Under the Present

544-546 Yates St.

Minutes

ys Promptly

rials

nd & Sons dora Street

Res. 376

two of military con-cen to criticism, but ntinued to purchase hurian products for

sh The one thing rt on. If they atthe lead of the Japmerchandise for andicapped by their . Newchwang, and to sell to the Jape, which of course, inder the then ex-The decadence of pean imports fol agents established interior, firmly de-ck their lost trade. by purchasing the mer, results were hey finally had to

unprofitable,
the real reason for
Manchuria. It all
hes of the "open
nfair tactics of the
railroad actually
it to see how they
us involved the real reason. e inevitable work mic law."

ne Reward une 17.—Richard lepartment deputy assisted the gov-ng over \$2,000,000 rweighing frauds, rd of \$100,000.

Lieutenant Hofd two officers of staff in the hope pointed to one of caused, and who rty years.

ifal Expires -In 1913 thirty rilege of the

gious "Parsifal," res.

RURAL AND SUBURBANA

Many arguments we hear as to which is the best breed to keep, and we every now and then get letters asking which of our three breeds are the best layers and which do we like the best. Also, don't we think a certain breed will lay more eggs, etc., etc. We usually answer: We don't know.

Some, of course, will think we ought to know, but let me explain. To begin with each

know, but let me explain. To begin with, each breed has its characteristic or special value. The Leghorn is known the world over as a layer, and always will be. There is probably no breed of fowl which has been so popular

no breed of fowl which has been so popular for so many years on its merits as the Leghorn family. There are strains, of course, better layers than others, but all are conceded as good layers if rightly treated.

The Orpington, of which we breed the buff variety for several reasons, namely, their rich golden color, their white legs and skin, their quiet habits, and their ability to shell out eggs in winter has its special value. Again, there is no better mother living than a buff Orpington. You can take her by the feathers of the back and lift her off the nest and she won't ever kick her feet let alone raise a fuss.

The Barred Rock is a good farmer's fowl which in too many cases has been spoiled.

which in too many cases has been spoiled. Here selection works wonders. Many there are who think a Barred Rock should be almost as big as a turkey; but this is a mistake. A Barred Rock cock should weigh 9 1-2 lbs.; cockerel, 8 lbs.; hen, 7 1-2 lbs.; pullet, 6 1-2 lbs. When you make a practice of getting them year after year larger than this, you get them year after year larger than this, you get them too big and lazy to fill the egg basket. We have often seen Rock hens, whole flocks of them, large, blocky, too blocky and too lazy, and the owner disgusted with the result of his season's produce; no wonder. We like a Rock female not too short in leg, fairly long keel, long back, with not much tail, good bright eye, alert and quick. Females like this bred right won't bother you going broody too often. The male should be not too large, nicely curved back, good breast and good, alert upright carriage, and his chicks can be marketed at 3 lbs. in twelve weeks.

Everyone has his or her own fancy in the matter of breed, but we often wonder if there is any one best breed. I think it is more a matter of type and strain and the owner's ability to raise and treatment.

matter of type and strain and the owner's ability to raise and treat them right,

One of the most important items to be borne in mind is breed type. Find out what the standard calls for, and then buy as near that type as possible and keep it. You will not improve much by going away from the standard. If you want a Rock as big as a turkey, better sell the Rocks and buy turkey. key, better sell the Rocks and buy turkeys, for the Rocks won't lay any more than the turkey if you run to turkey size. But Mediterranneans, Dutch and French breeds need a little different treatment to most American, English and Asiatic breeds. H. E. Waby, Enderby, B. C., in Farm and Ranch Review.

LAYING PULLETS

Every farmer in Colorado should have 200 bright, hustling, laying pullets next winter when eggs are bringing fifty cents a dozen. This means hatching six or eight hundred chicks, which should be done not later than this month; earlier would be better for the larger breeds.

They should be kept free from lice, be given plenty of grain and milk; exercise and vegetable food will be beneficial if they have the run of the farm, and you need not be afraid of over feeding if the grain is scattered w or loose earth. Keep the coops clean and sweet, cull out the cockerels as soon as they are large enough to eat; they will taste better then, bring more on the market than later, and make more room for the growing pullets.

