C'NEILL FRONTIER



Jo's slender wardrobe for

morning use. If she had known

Dr. Mary Rutherford was com-

ing, her dark hair couldn't

have been more smoothly or-

dered-it was one of Jo's

charms that she was never to

be discovered looking mussy

and ill kempt, as Adelaide so

often was-when there were

no young men about. Sally

thought sometimes that this

personal nicety of Jo's might

have been one of Adelaide's

special reasons for antagon-

ism; Adelaide wanted to look

like that, but wouldn't take

the trouble, and hated one who

was willing to pay the price

is waiting in the parlor to see

you." Sally enjoyed an-

nouncing it, though she was

of the heart at the thought of

prize of hers. "Let this go-

you mustn't keep her walting.

She's no less a person than Dr.

The look of startled joy

which flashed over Jo's face

told Sally still more plainly

that Dr. Rutherford had al-

ready intimated the relation

"Doctor Mary! Oh, how did

she know where to find me?"

Jo followed Sally out of the

kitchen as one who goes to

Sally turned with a search-

ing look. "Do you mind her

finding you here, Jo?" she

asked, for somehow she felt

"Oh, not a bit-not the least

bit. Why should I? I'm proud

of it. And I want her to know

you, Mrs. Chase. Won't you

"I should be delighted to see

more of Doctor Rutherford,

meet a long absent friend.

Mary Rutherford."

between the two.

she had to know.

come back with me?"

"My dear, a friend of yours

for the result.

With a charming mannerthe one she could use when she felt it called for-Adelaide led the visitor into the house. For a fleeting moment she had considered taking her through the hall into the dining room, as a place suitable to a housekeeper receiving calls. But she realized instantly that it would be unwise to indulge herself in this effort further to label Jo as the upper servant Sally Chase didn't consider her. If Sally had been out of the house, it might have been done But she wasn't-she was coming into the hall from a side door at this very moment, on her arm a basket of flowers which she had lately picked. At sight of the visitor she dropped the basket upon an old settle which stood beside the door, and came forward.

"This lady is inquiring for your housekeeper, Sally," Adelaide explained, reluctantly resigning the situation with this final repetition of the word she so enjoyed using. If only she could have been left to manage things herself, she might have succeeded in making them difficult for Jo as she would have liked to do. Still, she reflected, the visitor seemed to be informed as to Jo's status in the household. Perhaps she wanted to engage her in the same capacity.

Of course, as at sight of Sally her cousin had known would happen, the whole atmosphere of the arrival of this stranger changed. Mrs. Chase received Jenny's caller in her own informal, friendly way. The lady introduced herself as Miss Rutherford. Sally took her into the old parlor. She said she would call Miss Jenney, adding that Miss Jenney was not only her housekeeper for the summer but her friend as well, saying it in the warm but are you sure you want me tone which vouches for the stability of a proclaimed friendship. Adelaide, lingering out of sight in the hall, heard the conversation fragment of which followed. "You've been fortunate to have her in your home in any capacity, Mrs. Chase," Miss Rutherford observed. "She is a very remarkable girl, as] well know, after four years of contact with her." "We have all felt that she is remarkable," Sally answered. "We've become deeply attached to her. Indeed, we're dreading the day which takes her away from us, since of course it must come." "It will come rather soon, I must warn you, if I have my way," said Miss Rutherford, with a quick smile which showed beautiful teeth. Her face seemed to Sally probably to be habitually grave, but this smile redeemed the impression of a slight austerity of character. "Since you are her friend, I may say to you that her college is still very much intreested in Miss Jenney." "Oh-I think you must be Dr. Mary Rutherford, the president of that college!" Sally exclaimed. It was a quite famous name, and unquestionably it fitted the person before her. The visitor nodded. "With many last details ot look after, in spite of a busy summer on boul sides of the Atlantic I sau some difficulty in finding Miss Jenney's present address; she had omitted to send it to us. I'm very glad not to have lest more time in discovering her." Sally recognized, from past experience with college officials in business matters, the polite urgency of the phrase, and went to summon Je without further delay. She found her conferring with Norah in the kitchen, looking fresh and efficient in a crisp green linen which was Saily's favorite in

maid for the summer with Mrs. Chase."

"The housework as a sociological experiment?" questioned Doctor Rutherford gravely.

"Not at all. To earn the money, and as a means of being among people I liked. It was only chance which made me housekeeper here."

"Chance-and ability." amended Sally Chase. "And, presently, we found we nust make our housekceper our personal friend."

