A Page for the Farmer and His Family

LIVE STOCK

BIG VALUE OF SELF-FEEDER

Experiments Show Pigs Make More Gain Than When Hand-Fed by Man and Eat Less, Too.

Expenses may be made less by the use of the self-feeding plan in preference to the hand-feeding system in the hog lot. An experiment was conducted at the Kansas State Agricultural college to show the value of the self feeder in fattening 75-pound pigs, and at the same time to show the amount of tankage required to balance a corn ration. This experiment was carried on by Dr. C. W. McCampbell, E. F. Ferrin, and H. B. Winchester, in swine feeding investigations in 1918 and 1919.

Twenty pigs of the same age, quality, condition, and weight, were put into two dry lots in groups of ten. The pigs in lot 1 ate from a self feeder, that was divided in two compartments, one having shelled corn and the other tankage. The pigs in lot 2 were given all they could eat twice a day of mixture of ten parts shelled corn and one part tankage. They were watered twice a day in both lots and the experiment was carried on for one hundred days. Three days at the beginning and end of the test the pigs were weighed and all weights and expenses were carefully recorded.

The pigs in lot one ate more corn and less tankage than the hand-fed pigs in lot 2. That a 5 per cent tankage could balance a corn ration in fattening 75-pound pigs was shown from this experiment, because the self-fed pigs consumed one part tankage and 20 parts corn.

A 100-pound gain in hand-fed pigs was produced by 6.8 bushels of corn and 38 pounds of tankage, and the same gain was produced in the self fed lot by 5.8 bushels of corn and 17.66 pounds of tankage, that is to say that the corn with tankage produced 14.7 pounds of pork in the hand-fed lot and 17 pounds of pork in the self-fed lot.

The self-fed pig gets more exercise than the hand-fed in the many trips he makes to the feeder and in this way probably will get more good from



Self-Feeding Method Proved to Be Most Profitable at Kansas State College.

his food. The hand-fed pig is fed twice a day and he eats all he can hold at that time. Perhaps this is the reason why the self-fed pig took less food to produce this 100-pound gain.

At the end of this test the pigs in lot 1 made a profit of $7.35 per head more than the hand-fed and they required less feed, and less labor to make the 100-pound gain.

FIGHT AGAINST HOG CHOLERA

Department of Agriculture Co-operated With 34 States in Campaign to Stop Disease.

The United States Department of Agriculture during the last fiscal year co-operated with 34 states in investigating reported outbreaks of hog cholera, administering treatment, preventing the disease from spreading, and stamping out the contagion by approved methods of cleaning and disinfecting premises, pens, and yards, where cholera-sick hogs had been held.

In addition, bureau of animal industry veterinarians conducted demonstrations, assisted veterinary practitioners in improving their technique, and conducted general educational work. During the greater part of the year, 140 veterinarians devoted their time to the control of hog cholera, but in the last quarter, when it became evident that such activities would be curtailed during the fiscal year 1921, owing to lack of funds, the number of veterinarians was reduced. For the same reason it became necessary to reduce the educational part of the work.

INDUCE SWINE TO EXERCISE

Keep Sleeping Quarters for Sows Some Distance From Feeding Place Is Good Plan.

A satisfactory means of inducing exercise on hog farms consists of keeping the sleeping quarters for the sows some distance from their feeding place so that the sows must travel this distance several times daily. However, if this cannot be done, sows will secure plenty of exercise eating hay from a low rack built for the purpose.

Feed for Young Colts.

To the young colts, reasonable quantities of oats along with the roughage should be fed and pay good returns in making a big colt.

ROOT AND SALAD CROPS IN FAVOR

Can Be Cultivated With Hand Tools and Take Up Comparatively Small Space.

FRESH THINGS ALL SUMMER

Specialists Suggest That Plantings Be Made a Week or So Apart to Obtain Succession of Various Kinds of Vegetables.

(Prepared by the United States Department of Agriculture)

Where garden space is limited plant root and salad crops. No garden, large or small, is complete without them, but they are particularly adapted to small back-yard gardens. Among the root crops are radishes, beets, carrots, parsnips, salsify or vegetable oyster, and turnips. Salad crops include lettuce, common or wild cress, dandelion, Cos lettuce or romaine, Chinese cabbage, and others. They require little space, because they can be planted in rows from 10 to 18 inches apart, and cultivated with hand tools. Many gardeners make only one planting of these crops, but the garden specialists of the United States Department of Agriculture suggest that several plantings of them be made a week or so apart, in order to have a succession of those vegetables.