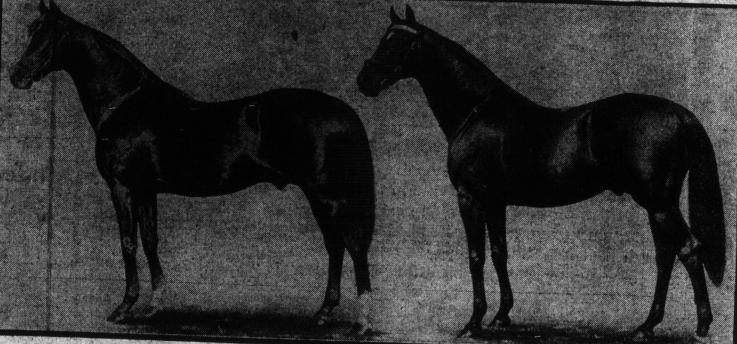
Begin next month, and, during the summer cull out the old hens, reserving only such of the yearlings as have proven good producers; the yearings as have proven good producers; the old roosters should go just as soon as you are through hatching unless you need their company. This thinning out means more room and better care for the pullets. Let the weaklings die; mark the slow growing pullets and sell them with the cockerels. During October make a last severe culling and keep nothing that does not mean business; your 200 pullets will cost about eighteen eggs a day for feed; will produce about fifty or sixty eggs above that number when they are at the best price, and will gradually increase in num-

A dollar a day profit on a hundred bens during the winter months means no grocery bills to pay next fall; it is not easily done, but it is being done right along, which means that you can do it with proper attention, hatching-early, providing a variety of foods and keep-ing steadily at it.—W. E. Vaplon, Colorado Agricultural College, Fort Collins.

WHITE DIARRHOEA

The suburbanite laughed with the others when the professor from the agricultural college threw on the screen the pictures of forlorn chicks affected with white diarrhoea (every breeder at some time had had such a group at home); then, turning to his seatgrandmother until I tried to raise chickens. The dear old lady raised from three to five five hundred chickens a year, and did her own

Farmers can't afford to lose their chickens



Cyllene

TYPICAL ENGLISH THOROUGHBREDS

The above illustrations show fine types show eight crosses to the animals, whose pedigrees were collated therein. A Thoroughbred is a horse registered or eligible for registry in the Stud-Book. This book was originally published in 1808, and it contained the pedigrees of the study of the register as the study of the register as the study of t of the English thoroughbred. The animals represented were recently purchased in England by Argentine breeders. In his way the English Thoroughbred is the finest type of the horse. The expression "thoroughbred" is frequently misapplied. There can be no such thing as a thoroughbred cow, hog, sheep or dog. Coming to horses, we often read of thoroughbred Clydes, Perchetons, Morgans, Hambletonians and so on This is misarally Hambletonians, and so on. This is a misapplication of the term. The Thoroughbred is a distinct class, and the term is the name of that the stock to horses imported from the Continent and of Arabian origin. Among them was the Byerly Turk, so called because one Captain Byerly rode him during King William's wars. Another was the Darley Arabian, a direct importation from Aleppo by the man whose name he bears. He was brought to England in the beginning of the reign of Queen Anne, and from him all the best horses are descended. The celebrated Flying Childers, of whose deeds on the turf there are all manner of wonderful stories told, was a son of his. The Godolphin class, just as the other terms are the names of the other classes. If it is desired to express purity of breeding in regard to other animals, the correct term to use is "pure-bred." There can, of course, be no such thing as absolute purity of blood in any animal, for if we go back for enough in the case of the longest padients. far enough in the case of the longest pedigree, we will find other strains coming in. Therefore, the founders of the various books in

grees of as many animals bred for racing as could be compiled with any degree of certainty. It goes back to the close of the Seventeenth Century, and its record, which is pretty well settled as authentic assembles the beginning of settled as authentic, ascribes the beginning of the stock to horses imported from the Contin-

stories told, was a son of his. The Godolphin which pedigrees are kept set certain standards by which admission into those books is regulated. The original rule for the English Stud-Book, which is the record of the Thoroughbred, was that the animals to be registered should Arabian was another of the great founders of the race. He was imported from Barbary about 1730. Charles II., who was very fond of good horses, imported a number of choice mares of Eastern origin, and they have gone down into horse history as the royal mares. In the horses Diamond Jubilee

named and the royal mares we have the foundation of the great family of horses known as the

