

A MODEL FARM

How a Clergyman Lifted a Mortgage on a Pennsylvania Farm

QUY ELLIOTT MITCHELL.

There is a farm in southeastern Pennsylvania which the Department of Agriculture considers a model twentieth century farm. It consists of fifteen acres, thirteen of which are in cultivation, the remaining two acres being occupied by buildings, yard, etc. This land came into the possession of the present owner—a minister of the Gospel—in 1881 with a mortgage of \$7,200 upon it.

Improving the Soil.

The soil of the farm is a reddish somewhat gravelly clay. So run down was it in 1881 that it did not support the two cows and one horse kept upon it. Last year it raised all the roughage for thirty head of stock, seventeen of which are cows in milk. It has been brought up to its present remarkable state of fertility solely by the use of stable manure applied directly from the barn. The system of handling this manure is such that none is lost, either liquid or solid. No commercial fertilizers have ever been used and no manure has been hauled from the city. This is a practice greatly differing from that in vogue on the majority of

farmers in this country, where the owner seeing a dollar in sight for a load of manure readily sells it to a neighbor rather than apply it to his own soil, where its value might be three or four times as great. On the model farm in Pennsylvania most of the crops are fed to the stock and thus largely return to the land in manure. Upon assuming management of the farm the owner with no previous experience in farming began to read what agricultural literature was available. One of the first books secured by him was Quincy's little treatise on the soiling of cattle, written in 1859. Soiling consists in cutting and giving green feed in summer instead of allowing the animals to run on pasture. This system adopted by the farm owner did not prove satisfactory the first year because no other feed was used and the cows did not do well. In addition the manure was difficult to handle and it was not easy to keep the barn clean. Before the next season, however, the new farmer had procured Stewart's book on feeding animals and from it learned his first lesson in "balanced rations." He also learned to feed some dry hay with the soiling crops, thus giving the manure a proper consistency. Thenceforward the management of the constantly growing herd of cows was a simple matter and the farm began not only to pay a profit but to increase in fertility, so that within seven years the entire mortgage was paid off.

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Balanced Rations a Necessity.

Notwithstanding this extraordinary practice the bill for veterinary services on this Pennsylvania farm during the past six years has been but \$1.50, and

duplicate on other farms, but it depends on the soil and the man who has the management of it. It cannot be done by one who is not a student. A similar system may be developed on any dairy farm that disposes of pastures. Where land is cheaper and the dairyman can afford pastures, the system would be radically different in summer but not in winter. Probably the most important single feature of this Pennsylvania farm aside from the systematic manner in which it is conducted is the one of handling the manure. The fact that the stock is stabled the year round makes it possible to save all the manure both liquid and solid and apply it to the land. Being applied daily as produced, any leaching by rains, carries the leached materials into the soil where it is needed. The remarkable yields of every portion of this farm seem to indicate that this method of handling manure is highly satisfactory.

A BIG EDITORIAL OFFICE.

The Department of Agriculture Publishes Over Four Booklets for Every Day in the Year.

One of the biggest editorial offices in the Government and probably in the country is in the Department of Agriculture where the Division of Publications edits, revises, and in some cases returns to the authors for rewriting an average of four bulletins or books for every day in the year. During the last fiscal year 1,463 new publications passed through the editor's hands, nearly 400 of these, however, being issued by the Weather Bureau, which is under the Department of Agriculture. The total number of copies of the remaining 1,000 odd publications printed during the year was 12,000,475. Many of these are generously illustrated, and beside the great number of original photographs used, the artists of the Department make something over 1,000 drawings a year for illustrating.

The head of this Division, or the "Editor" of the Department as he is known, is Mr. George William Hill, an old-time editor of an agricultural paper, but he has held his present position for many administrations. "There have been very many radical changes," said Mr. Hill, "in the publications of the Department within the last ten years. At one time, the Agricultural Reports and other pamphlets and bulletins issued were more or less technical, having the reputation generally throughout the country, of being written in about as dry and uninteresting a manner as possible. The present Secretary has continually impressed upon his Chiefs of Divisions the desirability of short, crisp articles and bulletins, especially in the annual Year Books, written in a practical and simple style, with the result that the Publications of the Department have come into very general favor with the farmers and are eagerly sought after, which is evident by the enormous number of requests for them."

