

Dr. Salisbury's Henry

POULTRY HEALTH

MESSENGER

Spring 1937





The Four Fundamental Factors In Raising Baby Chicks

A few days ago, a poultry raiser asked me, "What do you think is the most important factor in successfully raising baby chicks?" After careful consideration, I had to admit that he had asked a question that couldn't be answered.

Because there is NO ONE factor which can truthfully be called more important than several other equally important ones. I believe, however, that if a poultry raiser carefully watches

FOUR very important points that most of his troubles will be solved. As a matter of fact, most of his troubles will never arise to confront him. These all important factors are:

First, purchase baby chicks from good parent flocks.

Secondly, house and brood your chicks carefully and use all necessary sanitary precautions.

Thirdly, buy a good, balanced, nourishing feed to start your chicks.

Lastly, prevent and check disease infestations by sane medical treatment.

You know, and I know, that a baby chick can be no better than the flocks from which it comes. A poor, low producing flock will not produce sturdy, high producing birds. So, the first factor is to buy your chicks from a hatchery which carefully superintends its flocks and in whom you have confidence.

After you have your chicks, see that they are comfortably housed. Repair the brooder house and eliminate the drafts from around the doors and windows; repair the cracks in the floor, and see that the chicks have a decent litter. A good brooder stove, capable of maintaining a constant temperature—neither chilling nor over-heating, is an excellent investment. Have plenty of drinking fountains and feeding equipment so all the chicks can eat and drink when they want. Keep the house disinfected and the eating equipment sanitary and clean.

Regardless of its health and vitality when hatched, unless a chick is fed regularly with a good, substantial feed, it will not successfully grow and develop. Good feeding is an all important item and it is poor economy to stint on a good feed to start your chicks. A baby chick only uses about a thimbleful of mash during its first ten days of life, so do not hesitate to use a well balanced, nourishing mash which contains the necessary elements and vitamins for growth.

Finally, the finest bred chicks, raised on the best feed, under sanitary conditions, are still capable of infection from bacteria and germs. This infection is often carried by the dirt and dust in the air, or by insects and a host of other means. Here medication enters to play its important role. Proper medical prevention will often stop outbreaks of intestinal disturbances and other disease epidemics. Or, if a flock becomes infected, sane, cautious medication will help restore the birds to health, reduce losses, and protect your investment.

Thus we see, that every one of these factors is closely linked to each other. Break but one link in this chain, and your chicks are open to serious trouble; the consequences will be seen in your poultry losses. A dead chick means not only the original purchase price, plus the feed and time spent on it; it also means the loss of the future profits that it would have made for you, had it but lived.

DR. SALSBUURY'S LABORATORIES,

Dr. J. E. Salsbury

President.

IN and ABOUT the BROODER HOUSE

There are certain fundamental principals to follow in successful chick raising

This article will be worth its weight in gold for the thoughtful, progressive poultry raiser

THE average American farm family is justly proud of its flock of chickens. A reasonable amount of pride is a good thing, for it carries with it a sense of satisfaction that is an active incentive for greater success.

There are, however, a few essentials necessary to achieve full success in poultry raising. The first essential is a good breed of birds with nice type, uniformity, etc. Secondly, a reasonably good place to keep them. And while it need not be an expensive place, some details must be correct to realize a full sense of security in the satisfaction a poultryman derives from working with a type of stock as interesting and responsive as chickens.

The breed of birds to select is a matter of personal choice. There is no one superior breed. If high production with a minimum of feed cost is wanted, and if flightiness is discounted, then White Leghorns are outstanding. Other Leghorns are very good. For a balance of egg production and meat, the heavier breeds such as the Rocks, Wyandottes and Reds are very popular. Among the breeds still heavier the Minorcas, Giants and Langshans rank high in favor. It is impossible to mention all of the outstanding breeds. The strain within the breed varies to some extent. It is well to accept the advice of a hatcheryman or other poultry expert in each community on that particular subject.

The chick that comes out of the shell is usually healthy, and very active, and under proper conditions it will remain so. There are, also, inherited factors of longevity, resistance, etc., but even these can be made to work in one's favor if one goes about it correctly.

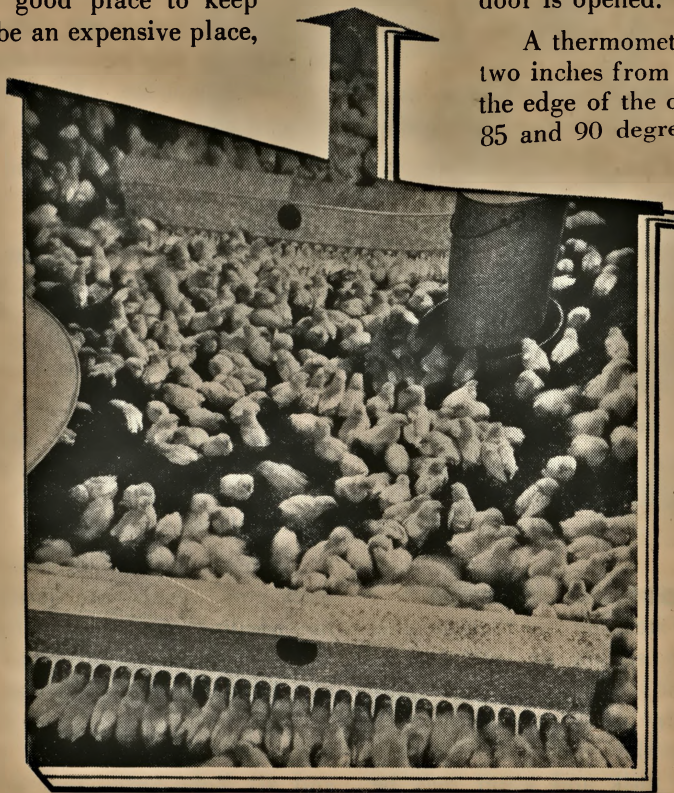
CHICK MANAGEMENT

Brooding

A house 10 x 12 or 10 x 14 feet equipped with a brooder stove that has a canopy 54 to 60 inches in diameter will accommodate about 350 chicks. Place the stove a little to one end of the house. Be sure to avoid crowding. Placing more than 350 chicks into a

house and under a canopy of the sizes mentioned, usually increases the mortality and is false economy.

For the first few days place chicken wire around the hover about 30 inches from the edge. This teaches the chicks the source of heat and keeps them from wandering into cold corners. A plaster board 2½ to 3 feet high placed inside and across the doorway keeps the cold air from rushing in on the floor whenever the door is opened.



Baby chicks should be fed regularly, have comfortable surroundings and access to water at all times.