The Thoroughbred has had a potent influence upon the development of other types of horses. Nearly all the best hunters are in part of Thoroughbred stock. The Cleveland Bay and the Coach Horse, for which a stud-book was started about twenty-five years ago in or-der to meet the American taste for certified pedigrees, also owe much of their excellence to their infusion of Thoroughbred blood. The trotting stock of America gets its stamina and ambition from the same source. Imported Messenger, as he is usually called, one of the great ancestors of the trotting families, was a Thoroughbred. An infusion of this blood 'seems to add courage, ambition and stamina to all other stocks, as well as that indefinable element known as "quality," which every horseman understands and no one can explain. In these days, when so much is being said about horse races, and when it must be confessed that "the sport of kings" is heing the stock of the stock of kings in the stock of kings is the stock of kings in the stock of kings is the stock of kings in the stock of kings in the stock of kings is the stock of kings in the stock of "the sport of kings" is being run into the ground, it is worth remembering that the breeding of horses in England for racing purposes did in times past more for the development of horses of a high class than any other influence.

The result of the prompt action of these public-spirited citizens has been an unquestion-

public-spirited citizens has been an unquestionable improvement in the general milk supply of the town, but owing to the effective personal efforts of the proprietor, and in particular to the painstaking, careful work of Mr. Robert A. Walker, the present lessee of Derby Farm, it has been only upon this farm that really clean milk has been consistently produced during the past two years.

Since the farm in question is equipped with

Since the farm in question is equipped with none of the facilities commonly considered essential to securing clean milk, especially as made in the "model dairy," it appears that a really valuable contribution to the milk question may be involved and a full account of the tion may be involved, and a full account of the methods and operations employed is here given in the hope that other dairy farmers who feel unable to invest in more or less expensive apparatus may be encouraged to improve their own product by similar means.

The Cows and Their Stable

Whatever arguments may be advanced in favor of pasteurization it is quite evident that the bulk of expert opinion, taking the plain, common sense view of the matter, holds to the proposition that in originally clean milk is the only ultimate solution of the question. As the first essential, therefore, only healthy cows, free from tuberculosis as shown by the tuberculin test, have at any time been admitted to the Derby Farm herd. These are housed in a well-lighted, fairly well-ventilated barn, with stables and stanchions and mangers fashioned on the models of twelve to fifteen years ago. The entire construction is of wood, concrete being employed nowhere except in the bottom of the gutter. Twice every day the whole stable is given a thorough cleansing and airing

The cows themselves are kept scrupulously clean by the use, as often as necessary, of currycomb and brush, supplemented by a dampened cloth. The milkers, one of whom is a tenyear-old boy, are required not only to wash their hands with soap and water before commencing, but also to keep their cuffs turned back from the wrist, to avoid brushing against the cow. Feeding occurs just before milking.

The Handling of the Milk From the time milking is begun the suc ceeding operations are carried on with the ceeding operations are carried on with the greatest rapidity consistent with the necessary care. After being weighed, the milk from each cow is immediately strained through at least two, and usually four thicknesses of cheese-cloth into a pail whose only other opening, the spout, is closed by a cap. It is then quickly carried from the stable to the dairy, where, the cap being removed, it is poured through an eightfold strainer, also of cheesecoth, into the sixteen-quart reservoir (of a separator), which sixteen-quart reservoir (of a separator) which is used as a bottling tank, therein being mixed with milk from another cow to keep the per-centage of butter fat uniform,

Out of this reservoir, again with the ut-

tles, which are at once set into iced water contained in a homemade, inexpensively constructed cooling tank, and loosely covered with the paper caps laid over their mouths. Here the milk remains for some twenty minutes or more until thoroughly chilled to a temperature somewhat below 50 degrees Fahrenheit, whereupon the caps are snapped into place and the bottles removed, loaded into the wagons and packed

in cracked ice for delivery.

The only variation from this procedure, made in the case of baby milk, is that for certain customers the milk from different cows is not mixed.