Radishes are one of the first and best vegetables that come from the garden in spring. They should be planted as early as possible, whether for market or home use. For the home supply small amounts should be planted, and at least two or three plantings made with varieties that mature at different times.

Food Value of Beets.

Beets are one of the most important crops for the home garden. Seed can be planted just as soon as the soil is in condition to work. When the plants crowd one another in the row, thin them out when they are young, and cook them as greens. Later, when



Salad Plants Can Often Be Grown in a Small Space Where Some Other Crop Has Been Gathered.

they are about an inch in diameter, both leaf stems and young beets can be cooked together. When the beets are larger the leaf-stems become tough and woody. As a rule two plantings should be made, one extremely early and another in about four weeks.

Carrots should be planted just a little later than beets, and as soon as the plants are up they should be thinned. A second thinning will leave the plants one and one-half to two inches apart in the row and give a supply of small carrots, known as baby carrots, for use on the table. The tops of the carrots cannot be used for greens.

Parsnips and salsify are more in the nature of winter crops; that is, they are grown during the summer and kept for winter use. A section of row 20 to 30 feet long generally will produce all the parsnips or salsify that the average family will want.

While it is true that too much lettuce often is planted at one time, not enough attention is given to keeping a continuous supply. Lettuce plants grown in the hotbed or cold frame, or in a box in the house, can be planted in the open ground just as soon as the danger of the last frost is past.

Fresh Things All Year.

By making a study of the different kinds of salad crops offered in seed catalogues one can easily have a continuous supply from the earliest springtime until the late autumn, and even into the winter. Water cress, for instance, is grown commercially in ponds or spring-fed streams in sections where the water naturally contains large amounts of lime. By starting water cress from seeds sown in a box in the house or by getting a bunch of cress in the market and using the stems for plants, it is easy to grow a bed of water cress without the aid of a stream or pond.

Chickory, or endive, is one of the finest of the winter salads. The roots are, grown during the summer, and then dug in the fall and packed in the cellar in boxes of moist sand, the roots being placed rather close together in the box with the crowns or tops near the surface. A covering of straw is placed over the box, and the soil around the roots kept moderately watered. Fresh, young leaves will be formed beneath the straw, and as they are grown in comparative darkness, these are white, crisp and tender.

NICOTINE SULPHATE IS LESS EXPENSIVE

Dusting Found Effective in Controlling Pests.

Insects Hard to Reach With Ordinary Sprays Caught by Floating Dust Settling on Under Side of the Leaves.

(Prepared by the United States Department of Agriculture)

To the sorrow of some of the insect pests which feed on the under side of plant leaves and so escape the effect of poison sprays, the bureau of entomology, United States Department of Agriculture, has been conducting experiments with nicotine sulphate applied in dust form. Mixed with kaolin to give the poison bulk, 40 per cent strength nicotine sulphate did remarkable work in controlling melon, cabbage and pea aphis, onion thrips and western cucumber beetles. All these



Hand Dust-Guns Are Effective on Small Areas.

insect pests are hard to reach with ordinary sprays, but the floating dust settles upon the under side of the leaves as well as on the surface. The experiments show that much larger areas can be treated in less time than is required by spraying. Moreover, the equipment necessary to apply the dust is much less expensive than a spray outfit and its cost of application is less than by the older method. It weighs less than spray and is more conveniently handled. It can be mixed with arsenate of lead or sulphur for use against insects and fungous diseases.

FRUIT FOR AVERAGE FAMILY

Everbearing Strawberries Should Find Place in Every Garden Where There Is Space.

Plenty of vegetables for the table should be the first consideration of every home gardener, but fruit trees and some bush fruit should be planted, say specialists of the United States Department of Agriculture. It does not take a very large space for growing enough fruit and berries of the different kinds to supply the average family.

Everbearing strawberries, which were a novelty a few years ago, are now being planted by thousands of gardeners, and they should find a place in every garden of the temperate region where space will permit. Strawberries, however, can be grown under a very wide range of climatic and soil conditions. The same is true of the blackberry and the dewberry.

Raspberries are more limited as to distribution, and will not withstand the heat of summer in the South or the extreme cold of the North. Their planting is confined almost entirely to the temperate regions, the Central and Eastern states and the Pacific Northwest. Certain varieties of the red raspberry that are practically everbearing, or that at least produce both a summer and fall crop of fruit, are now being developed. Raspberries, blackberries, and dewberries do well when planted along a fence.