The Farmers' Bulletins, descriptive of all sorts of farm work, stock-raising, fruit-growing, etc., and of which nearly 250 have been published, are by all odds the most popular of the Departments of Publications. They are brief, written in simple style and discuss subjects near to the heart of the agriculturist. Many of them have been condensed and rewritten from the longer and more technical bulletins, setting forth the results of exhaustive experiments. More than 6,000,000 copies of these popular bulletins were published and distributed last year. An active factor in the enormous work of editing the Agricultural Publications is the assistant chief and editor of the Division, Mr. Joseph A. Arnold, whose knowledge of the practical side of Agricultural Publications is something amazing.

The storage and distribution of this printed matter constitutes a large and important part of the Publication Division's work, the document section occupying the entire space of a large four story building. The total printing bill of the Division for the past year amounted to \$258,172. "Although we are sending out a vast volume of farm bulletins," remarked Mr. Arnold in speaking of this

work of the Department, "I cannot believe that the farmers of the country as a whole appreciate what a splendid mine of agricultural information exists in these farm bulletins, which they can have for the asking."



JOSEPH A. ARNOLD, Editor, Department of Agriculture.

They cover every practical subject and would make an exceedingly valuable farm library. Bound together they would form several large volumes prepared by the best agricultural experts in the country and the result of the widest and most extensive scientific farm experiments ever made."

KING ALFONSO'S SHOPPING.

A Paris Millinery Shop Started by a Visit From the Spanish King.

An amusing anecdote is related in connection with King Alfonso's recent visit to Paris. In his leisure moments he was fond of taking a turn in the Rue de la Paix, which is noted for its elegant shops, and making a few purchases. His majesty's appearance naturally created a good deal of flutter, especially among the demoiselles de magasin, who rushed to doors and windows to see him go by, so when three gentlemen stepped into a certain establishment one morning and the most youthful of the party asked to see some hats they were politely requested, as the most natural thing in the world, to wait a moment, as the king was in the street, and the girls were all watching for him. The knowing smiles which thereupon pervaded the features of the little party had the effect of promptly putting the quick-witted shop girls on the scent. After announcing the great news excitedly to the proprietor of the establishment they clustered in a ring round King Alfonso and his companions.

This was a thousand times better than a peep into the street, and then, what an honor! Only to think of the Spanish sovereign walking in such simple fashion into their shop. And what followed delighted them even more. The mistress of the place had advanced, and, courtesying low, had uttered one of those pretty compliments which our French friends have so glibly at the tip of their tongues, when his majesty smilingly replied: "I wish to see some hats. I want three; one for my mother, in rather a quiet style; one for my sister, and one for my aunt, and please put them all up together in the same box." The masterpieces of the shop were presented and inspected. The selection of the three hats took some time, as the young king is not accustomed to that sort of work, and in his dilemma he exclaimed: "Well, I was never so puzzled in my life!" Finally the choice was made, and with the request that the hats should be sent at once to the hotel, King Alfonso took his departure, leaving the mistress of the establishment and her young women charmed with their experience.

A NON-PATENTABLE MEDICINE.

Universally Used by the Medical Profession.

What is the most important remedy known to the medical profession? A guessing contest might be established upon this question which would doubtless bring to the fore a great variety of remedies, yet, as stated by a very successful practitioner, there is one medicine given to patients which physicians find more important than any other. Strange to say, this is the quite universal and ineffective "bread pill," which, after all, is not bread, but only so-called on account of its harmless nature. The bread pill is sometimes nothing more than a plain sugar pellet, at others, where a liquid prescription is given, a weak solution of sugar and water, or a mixture of powdered licorice or gentian, both harmless drugs when given in the weak proportions prescribed by the doctor.

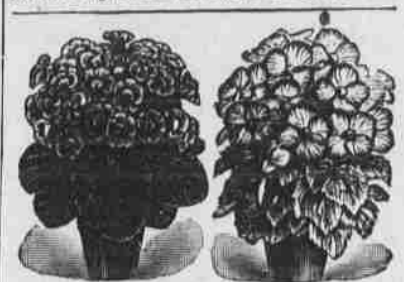
Of course the principle use of the "bread pill" is in the case of a patient, who, imagining himself ill, calls in his family physician, and the

ter of the disease or where they have not developed sufficiently for him to determine the true nature of the case. In this event he does not wish to display his ignorance or what in reality may be but an apparent lack of knowledge, since at some stages it is impossible to accurately diagnose a case; but a frank admission of this kind would destroy the patient's confidence in his physician. And so at this juncture the "bread pill" steps in, is given to the sick person, with no apprehension of any harm resulting therefrom.