Cleansing the Utensils

Since no amount of precaution in

the operations above described could suffice to keep clean milk contained in un-clean utensils, the washing of bottles and pails if of no less importance. For this purpose, a generous washcloth, a bottle brush and hot water containing, in solution, a naphtha soap and a little washing soda are used. The pails and bottling reservoir, after the dreg's of milk have been rinsed out with cold water, are given a liberal application of washcloth and brush, inside and out, rinsed free from the soapy solution with cold water and thoroughly scalded, after which they are inverted upon an outdoor shelf in the sunshine or upon a clean table in the dairy in stormy weather and left to air and dry. The strainer cloths are first washed out in cold water, then set in a pan of hot water upon the kitchen stove to boil for a half hour, and finally hung. up to dry, indoors or out, according to the

For washing the bottles two adjacent sinks and a large pail or dishpan are employed. In the first sink the washing is performed as just described in the case of the pails. In cold water contained in the second sink they are rinsed; and in boiling hot water in the pail they are given a thorough scalding. Afterward they are set, bottom up, upon clean ta-bles and allowed to cool and drain until next

The excellent quality of the milk produced in this manner and by the application of the simple process above set forth cannot be gainsaid. A few illustrations, most of which have come under the writer's personal observation, and the records of tests made by the bacteriological laboratory will furnish ample evidence.

On a broiling hot summer's day, a year ago a customer met the delivery team on the road and selected a bottle of milk at randers. He drove six or seven miles to the railway station and thence went to Boston by train, all the way carrying the bottle in his hands. The milk when examined at a laboratory, after this treatment, counted but 1,400 bacteria per cubic centimeter.

Unopened bottles of milk kept on ice have remained sweet for twelve days. On one occasion three bottles were left by the delivery team at a certain house, in the shade, but on the sunny side, and the day was one of the hottest of the season. The following morning they were taken back to the farm, and, after being off the ice a little over twenty-six hours under these adverse conditions, the milk was found unchanged and perfectly wholesome. It was, in fact, used by the writer.

But a most striking proof of the cleanness of the milk is found in the fact that a considerable number of the consumers, not being accustomed to milk of such exceptional quality, have been unable to understand why it should keep unsoured for so long. In one case a complaint was actually made because souring did no occur within what was thought a reason-

So far as concerns the cost of producing such clean milk, it will evidently be increased over the cost of milk produced by the usual slap-dash methods. This is the tendency of every addition of time, labor and care expended, and is undoubtedly met by the demand for certified milk. The point intended to be brought out here is that a more or less considerable investment in costly equipment is not

For example, the dairy at Derby Farm is provided with neither the sterilizing plant nor the milk cooler to be found at the "model dairies." The milk is cooled in the bottles, while all milk containers are simply scalded with hot water. And the records show that they are practically sterile as the result. In this connection, an experiment carried out by the writer with the co-operation of the laboratory is interesting. Two milk bottles were washed as usual and carefully rinsed with cold water. One was boiled for fifteen minutes and cooled, and both were then quickly filled with milk and capped. The milk in the sterilized bottle counted 4,000, than in the other 3,000 bacteria per cubic centimeter. The difference was probably due to an insufficient mixing of the milk in the reservoir. It would not be wise to conclude from this that sterilization is unnecessary or undesirable, for it is certainly better "to err on the safe side" But it serves to indicate, that careful washing, followed by scalding, is sufficient for all practical purposes.

It is therefore evident, from a consideration of the methods employed by Mr. Walker, as above illustrated and described, that expensively constructed barns and dairies, costly apparatus and elaborate processes, are not at all requisite for making milk clean. By the intelligent application of such simple methods and ordinary equipment as those used on Derby Farm, which are certainly at the command of every small dairy farmer, it is quite possible to produce milk which will average well below the "certified" standard (10,000) of the milk commissions.—William Ruthven Flint, Ph.D., in Good Housekeeping.

Liza-I won't say "obey.", Bill-Never mind, guv'nor. Get on wiv it. most rapidity, it is drawn directly into the bot- I'll see to that !- London Opinion.

extras so dear to the hearts of women in town or country. There is always a reason for white diarrhoea, either in the breeding stock, feed, My way of feeding is like this. In the housing, incubation or brooding of the chicks. morning I give a full feed of oats, at noon a white diarrhoea, now we know we don't know anything about it. However, we have not had serious difficulty with this disease for some time, and we believe we have overcome it by a few simple measures. First, we get the chicks out of the incubator by the time they

taste; and lastly, we give all the raw potatoes and onions they will eat from the very first.