"On the principle that you ean't keep a good man down?" Again the visitor's sn:"e flashed understanding. "Will, if Josephine Jenney could be kept down by such details of experience, I shouldn't be here today to offer her what I am offering Will you coma back to us, my dear, in Miss Elizabeth Sinclair's place-assistant to Professor Huston? You know Miss Sinclair has married quite suddenly! I know of nobody fitter for the work, or I should be engaging her."

experiencing a certain sinking "Doctor Rutherford! Surely I'm not fit at all!" having soon to part with this

"No? The data in my notebook and upon the college records would testify to the contrary. Higher honors have seldom been taken than you have won. Besides thosewhich, after all, count less heavily than do some other considerations-you established yourself as a noteworthy type of student. Your teachers don't forget you. I won't tell you quite all the points in your favor, except that when this position was suddenly made empty, almost my first thought was of you."

"But, Doctor Rutherford, all the teaching experience I've had since my graduation has been this one year at Cherry Hills. It's a-really almosta country school. To go back to my old college, I'm afraid 1 should have much more experience."

The keen gray eyes of the woman of affairs were studying Josephine; Sally, looking

out delay, only parsing as she went by a desk bookease which stood beside the parior door to point at it and say enthusiastically: "That's a Thomas Shearer, I should judge, and a very fine example. I envy you, Mrs. Chase. There aren't many of them to be found. We all have to have our hobbies, and old furniture is mine . . . Goodbye. Josephine Jenney,

don't fail me, if you can help it. Remember I want you very much!" Her rare, flashing smile

which, each time you saw x, lighted her face anew with attractiveness, was the last impression they had of her. Then they heard her command: "Back to New York, Peters, and don't forget that deceiving turn at the foot of this streetwe've no tiem to lose." The shining dark car fairly sprang away, and was out of sight before it seemed more than to have left the door.

"Josephine, con congratulations! Such an honor! Of course you will go?"

But Jo was very sober. There swas no light of excitement in her face, rather the look of one who studies a difficult problem.

"I don't know, Mrs. Chase." Sally considered. "Of course," she said, with some hesitation, "you know nothing could make us happier than to keep you with us as long as we may. We shall stay herepossibly-until early winter. I can't imagine getting on without you, here or back in New York. But of course, neither my husband nor I would venture to urge you against such an opportunity as this. I just wanted you to know."

Jo looked at her, and for the first time in her contact with this girl, Sally saw a hint of tears in her eyes. But Jo smiled through them.

"I appreciate that more than I can tell you, Mrs. Chase. Being with you these months has been almost the nicest thing that ever happened to me." "Really ?"



KNOW PRODUCTION COST Dairying and poultry raising, it is generally conceased, have been the most profitable la.n. energrises in recent years, yet a very intge proportion of those who have been seiling dairy products and raising poultry have not found these undertakings profitable. Some men continually have "bad luck" with their hogs, their cattle, their crops or other products. "Bad luck" covers a multitude of sins. It would be a good thing if this term could be completely eliminated from the farm vocabulary and the term "poor management" substituted therefor. If this were done many unprofitable farms would soon become profitable. "Bad luck" is a convenient term behind which to hide, but a most unfortunate one. It undoubtedly has come into use because of the rarity of farm records kept for the purpose of showing production costs. Millions of cows are being milked annually that do not produce enough milk and butter fat to pay for their feed, to say nothing about the labor of caring for them. Most of these cow losses are due to improper feeding practices and some of them to the maintenance of cows that are not fit for economical milk production.

To a certain extent the same thing applies to the raising of nogs. Attempts are still being made to raise hogs on corn alone or corn and oats, both in dry lot and on pasture, and the results are always unprofitable except when hog prices are extremely high because of scarcity of pork supplies. If production records were more generally kept fewer losses would have to be sustained.

CARING FOR OLDER CHICKS Most people feed their chicks well for the first month when the little chicks need careful attention in the brooder or with hens, but after they get older and do not need to be watched closely, many lose interest or at least allow the chicks to rustle for themselves. This common mistake is hard to overcome for it is natural for one to become more careless with the chicks after they have a good start in life. Chicks are not so apt to die as before, but they are still apt to become runts and therefore unprofitable.