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By H. D. Hemenway.

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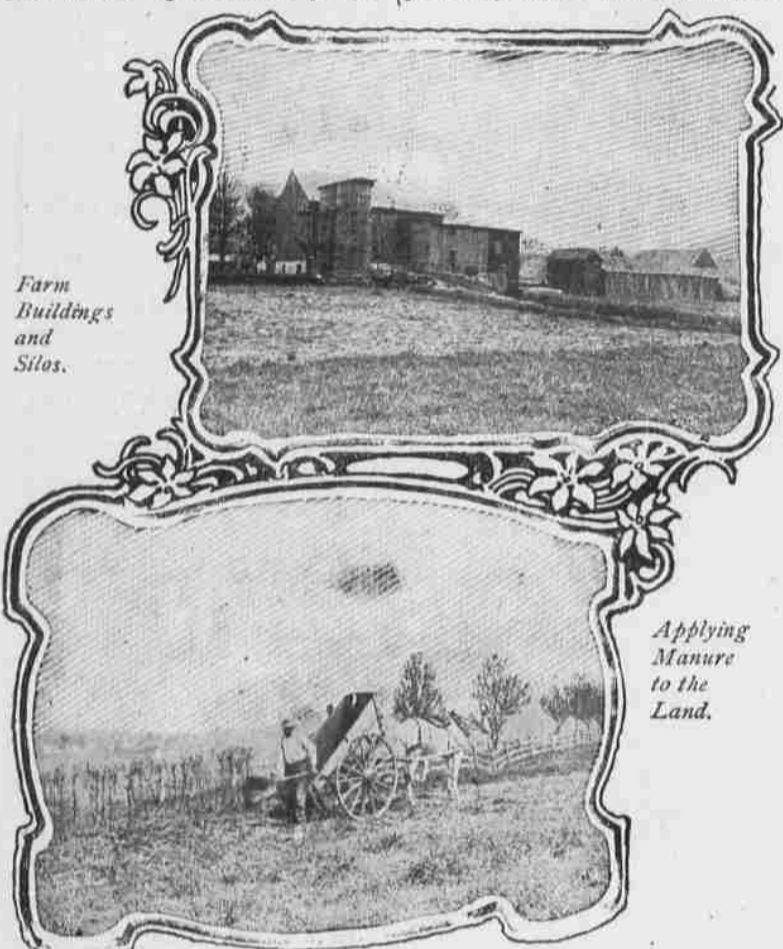
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Farm Buildings and Silos.

Applying Manure to the Land.

the farms of this country, where the owner seeing a dollar in sight for a load of manure readily sells it to a neighbor rather than apply it to his own soil, where its value might be three or four times as great. On the model farm in Pennsylvania most of the crops are fed to the stock and thus largely return to the land in manure.

Upon assuming management of the farm the owner with no previous experience in farming began to read what agricultural literature was available. One of the first books secured by him was Quincy's little treatise on the soiling of cattle, written in 1859. Soiling consists in cutting and giving green feed in summer instead of allowing the animals to run on pasture. This system adopted by the farm owner did not prove satisfactory the first year because no other feed was used and the cows did not do well. In addition the manure was difficult to handle and it was not easy to keep the barn clean. Before the next season, however, the new farmer had procured Stewart's book on feeding animals and from it learned his first lesson in "balanced rations." He also learned to feed some dry hay with the soiling crops, thus giving the manure a proper consistency. Thenceforward the management of the constantly growing herd of cows was a simple matter and the farm began not only to pay a profit but to increase in fertility, so that within seven years the entire mortgage was paid off.

The farm is strictly a dairy farm, the only products regularly sold being milk and a few head of young cattle each year. The cows are all registered Jerseys except one or two picked up at neighboring sales. They are not only pure bred but well bred. Male calves, if worthy of it, are reared for breeding purposes, but none is ever vealed. If a male calf is not fit to raise for a breeder it is killed at birth. "It doesn't pay to feed \$18 worth of meal to a calf that will sell for \$7," said the owner. The young cattle sold from this farm bring on an average \$100 apiece, and about five are disposed of each year.