SETTING OUT NUT TREES

Nut trees, such as walnut, hickory and oak, develop a deep taproot and few lateral feeding roots during their first year. They cannot ordinarily be transplanted to the field so successfully as other trees, so that planting the nuts or acorns on the permanent site usually is considered preferable.

GROWING MUSCADINE GRAPES

Best Results Obtained by Training to Trellis, Using Three Wires Instead of Two.

The muscadine grape will produce the best results when trained to a trellis, using three wires instead of two as in training the "bunch" varieties. Posts should be at least eight to nine feet in length, and set two to three feet in the ground. The wire should be two feet apart on the posts, which should be sixteen feet apart. The vines should be set at least twenty-five feet apart in the row.

Excellent Sow Ration.

A ration which is excellent for sows with pigs is corn, grain and alfalfa. The hay can either be self-fed in a rack or ground at a small cost and mixed with grain feed.

DAIRY FACTS

BETTER BULLS ADD PROFITS

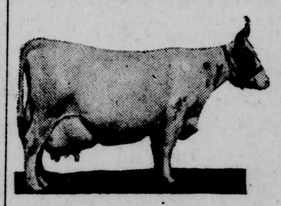
Associations Make Possible Improved Sires at but Small Additional Cost to Dairyman.

(Prepared by the United States Department of Agriculture)

Two years ago a bull association was organized in Webster County, Mo.; and a year later another one in the adjoining counties of Wright and Douglas. The experience of these two associations illustrates the tendencies that such organizations display. A tabular comparison is given below, from which it will be noted that both organizations brought about a great reduction in the number of bulls needed. Before organizing, Webster county had 1 bull for every 17 cows, and Wright and Douglas counties 1 bull for every 29 cows; but in each locality after they got the association into operation they found 1 bull for every 50 cows was enough.

Another great change was in the value of the bulls. Before the bull associations were organized the bulls which the members owned were valued at $75 each. After organizing, the bulls purchased and owned by the two associations were worth on the average about $275 each, which is nearly four times as much as the privately owned bulls.

Yet the cost was not much greater per farm. When an individual owns a bull, the value of the bull and the amount of the investment are the same; but in a co-operative association each man pays only a part of the cost. The tabulation shows that the investment per farmer, that is, the average amount that each man had to pay was about one and a quarter times as much after the organization as it was before, in Webster county, and a little over twice as much in the Wright-Douglas association; but in both cases the value of the individual



A High-Producing Cow—The Result of Good Breeding.

bull was three and two-thirds times as much. It appears, therefore, that by a comparatively small additional investment the members of these two associations were able to secure very much more valuable bulls.

Both these Missouri associations seem to have considerable influence in encouraging their members to keep pure-bred cows. The Webster county association started with only 2 pure-bred cows, but in 1920 there were no fewer than 95. The Wright-Douglas association had no purebred cows at all when it began, but a year later it had 12, a change which, though small, shows progress and may lead to great results in the future.

Comparative Figures.

	Webster County Association. June, 1918	Wright-Douglas Association. Oct., 1919
Number of members at time of starting	31	26
Total number of cows at starting	300	200
Number of bulls owned by members before organizing	18	7
Number of bulls owned by association after organizing	6	4
Cows per bull before organizing	17	29
Cows per bull after organizing	50	50
Average value of bulls owned by members before organizing	$75	$75
Average value of bulls owned by association	$276	$275
Investment per farmer before organizing	$43.71	$20.19
Investment per farmer after organizing	$53.45	$42.31
Purebred cows at time of starting	2	.....
Purebred cows at present	95	12

SUCCESS WITH YOUNG STOCK

Part of Constructive Benefits Lost by Failure to Properly Develop Animals.

To breed good dairy cattle and then fail to grow and develop them is to lose part of the benefits of constructive breeding. More beginners fail because they do not properly feed the stock they buy or breed, than fail from any other cause. Find the farmers who grow out their young stock, and you will find men who are making a success in their animal husbandry enterprises.

MUCH BUTTER IS IMPORTED

Efficiency of Foreign Dairymen Is Largely Responsible for Large Amount Coming Here.

The efficiency of the foreign dairymen is largely responsible for the vast amount of imported butter reaching this country. In Denmark the average cow's production is 220 pounds of butterfat a year. The average cow in this country is credited with less than 150 pounds.

