

# LIVE STOCK

## DISINFECTION IS NECESSARY

Invisible Organisms or Disease Germs Spread Rapidly and Live for a Long Time.

(Prepared by the United States Department of Agriculture.)

In dealing with infectious diseases of live stock, the average stockman and farmer does not sufficiently realize the importance of thoroughly disinfecting his premises following an outbreak of contagious disease on his farm or in his locality. Unless the germs which cause the disease are destroyed, they have the power to maintain themselves on premises for indefinite periods. So long as they thus remain they are a constant menace and may at any time be the cause of an outbreak.

It is but natural to acknowledge the presence of only such objects as can be seen with the unaided eye. Science, however, by means of the high-power microscope, has clearly proved the existence of numerous minute animal and vegetable organisms—micro-organisms—and it is a matter of common knowledge that many of these organisms frequently find their way into the animal body and produce disease. It is also well known that these micro-organisms, or germs, vary in form and other characteristics and that for each disease of an infectious nature there is a specific germ.

If these germs could be confined to the animal body and die with it there would be no such thing as an infectious disease. Unfortunately, however, they are thrown off by the animal through the excretions and lie in the soil, in the litter of stables, upon the floor and walls, and in cracks and crevices. Here they may remain and maintain their virulence for an indefinite period, ready at any time to be gathered up by an animal in its feed or to be blown about in dust and drawn into the lungs.

For example, we have tuberculosis in cattle and glanders in the horse. In the former disease the causative agent is a rod-shaped germ which averages about one ten-thousandth of an inch in length. Cattle affected with tuberculosis pass myriads of these germs with the manure, and it is not difficult to understand how in the average stable they would have little difficulty in finding many lodging places.

In glanders the causative agent is another rod-shaped germ, about the same length as the tuberculosis germ, but somewhat thicker. A character-



Cattle Affected With Tuberculosis.

istic of this disease is the formation of ulcers in the nostrils and other portions of the body, from which there is more or less discharge laden with the glanders germ. And here, again, it is not difficult to understand how one diseased animal may contaminate extensive premises.

As has been stated, some of these minute forms are vegetable organisms. In fact, these vegetable parasites are the cause of some of the most destructive diseases, and some of them are very difficult to destroy, for the reason that they contain spores. A spore may be likened to the seed of a plant, for it bears about the same relation to the bacillus that a grain of wheat does to the plant proper. As the plant may be destroyed and the seed remain latent for an indefinite time, so destruction of the bacillus may be accomplished while the spores remain unharmed and retain life for weeks, months or years.

An example of this class of organisms is seen in the agent which causes anthrax. Ordinary methods for the destruction of the bacillus will not destroy the spore as well, and thus anthrax becomes a most difficult disease to eradicate. Upon farms where animals have died from anthrax and the carcasses have been buried instead of destroyed, repeated outbreaks of the disease may occur from time to time, possibly extending over a period of several years. This condition is due to the existence of the very resistant spores, which under favorable circumstances are carried to the surface of the earth, and become infecting organisms—much as the seed of a noxious weed, after remaining in the soil during the winter, finds the conditions favorable in the spring and develops into a plant—except that these minute forms of life multiply with the most wonderful rapidity.

Thus it is that our increased knowledge regarding micro-organisms or bacteria as the cause of many animal diseases has emphasized the importance of disinfection.

Ventilation is very essential in a barn. Animals are much like human beings in that they need fresh air.

# DAIRY FACTS

## PREVENT MILK PLANT WASTE

Managers and Employers of Dairy Establishment Should Work to Avoid Spoilage.

(Prepared by the United States Department of Agriculture.)

A quart of milk wasted now is about twice the loss it was a few years ago, and the financial loss, though great, is even less serious than the waste of this essential food. Managers and employees of market milk establishments should take every possible precaution to prevent waste. Here are a few suggestions along this line:

**To Prevent Milk Waste.**  
Keep the shrinkage as low as possible by close attention to leaks, spillage and slopping.

Avoid milk piling as much as possible, since considerable milk will stick to pipes at the end of the run.

Have milk vats so that they can be drained readily.

Drain cans and all containers well after dumping the milk.

**To Save Fuel and Ice.**

Utilize exhaust steam wherever possible for heating the building and providing hot water for various dairy operations.

Avoid extra steam piping by proper arrangement of rooms, thus avoiding losses due to condensation of steam.

Keep steam valves and joints well packed.

Keep doors of refrigerator room closed. Do not work in refrigerator more than necessary and do not leave lights on.

**To Save Labor.**

Avoid use of milk pumps wherever possible by adopting the gravity-flow system. Extra labor is required for cleaning pumps.