Chicks should have access to a well balanced ration throughout ther life. Pullets that are matured are the ones that lay during the fall and winter when eggs are high in price. It takes proper rations, plus early hatched chicks to raise this

type of pullets. The all-mash system of feeding chicks after the first month furnishes a satisfactory method and also allows the person handling the flock some leisure time without damaging the young birds. The allmash system consists simply in grinding the grain that is usually fed separately and mixing it with the chick method and mixing it with tire ration in a self feeder so that the chicks can eat whenever they are hungry. Feeding in this man-ner insures chicks getting all the feed they need, that they will get a balanced ration and that they will not be forced to scratch in the litter and droppings for their feed, as is usually the case when scratch grain is fed separately. When chicks have sour milk to drink, the following feeds make a fairly satisfactory all-mash ration: Ground corn, 300 pounds; ground hulled oats, 100 pounds; bran, 100 pounds; shorts, 100 pounds; meat scrans or tankage 100 pounds; meat scraps or tankage, 100 pounds; pure high grade ground limestone, 25 pounds; ground raw bone meal, 25 pounds; salt, 10 pounds. This combination may be changed slightly in order to use other feeds, when those mentioned cannot be secured. A ration of this kind should not have too much crude fiber in it. For that reason we have specified hulled oats. As the chickens get older they can use the ground whole oats. A lib-eral allowance of animal protein must be included. This is furnished by the meat scraps or tankage, plus the milk. If milk is not available then 50 pounds of dried buttermilk or a like proportion of semisolid but-termilk should be used. Minerals should also be included to get the best results. best results. Chicks of this age should be al-lowed to range. If green stuff is growing on the range, it is more satisfactory both from the stand-point of saving labor and for the chicks. If such green stuff is not available, then refuse garden vege-tables green chour or alfalfa are tables, green clover or alfalfa are good substitutes. Chicks should get out every day as the sunshine helps them to assimilate the minerals in the feed. Oyster shell and grit also should be supplied. GOOD BROODER MITTER There is no best litter to use in the brooder house, but there are certain requirements a litter must meet to be satisfactory, according to poultry authorities. It should be light in weight, thus allowing the droppings and dirt to work to the floor so the chicks are less likely to come in contact with contaminated material; it should be ab-sorbent, and therefore capable of keeping the floor of the brooder house dry; cheap, so one can afford to replace it every five days after the first four weeks; and should be clean, which means free from mold, mustiness, and dust. Shavings, cut straw, and out hay meet these requirements. These are not the only materials that one can use, but they are among the best. Straw or hay used for litter, should always be cut. If the straw or hay is not cut it becomes matted and covered with droppings and is therefore of no value for litter Bacillary white diarrhea, coccidiosis, and intestinal worms are spread to a large extent by dirty litter. One rule in brooding chicks VENTILATE AND FUMIGATE Feed is given chickens with the hope that it will be used by the fowl to maintain its body and pro-duce eggs in the case of hens. Chicks are expected to live, grow and develop ravidly. For either to show real profit, the feed must be right and none of it go to support lice and mites. Now is the time to declare war on lice and mites.

that should be followed, if all others are forgotten, is "clean the brooder house every five days." This means removing the litter, sweeping the floor of the brooder house, and putting in clean litter.

FEEDING SKIM MILK

Unless skim mil: is allowed to stand for a considerable time it will not separate out to any great extent. Clabbered milk retains a uniform texture for some time. To throw away any of the settled out whey entails a loss of valuable food. The asme policy of feeding should be followed when semisolid buttermilk is fed in a diluted condition. To prevent it from separating too much feed it in comparatively small amounts at a time or stir it up in the containers every two or three hours

In feeding skim milk it is import-ant that it be fed soured. If milk is fed sweet one day and sour the next it is apt to upset the bowels of the chicks. Milk can be soured rapidly by adding some sour milk to the cans of sweet milk and allowing them to stand in a comparatively warm place until sour enough for use.

FAT CONTENT VARIES

Many farmers believe that one can change the percentage of fat in cows milk by feeding. Some say that heavy grain feeding, irrespective of the nature of the ration, results in cows giving milk richer in fat than when fed a smaller amount. This theory, however, is not borne out by facts. The quantity of milk a cow produces is, of course, greatly in-fluenced both by the quality and the quantity of the ration fed and thus the total amount of fat produced by a cow in a given period is corres-pondingly increased. A sudden change in the ration of a cow almost invariably brings about a temporary change in the composition of the milk First the stars of lastic milk. First the stage of lactation is only temporary and in a short time the cow produces what for her is normal milk.

There are, however, certain other factors which do have an effect upon the percentage of fat in cows' mlik. First the stage of lactation causes variations. The milk of a fresh cow usually carries a relatively high percentage of fat. The per-centage then slowly declines in the course of one to two months to the extent of around 1/2 per cent. Then it remains at this new level for three to five months and then rises from 2 to 3 per cent. higher during the remainder of the lactation period.