A thermometer hung from the ceiling about two inches from the floor and four inches from the edge of the canopy should register between 85 and 90 degrees for the first week and may be lowered two degrees each week thereafter. When the entire room is heated the thermometer should be placed about 15 inches from the stove and two inches from the floor.

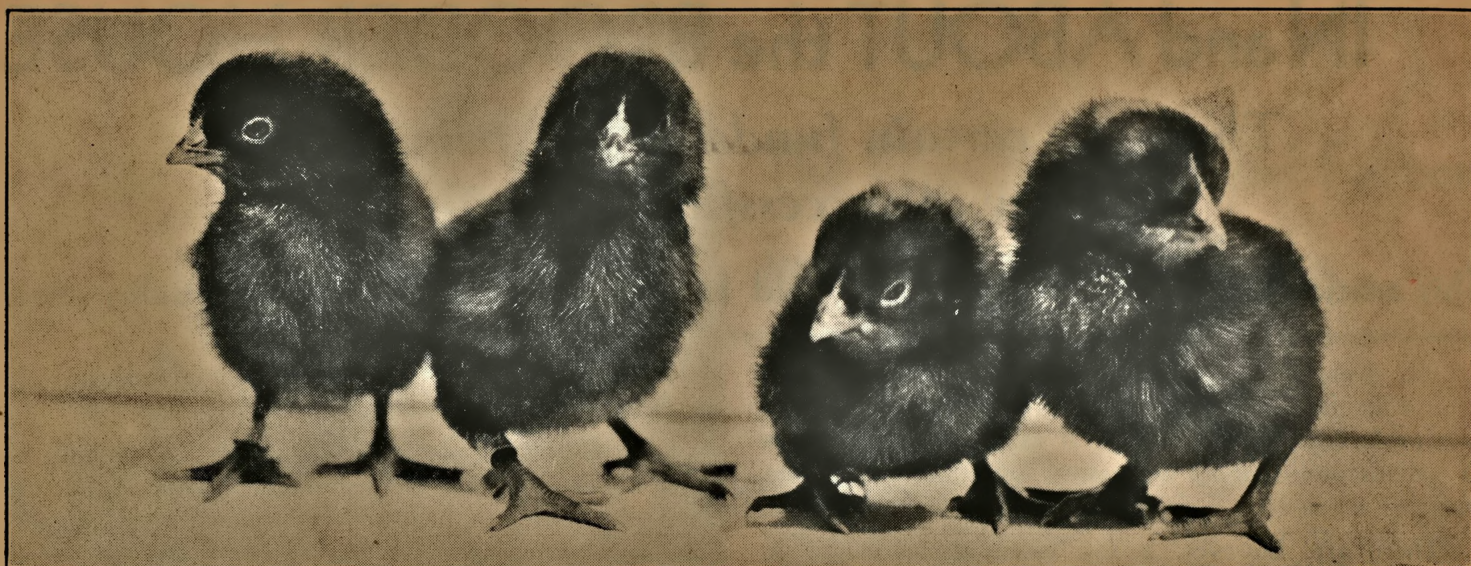
A dim light at night helps prevent the chicks from crowding. It must be properly protected to guard against danger from fire. A small electric light bulb may be used or a common barn lantern will do.

For light breeds, roosts may be provided at the end of the second week by arranging laths on 2x2 inch strips. Fine netting should be used under the roosts to keep the birds away from the droppings. Keep a clean litter on the floor. There are many kinds of good floor coverings. Any material not too coarse that is free from dust and not readily eaten by the chicks is suitable.

Movable houses should be well banked so there will be no drafts under the floor. Chicks should be sprayed with Cam-Pho-Sal every night after they have settled. This helps to freshen the air, kills the disease germs and imparts much needed moisture to the air, all of which hastens maturity and assures a better feather growth.

Feed and Water

It is best to feed chicks when they are about 24 hours old, selecting a well balanced baby chick starter. Scatter it on newspapers and leave it before the chicks for about half an hour. Then at that time roll up the newspapers and burn them. Chicks should be fed every



two or three hours for the first few days. In some cases the feed is put into hoppers and left before the chicks constantly right from the start. As a rule this is a safe procedure.

Hopper space should be planned so there is an average of one inch feeder space per chick. The feeders should be placed close to the light in various locations so all the chicks can easily find them.

One may start out immediately with one pound Avi-Tone to every one hundred pounds of feed as a tonic and conditioner. The drinking water should be placed in jars or fountains protected against contamination from the droppings. Glass jars which screw into a metal base are quite satisfactory. Enough of these must be provided so they will never become entirely dry between the times the chicks are cared for. Baby chicks should at all times have access to water. Phen-O-Sal may be put in the drinking water from the very beginning.

How to Feed Potatoes to Chickens

Potatoes should be boiled or steamed and then mashed for poultry feeding. In finish-feeding or fattening of broilers, springers, hens or capons, mashed potatoes may be mixed in equal parts with dry mash, and skim milk or buttermilk added to bring to the consistency of pancake batter. Ten per cent dry milk and water may be used. For growing pullets and capons, or layers, mashed potatoes and the regular dry mash in equal parts are mixed. This is fed daily as a warm, moist mash.

Cannibalism in Poultry

Cannibalism is not a disease but a habit that develops in chickens that are crowded and highly nourished without much exercise. The birds begin to devour each other by picking the tails, backs, vents, toes, any place allowing access to flesh and blood. This can become a very serious habit.

In treating cannibalism try to locate the cause and remove it. Balance the ration, add additional leafy vegetables, alfalfa meal, etc., avoid crowding, provide more humidity and less heat. For that purpose daily spraying with a mild solution of Cam-Pho-Sal is very good.

To break up the habit use Dr. Salsbury's Stop-Pick liberally on at least ten per cent of the individual birds in the flock. It may be applied to the wings, backs, etc., preferably to the healthy, husky ones that can stand being picked.

When cannibalism becomes a serious problem in a flock good results are obtained by painting the inside of the windows red with Paint-O-Sal. This causes all the light inside the building to have a reddish hue. Consequently red objects such as blood look gray and cannot be distinguished by the birds with the picking habit. All openings that admit light must be covered and painted and all light bulbs that are used should be dipped or painted with Dr. Salsbury's Paint-O-Sal. The worst cases of cannibalism may be stopped by the combined use of Stop-Pick and Paint-O-Sal.

