the country table cost little or nothing. Therefore, it is a pleasure for the country woman to entertain, and also debts, social debts contracted in this way, need never be repaid.

About the time the paper came under my eye, I heard a town woman discoursing about how her country relatives over-ran her premises and never paid their social debts by asking her to visit them. Having no automobile and not being able to walk the distance to the locality of her relatives, she had to submit with such grace as she could muster, and her wail was that country people believe, or try to make believe, that living is as cheap in town as in the country. "They charge me market prices for the butter and eggs and fruit and vegetables they bring me," she said, "then sit down with their hearty country appetites to help eat what they charged me for."

There you have it! Some people in the country imposed upon and some in town. I could not but think of the fair and honorable exchange of courtesies that has existed between my family and a fine country family for some years past, for if social life is one-sided it soon loses its charm. Exchange is not the wrong word to use in this connection.

When they thresh or put up hay or something that is a rare treat to town children, they invite the youngsters out to see the performance, and on Saturdays, when the weather is good, there is real fun on the farm. In winter, and occasionally in summer, we return the compliment by inviting their children to the city.

If it happens that circus day finds the farm folks too busy to bring the children in for the parade, we run out and get them, keeping them safe for the day just as our own are kept safe from machinery on clover hulling or threshing days.

Most of the adult visits are "endless" ones, but the children do revel in eating away from home. We save up magazines and papers for them of which we have more than the ordinary family because of business relations along that line, while they in turn give the children a chance to gather nuts and wild berries in summer and fall.

I am sure there has never been the slightest feeling on my part that I have been imposed upon, and am quite certain my busy friend feels the same. We are not rich, but they have luxuries that we have not, and we have some things that they can not enjoy because of their location. It is nice for them on a stormy night to know that they will not have to drive in for their high school children, and nice for us to know that short vacations in the summer are available to ours. There has never been the slightest jar and I hope never will be. We can not understand how people can take and never give, either in town or country, for one-sided friendship is never enjoyable or profitable.

HARRY THORN'S TEMPTATION

BY SOPHIE M. McGIFERT.

"Where's the use of being so mean? A fellow can't never have any fun," muttered Harry Thorn.

He was half ashamed of the words as he spoke them, and hoped the next minute his mother did not hear; but she did, and sighed deeply, as she made answer:

"You know I try as hard as I can, Harry, but it takes more money than I can earn to give us even the necessities of life; we mustn't expect luxuries."

"Good thing we don't expect them; we'd never get 'em."

Harry strode out, slamming the door violently behind him.

What had come over the usually good-tempered lad? Nothing more nor less than a prospective boat-club talked over that morning at school by the boys.

The first meeting had been appointed for that evening, at the house of Alfred Anderson, the lawyer's son.

The club was to consist of about a dozen boys, who were to make arrangements for buying a boat, building a boat-house, and other matters pertaining to naval enterprises.

With the exception of Harry, the boys were all sons of wealthy parents, and he had considered it quite an honor to be invited to join them.

But when he was informed that the initiation fee would be five dollars, in order that they might have sufficient cash to buy their boat at once, his face fell, and it was with a pretty sober countenance that he entered his humble home.

His mother was a widow, and Harry her only son. He was just fourteen years old, and was still in school.

Mrs. Thorn tried to support him and the two younger children by doing plain sewing, for she was very anxious that Harry should continue his studies as long as possible.

It was hard work, however, to make the small sums she received from time to time pay the house-rent and feed and clothe them all.

Harry met some of the boys down town, eagerly planning with reference to the club. He was a silent listener to the eager talk and merry laughter, till gaily accosted with:

"Say, Hal, what are you so solemn for? You are coming to-night, of course?"

Harry mumbled an indefinite reply, and rushed toward home, resolving that he must be a member of that boat club, whatever happened.

At supper he could talk of nothing else.

"I say, mother, haven't you got a bit of money you could spare me?" he said, for the fortieth time, perhaps.

"Why, son, I have not one cent in the house, except five dollars I promised our landlord he should have to-morrow. He told me he could not wait any longer; that if I didn't pay him to-morrow, he would rent the house to some one who could pay."

"Hang the mean old fellow!" ejaculated Harry; then added: "But, mother, if I could only have the money to-night. Couldn't you borrow it? I would leave school and work hard to pay it back."

"No, Harry; I do not wish to borrow. I do not think that it is at all necessary that you should become a member of the boat club. I am surprised that you have teased me so about it."

Harry rushed from the room in great indignation. Yet his heart had not yet meditated the wicked deed he was so soon to do.

Alone in his room, he nursed his wrath against his mother, the landlord and his plaguey fortune, as he termed it. Finally he started up.

"I don't care; I'll have that five dollars. She can just as well borrow as not, or Mr. Davis can go without his rent—stingy old thing!"

Without giving himself time to think, he stole to his mother's room, took her purse, and there lay the five dollars before him.

For a moment he hesitated; but a thought of the boys' contempt if he told them he couldn't afford to join them decided him, and he tucked the bill securely in his pocket, then put the pocketbook where he had found it, and quietly left the room and the house.

He hastened to Alfred Anderson's elegant home, where the boys were already assmbled, and the cordial greeting given him drowned the voice of conscience for a while.

They had a jolly time that night. After their important business was transacted, pop-corn and apples were in order, and joke after joke made the room ring with laughter.

But a more thoroughly uncomfortable boy than was Harry Thorn never laid his head upon his pillow. He tossed from side to side of the bed, but could find no rest.

What would his mother say—his dear mother—who had worked for him all his life?

What would little Susie say when she heard that her big brother was a thief? Thief! How Harry shuddered at that word! Oh, if he only had power to undo that evening's work!

It seemed to him now that he didn't care if he never saw another boat in his life.

He could bear it no longer. Rushing to his mother's room, he dropped on his knees beside her bed and told her the whole truth. Mrs. Thorn saw how he was suffering, and refrained from any word of reproach, though her heart ached with the thought that her boy could not be trusted.

Breakfast was waiting the next morning when the outside door opened, and Harry Thorn bounded in and laid a crisp five-dollar bill upon his mother's plate.

"Oh, mother!" he exclaimed. "I thought being sorry wasn't enough, and so I've been to Alf. Anderson's, and I told him everything that has happened, and asked him to give me back by money and erase my name from the roll.

"But don't you think, mother, he wouldn't do it; and he took that five-dollar bill from his pocket and made me take it. I didn't want to a bit, for I felt I didn't deserve it. But he said I was to take it to you, and it wasn't a favor to me, but to him, for he couldn't afford to lose so valuable a member from the club. Oh, mother, wasn't he good?"

Mrs. Thorn folded her boy in her arms, thankful that his better nature had so far triumphed as to enable him to humble his pride by acknowledging his poverty and sin to his schoolmate.

She felt that this would be a lasting lesson to her son; and it was.

Throughout the pleasant summer, every boat-ride reminded Harry of his temptation, and he has never since been known to take even a penny which was not his own. For "Honesty is the best policy" because the watchword of his life.