

Brooders and Their Operation

By Capt. A. Waldwick.

Now that another season for the hatching and raising of chickens is approaching, the poultry raiser naturally begins to look about for the best way and method for raising of his chicks. The most practical, easiest and cheapest way and at the same time the way or method that raises the best chicks, is what the poultryman should adopt. Whoever has raised chickens knows the old hen method, and nothing need be said about that.

A great many have used the lamp heated brooders with varying results. We know what it meant to trim and fill lamps, get up in the middle of the night to look after the chicks and lamps. Not a few have gone to bed at night with everything apparently all right, but before morning has had chick, brooders, brooder houses and other property go up in smoke.

There has been failure after failure in the poultry business on account of fire caused by brooder lamps. Many men have given up on account of the drudgery caused by the continued care and watchfulness made necessary by the lamp heated brooders.

Another serious difficulty when using lamp heated brooders is the likelihood of overheating the chicks, vitiating the air they breathe, and as a result of these conditions weakening their vitality.

The writer's experience is that the best chicks are raised in good fireless brooders, with less labor and expense than with the heated brooder. It is an established fact that chicks reared in a properly constructed fireless brooder grow faster, mature more quickly, are stronger and better in every way than those reared in lamp heated brooders, or even under hens. Yes! even under hens!

The reason for this is not far to seek. When chicks run with hens they often get chilled because the hen will not stop to hover them when they need it. To be successful in the operation of a fireless brooder, the hover should be adjusted to the size of the chicks as they grow up, thereby increasing heights of brooding chamber, and also admitting a large space for air and ventilation. Ventilation should be arranged for in such a way as to enable the operator to have full control of conditions in brooders at all times. The most common fault with fireless brooders today is that there is no way whereby the ventilation is controlled. In cold weather less ventilation should be admitted than in warmer weather, for the greater the difference between the outside and inside temperature the greater will be the amount of air that will pass through the brooder.

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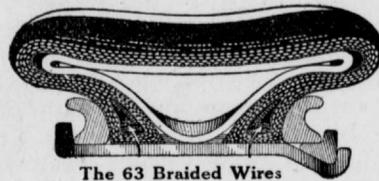
How to Save Half on Your Tire Cost

Here are tires which, until lately, cost 20% more than the ordinary. All because they can't rim-cut, and because they are oversize. Now these same tires, which save half on one's tire bills, cost no extra price.

We have sold half a million Goodyear No-Rim-Cut tires at 20 per cent more than the price of other standard tires. Last year our tire sales trebled—jumped to \$8,500,000.

All because the tires can't rim-cut, and because Goodyear tires are 10 per cent oversize.

Now these same tires—No-Rim-Cut tires—tires 10 per cent oversize—cost no extra price. Our multiplied output has cut the cost of production. All motor car owners should insist on them now.



The 63 Braided Wires

No Rim-Cutting

The picture shows how a Goodyear No-Rim-Cut tire fits any standard rim for quick-detachable tires. Also demountable rims.

Note that the rim flanges—which are removable—are turned to hook outward with No-Rim-Cut tires. There are no hooks on the tire base to hook into this flange, as there are on other tires.

The rounded flange comes next to the tire casing, and rim-cutting is made impossible. Half a million of these tires have been used.

We have run them flat in a hundred tests—as far as 20 miles. Yet there has never been a single instance of rim-cutting.



The Cause of Rim-Cutting

The above picture shows how an ordinary tire—a clincher tire—fits this same standard rim. The removable rim flanges must be turned to face inward—to grasp hold of the hooks in the tire. That is how the tires are held on.

Note how that thin edge of the rim flange digs into the tire. That is what causes rim-cutting. That is how tires are wrecked beyond

repair if you run them flat, even for a few hundred feet.

That rim-cutting ruins more automobile tires than any other single cause.

How to Avoid It

The difference is simply this: In the Goodyear No-Rim-Cut tires there are 63 braided piano wires run through the base on each side. That makes the base unstretchable. The tire can't creep on the rim, and nothing can possibly force it over the rim.

When these tires are inflated the braided wires contract. They are then held to the rim by a pressure of 134 pounds to the inch.

That is why Goodyear No-Rim-Cut tires don't need to be hooked to the rim. The rim flanges can be turned to hook outward, and you can't rim-cut the tire.