Amount of Medicine to Order for Flocks of Various Sizes

Size of Flock	Amount and Cost of Avi-Tone	Amount and Cost of Phen-O-Sal	Amount and Cost of Cam-Pho-Sal	Total Cost
250 chicks	6 lbs.....\$2.00	300 tablets.....\$2.00	Small bottle.....\$.75	\$ 4.75
500 chicks	15 lbs..... 4.75	500 tablets..... 3.00	Medium size..... 1.10	8.85
1000 chicks	25 lbs..... 7.50	1000 tablets..... 5.50	Large bottle..... 1.85	14.85

This small sum of money spent for the proper kind of preventive medicines will take the chicks through the dangerous six- to eight-week period in a much better condition. Birds raised on a proper prevention program develop faster, are fluffier, plumper and more free from various complications, and their livability averages much better. If you can save an extra 10% of the chicks, you are paid for the medicinal treatment and more than

that, you have these extra birds live and healthy, ready to produce and make money for you; while if they have died, there is not only the direct loss of their original cost, but there is no opportunity to get further returns from them. The cost of medicine is like an insurance premium. You pay for it whether you use it or not. The way to raise chicks at the least expense is to be ready with the preventive treatment before trouble starts.

● Chick Health Program

Never is the old saying "health is wealth" more appropriate than when it is applied to poultry

Here is a health program easy to follow--sure of results

THE KEY to success, profit and enjoyment in poultry raising is "health." Little progress can be made unless the health of a flock is maintained at the highest possible peak. Such a peak may only be attained by following a well planned health program. Precaution and prevention are quoted as proverbs but they are often misunderstood and many times are improperly carried through.

In suggesting a health program consideration has been made of all the pitfalls and problems that might arise to cause disaster. Not all of these will occur in any one flock or at any one time. Before starting on a health program, however, certain fundamental points must be agreed upon — first, chicks should not be over-crowded. Also, they should be cared for regularly. The temperature must be proper for the age of the bird, the season of the year and the location. The feed must be right, that is, it must be pure and wholesome, and should be a balanced food containing the various elements and essentials necessary for good and rapid growth. Cleanliness and sanitation are important and may not be neglected. With these fundamentals understood a health program may be charted as follows:

DR. SALSBUURY'S PRACTICAL PREVENTION PROGRAM

To guard against bowel trouble in baby chicks use Phen-O-Sal. For the various forms of colds and respiratory troubles spray with Cam-Pho-Sal or fumigate with Fumi-Tabs. For coccidiosis use either Phen-O-Sal or Rakos. For roundworms in growing or mature birds use Avi-Tone as a flock treatment and RoTa Caps as an individual treatment. For tapeworms use Avi-Tabs as a flock treatment and RoTa Caps or Kamala Caps as individual treatment. All of these properly used will give the results for their intended purposes.

FOR BIRDS FROM 1 TO 6 WEEKS OLD

Before starting the chicks determine that the brooder house is of the proper size, and that it is thoroughly cleaned and disinfected. Secure the house free from drafts. The first few days of life are very important. It is during this time that yolk absorption takes place and the foundation is laid for a healthy, sturdy body. Although chicks are perfectly healthy when they are hatched, they are delicate creatures and must not be abused. They must be given every opportunity to retain their healthy start and should be protected against the many germs, worms and parasites. Do not neglect any



Chicks must be given every opportunity to retain their healthy start by protecting them against the many germs, worms, and parasites that prey on them.

of the factors that improve health during this very important time.

When the chicks are first put out, use two Phen-O-Sal tablets in every gallon of drinking water or milk or both for the first ten days. After that use six Phen-O-Sal tablets in every gallon for two successive days each week. Spray the chicks each evening with three teaspoonfuls in one-half pint of hot water for the average flock of 450 chicks. This helps to settle the dust, tends to check the spread of bacteria, colds, etc., and insures the chicks of proper respiration.

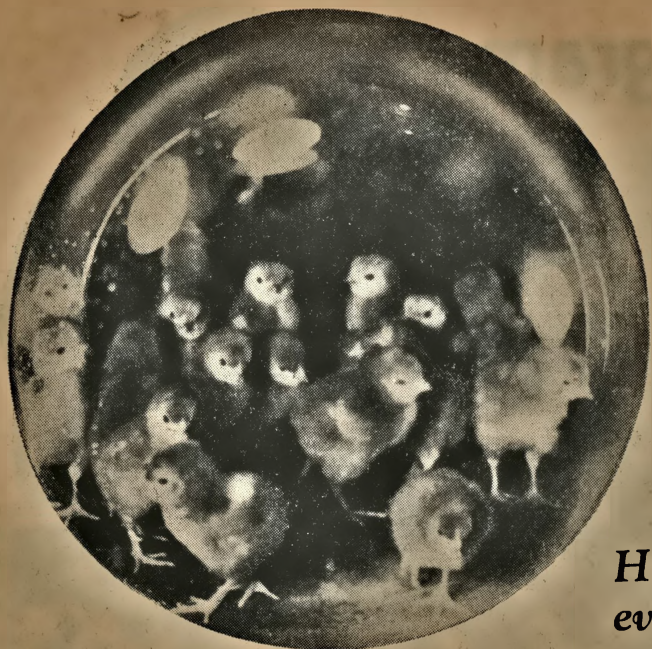
As a tonic and stimulant to aid in yolk absorption, intestinal secretion, etc., add two heaping teaspoonfuls of Avi-Tone to every two quarts of mash or one pound of Avi-Tone to every one hundred pounds of mash. Keep this before the chicks constantly for the first month.

FROM 6 TO 12 WEEKS OF AGE

This is the most dangerous age for coccidiosis and early roundworm infestation. Guard against these diseases by using the following schedule of treatment and in addition clean the houses, disinfect regularly and rotate the yards whenever possible.

To aid in the prevention of coccidiosis use Rakos in scratch grain two successive days each week. This is especially important during the months of March, April,

(Continued on page 11)



● LOOKING

A POULTRYMAN DOESN'T NEED TO BE A CRYSTAL GAZER OR READ THE STARS IN ORDER TO KNOW WHAT PROBLEMS WILL ARISE TO CONFRONT HIS FLOCK » » » »

Here are some plain facts that will save every flock owner Time, Worry and Money

WHEN working with poultry and looking into the future, it is not necessary to use crystal-gazing balls, stars, or palm readings to know accurately the poultry problems that will arise. With knowledge of the locality, the season of the year and past experience from prevailing conditions, it is possible to accurately foretell what may happen in any poultry flock for any month of the year. For instance, MARCH is the month of bowel troubles. Prepare to meet it with Phen-O-Sal in the drinking water at the very first indication of disturbances. APRIL is the month of wet feet with subsequent colds, swollen eyes and other accompanying symptoms. Be prepared for this by having Cam-Pho-Sal ready for spraying. MAY brings the beginning of coccidiosis. Heavy losses may take place unless proper preparation is made. Be ready to treat with Rakos. JUNE continues the coccidiosis danger but also brings on the early problem of worms. Get the birds into monthly preventive treatments with Avi-Tone.