SQUARE TYPE IS ALWAYS POPULAR

Has Many Advantages That Appeal to Home Builder.

CUTS COST OF CONSTRUCTION

Design Shown Here Is Built of Concrete Blocks, but Will Work Out Equally Well in Frame, Brick, Hollow Tile and Stucco.

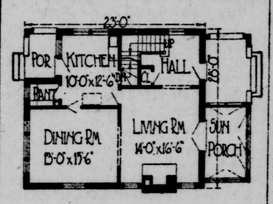
By WILLIAM A. RADFORD.

Mr. William A. Radford will answer questions and give advice FREE OF COST on all subjects pertaining to the subject of building, for the readers of this paper. On account of his wide experience as Editor, Author and Manufacturer, he is, without doubt, the highest authority on all these subjects. Address all inquiries to William A. Radford, No. 1827 Prairie avenue, Chicago, Ill., and only inclose two-cent stamp for reply.

While many people prefer the one room, so called condensed apartment of the large apartment buildings in the cities, and others like the small, unique and original bungalow brought from the West Coast a few years ago, a great many still hold a profound regard for the familiar and ever-popular square lined, hipped roof home of many rooms, the home that always gives the impression of bigness, comfort, and substantial security. This home is found in the large and small cities, suburbs, small towns, villages and on the farms. It has its supporters everywhere and will continue to be built for many years to come.

That is why we are showing a picture of an excellent example of this type. In this case the house is built of concrete blocks, although the same design may be constructed of frame, brick, hollow tile and stucco. There are no freakish corners, expensive innovations that tend to increase costs which are high enough as it is. In fact the contractor can build this kind of home as reasonably as any. Concrete block is growing in favor because of its attractive exterior appearance and insulating features. The hollow air space prevents extreme cold from penetrating the walls in the winter and likewise stops excessive heat from getting in during the warm months. Moreover it is easily laid and quickly. This block is smooth-faced. The foundation is poured concrete.

One of the appealing features of this home, one that indicates its comfortable arrangement is the expansive roomy porch, part of which has been glazed to form a sun parlor. In the summer time this glass can be changed for screens and a very comfortable sun porch built. The front door opens into a small reception hall which contains a clothes closet and which opens on one side into the living room and leads to the stairway going to the second floor. The living room is a large



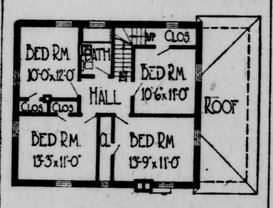
First Floor Plan.

spacious and cheerful room, 14 by 16 feet 6 inches, with a great open brick fireplace, easily one of the most attractive comforts that can be installed in the home. On either side of this fireplace are two small windows providing additional light and ventilation.

Directly in the rear of the living room and joining it by a large open doorway is the dining room, slightly smaller in size, 13 by 15 feet 6 inches, looking out into the rear through a large triple window. Another large double hung window on the side provides additional light. The dining room is connected with the kitchen by a small door on one side. In the construction of modern homes the kitchen is considered one of the most important rooms because of its importance to the wife. Unless arranged efficiently it will cause her a whole lot of unnecessary work and make her home life decidedly more difficult and slavish.

On the upper floor are the four bedrooms, small cheerful well-lighted rooms of about equal size and each containing exceptionally large clothes closets. These bedrooms are grouped about a central hall. The bathroom is also located on this floor.

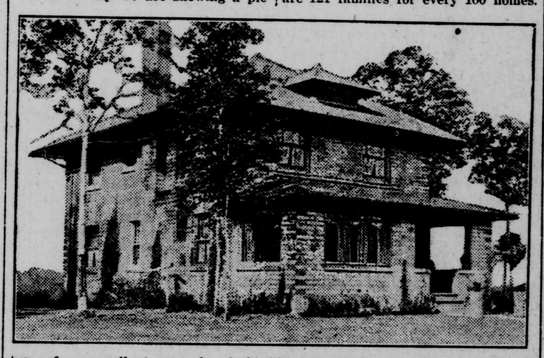
There are many features in this substantial home that will appeal to the man of family who wants plenty of breathing space. Moreover this type of house is very economical in cost. This is due to the absence of frills of any kind which always mean extra



Second Floor Plan.

expense. In these days of high costs, if people planning on homes would overlook many of the whims which they may want to incorporate in their new home they would find it quite profitable. For every added feature means special labor, millwork, and a whole lot of extra expense.