Other makers, to meet our competition, run a single wire through the base. Or they use a hard rubber base. But neither plan will do. The braided wires, which contract under air pressure, are absolutely essential to a safe hookless tire. And we control that feature.

Goodyear Tires 10% Oversize

Here is another feature which, with the average car, saves 25% on the tire bills.

The Goodyear—while it fits the rim—gives you 10% more tire for your money. That means 10% more carrying capacity. It means, with average conditions, 25% more mileage per tire.

The reason is this:

Motor car makers, in adopting tire sizes, figure on the weight of the car as they sell it and the weight of the passengers at 150 pounds each.

They supply the tire size to support that load, but they rarely leave any margin. They cannot afford to at the present prices for cars.

You may add a top, a glass front, gas lamps, gas tank, an extra tire, etc. And passengers may over-weight. With nine cars in ten the expected load is exceeded. The result is a blow-out—often while the tire is new. Overloading, with the average car, adds 25% to the tire cost.

We Save That 25%

When you specify Goodyear No-Rim-Cut tires you get 10% oversize without extra cost. That prevents overloading. It adds, on the average, one-fourth to the tire mileage.

We give you this extra size without extra cost to protect our reputation. When tires are wrecked by overloading, one naturally blames the tire maker. We wish to avoid that blame.

There are many other things you gain when you specify Goodyear No-Rim-Cut tires. They are all told in our book, "How to Select an Automobile Tire." Ask us to send it to you.

GOODYEAR

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I think you all understand that principle. Therefore for best results, absolute control must be had of the admission of the outside air into the brooder, so that it can be admitted or excluded according to the outside temperature and the requirements of the chicks. It can be easily seen that if the same amount of cold air was admitted at all times it would be too cold for baby chicks, while it would be too warm for them at about six weeks of age. A gradual decrease in temperature is what is needed. If there is no means whereby this increase is made, failure is sure to follow.

The best place to operate a fireless brooder is unquestionably in a brooder house, constructed for convenience, it enables the operator to do his work in the dry. Also provides a dry place for the chicks outside of brooders for exercise. Without sufficient exercise for chicks it is impossible to raise strong, hardy chickens that will grow up into money makers for their owner. If they are kept in a very small space too long, their vitality suffers in consequence. The fireless brooder is the most practical for fancier, farmer and commercial poultry raiser. A few chicks may be raised when and wherever you want to. Large numbers can be handled with less labor and expense than in any other way. One man can care for 2,000 to 5,000 chicks in fireless brooders, depending on the convenient arrangements of brooders, the ex-

perience and activity of the person doing the work. This would be impossible under any other method or system of brooding.

Berry Growers Organize.

A most enthusiastic meeting of berry growers was held at the Grange hall north of Kent Saturday, January 19. After considerable discussion as to the best berries to plant, best soil and berry markets, it was decided to form an organization to be known as the White River Berry & Fruit Growers' Association of Kent, with headquarters at Kent. There were about 30 men in attendance, 18 of whom joined the Association, and many more are joining.

L. Y. Williams, who has had splendid success in raising berries near this city was made president of the Association; C. H. Cottrell of the East Hill vice president and J. D. Dean secretary and treasurer. It was decided to ask all those who desire to plant berries to leave their orders

with the president and secretary so that they can be ordered in large quantities and thus save the growers money in the purchase.

The meeting was attended by a number of enthusiastic men who realize the necessity of making their land yield greater returns in this vicinity. The East Hill is especially adapted to the strawberries and there is already a large acreage planted and many more will be planted this spring. President Williams spoke of the benefits combined in raising of berries, poultry and bees on the same ground, saying it was the most successful and profitable way to farm in this district. John A. Stewart, the well known nurseryman of Christopher, gave some excellent advice as to starting berry fields. In all 18 signed the membership roll, as follows: Christopher W. Horr, John Gonnason, Kent, C. R. Cottrell, J. H. Wallace, A. O. Jeffries, Kent, D. I. Routh, M. C. Kennedy, A. Hamilton, Chas. Leigh, John A. Stewart, C. V. Garrison, E. N. Enlund, J. L. Study, J. H. Snyder, Robt. Ramsay, L. Y. Williams and J. D. Dean.

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