The birds in June are nearly all of vaccination age. The coming fall is going to bring trouble with pox, cankers, roup and colds and June is the time to prevent these ravages by vaccinating with Fowl Pox Vaccine. In many localities laryngotracheitis (pronounced "lar-ring-go-tray-key-i-tis" and meaning inflammation of the wind-pipe) comes on very suddenly and deals havoc to birds at any time. June is the time to prevent laryngotracheitis by vent vaccination. Vaccination by this method is simple to perform; birds stand the treatment very well at this age, and the immunity is, in practically all cases, very durable and very satisfactory. If a delay is made in vaccination for either pox or laryngotracheitis until the danger of outbreaks in the fall is reached, then very heavy but needless chances will be run.

July with its swarms of flies, bugs and beetles introduces the tapeworm menace, but this subject will be thoroughly discussed in the Summer Issue of the MESSENGER.

Copy these prophecies and tack them up on the door in the poultry house or feed room; they will come true.

But better yet, be prepared to combat the conditions before they arise so they need never occur. By being forewarned much can be done to keep the flock healthy and to prevent the heavy losses that have, within the past few years, become a scourge among even the most progressive poultry raisers.

HOW TO TREAT FOR COCCIDIOSIS

I. WITH PHEN-O-SAL. The so-called stop and go treatment is often practiced. For various ages use the following schedule of Phen-O-Sal treatment. Birds two to four weeks of age, 4 tablets to every gallon of drinking water; birds four to six weeks, 6 tablets; six to ten weeks, 8 tablets; ten weeks and over, 10 Phen-O-Sal tablets to every gallon of water.

Feed as usual up to 9:00 a. m., then take all feed away until about 5:00 p. m., when a light feed of grain and mash is given. After four or five days of this treatment, go back to the usual feeding program and gradually reduce the dosage of Phen-O-Sal in the water and milk, but continue the Phen-O-Sal for a total of at least ten to fourteen days.

Recovery from coccidiosis is greatly aided by the use of Avi-Tone as a tonic and to stimulate the appetite. Mix two heaping teaspoonfuls of Avi-Tone in every two quarts of feed or one pound in every 100 pounds of mash.

II. RAKOS TREATMENT—Mix the proper amount of Rakos for the number of birds to be treated according to directions on the Rakos package. Withhold all feed from the birds the night before. Mix the Rakos in as much moistened grain as the birds will clean up in twenty minutes. For birds seven weeks old it will take about one pint of water and two quarts of feed. Reduce or increase according to age. Give the moistened grain as the first feed in the morning. Then let the birds rest two hours and feed again with a well balanced mash near the middle of the day. In case of mature birds follow regular routine for the rest of the day. Young birds seem to do better when fed in two to three hour intervals. Take away all feed at night so the birds will be hungry and the intestines empty for the early morning treatment. If there is a severe attack, give a second treatment late in the afternoon. After the treatment has been continued for four days, give a laxative in the drink-

INTO THE FUTURE ●

ing water in the evening of the fifth day. In some cases it will be necessary to administer a longer and more intensive treatment.

SUPPORTIVE TREATMENT—Always continue with Avi-Tone or Avi-Tabs as a supportive treatment for several days after the flock has been treated for coccidiosis. Use Avi-Tone at the rate of 2 lbs. per 100 lbs. of mash, or Avi-Tabs, 10 tablets for each 100 birds a day. Avi-Tabs may be used either powdered in a dry mash, or mixed in a wet mash.

This helps the birds to regain flesh and develop normal functions. Good feed, care and nursing following an attack help to prevent carriers and the development of crow-heads, etc.

IMMUNITY—A flock that has passed through a siege of coccidiosis, has recovered and is on the road to health is often a more valuable flock than one that has never been exposed.

A properly handled and properly managed outbreak of coccidiosis is not a total loss to the owner, because



The months of April, May and June should present few problems if proper precautions are taken in advance.

recent studies have shown that an attack of coccidiosis produces some degree of immunity.

HOW TO VACCINATE FOR POX

There are two methods in use, the "follicle" and "stick" methods. We recommend the follicle method, which is done as follows:

1. Arrange a convenient way to catch and handle the chickens. Work in the shade if possible. The vaccine is sensitive to heat and sunshine and should not be exposed more than necessary. When not in use keep it in an ice box and take out only enough for half a day's work at one time.

2. Pour the powder from the small vial into the liquid in the larger vial, return the stopper and shake well.

3. Pluck four or five feathers from the thigh or drumstick.

4. Dip the brush into the vaccine bottle to moisten it.

5. Apply the moistened brush to feather follicles from which feathers have been removed. Rub in well and the job is over.

Do not allow any of the vaccine to come in contact with the bird's head.

In the "stick" or "stab" method a sharp instrument such as a crochet needle or embroidery scissors is used. The blade is wrapped with adhesive tape or cord so that 1/16 to 1/8 of an inch of the sharp point is exposed. Place a bit of cotton in the bottom of a small wide-mouthed bottle, then pour in enough prepared vaccine to just cover the wad of cotton. Dip the point and the edge of the wrapping in the fowl pox vaccine and quickly stab through the skin of the denuded leg. Some use the web of the wing instead of the leg.

The stick method is quicker than the follicle method, but it has a disadvantage in the danger of striking a blood vessel which will cause the wound to bleed and the vaccine to be washed away.

Any method by which the vaccine is introduced into the skin will give good results. The secret of successful vaccination is to get some of the vaccine right into the skin and not merely under or on top of it.

LOOK FOR "TAKES"

All birds that have not previously been vaccinated or have not had the disease should develop a "take" (scab formation). The effects of the take will begin to show in from five to ten days. After the scab formations dry up and fall off, in another two or three weeks time the immunity is complete. When the pigeon strain is used there is only a swelling of the follicles.

Vaccination for pox is easy of application, safe in its use and positive in results.

CARE AFTER VACCINATION

After vaccination, keep the birds in dry and sanitary quarters, or on outdoor range when the weather is good. Avoid exposure to rains and sudden changes of weather while the scabs are forming. Birds are more sensitive to infections at that time, and should be guarded carefully against roup and colds. Spray them nightly with Cam-Pho-Sal.

A healthy, producing flock is the goal of every poultryman. Simple, safe precautions will help assure arriving at this goal.



YOUR FUTURE POULTRY PROFIT



COLDS---BRONCHITIS---PNEUMONIA

A complete program of disease prevention for your chicks demands attention to respiratory troubles as well as intestinal disorders. In addition to adding PHEN-O-SAL Tablets to drinking water or milk, spray your chicks regularly with Dr. Salsbury's CAM-PHO-SAL. Its soothing, medicated vapors help to keep the air passages and lungs free from infection and wards off congestion. CAM-PHO-SAL is the ideal preparation for the control and treatment of colds, bronchitis and brooder pneumonia.