Last year there were 100,000 marriages, and only 40,000 homes were built. It is estimated that today there are 121 families for every 100 homes.



If this be true the situation is very acute. There must be home building, and work must be started soon or there will be an actual home famine.

TRACES ORIGIN OF HAWAIIANS

New Pork Scientist Finds Them Cousins to Asiatics and to United States Indians.

Whence came the ancient Hawaiians and others of the Polynesian race is a query which baffled the members of the pan-Pacific scientific congress when, it was in session at Honolulu last August, and which is answered in part by Louis R. Sullivan of the American Museum of Natural History, New York, who has been conducting investigations in the islands since the close of the congress.

Bodily, facial and cranial characteristics of the Polynesian, according to Mr. Sullivan's tables, show that he is 11 parts Mongolian, five parts European, five parts Mongoloid-European and two parts Mongoloid-Melanesian. The seemingly unavoidable conclusion is that the Hawaiian and his Polynesian brothers originally came from Asia.

The ancient Hawaiians were a race of regal proportions, the most commanding physically, Mr. Sullivan believes, the world has ever seen.

Science and Poetry.

The Arabians are using the theme of the X-ray in their love poems. Al Rusafi, a modern poet of Bagdad, now living in Constantinople, gives expression to the following sentiment in one of his recent lyrics: "Take from the light Roentgen's rays, by which the invisible becomes visible, throw the rays upon my heart and behold! Thou wilt find that my heart is pocked with wounds because of thee." The case is said to be by no means isolated.

Best Grades Really Cheapest.

The purchase of a cheap grade of goods for any serious use, is very poor economy. Such goods soon give way, and the service they render, while they do last, is not satisfactory. To obtain a given amount of service one will spend more money on articles of cheap grade than upon those that are better. The obtaining of the same amount of pleasure and satisfaction from the use of a cheap thing and a good one is an impossibility.

TO GET MASTERY OF GLOOM

Rainy Sunday Should Be Made Occasion for Improvement of the Mind by Reading.

"Sunday was a gloomy day, as far as the weather had to do with it, but where there's sunshine in your soul, never mind the weather," philosophized the Palmer Rustler in a recent issue.

"O'er these wide-extending plains shines one eternal day, where God in light forever reigns and scatters night away," sang the old hymnist. And why should the hymnist alone feel that way about it? Clouds are thin walls just above the earth. Beyond them is everlasting light. Gloom, which has an uncomfortable way of settling down like a fog upon our minds, is even thinner than the clouds, for the clouds are real, whereupon gloom is but a dark figment of the imagination. Most people regard a rainy Sunday as the last word in temperamental depression, but as a matter of fact, if a rainy Sunday is properly handled, adequately treated, courageously attacked, it can be made a fine day. The thing to do with a rainy Sunday is to first conquer it, to let it know who is master, to cow and intimidate it. Then get a good book, or several books, curl up in a lighted nook, and read. There is a lot of good reading which even the best-read person in Texas hasn't yet got around to, therefore, the best read, as well as those of us who have read hardly anything, need never lack good reading matter. State Press doesn't believe in overdoing even as good a thing as reading. Some people read too much. They spend so much time burrowing into printed pages they never get a chance to see the world, and it is the world, after all, and not books, which is most interesting and valuable to mankind. Sleeping off a rainy Sunday is the worst way to use it. Too much sleep conduces to stupidity, just as too much reading conduces to addled brains. The way to get the best of a gloomy day or a gloomy mind is to forget it; and the way to forget it is to become interested in something else.

IMPROVED UNIFORM INTERNATIONAL

SUNDAY SCHOOL LESSON

(By REV. F. B. FITZWATER, D. D., Teacher of English Bible in the Moody Bible Institute of Chicago.)
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LESSON FOR MAY 1

BIBLE TEACHINGS ABOUT EDUCATION.

LESSON TEXT—Deut. 6:4-9; Prov. 3:13-18; Luke 2:52.

GOLDEN TEXT—Wisdom is the principal thing; therefore get wisdom.—Prov. 4:7.

REFERENCE MATERIAL—Prov. 1:7-9; 4:1-13; Col. 2:3; Jas. 1:5; II Pet. 1:5.

PRIMARY TOPIC—The Boy Jesus With the Teachers.

JUNIOR TOPIC—Pleasing God in School.