FOR GREATER YIELDS

As a rule it cists but little more to secure a yield of 70 bushels of corn per acre than one of 35 or 40 bu-shels. We all know that the fertility of the soil has much to do with the yield, provided moisture and other climatic conditions are favorable. The thing to do, therefore, is to build up the amount of available plant food in the soil. This can be done by the application of barnyard manure as everyone knows, but unfortunately there is seldom enough manure to go around. If the soil on the average farm is to be materially improved, arrange-ments must be made to grow more legumes. Sweet clover is one of the best and most economical soil builders we have because the seed is relatively cheap and its producing capacity very great. The only drawback to sweet clov-er is its refusal to grow on sour land and three fourths of the corn belt land is sour. Let us start to lime our sour soils as soon as pos-sible, but before doing this have them tested for acidity to deter-mine the amounts of lime that may be needed. Once a sour soil has been given a dressing of one to three tons of limestone per acre, depending upon the amount of acidity existing therein, it will produce legumes for 10 to 15 years without further liming, so the expense is small compared with the benefits derived therefrom. The following points should be borne in mind by those who would produce maximum corn yields. Provide a good rotation of crops in which clover or some other legume is grown every three or four years. Conserve and apply all the stable manure and supplement it with acid phosphare. Prepare a good seed bed and cultivate it early Prepare a to kill weeds as soon as they start. Use a high yielding strain of corn that is adapted and will mature in the locality where it is to be grown. Test all seed corn by the use of the modified rag doll test-er and discard all diseased and weak ears. Change the farm lay weak ears. Change the farm lay-out to get large sized fields to ectnomize on man and horse labor.

Honest Zimmermann. From Time.

Leopold Zimmermann has lived for three-quarters of a century and he has often played a lone hand.

A peddler, with a willow basket full of shoe strings and auspenders, driving bargains in a German ac-cent on the doorsters of Manhat-tan That was Leepold Zimmermann in 1870.

A thriving broker, with o'fices on Wall street where the Naw York Stack Exchange now stands. In those days (the '30s) the sign above the door said Simmermann & For-shay. But David F. 3. Forshav

at this interview? It's a business interview, Jo-she told me a little about it, and I'm thinking it may be going to take you away from us." "Oh, no-that can't be!"

But Jo had caught at Sally's hand and Sally held it out, and drew her with her.

Adelaide had vanished from the hall as the two passed, but a coat closet stood slightly ajar, and Sally, with a wicked impulse following a sure divination, pushed the door sharply shut as she went by. The next instant she remembered this door had no knob upon the inside, and told herself to be sure not to forget to release the prisoner. Her lovely face was all sparkling with inner mirth as she and Jo reached the parlor door. It really was fun, now and then, to spike one cf those mean little guns of her cousin's, which seemed always trained on Jo. And she knew that worse than the humiliation of the imprisonment to Adelaide-though that was to sting-would be the loss of the chance to overhear a conversation not meant for her ears. How well Sally remembered that as a little girl "Addie" had always been spying upon other children. Was she never to grow up?

Doctor Rutherford was unquestionably Josephine Jenney's friend. She proved it to Sally beyond doubt by the two outstretched hands she gave the girl, and by the look of hearty pleasure on her own strong, interesting face as she held Jo off to study her.

"My dear, you're quite as nice as I remembered you. I can see that you're probably still better worth our interest Whatever and confidence. you've been doing since you left us, it's matured you."

"I've been teaching in the Cherry Hills school all the year, Doctor Rutherford Ard I took the place of the second

died in 1895 and Leopold Zimmermann went on alone.

A rich and feverishly busy potentate, with his offices at No. 170 Broadway jammed with speculators. That was Leopoid Zimmermann in 1919 when the Germon mark was behaving in a dizzy menner.

A bankrupt. That was Leopold Zimmerman in 1923 when the Ger-Zimmerman in 1923 when the Ger-man mark went shooting down to nothing. His firm fatled for more than 57,000,000. He paid creditors \$5,000,000 of what he owed them with his own fortune and with some money that the Mixed Claims com-mission awarded his firm. Theo

on, said to herself that to have this woman select one for a vacant place under her own authority was to have a new degree conferred. There was in her manner and words all the quiet assurance of a person who understands precisely what she is doing, and is not accustomed to make errors of judgment.

"In spite of that lack of experience, Miss Jenney, I should like very much to try you in this position. The time is short -you will need to make your decision within a week. I understand that you haven't renewed your contract with this school."

"No, Doctor Ruutherford." Jo didn't explain that, and the visitor's lips were touched by a sligh tsmile.