Administered together, PHEN-O-SAL and CAM-PHO-SAL are effective in checking chick losses—in building a strong, healthy, profitable flock.

Enough CAM-PHO-SAL for 250 chicks (a four-ounce bottle) costs only 75 cents. Larger sizes are even more economical!

Your local member of Dr. Salsbury's Nation-Wide Poultry Health Service, whose name appears on the back page, is qualified to advise with you on your poultry health problems.

There is a **DR. SALSBU**RY PREPARATI



IN *and* ABOUT the LAYING HOUSE

While baby chicks steal the front page news, don't forget the profit makers in the laying house

SOME TIMELY ADVICE TO KEEP THOSE EGG PROFITS ROLLING IN

WHILE the baby chick usually gets the front page publicity in the late winter months and early spring, we must not forget that the final results of last year's work and investment are tied up in the laying flock. Although the chicks may receive the best feed and the first attention in the morning, it must still be kept in mind that the profit comes from the layers and all efforts must be expended to keep that profit growing. During the cold spring months insulation and ventilation of the laying house are important. There should be enough ventilation so that frost and steam do not gather on the windows and walls to any great extent.

Night lights are almost necessary for good production. If electricity is not available a lantern with a metal shade may be hung in the house in such a way that most of the light is over the feed and water containers but a portion of the light also shines on the edge of the roost. It requires a large amount of feed to produce eggs in large numbers and the birds cannot eat enough during

the short days to keep their manufacturing machinery in full production twenty-four hours a day. In a well managed flock night lighting should not be objectionable from a standpoint of hatchability or fertility.

Lukewarm water is much better than cold water. Tonics and conditioners are very necessary and highly profitable when properly used. A five day treatment either with Avi-Tone or Avi-Tabs every month is a profitable investment. It helps to tone up the birds; it helps to increase their appetite, improve their digestion and stimulates the entire system to greater activity. Many discriminating hatcherymen refuse to take eggs for hatching from flocks unless they are given regular Avi-Tone or Avi-Tabs treatments. They have found from experience that it pays not only for the poultry raiser but for the hatcheryman and also the chick buyer.

Early spring vaccination is also in order. A mid-winter or early spring outbreak of either cholera or typhoid is nearly always predictable. These diseases are

governed somewhat by the locality. The birds' vitalities are lowest at this time and the trouble can be anticipated and prevented almost entirely by vaccination with Dr. Salsbury's Cholera-Typhoid Bacterin before cholera and typhoid have an opportunity to take their toll in the flock. Preventing the loss of only a few birds will more than pay for the bacterin and the security is worth many times that amount. Regular treatment with Phen-O-Sal in the drinking water clears the intestinal tract and is a good precautionary measure.

THE PREVENTION PROGRAM

Laying and Breeding Flocks

Continue the Avi-Tone treatment using six pounds to every one hundred pounds of mash five successive days each month. If tapeworms are serious, alternate with Avi-Tabs using a flock treatment of Avi-Tabs against tapeworms one month and Avi-Tone for roundworms the next month. Breeding and laying flocks fed regularly on this program are always favored by hatcherymen for producing setting eggs. It is observed that egg production is steadier, eggs average larger in size, and the general condition of the flock is better. Use 8 Phen-O-Sal tablets to the gallon in the drinking water on the same days that Avi-Tone and Avi-Tabs are used.

Vaccinate with Cholera-Typhoid Bacterin every 90 days to six months, to keep the birds immunized against cholera and typhoid. Cull the flock and treat for lice regularly. Test breeders for pullorum infection using Dr. Salsbury's Stained Antigen. If there are signs of tuberculosis in birds over a year old, test with tuberculin and remove all reactors. To help check chronic coccidiosis use Rakos two or three days each week as long as necessary.

NOTE: Whenever the droppings become watery, green, yellow, mustard colored or show any other abnormal condition regardless of age, use eight to ten Phen-O-Sal tablets in every gallon of drinking water. This may be followed with a five day treatment of Rakos. Whenever colds are noticed spray the birds frequently with Cam-Pho-Sal several times each day and night. Fumigate with Fumi-Tabs.

WHAT TO DO WHEN THE FLOCK IS SICK

When a flock is sick, begin definite steps of treatment at once. Follow these fundamental steps:

1. Separate the sick birds from the well as much as possible. The hopeless ones should be killed and burned to check the spread of infection. Those that are sick but still appear hopeful should be treated in a separate room or separate building.

2. Look over the feed carefully. See that you have plenty of good feed and a proper balance of proteins, grains, minerals and vitamins.

3. Check for lice and mites and treat against them.

4. Clean up and disinfect the premises. If possible

the healthy flock should be changed to new and clean quarters. Spray thoroughly with DIP-SAL.

5. Check the house and ventilation. See that the floors are dry and the ventilation is right for the time of the year.

6. Start medication by using a laxative to remove the irritating materials in the intestinal tract. This will give the medicine that is to follow a better opportunity to reach the seat of infection. For young birds one to three weeks, use one tablespoonful Epsom salts to one hundred birds; three to four weeks use two tablespoonfuls; four to seven weeks, four tablespoonfuls; seven to ten weeks, eight tablespoonfuls; ten to sixteen weeks, one-half pound; sixteen weeks and over, one pound.

In unusually severe and persistent cases, or when there are various complications of disease present, the following schedule is highly recommended.

First give a five day treatment of Rakos as described on the bottle. Next give a five day treatment of Avi-Tone using eight Phen-O-Sal tablets in each gallon of drinking water at the same time. Then follow this treatment with ten days of Avi-Tabs. Individual birds that do not respond may be given RoTa Caps. A flock affected with roup and colds should be sprayed with Cam-Pho-Sal following the detailed directions on the bottle and vaccinated with Mixed Bacterin. Fumigate with Fumi-Tabs. For other losses such as cholera and typhoid, vaccinate with the Cholera-Typhoid Bacterin. For the early stages of pox or cankers vaccinate with the Fowl Pox Vaccine. Use the chicken strain for young birds and pigeon strain for laying flocks. Against early cases of laryngotracheitis, vaccinate with Laryngotracheitis Vaccine. These two vaccines are not recommended after the disease has gone through the flock.

CHICK HEALTH PROGRAM

(Continued from page 5)

May and June. At six weeks of age, start the chicks on a regular monthly treatment of Avi-Tone; mix six pounds of Avi-Tone to every 100 pounds of mash. The mash may be either moist or dry and should be fed for five successive days each month. Leave the mash before the chicks all day, and allow a little scratch grain in the evening. Use eight Phen-O-Sal tablets to every gallon of drinking water on the same days that Avi-Tone is fed. Vaccinate against pox; preferably before 12 weeks of age.