Avoid unnecessary labor by convenient arrangement of equipment and rooms and through use of labor-saving devices.

Other points which deal principally with mechanical topics are included in the recommendation, all of which have



Exterior of Well-Equipped Dairy House.

a sound basis of investigation and experience. By issuing a monthly letter on timely matters to the milk trade, the dairy division seeks to raise the plane of milk handling efficiency. It makes official information available to those who are able to put it into immediate use and should assist in reducing operating costs as well as waste of dairy products.

## FEEDING COWS FOR PROFIT

Animals Must Have Liberal Ration at All Seasons—Pastures Must Be Supplemented.

If dairy cows are to be fed for profitable production they must receive a liberal ration at all seasons. In summer pasture generally is depended upon, but often it must be supplemented by silage or crops or silage, and sometimes by concentrates as well. For winter feeding, the ration usually is composed of hay, silage, and a mixture of grains. In properly balancing the ration the grain mixture is compounded to fit the roughage with due consideration for cost, bulk, palatability, and physiological effect upon the cow. For best results, cows must be fed individually, salted regularly, and furnished with all the clean water they will drink.

## COWS FRESHENING IN SPRING

Usually Desirable Where Possible for Herd to Secure an Abundance of Good Pasture.

Where it is possible for the herd to secure an abundance of good feed on pasture throughout a considerable portion of the year, it is usually desirable to have the cows freshen in the spring in order that one may take advantage of the inexpensive feeds at the stage of lactation when the largest amount of nutrients in the ration must be supplied.

## Disputed Alfalfa Question.

When to sow alfalfa is a disputed question. Many people say sow in August, but some of the most successful growers sow the seed early in the spring.

## Proper Feed for Cows.

Cows giving milk require more protein and carbohydrates than cows that are dry.

# FREE CITY of STRASSBURG



An Old House in Strassburg.

STRASSBURG, from the remotest times, has revealed a love of liberty and independence which, it must be said, frequently bewildered and even disconcerted its would-be oppressors. Through its numerous vicissitudes it has retained a personality which nothing ever succeeded in destroying. Little is known of the city during the Celtic period.

When the Romans invaded Gaul, they discovered on the banks of the Ill, and quite near the Rhine, a small village, the strategic importance of which they immediately recognized. Perched on a relatively high hill, Argentoratum, as the Romans named this hamlet, dominated the whole of the fertile plain of Alsace and the river valley. They therefore fortified it and established there the general headquarters of the legions who were especially entrusted with the defense of the passage of the Rhine. For more than three centuries this region remained under Roman domination, after which lapse of time it was conquered by a powerful Germanic tribe, the Alamans.

For several centuries, Strassburg was subjected to the continual vicissitudes of warfare, says the Christian Science Monitor. The Franks succeeded the Alamans and after the battle of Tolbin in 498, Strassburg and the greater part of Alsace were Christianized by Clovis.

Under the Merovingian dynasty, Strassburg was elevated to the dignity of a royal city. The Carolingian monarchs even signed several of their celebrated charters there. However, the city itself vegetated; lack of security hindered its development, and when, in 925, Alsace was incorporated in the German empire, Strassburg was still a relatively unimportant town. It had possessed a bishopric for several centuries, and so long as its development had remained stationary, had submitted unprotestingly to the dominion of the clergy. However, as its commerce developed and its industries gradually evolved, Strassburg rebelled, first timidly, then openly and successfully, against the clerical yoke.

**Building the Great Cathedral.**  
The real prosperity of Strassburg dates from the thirteenth century, when it already numbered 50,000 inhabitants. The bishops vainly strove to regain their former supremacy by force of arms, but Strassburg defended itself with much energy and at last enjoyed a period of relative peace, during which all classes lived in harmony.

This period coincides with a great development in the fine arts. It was then that Gotfried of Strassburg, the first Alsatian poet of the middle ages, was scribe in his native town, and Erwin of Steinbach, artist and architect, undertook to build the cathedral on the site of the former basilica, erected about 670 A. D. on a spot where once stood a temple dedicated to Hercules.

The original plan of Master Erwin has not been faithfully followed, and it must be admitted that the edifice has lost nothing through this, but has rather gained considerably. He had conceived of a facade two stories in height, dominated by two towers of equal height. It was, however, many years later that the cathedral was completed, and the two towers were welded together at the height of the first story, the left tower alone being finished, its delicate openwork spire—a marvel of sculpture—rising 142 meters above the earth. The threefold portal, giving access to the three Gothic naves, is decorated by a multitude of remarkable sculptures.