The milk is all sold at 25 cents a gallon the year round to a State institution located two miles distant. The milk tests high, is perfectly clean and free from adulteration. There is never any complaint from the buyers; on the other hand, this farmer is considered a public benefactor. As soon as the milk is drawn it is placed in perfectly clean cans standing in cold water some distance from the barn and stirred frequently to aerate it and aid the cooling. The milk vessels are never allowed to stand around uncleaned, but are washed as soon as the milk is removed, first with cold water, then with boiling and finally again with cold water. The amount of milk produced from the seventeen cows is nearly the same at all seasons and averages about twenty-six gallons a day. While this yield of approximately 4,800 pounds a year for each of the seventeen cows kept is not enormous, by any means, it is good. The income from the milk produced is about \$2,400 a year. The outlay for concentrated feeding stuffs is \$625 annually.

Economy in Farm Labor.

One man and a boy do the labor of the farm except in hay harvest and during the cutting of silage. So sys-

tematic is the work that the owner may leave for a week without notice to the laborers, with no interruption to the regular routine. The feeding of the cows, the handling of the milk, keeping the barn clean and disposing of the manure, are all worked out under such a system that they require little supervision on the part of the proprietor. There is no pasture on this farm for pastures on such high-priced land are out of the question. There is not even a barn lot, the thirty head of cattle remaining in the stalls the year round. We have been taught that this is not a good practice, for it has been supposed that milk cows need a certain amount of exercise, yet it must be considered that the Danish cows stand in their stalls from November to May and are staked out in the field from May to November, and yet Denmark ranks high in the dairy industry and her cows are healthy.

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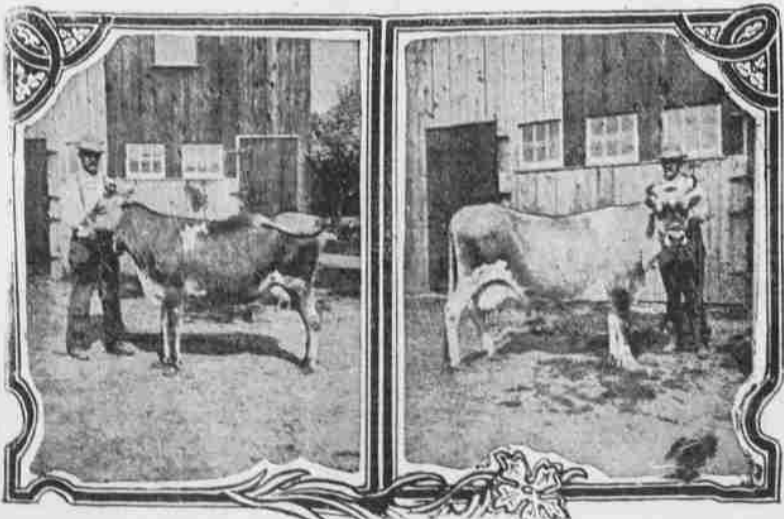
The remarkable yields on this farm are due entirely to the intelligent use of stable manure. Most farmers waste more than half of the value of the manure produced on their farms. On this model farm every particle of the plant food is utilized. The method of handling manure in this case can be used only on farms on which stock is kept in stalls and is therefore not applicable to all styles of stock-farming. Behind each row of cows is a gutter, eighteen inches wide and seven inches deep. These gutters have no outlets. They are thoroughly cleaned daily (the whole barn is disinfected twice a week by a free use of creoline, and the interior is frequently white-washed). When cleaned, the gutters are sprinkled with ashes or dry dirt to absorb what moisture may be present. During the day a quantity of absorbent, consisting of leaf mold, rotten sod, etc., is placed in them. The manure is lifted from the gutters into a cart backed up to the door and is then taken directly off to the fields and spread over them. In summer it is applied to the land from which the soiling crops are removed; in winter it is spread on the rye and grass fields. No manure is used on newly seeded grass lands.

This is the experience of a pioneer farmer starting in with no previous training, but going to work in a methodical manner to learn what he could from the experience of others. He has applied principles and business methods and has blazed a path into a region of great possibilities. There is no doubt that his experience can be



GEORGE WILLIAM HILL, Chief of the Publication Division, Department of Agriculture.

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THE 3-YEAR-OLD DAUGHTER OF A 15-YEAR-OLD JERSEY.

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"Although we are sending out a vast volume of farm bulletins," remarked Mr. Arnold in speaking of this

latter, knowing his patient to be perfectly well, prescribes the "bread pill." But, probably, the most opportune of all times for the use of the "bread pill" is when the man of science makes a visit to a particularly ill patient, but whose symptoms are of such a nature that he is perplexed as to the charac-