FROM 12 TO 20 WEEKS

Watch for lice and mites every month of the year. Fight them with Dr. Salsbury's Louse Powder, individually, or use Nic-Sal as a roost paint or Li-Tox as a spray. For mites, spray with Mite-O-Cide.

Vaccinate for laryngotracheitis. Vaccinate after pox scabs have healed and when birds are 12 to 16 weeks of age. If pox vaccination has been neglected, do it at this time. As a rule, it is safest to vaccinate with the two vaccines separately and leave sufficient time between each vaccine for the takes to heal—usually about 2 weeks.

Continue roundworm control, using six pounds of Avi-Tone to every 100 pounds of mash, five successive days each month. For tapeworm control use either the Avi-Tab flock treatment as described on the label of the can, or individual treatment of RoTa Caps or Kamala Caps. Use pullet size caps for birds 16 to 20 weeks, and adult size for older birds or birds of unusually large size and development.



TAPE WORMS... ... USE Dr. Salsbury's AVI-TABS Though amazingly small, microscopic tapeworms can, and do, cause a tremendous amount of damage to growing flocks. That's why it pays to keep their infestation down to a minimum. For accomplishing this, there's nothing better than a regular and systematic use of Dr. Salsbury's Avi-Tabs—the dependable flock treatment in tablet form. Moreover, Avi-Tabs help to stimulate the appetite, aid digestion, and to build up the strength and vitality of your birds. A package of 100 costs only \$1.00.

See Your Local Dealer for Complete Information Regarding Proper Treatment

PROTECT FUTURE POULTRY PROFITS

Vaccinate Against FOWL POX

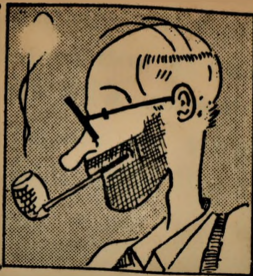


● When your chicks are six to twelve weeks old they'll be just at the right age for vaccination to prevent pox, sorehead, canker, diphtheria and other forms of the diseases of the head caused by the fowl pox virus.

You'll find there's nothing better to produce permanent immunity than Dr. Salsbury's Fowl Pox Vaccine (Chicken Strain). Scientifically produced in the most modern laboratories by expert technicians, and under U. S. Government license. So easy to use, you can do the job yourself. Complete instructions furnished—no syringe necessary.

See the Dealer Whose Name Is on the Back Page

Poultryman
Pete
Sez:



Yuh know, a man can git a heap of larnin' jist out a his newspaper. Now take our own TOOTVILLE BUGLE fur instance, which I wuz readin' this mornin'. I read all about the meetin' of our state legislature an' sometimes its a powerful lot funnier than the funny papers—the legislature meeting, I mean.

'Course there are a lot of mighty fine men in the legislature, but there be some mighty flighty ones too. Some a the legislative programs are jist about as clear as the water runnin' down in Frog Holler. It seems the legislature jist gits together toward the end of the session, when they is all anxious to git home, and sort of trade pet ideas. Jist a sort of "you scratch my back and I'll scratch yours" proposition. But when all the back scratchin' is through, its you and me that gits scratched—and we don't git scratched in the back, gentle like; we git a gol dern good rakin' in the seat of the britches, like a bob cat done it.

Now I ain't as young as I usted to be, and I only been makin' my livin' growing poultry fer nigh on to 25 year, and I'll admit there be plenty about raisin' chickens that I don't know, but I jist wonder if the legislature is goin' to send me back to school and write a state examination in order to blood test my flock? P'raps I ain't even goin' to git a chance to write the examination and can't even touch my birds? Sometimes it sort of makes a man sit down and wonder. Yuh know, it don't seem right to tax baby chicks coming an goin'. We Americans don't mind one tax, but *two* taxes on the same thing is jist a mite tough to chew. It seems to me a powerful lot like the legislature is deliberately gittin' down on its hands and knees to bite a skunk in the tail. The results is both surprisin' and sorrowful.

Now, ofen times laws are passed jist as a result of a little group a fellers gittin' together an applyin' the heat, where it needs to be applied. There are over 6,000,000 of us farmers growin' poultry to help make a livin' and it seems to me we have a purtty good right to be heard, before our pants are taken away. As fur our shirts, we ain't had none to have took away.

Laws in this country, I reckon, are supposed to be made fur the greatest good. My great, great grand-pappy fought in the Revolution War jist because he and his neighbors didn't have no say in the law makin' and because the taxes wuz too high.

We jist got to stick together and watch all the laws that are comin' up, and when we see a law that is takin' our bread and butter away, we jist got to write our representative in the legislature and call hiz attention to it. All of us have got to do it and all our neighbors have got to do it, too. After all, we are the ones that elected him and he has to help protect us, or lose hiz job—an' election jobs ain't easy to git.

POULTRYMAN PETE.

DR. SALSBUURY'S CAM-PHO-SAL



To lessen the danger of these troubles, and to guard against serious losses in your flock, spray your chicks regularly with Dr. Salsbury's Cam-Pho-Sal. Its soothing, medicated vapors keep the respiratory tract free of infection, and help to ward off congestion in the air passages and lungs. And if inflammation is present, Cam-Pho-Sal vapors bring quick and soothing relief, and check the germs before they can cause more serious trouble. Keep a bottle of Cam-Pho-Sal on hand at all times, and you'll save yourself a lot of trouble and worry. An 8-oz. bottle (enough for 500 chicks!) costs only \$1.50.