The great tower was finished in 1439, under the direction of John

# Home Town Helps

## IDEA WELL WORTH COPYING

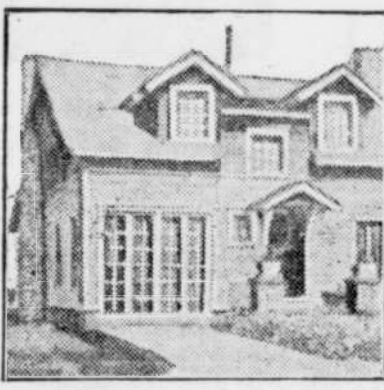
Tree-Planting Campaign Along Victory Highway in Texas Is a Step in the Right Direction.

People in other parts of the United States should find inspiration in the tree-planting campaign undertaken by the residents of Bell county, Texas. These thoughtful citizens have subscribed liberally to a fund which is being used to beautify the Temple-Belton road, or Victory highway. At every interval of thirty feet a tree is planted on either side of the road, numbered, and dedicated by the person who plants it to some Bell county soldier who fought in the great war, while a label on the tree gives the name and title of this soldier. With each tree are planted also two pecan nuts and two walnuts. If these produce seedlings, the owner of the tree may take his choice of one of these seedlings or the original tree. Here is a combination of patriotism, estheticism, and utility. The Victory highway will be useful as well as ornamental for generations to come. It will be sought by the tourist of the future not only for its beautiful shade, but out of sheer respect for the good taste and good sense of the people who designed and developed it.—Christian Science Monitor.

## ARCHITECT HAS DONE WELL

Somewhat Difficult Task of Combining House and Garage Accomplished With Good Results.

Many attempts to incorporate a garage in a modern house have left much to be desired in the way of architectural effect. Such a dwelling as is shown in the accompanying illus-



A Lakeside Cottage in Which a Garage Has Been Incorporated in a Way That Is Unusually Pleasing. The Long Glass Doors Suggest a Conservatory or Sun Parlor, Rather Than a Garage.

tration, therefore, attracts favorable interest because of the architect's happy solution of his problem. Artistic doors, made like French windows, afford ingress to the garage at the left of the dwelling entrance, the exterior appearance suggesting a sun parlor rather than a motor car shelter.—Popular Mechanics Magazine.

## Home Gardens in 1919.

The need for home production of perishables by means of the garden, it is believed, will continue. Because of the relatively high prices which obtain for practically all foodstuffs, those with sufficient land and spare time should find it profitable to maintain home gardens. Experience shows that very satisfactory returns to the grower, in the form of vegetable products, are obtained when gardening is intelligently and efficiently carried on. The necessity of transporting such products from distant points also is obviated. The department urges those who intend to maintain home gardens to plan to meet the needs of the family rather than to produce crops for sale on the market.—United States Department of Agriculture.

## Two States Doing Well.

In Fort Wayne, Ind., the department of public works has purchased 150 trees for a memorial park and Forester Jaenicke informs the association that each tree is to be marked with a plate six inches long and four inches wide. Governor Goodrich of Indiana, and Richard Lieber of the forestry department are working out plans for the tree planting by counties. In Alabama John H. Wallace, Jr., the former commissioner, has organized the state by appointing county committees.

## Another Nature Mistake.

"I have my back to the wall," explained the Erratic Thinker. "Not for the same reason that the Huns are fighting in that attitude, but because there is a place on my back, slightly lower than betwixt my shoulder blades, as there is on the back of every normal human being, that cannot be scratched without artificial aid. This is one of the very few grave mistakes of Nature."—Kansas City Star.

## Studying Ideas of Beauty.

Women at the Michigan Agricultural college are taking courses dealing with the methods of beautifying the farm home. A study of ornamental trees, shrubs and perennials is made, as well as the principles of grouping, arrangement, use of masses, etc.

# WOMAN WORKS 15 HOURS A DAY

Marvelous Story of Woman's Change from Weakness to Strength by Taking Druggist's Advice.

Peru, Ind.—"I suffered from a displacement with backache and dragging down pains so badly that at times I could not be on my feet and it did not seem as though I could stand it. I tried different medicines without any benefit and several doctors told me nothing but an operation would do me any good. My druggist told me of Lydia E. Pinkham's Vegetable Compound. I took it with the result that I am now well and strong. I get up in the morning at four o'clock, do my housework, then go to a factory and work all day, come home and get supper and feel good. I don't know how many of my friends I have told what Lydia E. Pinkham's Vegetable Compound has done for me."—Mrs. ANNA METIERMAN, 36 West 10th St., Peru, Ind.