"I took pains to inquire about that before I came to see you. The head of the school board expressed his regret that they probably couldn't keep you. He said things about you which interested me very much, and confirmed my suspicion that whatever you attempt you put through.] infer that you haven't made plans for the coming year."

"I haven't." Josephine flushed. "There have been reasons why I couldn't make plans till fall."

"I hope you can make them now, however. I shall send you at once an official invitation from the college to take this position. Meanwhile"-t h e visitor rose-"I want you to keep up a terrible thinking, dear-the sort of clear thinking which results in action. I hope it will be the action I want. I wish I could stay to talk things over with you more fully. But I have to be back in New York"-she looked at her watch-"in just about the time it will take Peters to get there without flagrantly breaking the speed laws." She took leave of them with-

the courts said, last summer, that

he need pay no more. But Leopold Zimmermann is a man who pays back every cent. He re-opened the firm of Zimmermann & Forshay and has already used the profils to pay \$100,000 of the re-maining \$2,000,000. He keeps a list of the old creditors on his desk, smiles sternly as he checks off names. He lives with his wife in a two-room hotel suite costing \$1,400 a year, rides to work at 8 a. m. on the subway. He has no children, no partners. He swearu he will tear up that list on his deak before he dies. That is why he wants to live

"Really. My life-for some time-hasn' been exactlyeasy. This has been-a little breathing space. But what I shall do next isn't clear. As Doctor Rutherford said, I shall have to keep up 'a terrible thinking' about it."

"Jo, run away today somewhere to do that thinking, dear. We can get on nicely without you-for a day." "Oh, may I?"

"Indeed you may. Some things can't be thought out except in solitude."

As they went through the hall together, Sally turned and set the door of the coat closet very slightly ajar.

An hour later, Jo Jenney, sitting on the bank of a stream under tall pines, her hands clasped about her knees, began to try to look further into the future than she had ever dared to look before.

It was two days after this that Adelaide took her departure from Cherry House. Whether the episode of the coat closet hastened the day, Sally didn't know, and didn't attempt to discover. Adelaide was very distant in her manner as she made her farewlels, after her huge pile of luggage had been bestowed in the Chases' car by Jimmy O'Grady, who was to drive her into town. But she had a parting shot to fire, which she reserved till the last possible moment.

"I'm not at all sure you'll be interested," she said, quite as though she were not much interested herself. "I'm going to marry Chester Graham-if you happen to know who he is. Probably you don't, since you go out so little except as a minister's wife."

"Of course, I'm interested," Sall yassured her. "I'm afraid I don't know Mr. Graham, but I certainly do wish you all possible happiness."

(TO BE CONTINUED)

to be 85, 95, a century. . . . Citizens recalled a younger brok-er, whose firm failed in 1904 and who has paid all debts with interest for 22 years. He is Reuben H. Donnelley, 63, now famed as president of the Reuben H. Donnelley Corp. and vice president of R. R. Donnel-ley & Sens Company, able Chicago printers.

> Still Short, Eh! From Tit-Bits.

"I say, old fellow, you're getting thin since you retired from the coal business.

"Yes, I don't weigh as much as

COWS PRODUCING MORE

The average person is using more milk than he used 10, but the number of cows in the country is de-creasing each year. The answer is each cow is producing more than

In many sections of the state supplementing stable manure or plowed under legume crops with acid phosphate will bring very prof-itable returns.

SELECTING BREEDERS

Gilts for breeding purposes should be selected from families families that are good milkers and prolific. They should have 10 or 12 well developed teats Breeding gilts should be provided with a growing ration. They should not be fattened. For two months after breeding, the sows can be fed a ration containing a limited quantity of fat forming elements, but they should be given a narrow ration during the last two months of gestation and the ration diminished from 30 to 50 per cent. 1 week prior to farrowing. The sow should be provided with water but no food for 1 to 2 days after farrowing. The ration should be limited until the pigs are about 10 days of age after which it should be gradually increased, reaching the maximum when the pigs are about three weeks of age.

Tonics are a great help in producing appetite, building stamina among the lightweights and in warding off disease.

SOIL EROSION COSTLY

Erosion on farms in this country accounts for a toll of nearly \$2.000,accounts for a ton of hearly \$2.000,-000 annually in plant food. This is more than 20 times the amount of plant food consumed by all growing crops in the country. Removal of forest land, improper cultivation of soils that erode easily and failure to terrace lands is cited by the depart-ment of agriculture as the main causes for this loss.

AID THE WEAKLINGS The runt gets its greatest set-back at weaning time, therefore it is important to see that the little pig receives special care and feed.