See Your Local Dealer for Your Supply of Cam-Pho-Sal

Fight COCCIDIOSIS

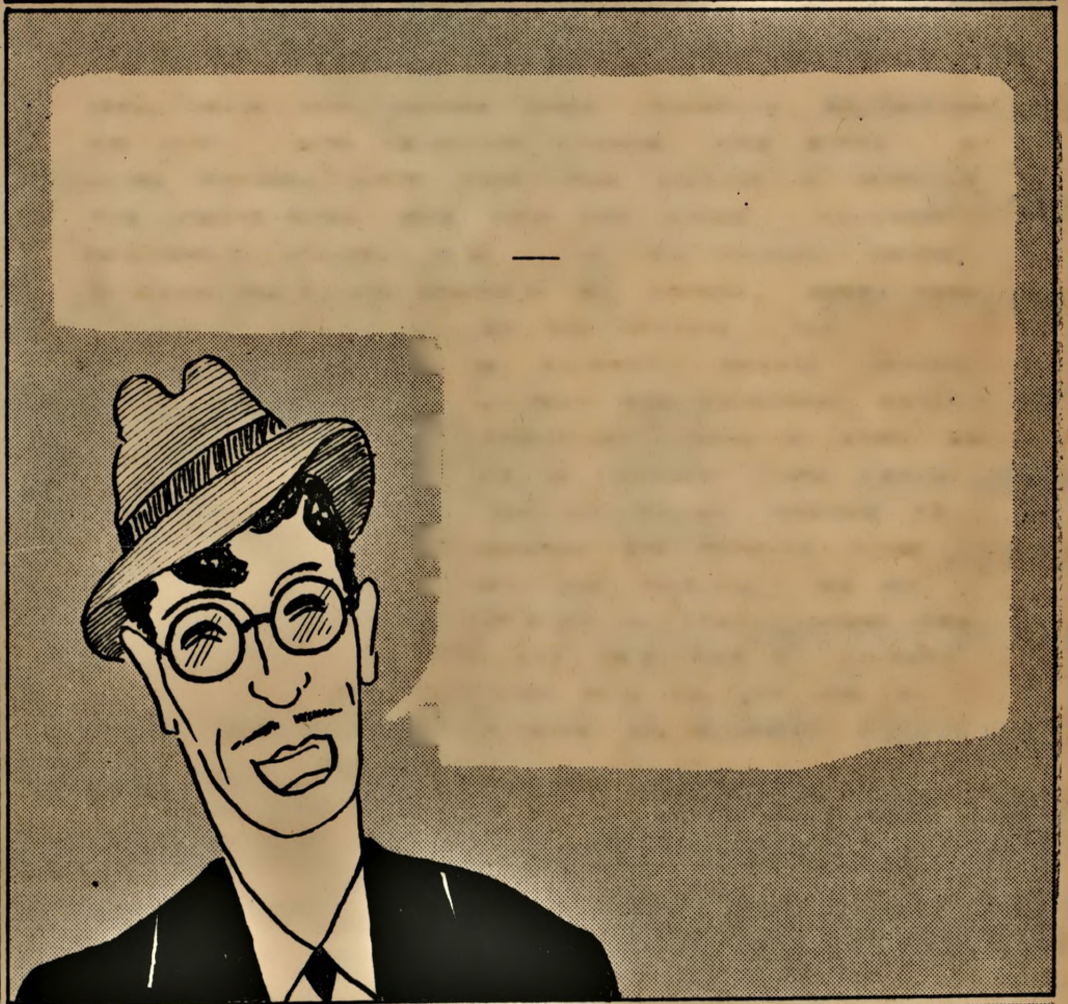
● Keep a sharp lookout for coccidiosis! The most dangerous age for this deadly disease is from four to 16 weeks; the most dangerous time, from the latter part of April through May and June.

Thousands of poultry raisers prefer a liquid, acid treatment in fighting this trouble. They have enjoyed good results with Dr. Salsbury's Rakos—a combination of acid medicines with astringents and antiseptics in concentrated liquid form. Quickly renders bowel contents acid, constricts blood vessels to stop bleeding, and helps to get rid of the coccidia. Also stimulates appetite, aids digestion, and helps to restore good health and vitality.

So be prepared for coccidiosis! Keep a bottle of Dr. Salsbury's Rakos on hand to check the danger of serious losses. Easy to use—just mix with ground grain or other scratch feed. A quart-size bottle costs only \$2.00.