Women who suffer from any such ailments should not fail to try this famous root and herb remedy, Lydia E. Pinkham's Vegetable Compound.

# HOW CAN YOU TELL YOUR FAVORITE TOBACCO?

As Plain as the Nose on Your Face—Just Smell It

Smokers do not have to put tobacco in their pipes to find out if they like it. They can just rub the tobacco between the palms of their hands and smell it. The nose is an infallible guide to smoking enjoyment.

All smoking tobaccos employ some flavoring "to improve the flavor and burning qualities of the leaves," to quote the Encyclopedia Britannica. Naturally, there is considerable difference in the kind of flavorings used, and the nose quickly detects this difference. TUXEDO Tobacco uses the purest, most wholesome, and delicious of all flavorings—chocolate. And the almost universal liking for chocolate in a great measure explains the widespread popularity of TUXEDO Tobacco.

Carefully aged, old Burley tobacco, plus a dash of pure chocolate, gives TUXEDO Tobacco a pure fragrance your nose can quickly distinguish from any other tobacco. Try it and see.

## Petroleum Substitute.

One Spanish substitute for petroleum for miners' lamps contains 77.5 per cent of 90 degree per cent alcohol and 22.5 per cent of benzol. This lamp fuel seems to have met with some approval, but an objection is its low efficiency, the lamp using it developing only 77 per cent of the illuminating power of the standard petroleum lamp. A new mixture designed to yield this brilliancy is made up of 62 per cent by volume of the alcohol, 16 of benzol, 7.5 of rectified turpentine and 14.5 of fusel oil.

# Health Was Shattered

Mrs. Hayes Was Discouraged Until Doan's Made Her Well.

"I was in awful shape from kidney trouble," says Mrs. Frank Hayes, 42 Dover St., Boston, Mass. "When I got up out of a chair, I felt as though someone had stuck a knife into the small of my back and it fairly took my breath away. "The kidney secretions passed often and only a little at a time. They were so scalding I would scream so I believe I could hear myself heard a block away. They deposited brick-dust-like sediment and their color was something awful. My complexion became sallow and I had large puffs under my eyes. "I was troubled with spells of gasping for breath and had such dizzy attacks I often fell right over. Spots floated before my eyes and I got so nervous I couldn't stand any noise. I cried over nothing at all, became irritable and imagined all sorts of things. My health was shattered and I became discouraged. "I continued to grow worse in spite of any treatment and came pretty near giving several times. After several months of this horror, I heard about Doan's Kidney Pills. I used a dozen boxes of Doan's and was cured. I was entirely well and have enjoyed good health ever since."

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# LIFE HOLDS N

Man That Has Heart Need for Happiness

Discontent with the great curse of estate in this world things that are he sums him with a men, as a rule, spare, but this do isfy them. If the mine to be content have they would

The consequence a dismal failure of easily have been far as their happiness. And, without happy that a man had no

Then we have the wealth add po the glory that he in constant fear th away from him; th worldly possessions will rob him of the

Contentment never roof of such a man what good to him is

Now, if the man which is beyond his himself to be like whatsover state" he would get thing he never dreamed of soundly and awake if the man had had craved could feel that it would were to lose it all, soundly and awake

Who among us go through life anything there is in man on earth can for his very own of the mind that G he was born.

The big thing in Contentment. It Take it up and let Utica Globe.

## EXPLAINED ONI

Origin of Band Ring Is Wrapped est Obs

Why is a wedding a man slip a ring of woman who become doesn't he give her a lace, or a pair of earrings, the universal symbols? And what Ever stop to think Probably not. Who to marry, you husband, est jeweler's and your bride, and, as concerned, that end

The origin of the wrapped in obscure theories have been plain it. One hark Egypt. Before the cologne in Egypt, made in the form of fingers of a man's most convenient ba money. When an slipped one of these his bride's finger, I realize that he gave self, but his fortune. Just what the means when he says of the ring at the worldly goods I the

## The styles today

or platinum, plain wedding rings, and rings of any kind of diamonds or pearls, rings.

## Mends Gran

The government stize on kitchen uter hole in granite wa of putty until perfect a piece of the putty cover the hole and either side of the m gether inside and out the edges. Place the oven and bake until deep brown. For co vessel will be as good

## Early Irish

The evidences of culture in Ireland at beautiful things, class but likewise wonders Thus at Cong Abbey, of Ireland's ancient them Rory O'Connor there is an exquisite traceries and delicate and copper and enamel proof of the civilization in Ireland long before crossed to her shores might be multiplied.