By getting the chicks out of the incubator, and on a soft, absorbent bed, we remove the temptation to peck at the droppings, and eggshells, possibly full of the germs of this diarrhoea, and furnish an absorbent for the droppings. The listerine is an intestinal disinfectant, and chicks drink very little of it in comparison with fresh water. The first feed is bread and milk; the potatoes and onions are not supposed to nourish so much as to provide the green food on which the chicks seem to thrive. We have raised chicks without any water for ten days by giving plenty of finely-cut raw potatoes Our method is to take a good-sized potato, split it, and cut a piece off the bottom to make it stand level. Then we criss-cross it with a knife, leaving the potato in the skin—and how the baby chicks do love

to peck out the juicy morsels! Another very important point is to keep the brooders clean and well ventilated. The fresh air cure is as good for chicks as for peo-ple. It was the good common sense of our grandmothers which helped them raise nearly every chick which hatched. They made no effort to force the hens for winter eggs; the hens probably had a hard time through the winter, but the fittest survived and laid hatchable eggs, the chicks from which came into the world to live. Our hens can be made to lay hatchable eggs, and our chicks can be grown without disease if we get and keep our breeding birds in condition, and if we give our chicks wholesome, natural conditions.—Wal-

CLAIMS RECORD FOR EGGS

In reply to my letter of the latter part of last winter, Mr. Brisco asked me to give details and methods of my neighbor's feeding and way of caring for his poultry. Now I will with white diarrhoea; when there is a shortage give my method and way of caring for poulof crops we need the hen to pay the grocery try, as I think my hens have broken most all

bills; when the crops are good we need her to furnish a profitable market for the glean-ninety days have laid 172 eggs, and five hens, those required for the making of clean milk ings of the stubblefield, and to get the little that have laid 425 eggs, How is that for layers? If anyone can beat that I want to

We used to think we knew something about wet mash, and at night either barley or wheat, prairie. My way of preparing the buffalo heads is this: I take an axe and first break in small chicks out of the incubator by the time they are twenty-four hours old; second, we give them in the brooder deep, soft, absorbent litter, fine clover chaff by choice, and we stir this up to cover the droppings whenever we look at the chicks; third, put listerine in all drinking water they get for the first ten days, making it strong enough to give a decided. These here are the ones I have a making it strong enough to give a decided. These hens are the ones I began experiment, ing with in the latter part of last winter. I bought them from a flock that hadn't laid an egg all winter.-G. W. Wallace, in the Farm and Ranch Review. *

EGG-LAYING COMPETITION

In England an egg-laying competition extending over six months has just been completed with 43 pens of hens in competition. In the report emphasis is laid on the necessity of breeding from strains of good laying capacity, and breeders are advised to specialize in a few breeds. Inathe six months' contest the winning pen of six: White Wyandottes laid 586 eggs, the lowest record of the same breed being 212. A pen of Buff Rocks were second with 550 eggs. The morning meal consisted of soft food mixtures of meal given warm, and at night wheat was given. The total cost of feeding all hens for seven months was £50 18s 4d, and seven tons of feed were used. This consisted of the following: Wheat, 38 cwt.; oats, 18 1-2 cwt.; sharps, 20 cwt.; barley meal, 10 1-2 cwt.; biscuit meal. 3 1-2 cwt.; rice meal, 1 1-2 cwt.; malt dust, 2 cwt.; bran, 2 cwt.; meat, 5 cwt.; grit and oyster shell, 15 cwt.; clover meal, 1 1-2 cwt.; The cost worked out to slightly under 1 1-2d. (3c.) per week.

CLEAN MILK AT MODERATE COST

The summer residents of Dublin, N. H The summer residents of Dublin, N. H., were awakened suddenly to the fact that they were being supplied with unwholesome milk. A few at once imported "baby milk" from Boston; but, with the idea of improving the local supply, a number of the influential members of the summer colony clubbed together, organized and equipped a bacteriological laboratory and provided means for its maintenance. A campaign was likewise immediately begun for the purpose of educating the farmers who were the milk producers, but who were, almost without exception, quite averse to changing