Dr. Salsbury's RAKOS

ADVENTURES OF SUPER SAMM, THE SERVICE MAN



DR. SALSBUURY'S MEDICINES FOR POULTRY

Preparations	Size Packages	Price	Uses												
AVI-TONE 100% Medicine	2 lbs.....\$.75 25 lbs.....\$ 7.50 6 lbs..... 2.00 50 lbs..... 14.00 15 lbs..... 4.75 100 lbs..... 27.00		Flock treatment for worms, worm preventive and general tonic. For baby chicks and turkeys, growing stock and laying flocks. In powder form.												
AVI-TABS	100.....\$1.00 400.....\$3.00 200..... 1.75 1000..... 7.00		Wormer and tonic in tablet form. For flock treatment.												
KAMALA-NICOTINE COMBINATION WORM CAPS	<table><tr><th>Adult Size</th><th>Pullet Size</th></tr><tr><td>50\$.75</td><td>\$.50</td></tr><tr><td>100 1.35</td><td>.90</td></tr><tr><td>200 2.50</td><td>1.75</td></tr><tr><td>500 5.00</td><td>3.50</td></tr><tr><td>1000 9.00</td><td>6.00</td></tr></table>	Adult Size	Pullet Size	50\$.75	\$.50	100 1.35	.90	200 2.50	1.75	500 5.00	3.50	1000 9.00	6.00		Individual treatment for tape and round and pin worms in chickens, turkeys and other fowls. A properly coated tablet that is easy on the birds.
Adult Size	Pullet Size														
50\$.75	\$.50														
100 1.35	.90														
200 2.50	1.75														
500 5.00	3.50														
1000 9.00	6.00														
KAMALA CAPS	Prices and sizes same as Kamala Nicotine Combination Worm Caps listed above.		For individual treatment against tapeworms only. Used for chickens, turkeys, ducks and geese.												
PHEN-O-SAL TABLETS	25.....\$.25 300.....\$2.00 50..... .50 500..... 3.00 125..... 1.00 1000..... 5.50		Excellent corrective for diarrhea and coccidiosis of chicks, Fowl Typhoid, Fowl Cholera, Enteritis, irritation from worms, blackhead in turkeys, also duck and goose cholera.												
RAKOS	Pint bottle \$1.25—quart \$2.00 ½ gallon \$3.50—1 gallon 6.00		Triple acid, antiseptic and astringent, treatment for coccidiosis in young and old fowls.												
CAM-PHO-SAL	<table><tr><td>Special</td><td>.45</td></tr><tr><td>Small bottle</td><td>.75</td></tr><tr><td>Medium bottle</td><td>1.10</td></tr><tr><td>Large bottle</td><td>1.85</td></tr></table>	Special	.45	Small bottle	.75	Medium bottle	1.10	Large bottle	1.85		For roup, colds, flu, gapes, bronchitis, brooder pneumonia, etc., in fowls of all ages. Pure medicine to be diluted with water.				
Special	.45														
Small bottle	.75														
Medium bottle	1.10														
Large bottle	1.85														
STOP-PICK	<table><tr><td>2½ oz. tube</td><td>.25</td></tr><tr><td>6 oz. jar</td><td>.50</td></tr><tr><td>16 oz. jar</td><td>1.25</td></tr></table>	2½ oz. tube	.25	6 oz. jar	.50	16 oz. jar	1.25		A preparation for toe, vent, tail picking, and all forms of cannibalism in poultry.						
2½ oz. tube	.25														
6 oz. jar	.50														
16 oz. jar	1.25														
PAINT-O-SAL	<table><tr><td>½ pint</td><td>.90</td></tr><tr><td>1 pint</td><td>1.50</td></tr><tr><td>1 quart</td><td>2.50</td></tr></table>	½ pint	.90	1 pint	1.50	1 quart	2.50		Stained dye for painting windows to prevent cannibalism and pickout.						
½ pint	.90														
1 pint	1.50														
1 quart	2.50														
DIP-SAL	1 gal.....\$1.25 30 gal.....\$30.00 5 gal..... 5.75 50 gal..... 45.00		A high grade coal tar disinfectant with a co-efficient of 4 for poultry houses and for general farm purposes.												
MITE-O-CIDE	<table><tr><td>Quart can</td><td>1.00</td></tr><tr><td>Half gallon can</td><td>1.50</td></tr><tr><td>Gallon can</td><td>2.50</td></tr></table>	Quart can	1.00	Half gallon can	1.50	Gallon can	2.50		To control mites, and disinfect poultry houses. A powerful germ killer and insect destroyer. For treating litter against coccidiosis dilute with distillate.						
Quart can	1.00														
Half gallon can	1.50														
Gallon can	2.50														
NIC-SAL	½ pint 75c—1 pint 1.25 1 quart \$2.00—1 gal. 6.00		A nicotine preparation to paint on the roosts for lice.												
FUMI-TABS	50.....\$.50 500.....\$3.00 100..... .85 1000..... 5.00		Incubator and brooder fumigant, very effective in killing germs without injuring the chicks.												
LI-TOX	½ pt.....\$.60 1 qt.....\$1.75 1 pt..... 1.00 1 gal..... 6.00		Spray for killing lice.												
LOUSE POWDER	Large sift-top can .25		Very effective for dusting fowls for lice. May also be used in the nests to keep down vermin.												
HATCHERY SPRAY	<table><tr><td>Quart can</td><td>2.75</td></tr><tr><td>Half gallon can</td><td>4.50</td></tr><tr><td>Gallon can</td><td>8.60</td></tr></table>	Quart can	2.75	Half gallon can	4.50	Gallon can	8.60		Effective germicide for spraying eggs and incubators. Not poisonous.						
Quart can	2.75														
Half gallon can	4.50														
Gallon can	8.60														
FOWL POX VACCINE Chicken and Pigeon Strains	100 dose pkg. each .75 500 dose pkg. each 3.25		To prevent Chicken Pox by feather follicle or stick method of vaccination.												
INFECTIOUS LARYNGO-TRACHEITIS VACCINE	100 doses 3.00 500 doses 12.50 1000 doses 24.00		For permanent immunity against the virus form of bronchitis.												
MIXED BACTERIN FOWL or CHOLERA-TYPHOID BACTERIN	60 doses, 60 c.c. .85 250 doses, 250 c.c. 3.00 500 doses, 2-250 c.c. 5.75 1000 doses, 4-250 c.c. 10.00		A preventive and curative treatment against roup, colds, and related diseases affecting the head of chickens and turkeys. Note that you get one full c.c. per dose. To vaccinate for Fowl Cholera and Fowl Typhoid in all poultry, both preventive and curative.												
MIXED BACTERIN (FOR TURKEYS)	30 doses, 60 c.c. .85 125 doses, 250 c.c. 3.00 250 doses, 2-250 c.c. 5.75 500 doses, 4-250 c.c. 10.00		Special bacterin for the common bacterial diseases of turkeys.												
ANTIGEN	Write for special literature.		Blood or slide test for B.W.D. The Ultra-Rapid Antigen Test.												
PULLORIN	Write for special literature.		Wattle method for B.W.D. testing.												
TUBERCULIN	40 tests .75 200 tests 2.00		For T. B. testing. Wattle method.												
B. W. D. TEST CABINET	Complete equipment 5.00		For rapid Antigen test.												
SYRINGE Complete with 2 needles	10 c.c. 2.75 2 c.c. 3.50		Lifetime Bacterin syringe. Pullorin or Tuberculin testing syringe.												

DR. SALSBUURY'S LABORATORIES—HOME OFFICE, CHARLES CITY, IOWA
BRANCH OFFICES: JERSEY CITY, N. J.; COLUMBUS, OHIO; KANSAS CITY, MO.; POMONA, CALIF.

SEE YOUR LOCAL DR. SALSBUURY DEALER

START YOUR WORM CONTROL PROGRAM...

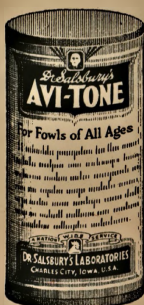


WITH DR. SALSBUARY'S **AVI-TONE**

The IDEAL Flock Wormer and Tonic

The best time for starting a worm control program is when chicks are young—BEFORE the worms can cause serious damage.

So join the thousands who know that it pays to use Dr. Salsbury's Avi-Tone treatment. Hundreds of tests—both on the farm and in the laboratory—prove that Avi-Tone gets up to 98% of the roundworms in chicks, and helps to prevent reinfestation.



Further tests show that Avi-Tone fed chicks grow considerably faster, are much more uniform, and generally subject to far less bowel trouble. That's because Avi-Tone stimulates the appetite, aids digestion, builds up vitality and helps to insure better health. All of which leads to quicker development and more economical use of feed.

So be sure to include Dr. Salsbury's Avi-Tone in your chick raising program this spring. In powder form—so it's easy to mix with the feed! A 6-lb. package costs only \$2.00.

Dr. Salsbury's
**POULTRY HEALTH
SERVICE STATION**

**YOUR LOCAL DEALER CAN SUPPLY YOU WITH
AVI-TONE--HIS NAME IS ON THE BACK PAGE**



HERE'S TO THE HEALTH OF YOUR BABY CHICKS!



We want to help you make money this year. Here at our hatchery we're doing everything in our power to provide you with strong, healthy chicks from good parent stock. But that isn't all! We're equipped to help you raise those chicks to a healthy, economical and profitable maturity.

For your success and convenience, we maintain a supply of Dr. Salsbury's Phen-O-Sal, Cam-Pho-Sal, Avi-Tone, and other poultry health preparations—dependable, effective products that will help you to build up and maintain the health and vitality of your flock.

And, as members of Dr. Salsbury's Nation-wide Poultry Health Service, we have for you, the latest scientific information on raising healthy poultry—information that comes to us regularly from the veterinary staff of Dr. Salsbury's Laboratories.

So, whenever you have questions on the care of your flock . . . whenever you need sincere advice, reliable information and practical help in solving your poultry problems—come in and see us. We'll be glad to help you all we can.



DR. SALSBUURY'S LABORATORIES

A Nation-Wide Poultry Health Service

HOME OFFICE: CHARLES CITY, IOWA

BRANCH OFFICES: Jersey City, N. J.; Columbus, Ohio; Kansas City, Mo.; Pomona, Calif.

Authorized Member DR. SALSBUURY'S NATION-WIDE POULTRY HEALTH SERVICE