INTERMEDIATE AND SENIOR TOPIC—The Value of an Education.

YOUNG PEOPLE AND ADULT TOPIC—Making Education Christian.

I. The Excellency of Wisdom (Prov. 3:13-18).

Let no man confuse this "wisdom" with the so-called wisdom resulting from an education in the arts, sciences and philosophy taught in the modern colleges and universities. The way to have this in its true sense is to get it from the Bible, God's revealed Word (Psa. 119:98-100). Wisdom personified means Christ (Prov. 8). All real wisdom leads to Christ, who is made unto us wisdom, righteousness, and sanctification (I Cor. 1:30). Wisdom is desirable because:

1. Of its inherent qualities (vv. 13-15). (1) "Better than the merchandise of silver and the gain of gold" (v. 14). Men set great value upon these, but they are corruptible and shall soon pass away. (2) "More precious than rubies" (v. 15). Though among the most valuable among the precious stones, the ruby is of secondary value when compared with the wisdom of God. (3) Of immeasurable value (v. 15). The best things that the human heart can desire are not worthy to compare in value unto wisdom.

2. It ministers to our earthly welfare (vv. 16-18). (1) "Length of days is in her right hand" (v. 16). Godliness tends to long life. (2) "In her left hand riches and honor" (v. 16). "Riches and honor" may not always be according to the world's standard. (3) "Her ways are ways of pleasantness" (v. 17). The notion that the life of the Christian is hard and that pleasure does not enter into his experience is all wrong. The way of the transgressor is hard (Prov. 13:15). Godliness is profitable unto all things, having the promise of the life that now is and of that which is to come (I Tim. 4:8). (4) "All her paths are peace" (v. 17). There is no peace to the wicked. "The wicked are like the troubled sea when it cannot rest, whose waters cast up mire and dirt (Isa. 57:20, 21). (5) "She is a tree of life to them that lay hold upon her" (v. 18). Those who eat of the tree of life, Christ, have eternal life (Gen. 3:22; ch. John 6:63. (6) "Happy is everyone that retaineth her" (v. 18). The only true happiness that can be had is in laying hold on wisdom in God's Word.

II. Israel's Responsibility With Reference to the Statutes of the Lord (Deut. 6:4-9).

1. Central truths to be taught (vv. 4, 5). (1) Unity of God. "The Lord our God is one Lord." This was a testimony against the polytheism of that day. He is God alone, therefore to worship another is sin. (2) Man's supreme obligation (v. 5). God should be loved with all the heart, soul, and might, because He is God alone and supreme. The one who is truly wise will make God first in everything in his life, first in business, first in pleasure, first in education, etc.

2. How these truths are to be kept alive (vv. 6-9). The place for God's Word is in the heart. In order that it may be in the heart (1) "teach diligently to thy children" (v. 7). The most important part of a child's education is that given in the Word of God. (2) Talk of them in the home (v. 7). How blessed is that home where God's Word is the topic of conversation. (3) Talk of them when walking with our children and friends (v. 7). (4) Talk of them when retiring for the night (v. 7). The last thing upon which the mind should rest before going to sleep should be God and His truth. (5) Talk of them when rising in the morning (v. 7). How fitting that God should speak to us the first thing when we awake. (6) Bind them upon thine hand (v. 8). This was literally done by the Jews. (7) Write them upon the posts of the house and on the gates (v. 8).

III. The Growth of Jesus (Luke 2:52).

It should be borne in mind that Christ's growth was not the result of education, but the normal unfolding of His human nature. His growth was harmonious.

1. Bodily stature. Being really human, His bodily size and strength increased. What wonderful condescension that God should take our nature and thus pass through the stages of physical development common to man!

2. Increased in wisdom. His mental equipment enlarged as any normal human being. His fountain of knowledge increased as He came in contact with men and the world.

3. In favor with God and man. His innate perfection and beauty more and more expressed itself as His human nature expanded.

Animosity Grows Into Ill Will.

"Resist beginnings." You cannot curb the power of the river; choke its source. You cannot arrest the fury of the conflagration; put out the spark. It is almost impossible to check hatreds that have been allowed free course; never let them begin. An animosity will sometimes spring up before one knows it; make its life a brief one. Animosity grows into ill will and malignity and rancor, and these are far more hurtful to ourselves than to those against whom they are directed. Subdue them by the spirit of Christ, without which we are none of His.—Watchman-Examiner

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